



# WILDLIFE TRADE MONITORING UNIT

# Traffic Bulletin

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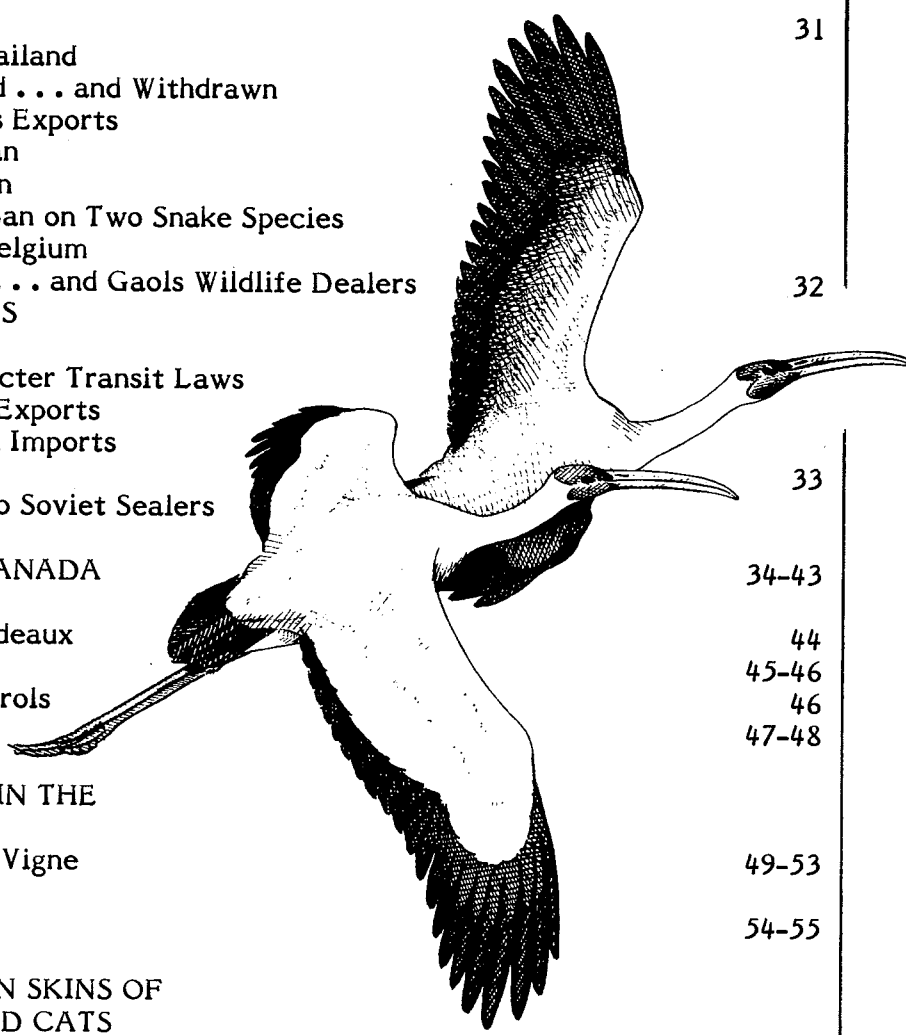


Illustration of Milky Storks by Craig Robson

## El Salvador in CITES

El Salvador acceded to CITES on 30 April 1987 (effective 29 July 1987) and becomes the 96th Party to the Convention.

In view of this, the CITES Secretariat believes that its earlier appeal to Parties to prevent and prohibit any trade with El Salvador in specimens of species listed in the CITES Appendices is no longer justified.

## Appendix III Listings for Thailand

The Government of Thailand has submitted to the CITES Secretariat the following list of species for inclusion in Appendix III.

Blue-tailed Pitta	<u>Pitta guajana</u>
Gurney's Pitta	<u>Pitta gurneyi</u>

The listings will become effective on 7 December 1987.

## CITES Reservations Entered . . .

On 13 April 1987, Austrian reservations entered into force with regard to the amendments to Appendix III submitted by the Republic of Honduras, which came into effect on the same date (see Traffic Bulletin 8(4):55).

## . . . and Withdrawn

<u>Zimbabwe</u>	Nile Crocodile <u>Crocodylus niloticus</u> (effective 2 April 1987)
<u>Thailand</u>	Estuarine Crocodile <u>Crocodylus porosus</u> Siamese Crocodile <u>Crocodylus siamensis</u> Bengal Monitor <u>Varanus bengalensis</u> <u>Python molurus bivittatus</u> Reticulated Python <u>Python reticulatus</u> (effective 17 August 1987)
<u>Zambia</u>	Sharp-nosed Crocodile <u>Crocodylus cataphractus</u> Nile Crocodile <u>Crocodylus niloticus</u> (effective 26 August 1987)

Source: CITES Secretariat

## Papua New Guinea Suspends Exports

Reports that two Frilled Lizards Chlamydosaurus kingii were smuggled into Japan in 1984 and sold for ¥16 million (US\$683 500) and that Japan is the world's largest smuggler of endangered species, have prompted the Government of Papua New Guinea to clamp down on all exports of wildlife (The Times, Papua New Guinea, 20-26.8.87). Since June 1987, the Department of Environment and Conservation has adopted a policy of not issuing export permits for any live vertebrate wildlife (excluding fish). This policy is to continue for an indefinite period until a review of all approved institutions has been completed. Papua New Guinea has had a longstanding policy of only permitting export of vertebrate wildlife to approved overseas institutions for legitimate scientific and zoological purposes. A recent investigation into one of the approved institutions, Kusatsu Tropicarium, Gunma Prefecture, Japan, revealed that the Institution was not a member of the Japanese Association of Zoological Gardens and Aquaria but was ▷

▷ in fact a private zoo facility with an amusement park. The Secretary of the Department of Environment & Conservation wrote to Kusatsu on 23 June 1987, advising that, as the zoo was apparently a profit-making venture, its approved institution status was being withdrawn.

Source: Frank Antram, *TRAFFIC* (Oceania)

## Taiwan Appendix I Trade Ban

From 27 June 1987, the Taiwanese Government has imposed controls on the import, export and re-export of all specimens of animals listed in CITES Appendix I. The Council of Agriculture's cabinet has informed the Board of Foreign Trade that it should not issue any permit for trade in these specimens without specific approval by the Council.

Source: Council of Agriculture, Executive Yuan (Taiwan), 27 June 1987

## Pakistan Extends Export Ban

The Government of Pakistan has extended its ban, imposed in September 1981, on the hunting, trapping and exports of wildlife, until August 1989.

It has requested that Parties to CITES take note that the export of all wild mammals, reptiles and protected indigenous birds is prohibited, including the export of all parts, products and derivatives, with the exception of a limited number of hunting trophies, which might be authorised by the Management and Scientific Authorities.

Source: CITES Secretariat

## Paraguay Suspends Export Ban on Two Snake Species

The Management Authority of Paraguay has informed the CITES Secretariat that, by Decreto 19.815 of 6 February 1987, the validity of Decreto No. 13.806 of 17 February 1986 has been extended for one year. Therefore, export of shoes in leather of Boa Constrictor Boa constrictor and Yellow Anaconda Eunectes notaeus is still authorised until 17 February 1988, while export of all other wildlife species for commercial purposes is still prohibited.

## Seized Ivory Auctioned in Belgium

Almost ten tonnes of ivory from Tanzania, seized in Antwerp, Belgium on 15 January 1986, was auctioned there on 18 September 1987 (see Traffic Bulletin 8(2):23).

The Belgian Management Authority, in close co-operation with the CITES Ivory Control Unit, invited members of the Ivory Importers Association to place bids for the ivory, which was to be auctioned as one lot. Eight written applications, of which only five were acceptable, were received from ivory dealers in Japan, Hong Kong and Europe.

The successful bidder was a Japanese company which bid BF5800 (US\$147) a kg, which for the complete consignment totalled US\$1 409 000.

The customs agency responsible for the transit of the ivory through Belgium, is to be prosecuted by the Belgian Customs authorities, who state that both CITES and Customs tax regulations were violated.

Source: Tom de Meulenaer, *TRAFFIC* (Belgium)

## Laos Bans Wildlife Exports . . .

On 28 October 1986, the Council of Minister of Laos imposed a ban on the trade in all species of wildlife, with immediate effect.

## . . . and Gaols Wildlife Dealers

The Laotian Supreme Court has sentenced two Thai wildlife dealers to gaol for falsifying documents to smuggle wildlife species out of the country.

Preecha Waravichit and Kamporn Pisaipong were respectively, sentenced to three years and two years, and fined 3M baht (US\$112 400) and 1.2M baht.

Preecha, the owner of Pimchai Bird Company, one of the biggest wildlife exporters in Thailand, and Kamporn, were arrested on 27 August 1987 for falsifying the documents of the state-owned wildlife exporter Phu Doi. A third suspect is awaiting trial.

The forged export permit listed the following species, which were destined for a trading company in Taiwan:

Species		No.
Indian Elephant	<u>Elephas maximus</u>	10
Clouded Leopard	<u>Neofelis nebulosa</u>	10
Eurasian Otter	<u>Lutra lutra</u>	20
Brushtailed Porcupine	<u>Atherurus macrourus</u>	10
Malayan Tapir	<u>Tapirus indicus</u>	10
Malayan Sun Bear	<u>Helarctos malayanus</u>	20
Leopard Cat	<u>Felis bengalensis</u>	20
Binturong	<u>Arctictis binturong</u>	10
Bengal Tiger	<u>Panthera tigris tigris</u>	20
Leopard	<u>Panthera pardus</u>	20
Asiatic Black Bear	<u>Selenarctos thibetanus</u>	20
Reticulated Python	<u>Python reticulatus</u>	25

All these species are listed in CITES Appendix I, with the exception of the Reticulated Python (Appendix II) and the Binturong (unlisted).

Sources: CITES Secretariat;  
Bangkok Post, 2 October 1987

## New Zealand Will Join CITES

New Zealand's Minister of Conservation, the Hon. Russell Marshall, announced in a press release dated 24 June 1987 that New Zealand would accede to CITES. Mr Marshall stated, "New Zealand has a proud record in the conservation of its endangered and threatened species and it is a logical and very positive step to join the international community in an agreement to prevent the illegal exploitation of endangered animals and plants worldwide." Accession will take place once the Trade in Endangered Species Bill has been passed by Parliament.

Source: Frank Antram, TRAFFIC (Oceania).

## TRAFFIC (Oceania)

From 11 July 1987, TRAFFIC (Australia) became TRAFFIC (Oceania), and its area of responsibility was expanded to include, besides Australia, the following countries and territories:

American Samoa, Cook Islands, Fiji, Kiribati, Nauru, New Caledonia, New Zealand, Niue, Papua New Guinea, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu and Wallis & Futuna.

## F.R. Germany Enforces Stricter Transit Laws

According to the law of the European Economic Community (EEC), the transit, through the EEC, of specimens of species protected under CITES without the export documents specified in the Convention, is inadmissible. This regulation makes CITES Resolution Conf. 4.10 applicable law throughout the EEC.

Since 1 January 1987, this regulation has been implemented in the Federal Republic of Germany via a new Act which provides that specimens which are to be transported without the export documents specified in CITES, or without proof of the existence of such documents, shall be confiscated and impounded. This also applies to transshipment in a free port under the supervision of the Customs authorities.

In conformity with Article X of the Convention, the transit regulation shall also apply to specimens exported to, or imported from non-Party states.

Source: CITES Secretariat

## Venezuela Permits Caiman Exports

The CITES Secretariat has been informed by the Management Authority of Venezuela that its ban on the export of skins of Spectacled Caimans Caiman crocodilus has been lifted. Exports are authorised on the basis of an annual quota established nationally.

## California Prohibits Caiman Imports

From 6 June 1987, the US State of California has prohibited the import of all species of live crocodylians, including members of the family Alligatoridae.

Laws enacted in the 1960s had prohibited the import and possession of members of the family Crocodylidae, in the belief that this included all crocodylians. It was later pointed out that caimans and alligators are included in the family Alligatoridae, but the California Department of Fish and Game (DFG) opted not to recommend an amendment in the law because there was not a "problem" at that time with caimans in California.

By the mid-1970s, however, prominent herpetologists had begun asking the DFG to reconsider its position, on the basis that caiman populations were being depleted in their native habitats in Central and South America. Meanwhile, caimans were becoming increasingly common in the pet trade in California. By 1986, there had been many problems with captive-bred specimens being released in the wild in California, and with enforcement of prohibitions on crocodile imports, so that the DFG welcomed a petition from the curator of reptiles at the Roeding Park Zoo, Fresno, California, to prohibit the import of caimans. The DFG took the proposal one step further and recommended that the ban include alligators and gavials, as well. The law now prohibits the import and possession of all members of the order Crocodylia, except under permit for bona fide scientific and educational institutions. The ban is aimed primarily at the pet trade. Pet shops and commercial outlets must dispose of their stocks immediately, although individual pet owners may be issued temporary permits for animals obtained prior to enactment of the ban.

It is believed that the species most commonly imported has been the Spectacled Caiman Caiman crocodilus. The DFG hopes that a ban on all live crocodylia will not only reduce the potential threat to native wildlife, but improve the ability of state and federal officials to regulate the trade in the 20 taxa declared endangered or threatened by the US Fish and Wildlife Service, and those regulated under CITES.

Source: Stephen J. Nicola, Department of Fish and Game, California, USA

## SEIZURES

### Macaques and Orang-utans in France

On 5 May 1987, whilst in transit from Jakarta, Indonesia, eight Crab-eating Macaques Macaca fascicularis, three Pig-tailed Macaques Macaca nemestrina and two Orang-utans Pongo pygmaeus were seized, with the assistance of TRAFFIC (France), at Roissy Airport, France. The shipment was on its way to Mexico.

The animals, which arrived in extremely poor health and without food and water, had been shipped on 2 May by Garuda Indonesian Airlines, without CITES documentation.

The specimens are currently being cared for by the "Jardin d'acclimatisation, Ménagerie du Jardin des Plantes" of the National Museum of Natural History in Paris.

Source: *Gwénola le Serrec, TRAFFIC (France)*

### Leopard skins in UK

A routine search, by Customs officers, of a vessel moored at Tees Dock, Middlesbrough, UK, and bound for the Netherlands, uncovered two Leopard Panthera pardus skins. They were in the possession of a seaman who was believed to have received an order for the skins on a previous trip to the Netherlands. The ship had travelled from Ethiopia, where Leopard skins can reportedly be bought for £50 (US\$80) each.

Source: *Portcullis, Vol. VII (11), July 1987*

### Bonytongue fish in UK

UK Customs officers were recently alerted by reports of Asian Bonytongue Scleropages formosus being offered for sale by a UK fish farm. This fish is listed in CITES Appendix I and known to be difficult to breed in captivity (see *Traffic Bulletin* 7(5):73-76), thus it was likely that the specimens had been illegally imported. Accompanied by a fish expert, Customs visited the premises and seized five specimens. They are now being held in a British zoo.

The seizure is the first ever in the UK of live fish imported in contravention of CITES controls.

Source: *Portcullis, Vol. VII (11), July 1987*

### Rare Pythons in US

Eighteen specimens of the rare Boelen's Python Python boeleni, a species only discovered in New Guinea in 1956, were found amongst a crate of 70 reptiles confiscated at Los Angeles International Airport, USA, on 9 March 1987.▷

▷ The snakes, which are about 4 m long and weigh 11-16 kg, have distinctive black, velvety skin, with yellow bellies and yellow flash marks along their sides.

The shipment, which was seized because it lacked the correct documentation, was on its way to an Ohio importer claiming to have a reptile research facility.

Source: *Los Angeles Times (USA), 12 March 1987*

### Hyacinth Macaws in Argentina

A total of 40 Hyacinth Macaws Anodorhynchus hyacinthinus were seized recently by officials in Resistencia, Argentina. The shipment, which had travelled from Brazil to Clorinda, on the border with Paraguay, destined for Buenos Aires, was not accompanied by CITES documentation.

Only 18 of the birds survived. Juan Villalba-Macías, Director of TRAFFIC (South America) accompanied the animals back to Brazil, where they are being cared for at a biological reserve in São Paulo.

The Hyacinth Macaw was transferred from Appendix II to I at the sixth meeting of the Conference of the Parties to CITES, in July 1987.

Source: *J. Villalba-Macías, TRAFFIC (South America)*

### Birds and reptiles in Paraguay

Eleven birds have been seized from a house in Asunción, Paraguay, where, earlier this year, two Spix's Macaws Cyanopsitta spixii were seized (see *Traffic Bulletin*, 9(1):1).

On 21 August 1987, whilst carrying out a search for Golden Lion Tamarins Leontopithecus rosalia rosalia, allegedly being kept at the premises, the Director of TRAFFIC (South America), Juan Villalba-Macías, accompanied by local police, discovered 2 Golden Conures Aratinga guarouba, 3 Hawk-headed Parrots Derophtus accipitrinus, 5 Dusky Parrots Pionus fuscus and 1 Mealy Amazon Amazona farinosa. No Tamarins were found.

The birds were seized and flown, courtesy of the airline Lineas Aéreas Paraguayas, to São Paulo, Brazil, where they are now being cared for at the Zoological Gardens.

On learning that the Tamarins were probably still being held in Asunción, Villalba-Macías was requested by the CITES Secretariat to return there. Although the primates were not found, further seizures from two other properties included 2 Mealy Amazons Amazona farinosa, 42 Blue-fronted Amazons A. aestiva, 5 Red-crowned Amazons Amazona dufresniana rhodocorytha, 1 Broad-nosed Caiman Caiman latirostris and 3 Spectacled Caimans Caiman crocodilus.

Source: *J. Villalba-Macías, TRAFFIC (South America)*

## New Zealand Closes Ports to Soviet Sealers

The Prime Minister of New Zealand, Mr David Lange, has announced that his country will close its ports to Soviet ships on sealing expeditions to the Antarctic, if the USSR does not halt such activities. The announcement by New Zealand follows two previous protests to the USSR this year concerning the killing of seals in the Antarctic.

Greenpeace has claimed that nearly 5000 seals killed by the USSR in 1986 are being sold for meat, fur and leather. A spokesman for the Soviet Embassy in Wellington, Mr Vladimir Ivanov, has confirmed that between December 1986 and January 1987 4014 Crabeater Seals Lobodon carcinophagus were killed in the Antarctic zone, but that they had been used for scientific rather than commercial purposes.

In response to Mr Lange's announcement, Mr Ivanov has stated that the USSR has taken into account the will of the New Zealand Government and that in future Soviet sealers will avoid New Zealand's ports.

A full report on Soviet sealing and its purposes is to be made to the Scientific Committee on Antarctic Research in October. Members of the Antarctic Convention, of which the USSR is a Party, are drawing up an international agreement to determine how commercial resources of the Antarctic can be exploited in the future.

Sources: *Sydney Morning Herald (Australia), 4 August 1987; The Dominion (New Zealand), 4 August 1987; New Scientist, 6 August 1987*



## CITES Conference in Canada

by Jonathan Barzdo, John Caldwell and  
Richard Luxmoore

The sixth meeting of the Conference of the Parties to CITES was held in Ottawa, Canada, from 12 to 24 July 1987. Delegations from 84 Party States were present at the meeting, more than at any previous CITES meeting. The participants also included observers from four non-Party States, the United Nations Environment Programme (UNEP), the Customs Co-operation Council, the Food and Agriculture Organisation of the United Nations, the European Economic Community (EEC) and 145 other organisations and agencies.

The following report of the meeting is a summary containing what the authors judge to be the most significant points. Some details of Resolutions and other aspects have therefore been omitted.

Mrs Pauline Browes, Member of Parliament in Canada, opened the meeting. In the opening ceremony, introductory speeches were given by Mr M.K. Ranjitsinh, Chairman of the CITES Standing Committee, for India, and Mr W. Mansfield, Deputy Executive Director of UNEP. As at the fifth CITES meeting, the opening addresses drew particular attention to the Convention's serious financial situation, due in part to the late or non-payment of contributions by some Parties.

Three new regional members of the Standing Committee were elected, these being Nepal, to represent Asia, Peru for South and Central America and the Caribbean, and Malawi for the African region. The term of office for regional representatives is four years.

The admission of observers, a normally uncomplicated and uncontroversial matter, was the subject of some discussion. Two Parties stated that they had not accredited certain observers from their countries and, as a result, three national organisations were deleted from the list of observers. In addition, the Netherlands and Uruguay proposed the exclusion of an Austrian organisation, named Arbeitskreis zur Erhaltung von Schimpansen (AES), because it appeared to be simply a cover for a commercial company whose activities were discussed in the Secretariat's report on Alleged Infractions. On a vote the proposal was not agreed, with 10 in favour of excluding AES, four favouring their admission, and the rest abstaining. As a result, the Chairman suggested that the criteria for admission of observers be reviewed prior to the next meeting of the Conference of the Parties.

In the report of the Secretariat, it was noted that, by the end of 1986, membership of the Convention had risen to 93 Parties and currently stood at 95 (see page 31).

It was reported that the financial amendment to the Convention (required for financial provisions to be made enabling the Secretariat to carry out its duties) came into force on 13 April 1987. It was also noted that, by the end of 1986, the Gaborone amendment (to allow membership of CITES by regional economic integration organisations) had been accepted by 12 of the states party to CITES at the time of its adoption, in 1983; a total of 54 acceptances by such states was necessary to bring the amendment into effect.

A list of specific reservations currently in force showed that - excluding the Austrian reservations on all species subject to listing amendments at the previous two meetings - 13 Parties had entered reservations with regard to a total of 31 Appendix I taxa (as at the previous meeting) and five Parties with regard to 13 Appendix II taxa (an increase since the previous meeting). The delegation of Japan stated that their Government is in the process of withdrawing its reservations on Green Turtle Chelonia mydas and Desert Monitor Varanus griseus, and committed themselves to withdrawing their reservations on Musk Deer Moschus spp. in about two years, pending development of a substitute for musk.

In 1986, the Secretariat and its consultants had conducted missions to 42 Party States and ten non-Party States, and had arranged three CITES meetings: the second meeting of the Technical Committee (TEC), held in Lausanne, Switzerland; the CITES Enforcement Seminar, in Bristol, UK; and the 14th Standing Committee meeting, in Ottawa.

Regarding the production of annual statistical reports by the Parties, the Secretariat drew attention to the continued late submission of reports by major trading Parties, which hampered production of comparative tabulations of the Parties' reports.

Beneficial links between the Secretariat and a variety of inter-governmental organisations and non-governmental conservation and trade organisations had been maintained. Owing to its workload, the Secretariat had been unable to do much itself in increasing publicity for CITES, but much had been achieved in this respect because UNEP had provided a consultant for this purpose. Increasing the supply of public information is one of the priorities of the Secretariat.

The Secretariat staff, in 1986, had consisted of 13 permanent staff members, including seven support staff. In addition, two long-term consultants were based at the Secretariat, and 14 other consultants had been employed, for various periods, during the year. The following posts were identified as necessary additions to the permanent staff: a plants officer, an enforcement officer and an officer responsible for dealing with the problems of trade in species subject to quotas.

The financial report indicated that, at the end of 1986, 45 Parties were in arrears of their contributions to the Trust Fund (although ten of these had contributed by 31 March 1987), three of whom had never contributed to the Fund. The Secretary General emphasised the extremely precarious nature of the Convention's finances and the need to increase the budget if serious cuts in services were not to be made.

In the development of CITES, a number of committees, sub-committees and working groups had been set up, some of which had only vague or generalised mandates. In some cases the membership, rules of procedure and lines of reporting had not been clear. It was evident that a new committee structure was needed and a review of permanent CITES committees had been conducted by Canada, Switzerland, UK and Zimbabwe before the meeting. This was used by an ad hoc working group, at the present meeting, to formulate a new structure and to formalize a system for the appointment of committees. This structure and system were approved by a Resolution (Conf. 6.1) which repealed the creation of all existing committees. It re-established the Standing

Committee (as the senior committee), the Identification Manual Committee and the Nomenclature Committee, and established the Animals Committee and the Plants Committee. It also allows further committees to be appointed by the Conference of the Parties. Working groups may also be appointed by, and report to, the Conference or the Standing Committee with specified terms of reference and a lifespan until the following meeting of the Conference of the Parties. The Standing Committee's Rules of Procedure will apply to all other committees. The Resolution also deals with regional representation in the Standing Committee and payment of its members' travel expenses, and repeals previous Resolutions establishing or concerning CITES committees. Five annexes to Resolution Conf. 6.1 specify the terms of reference of the five new permanent committees. The Standing Committee is the oversight body for Secretariat policy and operational direction, preparation of meetings, Secretariat budget and fund-raising, operation of other committees and drafting of resolutions, and any other functions specified by the Conference of the Parties. The Animals Committee must: assist the Nomenclature and Identification Manual Committees with respect to animals; take over the tasks of the former Working Group on Significant Trade in Appendix II species and the development of those activities; conduct a periodic review of animal species in the Appendices; advise range states on management; draft resolutions. The Plants Committee shall: provide guidance and advice on all aspects of international plant trade; assist the Nomenclature and Identification Manual Committees in their work relating to plants; establish a review system for plant species which may be significantly affected by trade; recommend remedial measures for species detrimentally affected and priorities for data collection; conduct a periodic review of plant species in the Appendices; advise range states on management; draft resolutions. The Identification Manual Committee is re-established not only to guide and co-ordinate preparation of Identification Manuals, assisting the development of regional/national volumes, but also to provide advice on identification, assist in preparation of enforcement seminars and review proposals to amend the Appendices. The re-established Nomenclature Committee shall: develop and maintain standard nomenclatural references for animals and plants; review the nomenclature used in the Appendices; review proposals to amend the Appendices; and advise on nomenclature, for example to ensure that changes in the names used do not alter the scope of protection.

The following Resolutions were repealed: Conf. 2.2, Conf. 2.4, Conf. 2.5, Conf. 3.1, Conf. 3.5, Conf. 3.10 - recommendations c) and d), Conf. 3.16 - recommendation c), Conf. 3.18, Conf. 4.1, Conf. 4.2, Conf. 4.4, Conf. 4.5, Conf. 4.19, Conf. 5.1, Conf. 5.17 and Conf. 5.18 - paragraph 5.

The financing and budgeting of the Secretariat and of meetings of the Conference of the Parties was a subject discussed in great depth because the lack of finances was extremely serious and, if this could not be resolved, all other discussions would have been academic. Finally, by Resolution Conf. 6.2: the 1988/89 budget was approved (US\$1 389 000 in 1988, \$1 611 000 in 1989); the Executive Director of UNEP was requested to seek an extension of the Trust Fund, for support of the Convention, until 31 December 1991; it was agreed that contributions to the Trust Fund would be based on the UN scale of assessments; all Parties were urged to pay their contributions, preferably in advance, and to accept the financial amendment if they had not done so; non-Parties and other organisations were invited to contribute to the Trust Fund; the charge for observers participating in meetings was raised to US\$150; the Standing Committee was requested to review the method of assessing contributions, the budgeting problems, the structure of the Secretariat, and radical options for achieving

economies; and the Secretariat report was approved.

In its report on external funding, the Secretariat pointed out that over US\$2 000 000 had been obtained for 1985-87 and beyond. It was noted that such external funding was vital to the work of the Convention but could only be applied to projects or activities outside of the normal operation of the Secretariat. The President of the Conservation Treaty Support Fund reported on this Fund's recent establishment, its primary object being to support CITES. In the course of the meeting, the All Japan Association of Reptiles Skins and Leather Industries presented a contribution of US\$10 000 to the Secretariat.

The Identification Manual Committee reported that, since the last report to the Parties, a further 437 sheets for animals and 23 for plants had been printed, bringing the total to 1043 sheets. It was particularly noted that, although all Parties having paid their contributions to the Trust Fund were eligible to receive seven free copies of the Identification Manual, only 22 Parties had made full use of their allocation. The Netherlands had obtained an additional 22 and the USA an additional 38 copies. Canada had started to translate the entire Manual into French; the Secretariat (supported by the EEC) had started translation into Spanish; a Japanese version had been published; and a German version was being produced. There is a large number of taxa for which no Party had accepted any responsibility to prepare data sheets. Regarding funding, UNEP and several ngos had already contributed to the production of data sheets, but further UNEP funding would not be forthcoming. Additional funding was needed for the Committee's work and it was noted that US\$20 000 was required to print data sheets that had already been prepared. In the course of the meeting, the Committee Chairman resigned in protest because proposals were adopted to list, in the Appendices, a large number of species (notably *Trochilidae* spp., *Dendrobates* spp. and *Phyllobates* spp.) whose inclusion would create enormous identification problems, and this was done without the application of the Berne criteria.

Since the fifth meeting of the Conference of the Parties, the Nomenclature Committee had: reviewed the nomenclature of all taxa listed in the Appendices, to ensure that the listings accurately reflected the intent of the Parties at the time of the species' inclusion; compiled checklists on 'Turtle and Crocodile Species of the World' and 'Snake Species of the World', both of which would be finalised and published before the next meeting; updated Mammal Species of the World, the second edition of which would be published before the next meeting; and developed computer software to handle future checklists in a database format and converted Mammal Species and Amphibian Species files into this format. Before the next meeting, the Committee would begin compilation of 'Cacti Species of the World' and 'Lizard Species of the World' as standard nomenclatural references.

For the report on national reports, the CITES Secretariat had commissioned a study, by the Wildlife Trade Monitoring Unit, on the Implementation of CITES as demonstrated by the trade statistics in the annual reports of 1984 and 1985 submitted by the Parties. This study looked at the reported trade in selected taxa for the two years, the total number of records in the sample being over 14 000. It appeared that there were continued slight improvements, both in the percentage of perfect correlations between reports and in the numbers of annual reports submitted. However, perfect correlation between potentially correlating records totalled only 16% in 1985, whereas the percentage of records showing no correlation whatever had increased to 78% in 1984 and 74% in 1985. The CITES Secretariat identified four main problems with respect to submission of annual reports: failure to submit annual reports (in spite of submission being mandatory under Article VIII of the Convention); late submission of

annual reports; submission of annual reports which substantially departed from the recommended guidelines for their preparation; and submission of annual reports which omitted substantial sections of data or contained substantial inaccuracies. The Secretariat felt that it would not be useful to adopt any further resolution on this subject. Instead they made the following recommendations that were adopted:

- a) The Secretariat should continue the work it was requested to do following the report of the TEC Working Group on Annual Reports - particularly in finding solutions to the problems of annual report production;
- b) Parties regularly failing to submit annual reports should make greater efforts to comply with this requirement and, if appropriate, seek technical assistance from the Secretariat;
- c) Parties submitting annual reports late should take urgent steps to remedy this situation;
- d) Parties which have not computerised their recording of CITES trade statistics should explore this possibility and ensure that any computerisation is compatible with the CITES database at WTMU;
- e) Parties should ensure that the accuracy and completeness of their reports are improved - in particular by reporting on a shipment-by-shipment basis and including permit/certificate numbers;
- f) Distribution of individual annual reports to Parties by the Secretariat should discontinue and be replaced by distribution of the comparative tabulation.

At its fifth meeting, the Conference of the Parties had agreed that the Secretariat should conduct a regular review of alleged infractions and submit a separate report on this subject to each meeting. The first such report was submitted to the sixth meeting and included details of a sample 54 cases, representing important infractions in eight categories:

- A. Appendix I species traded commercially or in large quantities or without valid documents (17 cases);
- B. Appendix II species traded without valid documents (5 cases);
- C. Appendix III species traded without valid documents (1 case);
- D. Cruelty or inhumane treatment during transport (2 cases);
- E. Failure of a Party to take action against illegal trade or to respond to the Secretariat under Article XIII (1 case);
- F. Use of forged or fraudulent documents (20 cases);
- G. High volume trade with non-Party states which undermines CITES objectives (4 cases); and
- H. Repeated general actions of a Party which diminish the effectiveness of CITES (4 cases).

For most cases the Secretariat made a specific recommendation on action that should be taken. In committee session, they also recommended that the subject be discussed by the Standing Committee, which should consider creating an 'Enforcement Committee' to provide guidance on how to proceed with this work in future. However this recommendation was not adopted by the Plenary session.

In spite of requests by the Secretariat and some Parties to discuss their report constructively, without picking out 'guilty' Parties, since no country is free of enforcement and implementation problems, much of the debate was acrimonious.

As a result of the report, the countries of the Latin American and Caribbean region prepared a draft resolution, drawing attention in particular to the serious problems of illegal trade in French Guiana, urging Japan, France and Austria to strengthen their CITES controls and requesting the Standing Committee and Secretariat, respectively, to evaluate implementation of CITES in these three countries and to prepare a report on progress in their implementation for the next meeting. However, Denmark, supported by Cyprus, proposed: that the

problems in French Guiana should not be highlighted; that all countries and not just the three named should be referred to in the resolution; and that the Standing Committee and the Secretariat not be requested to take action. This was agreed and (by a vote of 40 to 18) Resolution Conf. 6.3 was adopted: urging all Parties to strengthen their control of CITES shipments originating in producing countries, and to strictly verify the accompanying documents. In addition, the Secretariat requested Parties to submit comments on the cases in their report by 31 October 1987, for distribution to all participants.

A document on the implementation of the Convention in certain countries had been prepared by the Secretariat because some Parties' problems were of too general a nature to be discussed as alleged infractions. This report described the serious illegal trade problems prevailing in Bolivia, French Guiana, Paraguay and the United Arab Emirates (UAE), and the reasons behind them. The Secretariat expressed its continuing concern about the situation in French Guiana; recommended condemnation of UAE's subversion of CITES, and the need for discussion of how to improve UAE's attitude to CITES; and recommended improvements in controls in Paraguay and countries which allow imports from that country. However, none of these concerns was discussed. A draft resolution, prepared by the countries of the Latin American and Caribbean region, and proposed by Bolivia: recommended that all Parties importing wildlife shipments from Bolivia ensure that they are accompanied by the correct CITES export permits, and specified additional requirements with respect to imports of caiman skins and products; urged Bolivia's neighbouring states to strengthen their controls on wildlife trade; and urged all Parties to prohibit illegal imports of wildlife from their neighbouring countries. This was adopted (Resolution Conf. 6.4). The Secretariat reported on an agreement they had reached with the President of the Republic of Bolivia, to try to solve Bolivia's wildlife trade problem once and for all. It involved two phases. In the first phase (which began on 18 May 1987), an inventory of all wildlife stocks already held by legitimate Bolivian traders, members of ASICUSA (Asociación de Curtidores de Cueros de Saurios) would be prepared. The inventoried stock could then be exported, following which a trade ban would be implemented until the second phase was completed. In the second phase (which started on 1 September 1987), a Secretariat consultant will work with the Bolivian Management Authority for one to two years, to establish a CITES implementation system. This will include: revising Bolivia's wildlife legislation, establishing a national CITES Scientific Authority; training central and regional staff of the Centro de Desarrollo Forestal (CDF) in CITES procedures; implementing a management programme for sustainable utilisation of species in CITES Appendix II; establishing priorities for ecological studies, a database on priority species and a monitoring programme to support an export quota system; and training of Customs officers. This agreement was supported and endorsed by the present meeting of the Conference of the Parties.

Following the recommendations of the Buenos Aires conference, an ivory co-ordination unit had been established within the CITES Secretariat to co-ordinate the world's trade in ivory from African Elephants *Loxodonta africana* from 1986 onwards. In order to strengthen the working of that unit, and to improve the ivory control procedures in the light of results of the first year of the quota system, the Committee session considered three background documents. A report by the Secretariat on the operation of the quota system contained two annexes: a report by WTMU, concerning the effect of the recent legislative changes on the overall pattern of the world's ivory trade; and a report by IUCN's African Elephant and Rhino Specialist Group (AERSG), on

recent trends in African Elephant population estimates and how these trends should be viewed in the light of the quota system. The other background documents addressed the marking of cut pieces of ivory, trade in worked ivory and financing the co-ordination of ivory trade controls. Such keen interest was expressed in the subject of ivory that a working group was formed comprising at least 26 Parties and non-governmental organisations (ngos). The working group developed six draft resolutions which were adopted at the Plenary session. These are Resolutions Conf. 6.11 to Conf. 6.16.

Resolution Conf. 6.11 is aimed at putting pressure on countries which deliberately flout the ivory control procedures. It recommends that all Parties should use all possible means to exert pressure on countries continuing to allow illegal trade in ivory, and that a delegation should meet with the heads of State of Burundi and the United Arab Emirates to apprise them of the gravity of the problem in their countries.

Resolution Conf. 6.12 recommends that Parties should:

- i) comply with the ivory quota system as outlined in Resolution Conf. 5.12 and improve that compliance wherever possible;
- ii) improve management by better law enforcement and population monitoring;
- iii) offer rewards for information leading to the arrest and conviction of illegal hunters and traffickers in ivory;
- iv) establish an African Elephant Working Group, responsible to the Standing Committee, to work closely with the CITES Secretariat and AERSG on implementation of the ivory control procedures, and which would report at least six months prior to the next Conference of the Parties; and
- v) direct the Secretariat to initiate a survey of trade in raw and worked ivory within Africa as soon as possible.

Resolution Conf. 6.13 is aimed at improving the financing of the ivory co-ordination unit. It urges all agencies with an interest in the ivory trade, including governments, ngos and trade groups to contribute on a voluntary basis to the Secretariat. It further directs the Secretariat to consult with the IUCN Environmental Law Centre on potential sources of revenue from duties, taxes, awards, fines and fees, to assist in CITES enforcement, and to report their findings to the Standing Committee within one year.

Resolution Conf. 6.14 recommends that Parties establish a system of registering or licensing importers and exporters of raw ivory and limit commercial trade in raw ivory to such registered or licensed importers and exporters from 1 January 1989. It further recommends that such dealers be encouraged to form an association to regulate their own industry and to liaise with the CITES Secretariat. It suggests that Parties having ivory craftsmen who were not yet organised, structured or controlled should examine ways to register or license such enterprises and introduce procedures to allow monitoring of the flow of ivory within the state.

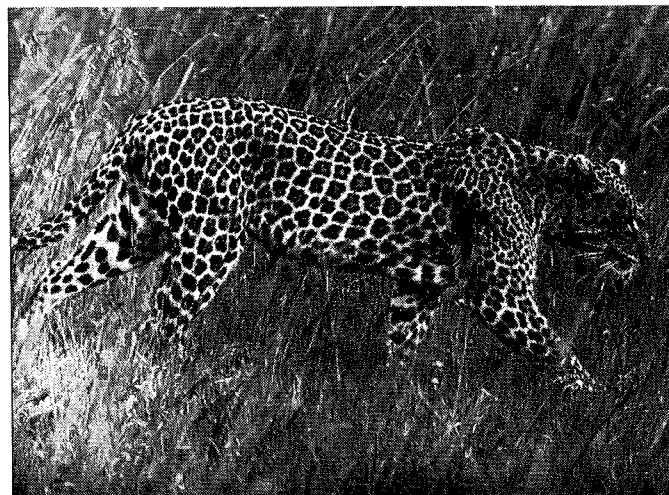
Resolution Conf. 6.15 defines the size limit for cut pieces of ivory which must be marked as those which are both 20 cm or longer and 1 kg or heavier. Thus, those cut pieces which are shorter than 20 cm or, if longer, weigh less than 1 kg, need not be marked. All whole tusks should be marked. This Resolution also recommends that, for raw ivory, importing countries should accept re-export certificates that do not state the country of origin if the certificate bears a statement to the effect that the omission is justified in relation to the recommendations of Resolution Conf. 3.6.

This final recommendation is also included in Resolution Conf. 6.16 but in relation to commercial shipments of worked ivory. The main recommendation of this Resolution is that worked ivory should be considered "readily recognizable" in relation to the Article I(b)(ii) definition of "specimen" and the provisions of Article IV,

but that Parties should take a practical approach in determining the quantity of items that should qualify under Article VII for exemptions from control.

A report on trade in rhino products had been prepared by Esmond Martin on behalf of the IUCN/SSC African Elephant and Rhino Specialist Group. The severity of the crisis facing rhinos was underlined by the conclusion that today under 11 000 rhinos, of the five species, survive. This represents an 85% decline since 1970, due primarily to the poaching of rhinos for their horn. The most severely affected species is the Black Rhino Diceros bicornis whose population has fallen from 65 000 to 4000 in that time.

A draft resolution, prepared by the CITES Secretariat, called for stricter measures to be taken with respect to control of trade in rhinoceros horn products. After slight amendment by Plenary this was approved by consensus, as Resolution Conf. 6.10. The Resolution urged all Parties to implement a complete prohibition on all sales of, and internal and international trade in all rhinoceros parts and derivatives with the single exception of legitimate hunting trophies. It also urged better awareness by law enforcement agencies, higher penalties for individuals/companies convicted of relevant offences and firm action against middlemen and poachers. Perhaps most importantly, the Resolution urged that all government and parastatal stocks of rhinoceros horn should be destroyed, and funds from external aid sources be used for rhino conservation in the states concerned. The Resolution further recommended that Parties: use all appropriate measures to exert pressure on countries continuing to allow trade in rhinoceros horn, particularly Burundi and the United Arab Emirates, to take action to prohibit such trade; encourage the use of substitutes for rhino products and encourage development of national and international rhino conservation strategies.



Leopard Panthera pardus

© WWF/Charles A. Vaucher

In discussions on trade in Leopard skins at the fourth meeting of the Conference of the Parties (Botswana, 1983), Zambia and Zimbabwe proposed transferring several populations of African Leopard Panthera pardus from Appendix I to II, because those populations were not endangered. In the face of opposition, this was withdrawn in favour of a resolution (Resolution Conf. 4.13) establishing Leopard skin export quotas for some countries, with strict conditions attached to ensure that any trade was non-commercial and well regulated, and to enable a thorough review at the fifth meeting. Concern was expressed at the latter meeting (Argentina, 1985) that insufficient information was available to review the



quota system, and the Secretariat was instructed to report on this system to each meeting. For the sixth meeting, the Secretariat not only reported on the quota system but, with funds from the Safari Club International and the American Fur Institute, had commissioned a major report, by Rowan Martin and Tom de Meulenaer, on the status of the Leopard in sub-Saharan Africa. Using all available information about Leopard density, available habitat and rainfall, a mathematical model had been constructed, which gave an estimated population, for the whole of sub-Saharan Africa, of 700 000 Leopards. This population was therefore not endangered. Because of this rather startling result, many Parties, especially African ones, felt that more time was needed to review the report. Many also said that the status of the species was vulnerable and that quota controls should be maintained. (No proposal had been submitted in advance for transfer of the African Leopard from Appendix I to II). In their report on the operation of the quotas, the Secretariat indicated that there had been few problems, the main one being that Botswana had not reported on its exports in 1986 and that its exports in 1985 had exceeded its quota by about 25%; moreover, some of these exports had been fully commercial. Zimbabwe requested an increase in quota and the Central African Republic and Ethiopia requested quotas for the first time, the latter country seeking to eliminate a very large existing stock. Resolution Conf. 6.9 was adopted, renewing the quota system, similar to Resolution Conf. 5.13, but amending the annual quota for skins as follows: Botswana, 80; Central African Republic, 40; Ethiopia, 500; Kenya, 80; Malawi, 20; Mozambique, 60; United Republic of Tanzania, 250; Zambia, 300; Zimbabwe, 500. The Resolution also clarified that the quotas include hunting trophies.

**Trade in crocodilian quota species:** the quota system under which species are transferred from Appendix I to Appendix II is destined for a full review at the seventh meeting of the Conference of the Parties but, in the interim, all of the ten African countries currently holding quotas for Nile Crocodile *Crocodylus niloticus* applied to continue their quotas for 1987, 1988 and 1989. Detailed management plans and population estimates, as required under the terms of Resolution Conf. 5.21, were received from Botswana, Malawi, Mozambique, Tanzania and Zambia, and these requested quotas were approved. Kenya applied to increase its quota from 150 to 5000, and approval was given once clarification was received that 4000 of the quota was for skins deriving from ranching operations. Sudan's continuing quota and Cameroon's modest increase were also agreed with little opposition, but the substantial increase requested by Madagascar was rejected once it became clear that there was little protection for crocodiles on the island, and that they were officially classified as vermin. Congo originally applied for a quota of 650 *C. niloticus* and to extend the quota to include two new species, Sharp-nosed Crocodile *Crocodylus cataphractus* and West African Dwarf Crocodile *Osteolaemus tetraspis*, on the grounds that all three species were killed in the country and that the wildlife authorities were incapable of distinguishing between the skins. This controversial argument, though with reduced quotas for all three species (see table), was accepted once plans for a more detailed survey of crocodiles in the country had been drawn up, in spite of the fact that the proposal met few of the requirements stipulated in Resolution Conf. 5.21.

Indonesia, which already held a quota for 2000 *Crocodylus porosus*, originally proposed a simple retention of its population in Appendix II without the restriction of quotas, but this was modified at the meeting to a request for an increased quota of 4000, to be administered under a new FAO crocodile programme operating in the country. Because of the difficulty of controlling illegal exports, adherence to the quota could only be guaranteed by the co-operation of the importers and, although Japan

agreed to co-operate with the Indonesian authorities, Singapore, the other chief importer, did not. It was pointed out that the great majority of *C. porosus* skins in trade now came from countries with legal supplies and there was thus no justification for Japan and Singapore to retain their reservations, but both refused to commit themselves to withdrawing them. The discussion of Indonesia's quota was re-opened in the Plenary session when it was agreed that the Secretariat should negotiate with Japan and Singapore for a withdrawal of their reservations; meanwhile the quota of 4000 was adopted.

Export quotas for crocodilians agreed at the sixth meeting of the Conference of the Parties to CITES, Ottawa, 1987, plus previous year's quotas.

	1986	1987	1988	1989
<u><i>Crocodylus niloticus</i></u>				
Botswana	-	2000	2000	2000
Cameroon	20	100	100	100
Congo	1000	150	150	150
Kenya	150	1000 *	1000 *	1000 *
		4000 °	4000 °	4000 °
Madagascar	1000	1000	1000	1000
Malawi	500	700 *	700 *	700 *
		200 °	300 °	600 °
Mozambique	1000	1000 *	1000 *	1000 *
				3000 °
Sudan	5000	5000	5000	5000
Tanzania	1000	2000	2000	2000
Zambia	2000	2000 *	2000 *	2000 *
		1350 °	3600 °	6200 °
<u><i>Crocodylus cataphractus</i></u>				
Congo	-	600	600	600
<u><i>Osteolaemus tetraspis</i></u>				
Congo	-	500	500	500
<u><i>Crocodylus porosus</i></u>				
Indonesia	2000	2000	4000	4000

\* = wild specimens

° = ranched specimens

Following discussions at the second TEC meeting, in 1986, a Working Group had drafted three resolutions on controls on trade in ranched, captive-bred, look-alike and quota species. The first (Resolution Conf. 6.21) aimed to strengthen the controls on trade in Appendix I species bred in captivity primarily by requiring that the products be marked at least by the standards demanded for ranching operations (in Resolution Conf. 5.16), and also by establishing a mechanism for deleting operations from the register held by the Secretariat should they cease to meet the necessary standards. A controversial amendment, proposed by St Lucia, was eventually accepted which further required that the inclusion in the register of operations breeding species not already listed in the register must be agreed by the Conference of the Parties. The second resolution (Resolution Conf. 6.22) resolved that Parties should submit detailed annual reports of the conduct of ranching operations and established a procedure for transferring the populations back to Appendix I if serious and insoluble problems became apparent. It gave the Secretariat the power to investigate the conduct of ranching operations and to report on any deficiencies. All products of ranching operations are to be considered "readily recognizable" under the terms of Resolution Conf. 5.9. Resolution Conf. 6.17 strove to resolve the potential problem of

Parties building up stocks of tags for crocodile skins to be exported under quota, by ensuring that unused tags be destroyed at the end of the year to which they apply.

In response to requests for further information on sea turtles made at previous meetings, the Secretariat had contracted IUCN's Conservation Monitoring Centre to prepare a report on the biological and trade status of *Chelonia mydas* and *Eretmochelys imbricata* (Green Turtle and Hawksbill Turtle). The results of this study were presented and Parties were urged to comment on the draft report prior to its publication. The only proposal on ranching was that put forward by France to transfer the populations of *Chelonia mydas* on the islands of Europa and Tromelin to Appendix II. The proposal had been substantially revised since the one rejected at Buenos Aires, and TEC had subsequently approved the new marking procedures, which had been the chief grounds for the rejection. France pointed out that the turtle populations on the two islands were amongst the largest in the Indian Ocean, well protected and probably stable. The ranching operation was said to confer significant advantages in terms of augmenting the survival of hatchlings and of adult females and in promoting turtle research in the region. Strong opposition was voiced by a number of Parties, mostly based on evidence of inadequate controls in France of trade in turtle products, particularly focusing on the French Overseas Departments in the Caribbean, where turtles are still legally harvested and which are thought to act as a point of entry to the EEC for illegal turtle products. After lengthy discussion, a secret ballot was requested at which the proposal was rejected by 37 votes to 14 with 5 abstentions and one null vote. France then requested guidance on how the proposal could be improved in such a way that it might be acceptable to a future meeting of the Conference of the Parties. This resulted in the adoption of Resolution Conf. 6.23, requesting IUCN to convene a meeting to draw up guidelines for the evaluation of turtle ranching proposals, which should be submitted to the Secretariat by 30 April 1988.

Trade in plant specimens: At the fifth meeting of the Conference of the Parties, it was agreed to annotate Appendix II for plants to indicate that, unless otherwise stated, all parts and derivatives were included except seeds, spores and pollen (including pollinia), tissue cultures and flaked seedling cultures. In the apparent belief that this would not apply to species listed in future, the Plant Working Group had prepared a draft resolution: specifying that all the above "are standard exemptions for Appendix II and III plants"; and recommending that the list of forms in which plants and their parts and derivatives are commonly traded (recommended in Resolution Conf. 4.24) be prepared by the Identification Manual Committee. This was adopted (Resolution Conf. 6.18). The Plant Working Group also prepared Resolution Conf. 6.19, on artificially propagated hybrid plants, which allows Appendix I species to be annotated so that: for annotated taxa, export permits or re-export certificates are required for all artificially propagated hybrids (in accordance with Resolution Conf. 2.13); and hybrids produced from one or more non-annotated Appendix I taxa may be traded with a certificate of artificial propagation. (The Resolution does not mention hybrids between annotated and non-annotated taxa but it is presumed that the Plant Working Group intended export permits and re-export certificates to be required in this case). Finally, Resolution Conf. 6.20 was adopted, recommending that the Nomenclature Committee prepare a standard nomenclature for Cactaceae, detailed to the lowest taxonomic level possible, for adoption by the Conference of the Parties.

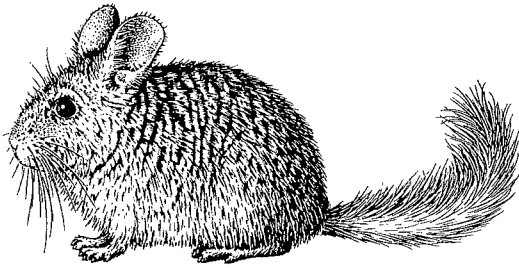
The Working Group on Significant Trade in Appendix II Species had considered the draft report on this subject, by the IUCN Conservation Monitoring Centre (CMC), in

June 1986. At that time, a series of recommendations and priorities had been established. The Secretariat had initiated studies (with external funding) on Hyacinth Macaw *Anodorhynchus hyacinthinus*, Spectacled Caiman *Caiman crocodilus*, Tegus *Tupinambis* spp., Asian Varanidae and Latin American spotted cats (Felidae) and otters (Lutrinae). The final reports of the first and last-named studies were available in Ottawa. The relevant pages of CMC's draft report had also been sent out to all Parties and to several ngos for comments; those received were being incorporated and the report was expected to be finalised by the end of 1987. No further resolution was needed since the programme for continued action on this subject had already been agreed (in Resolution Conf. 5.3) and the tasks of the Working Group were included in the terms of reference for the newly created Animals Committee.

The Netherlands had prepared a document about the problem of retrospective issuance of CITES documentation. They cited examples where commercial shipments had been seized at the port of entry into a Party state because the required export/re-export documents were not available. However, such documents have often been issued and presented subsequently, without the issuing authorities having inspected the shipments and in spite of them having been exported illegally. Sometimes Management Authorities have been requested to issue retrospective export permits even though they were not the actual country of export. Permits issued retrospectively have had the effect of undermining the due process of law in importing countries. Equally problematic was a case where, after a shipment had been seized in an importing country, the Management Authority of the exporting state issued a statement about the legality of the shipment, without ever having inspected it. To prevent these and similar problems in future, Resolution Conf. 6.6 was adopted, with the following elements: all Parties are urged to implement strictly the Convention's provisions with respect to the issuance and presentation of CITES documents prior to trade taking place, and to implement the necessary domestic legislation. It was recommended that: a) Management Authorities of exporting/re-exporting states not issue CITES documents retrospectively, and not provide to exporters, or to consignees in importing countries, declarations about the legality of exports that took place without the required documents or the legality of export documents that did not meet the requirements of CITES at the time they were used; b) Management Authorities of importing or transit countries should not accept retrospective export documents; c) exceptions to a) and b) may only be made for Appendix II and III specimens and only if co-operative investigations by the importing and exporting states' Management Authorities conclude that the traders were not at fault and that the trade was otherwise legal.

The organisers of travelling fur trade exhibits face the problem that they move fur garments of several Appendix II species from their country of manufacture to display centres in several countries, selling off a few at each place, and returning with the unsold specimens. A typical route is Canada to Norway to Sweden to F.R. Germany and back to Canada, and new CITES documents must be obtained at each stage. To relieve the administrative burden, Canada proposed the adoption of a special type of export permit for multiple use under the above circumstances, so that just one document would be needed for the whole round trip. The Conference of the Parties rejected this proposal, several delegations to the meeting stating that the system would be open to abuse. The Secretariat suggested that, as the problem was administrative, the countries concerned should take appropriate measures to solve the problems raised.

Although chinchillas *Chinchilla* spp. are listed in CITES Appendix I with the annotation "population of South America", Canada reported that there had been confusion among Parties about the status of captive bred populations of the chinchilla occurring outside of South America. To clarify this confusion, it was agreed to change the annotation to state categorically that chinchilla bred in countries outside South America are not included in the Appendices.



Long-tailed Chinchilla *Chinchilla lanigera*

Illustration by A. Coray  
© CITES Secretariat

The implementation of the Convention with regard to personal and household effects had continued to create problems and confusion. This was partly because there had been hardly any response to the recommendation, in Resolution Conf. 4.12, that "Parties which regulate the export or import of Appendix II tourist souvenir specimens . . . communicate to the Parties through the Secretariat which species are so regulated." Without this information, it is not possible to implement correctly or uniformly the exemption allowed for Appendix II personal and household effects under Article VII of the Convention. In addition, some states attempt to control and report on all trade in such effects and others implement few if any controls. As a result, tourists frequently have specimens seized; and annual report data show great inconsistencies and are incomplete and useless for monitoring. A long and comprehensive draft resolution was proposed by Belgium, clarifying the correct treatment of specimens under the Article VII exemption. However this was evidently considered premature and was drastically amended in committee session so that Plenary adopted Resolution Conf. 6.8: requesting the Standing Committee to examine the matter further and make recommendations to the next meeting; and urging Parties that do not regulate trade in Appendix II tourist souvenirs to inform the Secretariat by 31 December 1987, and subsequently inform them of any change in the regulations. Although not stated in the Resolution, Parties which send nothing to the Secretariat may be assumed to regulate Appendix II personal and household effects, and the countries with which they trade will know what documents are required.

The question of interpretation of Article XIV paragraph 1 had been raised as a problem at the fifth meeting of the Conference of the Parties. A document from ten African Parties there had highlighted the difficulties experienced in some exporting countries when importing countries implemented domestic legislation stricter than CITES required. Since then, a working group had met and prepared a draft resolution to solve the problem by ensuring mutual consultation between importing and exporting countries. As adopted by the Conference of the Parties, Resolution Conf. 6.7 recommends: that each Party intending to take measures to control trade in non-indigenous CITES species more strictly than the Convention requires, should notify the range states as early as possible and consult with range

states that wish to confer; and that Parties having already taken such measures consult with the range states on their appropriateness if so requested.

The Working Group on Transport of Live Specimens had drafted a resolution on shipment of live animals, that was adopted (Resolution Conf. 6.24), recommending the use of a "health and welfare checklist" (of which a model was adopted) which would be signed by an authorised person immediately prior to shipment. On arrival at the port of entry in the country of destination, the reporting system for specimens stressed during transport (Resolution Conf. 4.21) should be used. The Resolution also recommended: that applicants for export/re-export documents be notified that their issuance is conditional on the specimens being shipped in accordance with IATA Live Animals Regulations and the CITES Guidelines on Transport of Live Specimens; that, where Parties have designated ports of exit and entry, animal holding facilities and cargo sheds and relevant documents be open for inspection by appropriate authorities and technical observers; and that Parties gather information on mortality relating to transport, and/or its causes. The committee session agreed, on the UK's recommendation, that the Working Group should continue its work; but this was not endorsed by the Plenary session.

The designation of Scientific Authorities by Parties is obligatory under Article IX, paragraph 1, of the Convention. Yet many Parties have not designated such authorities or, if they have, have not informed the CITES Secretariat. The USA had prepared a draft resolution, to urge Parties to correct this situation, and reminding potential new Parties of the above requirement. However, it withdrew this proposal on the understanding that the Secretariat would pursue the matter individually with each relevant Party.

The relationship between CITES and the European Economic Community (EEC) was on the agenda in view of the amendment to Article XXI of the Convention (not yet in force) to allow accession by regional economic integration organisations (the Gaborone amendment), and in view of the concern expressed about the implementation of CITES in the EEC, and about the lack of reporting on intra-Community trade. The Conference of the Parties adopted Resolution Conf. 6.5, by consensus: congratulating the EEC on commissioning an independent study of the Community's implementation of CITES; recommending that the study be made available to the Secretariat, Parties and ngos, and suggesting that other Parties consider the benefits of similar studies of their own implementation. In view of the abolition of internal EEC border controls, the Resolution also requested the EEC to establish a Community inspectorate to ensure Community supervision of Community legislation. The Resolution also recommended that the EEC Member States monitor intra-Community movements of CITES specimens, and urged Parties to ratify the Gaborone amendment.

The next meeting of the Conference of the Parties to CITES will be held in Indonesia, in October 1989.

The following three pages summarise:

- a) proposals adopted;
- b) proposals rejected; and
- c) proposals withdrawn.

a) Proposals adopted

## F A U N A

## MAMMALIA

Pteropus insularis Truk Flying-fox  
Pteropus macrotis Big-eared Flying-fox  
Pteropus mariannus Marianas Flying-fox  
Pteropus molossinus Ponape Flying-fox  
Pteropus phaeocephalus Mortlock Flying-fox  
Pteropus pilosus Large Palau Flying-fox  
Pteropus samoensis Samoan Flying-fox  
Pteropus tokudae Guam Flying-fox  
Pteropus tonganus Insular Flying-fox  
 Inclusion in App. II, dead specimens only being subject to CITES controls.

Erinaceus frontalis\* South African Hedgehog  
Nesolagus netscheri\* Sumatran Short-eared Rabbit

Lariscus hosei\* Four-striped Ground Squirrel

Dipodomys phillipsii Phillips' Kangaroo Rat  
phillipsii\* Hopping mice  
Notomys spp.  
 Deletion from App. II.

Pseudomys fumeus Smoky Mouse  
 Deletion from App. I.

Pseudomys shortridgei Heath Rat  
 Deletion from App. II.

Dusicyon gymnocercus Pampas Fox  
 Inclusion in App. II.

Felis yagouaroundi Jaguarundi  
 Inclusion in App. I for North and Central American populations in lieu of subspecies F.y. cacomitli, F.y. fossata, F.y. panamensis, F. y. tolteca.

Panthera tigris altaica Siberian Tiger  
 Transfer from App. II to I.

Catagonus wagneri Chacoan Peccary  
 Inclusion in App. I.

Tayassu spp. Peccaries  
 Inclusion in App. II, excluding USA population.

Vicugna vicugna Vicuna  
 Transfer from App. I to II of parts of populations of Chile and Peru\*\*, to allow trade in cloth under certain conditions.

## AVES

Balaeniceps rex Shoebill  
 Inclusion in App. II.

Mycteria cinerea Milky Stork  
 Inclusion in App. I.

Eudocimus ruber Scarlet Ibis  
 Inclusion in App. II.

Megapodius freycinet Abbott's Scrubfowl  
abbotti\*  
Megapodius freycinet Nicobar Scrubfowl  
nicobariensis\*  
Tetrao mlokosiewiczzi\* Caucasian Black Grouse  
 Deletion from App. II.

Rheinartia ocellata Crested Argus Pheasant  
 Inclusion in App. I.

## AVES ctd.

Otididae spp. Bustards  
 Inclusion in App. II.

Numenius minutus\* Little Curlew  
Larus brunnicephalus\* Brown-headed Gull  
 Deletion from App. II.

Anodorhynchus hyacinthinus Hyacinth Macaw  
Ara militaris Military Macaw  
Probosciger aterrimus Palm Cockatoo  
 Transfer from App. II to I.

Trochilidae spp. Hummingbirds  
 Inclusion in App. II.

Picus squamatus Western Scaly-bellied Woodpecker  
flavirostris\*  
Psophodes nigrogularis\* Western Whipbird  
 Deletion from App. II. Flycatcher

Gubernatrix cristata Yellow Cardinal  
Paroaria capitata Yellow-billed Cardinal  
Paroaria coronata Red-crested Cardinal  
 Inclusion in App. II.

Emblema oculata\* Red-eared Firetail  
 Deletion from App. II.

## REPTILIA

Crocodylus cataphractus Short-nosed Crocodile  
Osteolaemus tetraspis West African Dwarf Crocodile  
 Transfer to Appendix II of Congo population, subject to quotas (see p. 38).

Paradelma orientalis\* Queensland Snake-lizard  
 Deletion from App. II.

Gallotia simonyi Hierro Giant Lizard  
 Inclusion in App. I.

Podarcis pityusensis Ibiza Wall Lizard  
Podarcis lilfordi Lilford's Wall Lizard  
 Inclusion in App. II.

Boa constrictor Argentine Boa  
occidentalis Constrictor  
 Transfer from App. II to I.

Thamnophis couchi Two-striped Garter Snake  
hammondi\*  
 Deletion from App. II.

Vipera ursinii Ursini's Viper  
 Inclusion in App. I of European population only, excluding USSR.

## AMPHIBIA

Ambystoma lermaense\* Lake Lerma Salamander  
 Deletion from App. II.

Dendrobates spp. Poison-arrow frogs  
Phyllobates spp. Poison-arrow frogs  
 Inclusion in App. II.

Dyscophus antongilii Tomato Frog  
 Inclusion in App. I.

## PISCES

<u>Salmo chrysogaster*</u>	Mexican Golden Trout
<u>Stenodus leucichthys leucichthys*</u>	White Salmon
<u>Plagopterus argentissimus*</u>	Woundfin
<u>Ptychocheilus lucius*</u>	Colorado River Squawfish
<u>Xiphophorus couchianus*</u>	Monterrey Platyfish
Deletion from App. II.	

## INSECTA

<u>Bhutanitis spp.</u>	Bhutanitis swallowtails
Inclusion in App. II.	

<u>Ornithoptera alexandrae</u>	Queen Alexandra's Birdwing
Transfer from App. II to I.	

<u>Papilio chikae</u>	Luzon Swallowtail
<u>Papilio homerus</u>	Homerus Swallowtail
<u>Papilio hospiton</u>	Corsican Swallowtail
Inclusion in App. I.	

<u>Teinopalpus spp.</u>	Kaiser-I-Hinds
Inclusion in App. II.	

## ANNELIDA

<u>Hirudo medicinalis</u>	Medicinal Leech
Inclusion in App. II.	

## MOLLUSCA

<u>Choromytilus chorus*</u>	Choro
Deletion from App. II.	

<u>Coahuilix hubbsi*</u>	Cuatro Cienagas snails
<u>Cochliopina milleri*</u>	
<u>Durangonella coahuilae*</u>	
<u>Mexipyrgus carranzae*</u>	
<u>Mexipyrgus churinceanus*</u>	
<u>Mexipyrgus escobedae*</u>	
<u>Mexipyrgus lugoi*</u>	
<u>Mexipyrgus mojarralis*</u>	
<u>Mexipyrgus multilineatus*</u>	
<u>Mexithauma quadripaludium*</u>	
<u>Nymphophilus minckleyi*</u>	
<u>Paludiscala caramba*</u>	
Deletion from App. II.	

<u>Achatinella spp.</u>	Oahu tree snails
Inclusion in App. I.	

## F L O R A

## CACTACEAE

<u>Astrophytum asterias</u>	Star Cactus
Transfer from App. II to I.	

## CUPPRESSACEAE

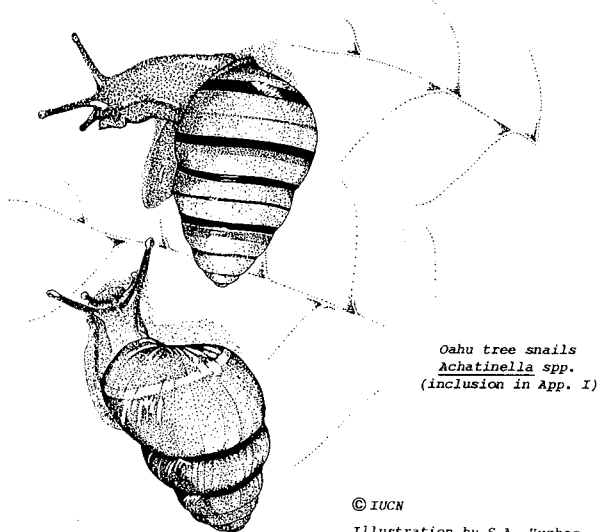
<u>Fitz-Roya cupressoides</u> (Chilean coastal population)	Alerce
Transfer from App. II to I.	

## CYCADACEAE

<u>Cycas beddomei</u>	Beddome's Cycad
Transfer from App. II to I.	

## NEPENTHACEAE

<u>Nepenthes spp.</u>	Pitcher-plants
Inclusion in App. II.	
<u>Nepenthes khasiana</u>	Indian Pitcher-plant
Inclusion in App. I.	



Oahu tree snails  
*Achatinella* spp.  
(inclusion in App. I)

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Illustration by S.A. Hughes

## ORCHIDACEAE

<u>Paphiopedilum druryi</u>	Drury's Slipper Orchid
Transfer from App. II to I.	

## PALMAE

<u>Chrysalidocarpus lutescens</u>	Areca Palm
Deletion from App. II.	

## SARRACENIACEAE

<u>Sarracenia spp.</u>	North American pitcher-plants
Inclusion in App. II.	

b) Proposals rejected

## F A U N A

## MAMMALIA

<u>Eupleres goudotii*</u>	Falanouc
Deletion from App. II.	

## AVES

<u>Pitta brachyura nympha*</u>	Fairy Pitta
Deletion from App. II.	

## REPTILIA

<u>Chelonia mydas</u>	Green Turtle
Transfer from App. I to II of Europa and Tromelin populations in context of Resolution Conf. 3.15 on ranching (see p. 39).	

## AMPHIBIA

<u>Mantella aurantiaca</u>	Golden Frog
Inclusion in App. I.	

## ANTHOZOA

<u>Corallium rubrum</u>	Mediterranean Coral
Inclusion in App. II.	

## F L O R A

## COMPOSITAE

<u>Saussurea lappa</u>	Kuth
Transfer from App. I to II.	

Mountain Pygmy Possum  
*Burramys parvus*  
(deletion from App. II)



Illustration by E. Fry  
© CITES Secretariat

### c) Proposals withdrawn

#### FAUNA

##### MAMMALIA

<u>Phalanger lulluiae</u> <u>Myrmecobius fasciatus</u> Inclusion in App. I.	Woodlark Island Cuscus Numbat
<u>Burramys parvus</u> * Deletion from App. II.	Mountain Pygmy Possum
<u>Cynogale bennettii</u> * Deletion from App. II.	Otter-civet
<u>Odobenus rosmarus</u> Inclusion in App. II.	Walrus
<u>Trichechus senegalensis</u> * Deletion from App. II or transfer from App. II to I.	African Manatee
<u>Pudu mephistophiles</u> * Deletion from App. II.	Northern Pudu

##### AVES

<u>Anas bernieri</u> * <u>Francolinus ochropectus</u> * <u>Francolinus swierstrai</u> * <u>Pedionomus torquatus</u> * <u>Pseudochelidon sirintarae</u> *	Madagascar Teal Djibouti Francolin Swierstra's Francolin Plains-wanderer White-eyed River Martin
<u>Niltava ruecki</u> *	Rueck's Blue Flycatcher
<u>Carduelis yarrellii</u> * Deletion from App. II.	Yellow-faced Siskin
<u>Meliphaga cassidix</u> Deletion from App. I.	Helmeted Honeyeater

#### REPTILIA

<u>Clemmys muhlenbergi</u> * Deletion from App. II.	Bog Turtle
<u>Chelonia mydas</u> <u>Eretmochelys imbricata</u> Transfer from App. I to II of Indonesian populations.	Green Turtle Hawksbill Turtle
<u>Phrynosoma coronatum</u> <u>blainvillei</u> * Deletion from App. II.	San Diego Horned Lizard

#### AMPHIBIA

<u>Dendrobates</u> <u>altobueyensis</u> Inclusion in App. I.	Golden Poison-arrow Frog
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#### PISCES

<u>Latimeria chalumnae</u> * Deletion from App. II.	Coelacanth
<u>Scleropages formosus</u> Transfer from App. I to II of Indonesian population.	Asian Bonytongue
<u>Caecobarbus</u> <u>geertsi</u> * Deletion from App. II.	African Blind Barb Fish
<u>Cynolebias constanciae</u> * <u>Cynolebias marmoratus</u> * <u>Cynolebias minimus</u> * <u>Cynolebias opalescens</u> * <u>Cynolebias splendens</u> * Deletion from App. II.	

#### MOLLUSCA

<u>Cyprogenia aberti</u> * <u>Epioblasma torulosa rangiana</u> * <u>Fusconaia subrotunda</u> * <u>Lampsilis brevicula</u> * <u>Lexingtonia dolabelloides</u> * <u>Pleurobema clava</u> * <u>Paryphanta spp.</u> * Deletion from App. II.	Pearly Mussels
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#### FLORA

##### ORCHIDACEAE

<u>Iphigenia stellata</u> Inclusion in App. II.	Starry Iphigenia
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##### LILIACEAE

<u>Dendrobium pauciflorum</u> Transfer from App. II to I.	
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\*proposals submitted in the context of ten-year review of the Appendices.

\*\*Chile - part of the population of Parinacota Province, Ia. Region of Tarapacá;  
Peru - populations of Pampa Galeras National Reserve and Nuclear Zone, Pedregal, Oscontana and Sawacocho (Province of Lucanas), Sais Picotani (Province of Azangaro), Sais Tupac Amaru (Province of Janín) and Salinas Aguada Blanca National Reserve (Provinces of Arequipa and Cailloma).

## The Psittacine Trade in Bordeaux

by Gwénola le Serrec, TRAFFIC (France)

From 22 September to 2 October 1986, TRAFFIC (France) carried out an investigation into the application of CITES in Bordeaux, one of the 55 ports of entry into France. The study was in three parts:

- an investigation into the application of CITES in Bordeaux by the official services and associations for the protection of nature;
- an analysis of psittacine imports into Bordeaux in 1985 according to entry certificates issued by the Border Veterinary Services;
- an investigation into psittacine retailers: the species, and the numbers of specimens on display.

The main official services monitoring the importation of wild fauna at Bordeaux are the Customs officers and the Border Veterinary Services. Officially, all imports go through Merignac Airport; any shipments passing through the maritime port are illegal.

Customs officers control the shipping papers which include CITES permits. In general, only the export permit from the country of origin is presented by the dealer. The importer benefits from an allowance of one month before having to present Customs with the import permit. This may be obtained retrospectively after the Management Authority has seen the original CITES export permit. The animals are delivered directly to their destination by the importer before presentation of the import permit, because the airport lacks facilities in which to hold animals for inspection.

In addition to checking the health of the animals, the Border Veterinary Services are responsible for identifying species and counting individuals. During this survey the veterinarian in charge was found to have neither adequate training nor the identification manuals necessary for accomplishing the latter task. Moreover, the veterinary controls are made difficult, if not impossible, by the complete absence of animal holding facilities. The veterinarian issues a health certificate, and he rarely takes into account whether CITES requirements have been met.

There are only a few cases where animals have been seized. It would appear that, when animals arrive in violation of CITES, Customs officers prefer to deal with the problem amicably, again due to the lack of any official procedure to take seized animals into charge.

The local associations for the protection of nature are not really concerned with the application of CITES.

The total number of birds imported into Bordeaux in 1985, as recorded by the Border Veterinary Services, was 19 259, of which 6576 were psittacines.

As the 'entry passes' issued by the Border Veterinary Services do not indicate which species have been imported, it is difficult to verify the identification of the psittacines.

Of a total of 14 pet shops operating in Bordeaux, eight sell psittacines (other than Budgerigar *Melopsittacus undulatus*) on a regular basis.

Over a 4-day period in September 1986, a survey of the pet shops showed a total of 182 specimens of 31 psittacine species for sale (not including *M. undulatus* and the Cockatiel *Nymphicus hollandicus*) (see table). No specimens of Appendix I species were for sale.

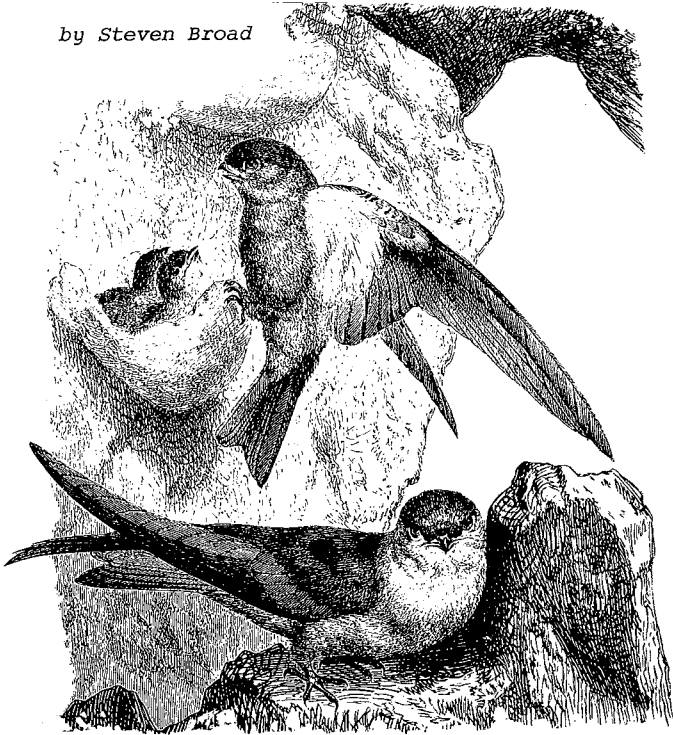
In spite of the fact that Bordeaux is traditionally a city of considerable and varied trade in psittacines, the officially recorded importation through the airport is low compared to airports and ports of entry such as Roissy, Lyon, Risquon or Orly. However the poor facilities and inadequate training of the authorised officials means that CITES regulations are, as a consequence, difficult to enforce.

### Species for sale at eight pet shops visited in Bordeaux (22-25 September 1986)

Species	Total No. of Birds
<i>Agapornis cana</i> Grey-headed Lovebird	1
<i>Agapornis fischeri</i> Fischer's Lovebird	42
<i>Agapornis personata</i> Masked Lovebird	2
<i>Agapornis roseicollis</i> Peach-faced Lovebird	7
<i>Amazona aestiva</i> Blue-fronted Amazon	9
<i>Amazona ochrocephala</i> Yellow-crowned Amazon	2
<i>Anodorhynchus hyacinthinus</i> Hyacinth Macaw	1
<i>Ara ararauna</i> Blue-and-yellow Macaw	3
<i>Ara severa</i> Chestnut-fronted Macaw	1
<i>Barnardius barnardi</i> Mallee Ringneck Parrot	2
<i>Cacatua galerita</i> Greater Sulphur-crested Cockatoo	2
<i>Cacatua moluccensis</i> Salmon-crested Cockatoo	1
<i>Cacatua sulphurea</i> Lesser Sulphur-crested Cockatoo	1
<i>Cyanoliseus patagonus</i> Patagonian Conure	1
<i>Cyanoramphus novaezelandiae</i> Red-fronted Parakeet	2
<i>Lorius garrulus</i> Chattering Lory	1
<i>Myiopsitta monachus</i> Monk Parakeet	1
<i>Nandayus nenday</i> Black-headed Conure	2
<i>Neophema bourkii</i> Bourke's Parrot	5
<i>Neophema pulchella</i> Turquoise Parrot	3
<i>Nymphicus hollandicus</i> Cockatiel	47
<i>Platycercus elegans</i> Crimson Rosella	2
<i>Poicephalus meyeri</i> Meyer's Parrot	1
<i>Poicephalus senegalus</i> Senegal Parrot	6
<i>Polytelis alexandrae</i> Princess Parrot	3
<i>Psephotus haematonotus</i> Red-rumped Parrot	10
<i>Psittacula cyanocephala</i> Plum-headed Parakeet	1
<i>Psittacus erithacus</i> Grey Parrot	20
<i>Pyrrhura frontalis</i> Maroon-bellied Conure	2
<i>Trichoglossus ornatus</i> Ornate Lorikeet	1

## Swiftlets' Spit in the Soup

by Steven Broad



A number of swiftlet species of the genus *Collocalia*, members of the swift family (Apodidae), build extremely valuable nests. These nests, which consist largely of the birds' saliva, are used to make birds' nest soup, a Chinese gastronomic delicacy which is traditionally claimed to convey numerous beneficial effects to the consumer. The following brief summary of known information relating to the trade in birds' nests, precedes a more detailed analysis of the trade which when completed will be published in a future issue of the *Traffic Bulletin*.

The number of species in the genus *Collocalia* is uncertain. However there are probably in the range of 10-15 species (Morony *et al.*, 1975) distributed over a large range, including much of South East Asia and the islands in the Indian and Pacific Oceans. Some recent revisions of the nomenclature of the swiftlets, for example that by Medway and Pye (1977), have included many of these species in the genus *Aerodramus*, although this is by no means universally accepted.

Many of the swiftlet species have well developed echolocation systems which facilitate their use of caves as nesting sites. Like other swift species, the cave-dwelling swiftlets use saliva in nest-building. A cup-shaped nest is built, usually attached to a vertical surface. The nest composition varies among the different species but there are three basic types. The most sought after and valuable nests in trade are those wholly consisting of saliva, which are usually classified as 'white nests'. The second type of nest, the 'black nest', consists of feathers cemented together with saliva. Black nests, though less valuable, are also collected for trade, however the feathers have to be removed before sale. The third type of nest includes moss or other vegetable matter together with some saliva; these nests are discarded by collectors as they are valueless. Perhaps as few as three swiftlet species supply the bulk of the nests in trade (Sims, 1959). The species whose nests are traded in the largest numbers (following Morony *et al.* (1975)), are the Edible-nest Swiftlet *Collocalia fuciphaga* which builds white nests and the Black-nest Swiftlet *Collocalia maxima* whose English name is self-explanatory.

Nest collecting is an extremely hazardous occupation. Collectors use bamboo scaffolding or rattan ladders to reach the highest parts of the caves where the nests are found, often climbing over 40 m above the cave

floor. The nests are then collected by torchlight, usually by hand but sometimes by use of wooden poles. The number of fatalities among nest collectors is reportedly low, a reflection of their skill rather than the quality of safety precautions taken. In one year, up to three nests may be collected from one pair of birds. However collecting has been restricted to two harvests a year in some caves, such as the Gomantong caves in Sabah, Malaysia, in order to minimise any detrimental effects on the swiftlet population (de Groot, 1983). Swiftlets are also occasionally known to nest in houses and it has been reported that, in such cases, it is not unusual for the inhabitants to vacate the premises until the nests can be collected, the high value of the nests being ample compensation for the inconvenience (Middleton, 1986).

The trade in birds' nests has become a well organised industry. Nests have been reported to be collected in large numbers in India, Burma, Thailand, Malaysia (especially Sabah and Sarawak), Indonesia and the Philippines (Earl of Cranbrook (formerly Lord Medway), *in litt.* to J. Rudge, 1982). Initial impressions of the trade, gained from the statistics collected so far, indicate that the trade routes, between collection and consumption, are complicated, that a number of the source countries both export and re-export nests, and that Hong Kong and Singapore are probably the largest markets. The total annual volume of this trade is unknown. A number of countries produce trade statistics which detail imports and exports of swiftlet nests but, so far, the data collected are insufficient to estimate the size of world trade.

As an illustration of the extent of the trade, *Table 1* summarises Hong Kong's imports and re-exports of edible birds' nests as recorded in their Customs reports for the period 1982 to 1985. Over this four-year period, an annual average of 94 tonnes (t) of nests were imported, while re-exports averaged just over 13 t a year. The total declared value of the imports averaged annually around HK\$53M (approximately US\$6.75M). Indonesia was the largest source of nests recorded in the Hong Kong data, although Sabah, Sarawak, Singapore and Viet Nam were also reported to supply large numbers. Imports from Burma and Thailand, although smaller in number than those from the major sources, were recorded with very high declared values which exceeded HK\$2000 a kg in most years, compared with the HK\$570 a kg overall average over the period studied. By far the major destination of re-exports from Hong Kong was the USA, although Canada and Japan were reported destinations of substantial quantities in some years. However it is notable that such re-exports are small compared to the numbers reportedly imported, and that the data imply an average consumption of over 80 t of edible birds' nests in Hong Kong each year during the period 1982 to 1985.

The value of the nests increases greatly between collection and retail. Sims (1959) estimated that prices increase by around 1500% to 3000% during transportation from local markets in Sabah to restaurants in Hong Kong. White nests were reported by Chapman (1987) to be worth about 5 Malaysian dollars (around US\$2.20) each to collectors in Sabah during 1986. As de Groot (1983) estimated that 1 kg of nest material may consist of up to 50 swiftlet nests, these white nests can be estimated to have been worth about US\$110 a kg. This price can be compared with the declared values of nests in trade, indicated in *Table 1*, although such comparison is hampered by the fact that the relative numbers of white and black nests in trade are unknown. Smythies (1981) reported that black nests were worth about one twenty-fifth of the value of white nests.

Recent indications of final retail value include the price of US\$2000 a kg paid for white nests in Bangkok in the early 1980s, and US\$8000 a kg for top-quality nests on sale in a Hong Kong restaurant (de Groot, 1983). These retail values for white nests, although based on one report and therefore in need of confirmation, indicate that white edible birds' nests were one of the most valuable animal



products in the early 1980s. Comparison can be made with the value of musk from the Himalayan Musk Deer *Moschus chrysogaster*. Although the retail value of musk in 1983 is unknown, the retail value in Japan in 1981 of US\$20 000 a kg, reported by Green (in press), at that time represented an increase of 180% over the value declared in official Japanese import statistics. Assuming a similar increase in value between import and retail was operative in 1983, the declared value in Japanese import statistics for that year of almost US\$6500 a kg (Green, in press), would indicate a retail price of under US\$12 000 a kg. These comparative values can be viewed with reference to the fact that world trade in musk in 1983 was estimated to have totalled only 387 kg (Green, in press), while imports of edible birds' nests into Hong Kong alone for the same year, in which admittedly the proportion of white and black nests is unknown, totalled 81 t.

Based on de Groot's (1983) estimate of 50 nests per kg, Hong Kong's imports alone may account for as many as 5 million nests each year. Although many collection sites are policed in order to minimise detrimental effects on swiftlet populations, there are fears in some areas that populations are decreasing. Such worries have prompted the Malaysian Forest Department to instigate population surveys in the Gomantong Caves, Sabah, one of the major collection sites in the country.

TABLE 1  
Hong Kong's imports and re-exports of edible  
birds' nests (1982-1985)

	Total imports (kg) (average value per kg in HK\$)	Total re-exports (kg) (average value per kg in HK\$)
1982	105661 (391)	18018 (437)
1983	81325 (513)	11189 (501)
1984	84686 (725)	10778 (878)
1985	104285 (647)	12987 (907)

Source: Hong Kong Customs statistics

There are a variety of recipes for making birds' nest soup, including such exotic-sounding treats as 'Nests of sea-swallows with fresh snake venom and Chrysanthemum

petals with lemon grass and lotus seeds in soup' (Chapman, 1987). De Groot (1983) stated that about six nests were used to make soup for four people. The alleged nutritive properties of the soup have been questioned in the past (Medway, 1969) but, according to Middleton (1986), recent research in Hong Kong has reinforced such claims.

A full appraisal of the trade in edible birds' nests, and its possible effects on the populations of the species involved, will require more trade data, further information on the controls exerted on nest collecting in different countries, and more-detailed evidence of the effects of such collection in areas of heavy exploitation. WTMU would be extremely grateful for any suggestions from readers who are aware of sources of such information.

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## EEC Urges 'Roo Trade Controls

The European Parliament has adopted a resolution which urges the European Economic Commission and Council:

1. to amend the EEC-Regulation 3626/82, on CITES, so that species of fauna and flora not listed in the Appendices to CITES can be included in Annex C of the Regulation;
2. to place the Red Kangaroo *Macropus rufus*, Western Grey Kangaroo *M. fuliginosus*, and the Eastern Grey Kangaroo *M. giganteus* in Annex C, Part 2 of the EEC-CITES Regulation;
3. to place all the other 45 named species of the Australian kangaroo family Macropodidae in Annex C, Part 1 of the EEC-CITES Regulation;
4. to extend the EEC-CITES Regulation, to include an Annex D listing all wild vertebrates affected by trade and for which Community import and export statistics are compiled;

5. to support initiatives with a view to a draft convention on cruelty (International Convention for the Protection of Animals) and to take measures for the implementation of such a provision for the Community;
6. to bring every possible form of pressure to bear so as to remind Australia (in particular Queensland and Tasmania), of its responsibilities with regard to protecting its tropical forests and the kangaroos living in them; and
7. instructs its President to forward this resolution to the Council, the Commission and the Governments of the Member States.

Source: *European Parliament Session Document*, 5 June 1987

## The Silk Trade

Silk is the most expensive animal fibre in the world. Although most silk is consumed in producer countries, substantial quantities enter international trade, almost entirely for the production of high quality textiles.

In a report on The world market for silk, Dr Peter Greenhalgh of the Overseas Development Natural Resources Institute (previously the Tropical Development and Research Institute), UK, assesses the trends in markets for silk and looks at the commercial prospects for existing and potential markets. The report analyses the international trade in silk, in particular raw silk, and the imports and exports of major silk-producing countries. The following article summarises this information.

### Introduction

Silk enters international trade in a wide variety of forms, most commonly as raw silk, although trade in silk fabrics and finished products has increased considerably over the last twenty years.

Raw silk is obtained in the form of continuous filaments from the cocoons of "silkworms" (which are moth caterpillars). The cultivation of silkworms for silk production, sericulture, involves many types of silkworm. The most important is the Mulberry Silkworm Bombyx mori which feeds solely on Mulberry Morus alba leaves and is wholly domesticated. It produces a fine white-to-yellow silk and accounts for the largest proportion of silk in trade. Other varieties include the Tussah (Tasar or Tusore) Silkworm Antheraea pernyi, the Eri Silkworm Attacus ricini or Philosamia ricini, the Muga Silkworm A. assama, all of which are partially domesticated, and the Anaphe Silkworm Anaphe infracta, A. venata and A. moloneyi which is wild.

The Greenhalgh report concentrates on silk produced from the Mulberry Silkworm.

### Silk Processes and Products

Silk is processed in many ways: by silk reeling, which transforms cocoons into a continuous thread of raw silk; silk throwing, in which the threads are combined and twisted into various silk yarns; waste silk, which can be spun into yarns; and woven and knitted silk, which is made into fabrics and products such as kimonos and sarees, carpets, scarves and dresses. Whilst the whole range of silk products, from silkworm eggs onwards, enters international trade, cocoons are generally reeled in the country of production and it is raw silk and fabrics that dominate trade.

### Volume of Trade

Less than a quarter of world raw silk production enters international trade, but most countries either import or export some silk in one or more of its various forms. The precise volume and value of this trade, however, is difficult to assess, not only because of the wide variety of forms silk takes, but also because major trading nations, in particular China, do not provide a detailed breakdown of their trade statistics or of the destinations of silk exports.

Total annual world production of green mulberry silk cocoons is around 450 000 tonnes (t), equivalent to approximately 56 000 t of raw silk. About 11 000 t of raw silk are exported and silk yarn exports total around 3000-4000 t, whilst an increasing quantity of silk fabrics and made-up goods are entering international trade.

### Source Countries

Historical evidence shows that silk was developed in China at least 4500 years ago. Gradually knowledge of sericulture spread both eastwards and westwards to Japan, Korea, India, Persia (now Iran) and eventually to Western Europe and the Americas.

Nowadays, although much of the production of silk fibre and fabric has been completely mechanised, the breeding of silkworms is still a highly labour-intensive industry which can provide a significant income and employment to poor, rural communities. As a result, production of silk in developed countries such as Japan, Italy and France has declined or disappeared in recent decades, whereas production in developing or less-developed countries, particularly China, India, Korea and Brazil, has increased substantially. High profits and foreign exchange can be earned, but it is a complex agro-industrial process which requires considerable agricultural and processing skills, and attempts to introduce sericulture to several developing countries have not always been successful.

In the past three decades, some forty countries have produced raw silk and sericulture is quite widely practised in China, Japan, India, USSR, Brazil, and Korea. Whilst silk production in tropical countries has faced many difficulties, these regions now account for a growing proportion of world production.

**China:** China dominates the world silk industry. In the 1960s it replaced Japan as the major producer and exporter of raw silk, and now accounts for 80% of raw silk entering international trade. It is also an important exporter of spun silk yarns and noil yarns (obtained from the processing of waste silk).

In recent years, exports, currently valued at \$900M, have shown an upward trend, and major and successful efforts have been made to upgrade their quality, particularly fabrics and garments, to suit international market requirements.

**Japan:** Japan was for many centuries the world's largest producer and silk was a principal export. It is now the world's largest importer. With the rapid rate of industrial development and also the decline in the consumption of kimonos, there has been a diversion of land and labour away from Mulberry cultivation and silkworm rearing. Although it continues to be a major exporter of silk products, especially silk fabrics, Japanese raw silk production is declining and is now less than 10 000 t a year.

Japan is also an important producer and processor of silk waste, some of which is imported. Despite continued government support, however, the Japanese cocoon and raw silk market remains weak.

**India:** India produces silk throughout the year by using multivoltine silkworms (that normally produce several generations a year). In contrast, production elsewhere is mainly based on the use of bivoltine silkworms (producing two generations a year). Silk production in India continues to show very rapid growth, with production of Mulberry raw silk in 1985/86 exceeding 7000 t. India is a major importer of Chinese bivoltine raw silk, estimated at around 2000 t a year, and this is often combined with indigenous silk in the production of many silk products, particularly for export. Over 80% of Indian silk production is used for the production of silk sarees, nearly all of which are sold on the rapidly expanding domestic market.

**Republic of Korea:** Silk has been produced in South Korea for many centuries and in the period 1975-1977 production peaked at over 5000 t a year. South Korea is still a big supplier, but as a country becoming rapidly industrialised, production has slumped, despite government support.

Silk: major importers and exporters 1982\*

Tonnes (raw silk equivalent)

Country	IMPORTS				Total	EXPORTS				Total
	Raw silk	Silk yarn	Silk fabrics	Silk made-up goods		Raw silk	Silk yarn	Silk fabrics	Silk made-up goods	
Brazil	-	-	-	-	-	650	160	120	-	930
Bulgaria	-	-	10	-	10	30	50	-	-	80
China	-	40	150	10	200	8810	1430	4620	1380	16240
France	720	20	300	60	1100	-	10	170	160	340
Germany, F.R.	100	10	510	410	1030	-	-10	140	70	220
India	510	240	-	-	750	-	20	940	320	1280
Iran	-	-	20	-	20	-	-	-	120	120
Italy	3440	120	650	130	4340	30	170	910	740	1850
Japan	2300	850	3260	1280	7690	-	20	1090	210	1320
Korea (North)	-	-	-	-	-	90	10	10	-	110
Korea (South)	560	460	350	10	1380	350	350	1580	700	2980
Romania	-	-	-	-	-	-	-	-	10	10
Switzerland	140	10	140	80	370	10	40	60	40	150
Taiwan	320	110	20	-	450	-	10	320	40	370
Thailand	250	270	-	-	520	-	-	350	20	370
UK	90	20	310	250	670	-	10	80	80	170
USA	290	20	1840	3730	5880	-	280	40	80	400
USSR	990	-	20	20	1030	-	-	-	-	-
Viet Nam	-	-	-	-	-	-	-	10	-	10
Others	1270	1580	4210	1920	8980	1010	1180	1350	3930	7470
TOTAL	10980	3750	11790	7900	34420	10980	3750	11780	7900	34420

**Note:** \* only Mulberry silk is included, not wild silk or waste silk. To avoid a spurious sense of accuracy, data have been rounded to the nearest 10.

**Sources:** Japan Raw Silk and Sugar Stabilisation Agency. Individual country reports on external trade.

**Brazil:** Production has fluctuated widely, mainly because of Brazil's reliance on export markets, but it is still the sixth largest producer and second largest exporter of raw silk. Production is currently stable at around 1300 t, and efforts are being made to raise production levels. However it is unlikely that Brazil will become a major supplier of raw silk.

**USSR:** The Soviet Union is the fourth largest producer of raw silk. Most is thought to be for domestic consumption, however, and its role in international raw silk trade is not significant. It is the major exporter of silk waste, which may suggest some inefficiency in silk processing.

### Overview

There are over thirty countries producing and processing silk. China, and to a much lesser extent Brazil, dominate raw silk exports, although there is a sizeable entrepot trade involving mainly Hong Kong and Switzerland. Italy and Japan are the dominant raw silk importers, although many other countries import large quantities. The major exporters of silk goods are China, India, Japan, South Korea and Italy, whilst the dominant markets for silk goods are Western European countries, the USA and Japan.

Asian countries and territories have a long history of silk production and processing and often a large home market exists. However, depending on various socio-economic and political factors, trends in production and consumption have varied, some countries having stagnated whilst others have shown substantial growth.

During the 1960s and 1970s, raw silk production showed an upward trend, but in recent years it has been relatively stable. Dr Greenhalgh suggests a number of strategies for developing countries to pursue, in order that their potential as better silk producers is fully realised. However, unless Chinese raw silk supplies diminish greatly, and the price increases substantially, the prospects for existing and new producers of raw silk capturing a greater market share are minimal.

Kim Lochen

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## Recent Developments in the Rhino Horn Trade

by Esmond Martin and Lucy Vigne

No large mammal has been destroyed in recent times at such an appallingly high rate as the rhinoceroses. Over the past seventeen years the world's rhinoceros population has declined by about 85%. In 1970 there were an estimated 65 000 Black Rhinos *Diceros bicornis* in Africa (Martin and Martin, 1985) and today there are less than 4000 (Cumming, 1986). The White Rhino *Ceratotherium simum* population has been gradually increasing since 1975 and now there are about 4000 in Africa (Western and Vigne, 1985).

The numbers of the three rhino species in Asia are much lower. The Indian Rhino *Rhinoceros unicornis* now numbers about 1700 (Martin, *et al.*, in press). The rhinos in the state of Assam, where over 95% of the population of this species lives, have recently become threatened by poaching. There are approximately 660 Sumatran Rhinos *Dicerorhinus sumatrensis* (Martin and Martin, 1985) and recently there has been poaching in Malaysia and Indonesia. The Javan Rhino *Rhinoceros sondaicus* population numbers about 50 (Sajudin, 1986) despite essentially no poaching since 1967 due to an improved guarding system (Amman, 1986). However, one animal was poached at the end of December 1984 (Sajudin, 1986).

The reasons for this slaughter of the world's rhinos lie in the sudden growth in the rhino horn trade in the 1970s. The horn is highly prized in traditional Oriental medicine as a fever-reducing drug and is equally in demand in North Yemen for making dagger handles.

All five species of rhino are listed in CITES Appendix I.

Information below on products, quantities and prices on rhino horn for sale are from the authors' own surveys, except where otherwise specified.

### BRUNEI

The Sultanate of Brunei on the island of Borneo is an oil-rich, newly independent country which, according to traders and shop-owners, has been importing Sumatran Rhino products from Singapore, specifically horn, hide and hooves. The demand comes solely from the Chinese population of 55 000 but very small quantities are bought. Brunei is not a Party to CITES but it is illegal there to export Sumatran Rhino products, under the Wildlife Protection Enactment, 1978 (Notification No. E 10). This act does not refer to products from other rhino species though and it appears that Brunei could therefore become an entrepot for African rhino horn. However, following a letter from Prince Philip, as President of WWF, to the Sultan of Brunei, emphasising the importance of conserving the rhinoceros, on 2 February 1987, the Permanent Secretary in the Prime Minister's office informed WWF that, "the prohibition of importation and exportation of goods (rhino horn), in such interest, whereby Brunei Darussalam had adhered to has been provided for in our Customs Act". Details of this Customs Act have not yet been obtained.

### CHINA

During a survey carried out by Esmond Martin in late 1985, of ten major cities visited in China, only two, Guangzhou and Xian, had rhino horn available in the medicine shops. In Guangzhou two of the 12 shops visited offered it for sale, at an average price of US\$18 722 a kg; in Xian, four of the eight shops visited sold rhino horn at an average price of US\$2413 a kg. The main reason for the cheaper horn in Xian is that, for a variety of reasons, including its geographical location, no new horn was being imported there, whereas Guangzhou was still importing

rhino horn from Hong Kong and the higher world market prices were being paid.

It is not surprising that Guangzhou has been importing stocks of rhino horn over the past few years for sale in its medicine shops. The Cantonese have the greatest fascination for animal products of all the Chinese people. There is a saying in China that the Cantonese will eat anything on four legs except the kitchen table. The traditional medicine shops in Guangzhou sell a wide range of animal products including Water Buffalo *Bubalus bubalis* horn (as a substitute for rhino horn) and rhino hide for US\$146 a kg.

Rhino horn, mostly of African origin, used to be available in most Chinese cities, but today it is mainly used to manufacture patent medicines which are rarely found on the domestic market. Large factories in Beijing, Chengtu, Shanghai, Tientsin and Tsingtao make items such as "Rhinoceros and Antelope Horn Febrifugal Tablets", "Laryngitis Pills", and "Dendrobium Moniliforme Night Sight Pills". Considerable amounts of these are exported all over eastern Asia and earn the factories hard currency.

According to traders abroad, rhino horn which came to China in 1985 was brought from Hong Kong, Macau, Singapore and Thailand. One exporter in Bangkok personally carried 11 kg of African rhino horn by air to Beijing and sold it to one of the main pharmaceutical factories which was government-owned!

China is a Party to CITES which bans all commercial international trade in rhino products. But the Convention only applies to 'readily recognizable products' and the small quantities of rhino horn contained in medicines cannot be easily identified amongst the other ingredients. In the past, this has allowed Parties not to control trade in medicinal rhino products. Since 1985, however, CITES has adopted a definition of 'readily recognizable' such that, if rhino horn is mentioned on the label of a product, it is therefore identifiable and is subject to CITES controls. During Martin's 1985 survey, senior staff at a couple of medicine factories stated that, if they were to stop using rhino horn and remove it from the list of ingredients on the labels of their medicines, sales would fall. However, some other people, such as the Deputy Manager of the China National Medicines and Health Products Import and Export Corporation, Mr Yu Yun, understood that selling medicines containing rhino horn abroad encourages further use of rhino products which in turn puts increasing pressure on the remaining live rhinos. He agreed to find suitable substitutes and promised he would soon remove rhino horn from his medicines. The Director of the Shanghai Medicine Company said that they had been using some Water Buffalo horn to replace rhino horn since 1984, when the Chinese Government banned the use of rhino horn in any newly devised medicines. Although rhino horn is permitted to be used in drugs developed prior to 1984, the director of this company, which employs 14 000 people, plans to phase out rhino horn from all medicines.

### HONG KONG

From the end of World War II until 1979, Hong Kong had been the main importer of rhino horn (Parker and Martin, 1979). In 1979, the Government amended its legislation to close a loophole which had allowed importation of rhino horn and, at the request of the ivory traders, all further imports were banned. In addition, Hong Kong law required owners to hold a possession licence, thus, effectively, providing a stock-registering mechanism, and 2167 kg were inventoried (Chan, *in litt.*, 20.11.85). During the following six years, much of this large amount of rhino horn was legally exported. In late 1985, the Department of Agriculture and Fisheries announced that exports would be banned after March 1986. By then, only 75 kg of legal horn remained in Hong Kong (Wong, *in litt.*, 3.9.85). As Hong Kong law allows the internal sale and consumption of rhino horn, this small stock could be sold locally where there is still a strong

TABLE I  
Average Retail Prices of Rhinoceros Horn in some major cities of Eastern Asia  
from 1979 to 1986

Year & Place	Total Number of Clinics/ Pharmacies visited	No. and % Selling Horn		Type of Horn	Average price per kg in US\$
		No.	%		
<u>SEOUL</u>					
1980	30	19	63%	African	1436
1982	76	47	62%	African	1797
1986	108	55	51%	African	1771
<u>HONG KONG</u>					
1979	15	11	73%	mostly African	11103
1982	50	23	46%	mostly African	15700
1985	80	33	41%	mostly African	14282
<u>MACAU</u>					
1979	9	7	78%	mostly African	4127
1982	14	9	64%	mostly African	7797
1986	20	16	80%	mostly African	8644
<u>TAIPEI</u>					
1979	9	9	100%	a) African b) Asian	1596 17090
1985	34	26	76%	a) African b) Asian	1532 23929
<u>KAOHSIUNG, TAIWAN</u>					
1985	20	18	90%	a) African b) Asian	2077 21365
<u>TAINAN, TAIWAN</u>					
1985	4	4	100%	a) African b) Asian	1772 29910
<u>SINGAPORE</u>					
1979	15	8	53%	mostly African	11615
1983	46	16	35%	mostly African	11804
1986	33	13	39%	African & Asian	14464
<u>BANGKOK</u>					
1979	23	12	52%	mostly African	3654
1986	44	15	34%	mostly Asian	11629
<u>TOKYO</u>					
1980	18	8	44%	African	1620
1986	29	5	17%	African	3417
<u>OSAKA</u>					
1980	10	9	90%	African	2230
1982	5	3	60%	African	2516
1986	41	31	76%	African	3771
<u>BANDAR SERI BEGAWAN, BRUNEI</u>					
1982	5	2	40%	mostly African	6895
1986	7	1	14%	?	3797
<u>DJAKARTA</u>					
1980	26	7	27%	mostly Sumatran	12634
1986	34	2	6%	Sumatran & Javan (latter is old stock)	9448
<u>KOTA KINABALU, SABAH</u>					
1986	18	2	11%	Sumatran	14697
<u>KUALA LUMPUR</u>					
1981	26	15	58%	mostly African	19801
1983	29	6	21%	Asian & African	17280
1986	41	4	10%	Asian & African	11636

Source: Sample surveys taken by E. Martin in various years, from 1979 to 1986.

demand for rhino horn in the country. A survey in November 1985 of 80 Hong Kong medicine shops showed that 41% offered rhino horn for sale at an average retail price of US\$14 282 a kg (Table 1).

#### JAPAN

In 1980, with accession to CITES, the Japanese Government prohibited the international trade in rhino products and strongly encouraged the use of Saiga Antelope *Saiga tartarica* horn as a substitute for rhino horn. At the time of this ban, a survey showed that eight of the larger pharmacies visited in Tokyo were offering rhino horn for sale, but in a 1986 survey only five were found. In Osaka, which is in an area of Japan with stronger traditions, the percentage of pharmacies offering rhino horn fell from 90% to 76% (see Table 1). Importers of animal products and herbs state that people are accepting Saiga Antelope horn in place of rhino horn, and therefore there is little smuggling.

#### MACAU

In 1984, this tiny Portuguese enclave of less than seven square miles, and with a population of 365 000 people, became one of the world's largest importers of rhino horn. This was because, by then, most Asian countries had banned the international trade, and there was still a great demand for rhino horn. Sophisticated traders discovered Macau to be a perfect entrepot: rhino horn could be imported and exported legally; it was near Guangzhou in China and only 45 minutes from Hong Kong by jet-foil. Even though Portugal (which administers Macau) and China (which possesses sovereignty over Macau) are CITES Parties, the regulations of CITES were not applicable to Macau. Rhino products had been imported there for many years, to supply the Chinese pharmacies, but Macau's role as an entrepot was a very new development.

In June and July 1984, 160 kg of rhino horn were brought from Portugal to Macau and another shipment of so-called "old stock of Mozambique horn" left Portugal for Macau in November (CITES Secretariat, pers. comm.). In November 1985, a shipment from Lisbon of 100 kg was declared at Macau Customs as "old black rhino horn from Mozambique". A trader in Macau claimed that he paid US\$500 a kg for this latter shipment and had purchased several other consignments of rhino horn in 1984 and 1985. The same trader confirmed what officers in Hong Kong's Department of Agriculture and Fisheries and the CITES Secretariat had suspected; most of the new rhino horn reaching Macau was being re-exported to Hong Kong and mainland China.

In 1985, all that was required to bring rhino horn into Macau was an import licence which was extremely easy to obtain. However, certain government officials became embarrassed about Macau's international reputation as an entrepot for elephant ivory smuggled mostly out of Africa and were concerned that Macau may be connected to the endangered species trade. To prevent any more criticism, the Government decided to refuse all further requests for rhino horn import licences from 19 December 1985, according to the Director of Economic Services of Macau, Dr Antonio Duarte de Almeida Pinho. Traders did not know this at the end of January 1986 as this new regulation had not been publicized. However, on 22 February 1986 Macau officially published the text of the CITES Convention and a permanent liaison with the CITES Secretariat has been established.

#### SINGAPORE

Up until October 1986, Singapore was the greatest remaining problem concerning the trade in rhino products in eastern Asia, since the country still legally allowed rhino products from all five species to be imported and exported. Singapore became the main entrepot for Asian

rhino horn. Of the 40 to 70 Sumatran Rhinos in Sabah, Malaysia, at least twelve have been killed since 1982, according to Patrick Andau, Assistant Chief Game Warden in Sabah. Traders in Kota Kinabalu, Sabah, say that the horns, skin and hooves were sent to a syndicate in Tawau, near the Indonesian border of Kalimantan, who smuggled the horns in sea cucumbers for shipment by air to Singapore. From Indonesia, also, sailors were bringing horn to Singapore. Indonesian traders can earn more money and gain hard currency by selling their horns to Singapore merchants; this is evidenced by the fact that the number of medicine shops in Djakarta selling rhino horn has declined (see Table 1).

Singapore was also the largest market for Indian Rhino horn. A breakdown in law and order in Assam brought about an upsurge in poaching between 1982 and 1985, and 233 rhinos were killed (Martin *et al.*, in press). Almost all of the horn taken from them was sent to Calcutta and exported to Singapore for consumption locally or for re-export to other countries (CITES Management Authority, India, pers. comm.). Thus, Singapore's legal market was encouraging serious rhino poaching in India, Sabah and parts of Indonesia.

In a survey of 30 medicine shops by two Singaporean graduate students in mid-1985, only one shop (3%) was found to have rhino horn on sale (Anon., 1985a). However, when Martin surveyed the medical halls in Singapore in 1986, of 33 visited, 39% sold rhino horn (mostly Sumatran), 24% had rhino nails for sale, at US\$554 a kg, and 15% were selling rhino hide, for US\$496 a kg. These medical halls had relatively large quantities of Asian rhino horn and nails. Thus, Singapore appeared to be both an entrepot and one of the largest consumers of Asian rhino products.

Pressure was placed on the Singapore Government, notably by the CITES Secretariat, to prohibit the rhino horn trade. On 25 September 1986, a congressional hearing took place in Washington, DC, USA, at which Singapore's continued role in the rhino horn trade was heavily criticized. Also on this date, the US Government banned all imports of wildlife products from Singapore because it undermined CITES. Furthermore, there was extensive criticism in the international press about Singapore's trade in endangered species.

On 24 October 1986, the Singapore Government prohibited all imports and exports of rhino products with immediate effect. Following this, on 30 November 1986, Singapore acceded to CITES.

#### REPUBLIC OF KOREA

South Korea has been a large importer of rhino horn. International pressure from conservation organizations was put on the country in 1982 and 1983 to stop the trade. In November 1983, the Korean Ministry of Health and Social Affairs issued an order demanding the elimination of rhino horn from all medicines. The Ministry of Trade and Industry followed this up with a directive prohibiting all imports and exports of rhino products, which came into effect in 1984. Final legislation on this was passed in 1985 (Martin, 1986). The smuggling of rhino horn into South Korea now appears to be under control and Water Buffalo horn is replacing rhino horn in Oriental medicine clinics.

#### TAIWAN

Taiwan, like South Korea, was a major importer of rhino horn. From 1980 to 1984 an annual average of 83 kg was legally imported (Anon., 1980-1984). In addition, much horn was smuggled into the country to avoid import taxes.

In 1985, Taiwan was still one of the main importers of rhino horn and hide and much external pressure was put on the Government to stop the trade. A Minister of State, Mr Chang Feng-shu, was already very concerned about this commerce and lobbied against it. A letter

from Prince Philip, to Minister Chang in mid-1985, to encourage the Government to prohibit the rhino horn trade, resulted in the Taiwanese Government closing down legal imports and exports of such products in August (Anon., 1985b).

A survey taken in December 1985 indicated that 76% of Taipei's medicine shops and 90% of those in Kaohsiung, the largest port in Taiwan, were selling rhino horn. Some rhino horn was still being smuggled into the country. According to traders and government officials in Taipei, the main smuggling routes recently were from Hong Kong to Kaohsiung. Also, fishing boat crews would enter the international waters off the coast of China and meet mainland Chinese to exchange electronic gadgets such as watches and radios for fish, alcohol and a variety of raw medicinal products including rhino horn. The Taiwanese Government was aware of these activities in 1986 and has been trying to stop them.

#### THAILAND

In 1986 Thailand was still a major entrepot for Asian rhino products although this trade had been illegal since at least 1972. In Martin's survey of the Chinese pharmacies in Bangkok, in February 1986, 34% of the 44 visited were selling rhino horn (average retail price, US\$11 629 a kg); 18% sold rhino hide (average US\$395 a kg) and 11% sold nails (average US\$1487 a kg). A variety of rhino products not normally seen elsewhere in Asia were available in Bangkok. These products had been obtained from whole Sumatran Rhino carcasses. They included rhino bones which cost US\$115 a kg and which are made into a poultice to treat aching muscles. Rhino meat was on sale for US\$19 a kg, and dried blood, which is consumed as a general tonic, cost US\$230 a kg. Dried, undigested leaves from the small intestine of a Sumatran Rhino, consumed to relieve gastric pains, cost US\$115 a kg. Probably the rarest Sumatran Rhino product for sale in Bangkok was the penis, identifiable by the distinctive 'cross-bar' called the palang. They were said mostly to be bought by overseas Chinese for around US\$600. Although they were said to have been very difficult to obtain for many years, one Chinese pharmacy was offering six rhino penes for sale in 1986. The penis is boiled in water with ginseng or other ingredients and the liquid is drunk as an aphrodisiac.

It is surprising that, compared with a 1979 survey of the Chinese pharmacies in Bangkok which showed that most rhino products then available (mostly horn) were from African species, in 1986 the majority of products were from the Sumatran Rhino. At least four traders and pharmacy managers had bought rhino products from rhinos killed within the previous six years in Burma, Laos or Thailand. One businessman had been buying one or two whole Sumatran Rhino carcasses each year for US\$3800 to US\$7600 each. These carcasses would arrive fresh in Bangkok and would then be dried and their products sold. It has been thought by some conservationists that the Sumatran Rhino was extinct in Burma, Laos and Thailand, but the above information contradicts this view.

#### YEMEN ARAB REPUBLIC

From the early 1970s until 1984, North Yemen imported almost half the rhino horn put onto the world market. A ban on rhino horn imports in 1982 had little effect in stopping rhino horn being smuggled into the country up until recently. However, since 1984, there has been an economic slump in North Yemen and, in order to raise revenue, the Government has put considerable efforts into stopping the smuggling of goods into the country, including rhino horn, by tightening Customs control and increasing the number of border officials. Adverse publicity in the world's press has also encouraged the Government to prevent rhino horn being imported. Information obtained in interviews with importers and wholesalers indicates imports fell from an estimated

1700 kg a year from 1980 to 1984, to less than 1000 kg in 1985 and under 500 kg in 1986. The traders say they have been paying about US\$900 a kg for African rhino horn, imported recently via the Sudan.

In December 1986, the authors met the Minister of Foreign Affairs and the Minister of Economy, Supply and Trade, in Sanaa, the capital of North Yemen, to discuss ways of enforcing the ban on rhino horn imports further. A six-point action plan was drawn up:

1. The Prime Minister would talk to the principle trader of rhino horn who has been handling about two-thirds of all imports, to warn him to stop dealing in new supplies.
2. The Foreign Minister would discuss with a senior official of the United Arab Emirates the need to close down the entrepots for rhino horn in this country.
3. The Yemeni Government would ban all re-exports of rhino horn (Chinese, Koreans and Yemenis buy the left-over rhino horn shavings from dagger handles for export to eastern Asia).
4. Owners of dagger-making workshops would be required to sign affidavits when re-applying for their licences, agreeing not to use any more rhino horn. If, later, rhino horn were found on their premises, their shops would be closed.
5. The Customs Department would encourage the use of Water Buffalo horn as a substitute for rhino horn by eliminating all its import duties.
6. The Government would ask the Grand Mufti, the Moslem religious leader, to issue an edict stating that it is against the will of God to cause the extinction of an animal species.

At the time of writing (May 1987) the first three points have been acted upon, the most important one being the banning of all rhino horn re-exports under Ministerial decree No. 29 of the Ministry of Economy, Supply and Trade on 20 January 1987. The Cabinet ▶



Dagger handle being carved from rhino horn in North Yemen

© E. Martin

has agreed to the remaining measures, which the Foreign Minister has promised will be effected in 1987. The affidavit system will probably be the most effective way of stopping the use of rhino horn. Craftsmen are already turning to Water Buffalo horn as a substitute since it is more readily available than rhino horn. Thus, it is an opportune time for the Government to enforce the 1982 ban effectively.

## OVERVIEW

From the few official statistics there are on trade, and from information supplied by traders in eastern Asia and North Yemen, it appears that from 1980 to 1984 an annual average of three-and-a-half tonnes of new African rhino horn entered the world market. The horn originated from Black Rhinos mostly killed in the Central African Republic, Sudan, Tanzania and Zambia (see Martin & Vigne, 1986). On the basis of information received from many sources, it would appear that half of this was exported to North Yemen via Burundi, Djibouti, Sudan and the United Arab Emirates. The other half was exported to eastern Asia, mostly from Burundi, the Central African Republic, Namibia, Portugal, Tanzania, the United Arab Emirates and Zambia.

From 1980 to 1985 an estimated 40 kg of Indian Rhino horn and about 10 kg of Sumatran Rhino horn (representing 5% of the known population of this species) were put onto the international market on average each year. Despite the very small quantities of Asian horn compared to African horn, its total annual wholesale value has been about US\$450 000, while the African Rhino horn has been worth perhaps US\$2 000 000. The main entrepôts and consumers for Asian horn were Singapore and Thailand.

From 1972 to 1979 an annual average of eight tonnes of rhino horn was put onto the world market (Martin, 1980), compared with less than half this amount in the following five years. Yet the wholesale price of rhino horn remained relatively unchanged from 1979 to 1984 at US\$650 a kg for African horn and US\$9000 a kg for Asian horn. There was no monopoly position which could have caused the price to remain stagnant, since supplies of horn come from a variety of places. Rhino horn was still readily available in many eastern Asian countries in the early 1980s, and the trade was still legal in many places. Therefore it seems that there has been a significant decrease in demand for rhino horn or the prices would have risen dramatically in response to the much smaller supply.

To substantiate this, if the supply from Africa had dried up without a parallel contraction in Asian demand, the price would have risen since we know that the quantity demanded there is relatively insensitive to price. Furthermore, if the demand had contracted without a drying up of the supply from Africa, there would have been evidence of accumulations of unsold stocks and/or a decline in price since we know that supplies are sensitive to price movements (as was demonstrated by the upsurge of poaching in the 1970s).

In eastern Asia the demand for rhino horn is for an essential pharmaceutical product by those who culturally believe in it. An important factor is that rhino horn is considered there a medicine and, when it is needed, patients will pay what they must to obtain it. However, in recent years, the progressive westernization of youth, together with aggressive campaigns in favour of the introduction of substitutes, have caused the demand to contract. Pharmacists no longer offer rhino horn so readily; they, as well as importers, wholesalers and doctors, have been strongly urged to deal in Saiga Antelope horn and Water Buffalo horn instead. Both are acceptable substitutes in traditional medicine and are much cheaper. Customers are willing to rely on these alternatives, and now that rhino horn is so scarce, some customers even doubt that it is available.

In North Yemen there has been a marked decrease in demand for rhino horn as well. The Yemeni demand for a prestige item like a dagger with a rhino horn handle, and the affluent period of the 1970s which raised average incomes in North Yemen by a factor of six, are the two reasons for the huge price increase of over 1000 per cent in that period and the very great increase in consumption. In the 1980s, however, Yemeni incomes began to decline and by the time of the devaluation of the Yemeni rial, in 1984, two of the traders in rhino horn had already gone out of business, indicating that the demand had declined.

Hence, in Yemen the demand and price appear to be mutually sensitive. Most people who could afford daggers with rhino horn handles now have them and, with increasing westernization, younger people's demand for these daggers has been reduced. In the southern part of the country, very few people regularly wear daggers, because of a recent change in fashion. These factors, combined with the 1982 import ban on rhino horn which has recently started to become effective, have led to the increased use of Water Buffalo horn for the making of dagger handles.

Efforts, therefore, to discourage the demand for rhino horn must continue. Any slacking could well allow a reversal of the situation, as has occurred in Thailand recently with the Sumatran Rhino, and could mean the end for African and Asian rhinos which are not in zoos or in well guarded, fenced enclosures.

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## Australian Prosecutions

compiled by Frank Antram, TRAFFIC (Oceania)

### Federal:

On 20 July 1987, at Port Hedland, Western Australia, Cory Blanc of Longwood, Florida, USA, was convicted of attempting to export four Desert Death Adders Acanthophis pyrrhus without a permit, contrary to Section 21(b) of the Wildlife Protection (Regulation of Exports & Imports) Act 1982 through Section 7 of the Crimes Act 1914. Blanc had been arrested by Australian Federal Police at Port Hedland airport, on 28 March 1987, after his baggage had been found to contain the snakes. He was fined A\$1000 (US\$700) plus A\$261 court costs. He was also fined A\$500 plus A\$70.20 costs for illegal possession of protected fauna, contrary to Section 16A(1) of the Western Australian Wildlife Conservation Act 1950. Death Adders are valued at US\$400 to US\$600 each on the American market, according to a US Fish & Wildlife Service agent (TRAFFIC (USA) in litt.).

\* \* \* \*

On 23 July 1987 at Devonport Court of Petty Sessions, Tasmania, Marilyn Daniels of Sheffield, Tasmania, was convicted of illegal importation of two live turtles (Emydidae) and of making a false declaration, contrary to Section 22(b) of the Wildlife Protection (Regulation of Exports & Imports) Act 1982 and Section 234(1)(e) of the Customs Act 1901. Daniels had arrived at Perth airport, Western Australia, on 12 September 1986 on a flight from Indonesia. A search of her baggage had revealed the two small turtles hidden inside a soap dish. The magistrate fined Daniels A\$150 (US\$106) and ordered her to pay court costs of A\$21.10.

\* \* \* \*

On 10 August 1987 at Perth Magistrates Court, Irene Carter of South Guildford, Western Australia, was convicted of illegally importing a Pig-tailed Macaque Macaca nemestrina contrary to Section 22(a) of the Wildlife Protection (Regulation of Exports & Imports) Act 1982 and of making a false declaration contrary to Section 234(1)(e) of the Customs Act 1901. Carter, apparently acting out of compassion for the animal, had bought the male monkey from Wildlife Zoological Supplies, 23 Jalan Sultan, Kuala Lumpur, Malaysia, in January 1987 for MY\$160 (US\$60). She had given a false name and address to the suppliers as she knew that the monkey had to be registered with the Penang Wildlife Department. She left Malaysia on 15 January 1987 for Singapore, leaving there on 17 January 1987 for Perth, carrying the monkey under her jumper. On arrival at Perth airport, Carter did not declare that she was in possession of the animal and she passed through Customs without examination. It was not until 19 March 1987, after a tip-off, that Customs officers found the animal at Carter's house. Due to her financial problems and the fact that she was supporting a handicapped child, the magistrate did not fine or gaoil her, but ordered her to do 150 hours community service work and to pay A\$88.40 (US\$63) costs.

### State:

#### Queensland

On 4 March 1987 at Warwick Magistrates Court, Anthony Meyer of Texas, Queensland, was convicted on charges involving the taking and keeping of protected fauna, contrary to Section 54(1)(a) of the Fauna Conservation Act. Meyer was fined A\$400 (US\$285) and ordered to pay

A\$70.50 court costs. The following birds were seized from Meyer:- 2 Musk Lorikeets Glossopsitta concinna, 5 Rainbow Lorikeets Trichoglossus haematodus, 2 King Parrots Alisterus scapularis, 6 Crimson-winged Parrots Aprosmictus erythropterus, 2 Pale-headed Rosellas Platycercus adscitus and 1 Cockatiel Nymphicus hollandicus.

\* \* \* \*

On 31 March 1987 at Tara Magistrates Court, Raymond Hiles of Tara, Queensland, was convicted on a charge of keeping eight Crimson-winged Parrots Aprosmictus erythropterus and four Galahs Eolophus roseicapillus without a licence, contrary to Section 54(1)(a) of the Fauna Conservation Act. Hiles was fined A\$40 (US\$28.50) and ordered to pay A\$240 in royalties.

\* \* \* \*

On 22 May 1987 at Nanango Magistrates Court, Arthur West of Nanango, Queensland, was convicted of offences under Section 54 of the Fauna Conservation Act involving the taking and keeping of protected fauna, namely two Pale-headed Rosellas Platycercus adscitus and two King Parrots Alisterus scapularis. West was fined A\$600 (US\$425) and ordered to pay royalties of A\$80 and court costs of A\$70.50.

\* \* \* \*

On 23-24 June 1987 at Caboolture Magistrates Court, George Karas, a fauna dealer of Beerwah, Queensland, was found guilty of attempting to take Rainbow Lorikeets Trichoglossus haematodus contrary to Section 54(1)(a) of the Queensland Fauna Conservation Act 1974-1985; of permitting removal of three Scaly-breasted Lorikeets T. chlorolepidotus contrary to Section 62(1) of the Act; and of failing to maintain a proper register of dealings in fauna, contrary to Regulation 23 of the Fauna Conservation Regulations. Karas, who had pleaded not guilty, was convicted on all three charges and fined a total of A\$400 (US\$285). He was also ordered to pay A\$410.50 witness costs and A\$105.75 court costs. On 29 July 1987, the Queensland Minister for Tourism, National Parks and Sport revoked Karas' Class C Fauna Dealer's Licence and ordered that his application for a Class E Fauna Dealer's Licence (Aviculturist) should not be granted. The Minister further ordered that Karas be disqualified from holding any licence, permit, certificate or other authority pursuant to the provisions of the Fauna Conservation Act for a period of two years from 24 June 1987. Accordingly, a total of 316 native Australian birds were seized from Karas' premises on 7 August 1987.

\* \* \* \*

On 2 July 1987 at Bundaberg Magistrates Court, Brian Horsman of Cabramatta, New South Wales, and Martin Line of Marsden, Queensland, were charged with obstructing a fauna officer, contrary to Section 17(a) of the Fauna Conservation Act, keeping protected fauna contrary to Section 54(1)(a) of the Act, and moving fauna without a permit, contrary to Section 62(1). The fauna involved was one Amethystine Python Morelia amethystina. Horsman was convicted on all three charges and fined a total of A\$2200 (US\$1565) and ordered to pay A\$140 in royalties and A\$105.75 court costs. Line was convicted only on the charge of obstructing a fauna officer, the other charges being dismissed. He was fined A\$200 and ordered to pay A\$35.25 court costs.

### Australian State Prosecutions (ctd)

#### Queensland (ctd)

According to the Stanthorpe Border Post of 6 August 1987, Arthur Mace and his son, Shane, both of North Ipswich, Queensland, pleaded guilty to taking 41 Red-browed Firetail Finches Emblema temporalis at Lyra, Queensland, without a permit or licence. Both men were ordered to pay A\$405 (US\$288) in fines and royalties.

### **Australians Banned from Antarctic Sealing**

Australian citizens have been banned from taking part in any commercial exploitation of seals in Antarctica.

Announcing the ban, the Minister for Science, Mr Barry Jones, said the Government had formally approved the ratification by Australia of the Convention for the Conservation of Antarctic Seals.

'The Convention is designed to ensure the protection of Antarctic seals whilst allowing their scientific study and rational use' said Mr Jones. 'However Australia has gone a step further by implementing regulations which specifically prohibit Australian citizens from any sealing in Antarctica which is directly or indirectly for commercial purposes'.

Mr Jones said that the Antarctic Seals Conservation Regulations, which incorporate in Australian law the provisions of the Convention, provided that Antarctic seals could not be killed or taken except in accordance with a permit issued by the Minister for Science. Such a permit could only be issued where the Commission for the Conservation of Antarctic Marine Living Resources (an international body based in Hobart, Tasmania) had recommended the sealing; or to provide indispensable food for man or dogs; or to provide for scientific research; or to provide specimens for museums, educational or cultural institutions.

*Source: Australian Fisheries, July 1987*

### **Queensland's Crocodile Zones**

On 20 July 1987, the Queensland Minister for Tourism, National Parks and Sport, the Hon. Geoff Muntz, announced that the Queensland State Cabinet had approved a new management programme for Saltwater (Estuarine) Crocodiles Crocodylus porosus on the east coast of Queensland in a move to reduce the danger to people. In a press release, the Minister said that for the past 18 months the Queensland National Parks & Wildlife Service had operated a crocodile management programme which involved the removal of only 'problem' crocodiles from populated areas. The Minister stated that it was now appropriate to make substantial alterations to the management programme and that the new policy would apply along the coast south from Cooktown, including the coastal plains of the Endeavour River and the catchments of the Burdekin and Fitzroy Rivers up to 10 km inland. The Minister defined three types of Zone in which different management practices would be employed. In Zone A (restricted to the immediate environs of major coastal towns and cities), removal of all Saltwater Crocodiles, regardless of size, would be sanctioned. In Zone B (covering a majority of the rivers and streams), removal of all Saltwater Crocodiles over 1.2 m long would be sanctioned. In Zone C (covering waterways in and adjoining National Parks and other nature reserves), removal of individually identified 'problem' crocodiles would be performed by Queensland National Parks &

Wildlife Service staff (or otherwise by arrangement). Mr Muntz stressed that 'problem' crocodiles removed under this programme could be used only for breeding or display stock. They could not be slaughtered for skins or other by-products.

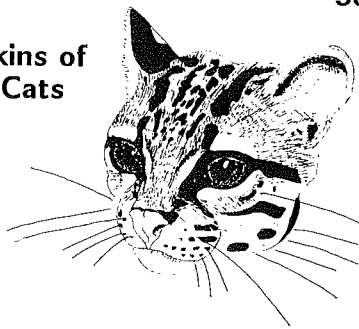
### District and river systems and their Zonings under the new Queensland Management Programme

<u>District/River System</u>	<u>Zone</u>
Endeavour River	B
Annan River	B
Cape Tribulation (settlement)	A
Daintree River	B/C
Saltwater Creek	A
Mossman River	A
Packers Creek	B
Trinity Bay	A
Barron River	A
Trinity Inlet	A
Russell River (adjacent to national park)	B/C
Mulgrave River (upstream of Fishing Falls)	A
Babinda Swamp	B
Eubenangee Swamp	C
Ella Bay	A
Johnstone River (Innisfail environs)	A
Johnstone River (elsewhere)	B
Moresby River	B
Liverpool Creek	B/C
North Maria Creek	B/C
Bingil Bay	A
Hull River	B/C
Tully River	B
Murray River	B/C
Dallachy Creek	C
Wreck Creek	C
Mounga Creek	A
Hinchinbrook Channel	C
Seymour River	B
Herbert River (Ingham environs)	A
Herbert River (upstream to Abergowrie)	B
Herbert River (upstream of Abergowrie)	C
Trebonne Creek	B
Orient Creek	B
Cattle Creek	B/C
Crystal Creek	B/C
Leichhardt Creek	B
Bluewater Creek	B
Saltwater Creek	B
Black River	B
Bohle River	C
Ross River	A
Alligator Creek	B
Crocodile Creek	B
Bowling Green Bay	B/C
Plantation/Seaforth Creek	B
Burdekin River (upstream to Dalbeg)	B
Upstart Bay	B
Abbott Bay	B
Don River	A
Port Denison	A
Edgecombe Bay	B
Whitsunday	B/C
Proserpine River	B
Repulse Bay	B
Bell Bay	B
Pioneer River (Mackay environs)	A
Pioneer River (elsewhere)	B
Sandringham Bay	B
Sarina Inlet	B
Llewellyn Bay	B
Ince Bay	B/C
Broad Sound	B
West Hill Creek	C

*Source: Frank Antram, TRAFFIC (Oceania)*

## International Trade in Skins of Latin American Spotted Cats

by Steven Broad



The following article is extracted from a recently completed report on the harvest of and trade in Latin American spotted cats (Felidae) and otters (Lutrinae). The full report, which is available from the CITES Secretariat, includes a synopsis of harvest and trade information for all of the countries in which the species occur, together with full tabulations of CITES trade records and national Customs statistics. It also contains a series of recommendations on activities needed to improve the conservation of these species which are included in full at the end of the present article.

The skins of wild cats have been highly valued by the fur trade for many decades. The trade, mainly producing 'fashion garments', has focused on what have been perceived as the more attractive skin patterns, textures and colours, often concentrating on the larger species the skins of which are needed in fewer numbers per garment. In Latin America, in the early 1900s, the Jaguar *Panthera onca* was hunted for its skin in large numbers. However apparent over-harvest, combined with increasing human destruction of habitat, caused the numbers to decline greatly by the 1960s. At that time the fur trade began to shift its attention to the smaller cats.

The international trade in neotropical cats is described below in two parts: firstly historical information on the trade up to the early 1970s, based largely on literature references to the species involved and the volume and dynamics of skin movements; secondly, details of the recent trends in trade, for which far more quantitative data are available.

### The skin trade until the early 1970s

The period between the end of the Second World War and the early 1970s was termed 'The golden era of the Amazon skin trade' by McGrath (1986). Wild populations of cats had not been exploited on a large scale and the world economy was generally expanding. The fur industry grew rapidly to meet the demand for wild furs and skins. In Brazil, modern tanneries were established in Manaus and Belém and an extensive commercial network linked the professional hunters, or gateiros, with the urban dealers (McGrath, 1986). Similar infrastructures built up in other countries to supply the export trade. Reliable quantitative data detailing cat skin exports from Latin America for the period up to the early 1970s are difficult to obtain. Some data are available for exports from Brazil, Peru and a number of other countries, however it is extremely difficult to assess what proportion of the total world trade these data might represent. The situation is further complicated by changes over the period in the species involved in trade and the countries from where they were obtained.

As McMahan (1983) pointed out, the USA was the major importer of Latin American cat skins until the 1970s although increasing numbers were imported into Europe during the 1960s, especially into the Federal Republic of Germany. Myers (1973) presented data (Table 1), detailing official imports of Ocelot

*Felis pardalis* and Jaguar *Panthera onca* skins into the USA during the period 1968-1970. However, the term 'ocelot' in this case probably includes species of small spotted cats other than *F. pardalis*.

The dominance of Brazil as the major source of skins during these years should be somewhat surprising as all such exports were prohibited by law in 1967. These skins are apparently the 'old stocks' allowed to be exported during the 'grace period' which the Brazilian Government granted to the skin traders. Langenberger (in litt., 1986), General Manager of the Verband der Deutschen Rauchwaren und Pelzwirtschaft e.V., stated that in the mid-1960s most cat skins imported into F.R. Germany were from Peru and that, in later years, Brazil, Colombia and Bolivia were major sources; the major importer of skins was reported to have been the USA, even as recently as 1978. Fehns (in litt., 1986), a major skin trader, reported that the major exporters of cat skins had been Brazil, Bolivia, Peru, Paraguay, Ecuador, Colombia and Argentina, with limited quantities exported from the Guianas.

Evidence therefore suggests that during this 'golden era' the major source of skins was the Amazon region, the major exporter having been Brazil. The volume of the trade in cat skins during this period is difficult to estimate accurately. Imports of 'Ocelot' skins into the USA during the period 1968-1970, detailed in Table 1, averaged well over 100 000 skins a year. Data presented by McMahan (1987) indicate that *F. pardalis* skin imports into the USA increased from about 100 000 in 1960 to a peak of over 133 000 in 1969, before falling sharply to 87 000 in 1970, less than 30 000 in 1971 and less than 1000 in 1972 and 1973 as the US Endangered Species Act 1973 was introduced. These data reinforce the statement made by Langenberger (loc. cit.) that the world trade in small spotted cat skins during the late 1960s amounted to over 120 000 skins per year, most of which were imported into the USA. Imports of *P. onca* skins were not detailed in US published statistics until 1968. The data tabulated in Table 1 indicate a decline in the numbers of skins imported; this has been shown to have continued in 1971 and 1972, after which no further imports were reported to have taken place (McMahan, 1987). The number of skins in trade during earlier years is unknown, however figures detailing the weight of skins exported from Brazil were given by Doughty and Myers (1971) (Table 2).

Tables 1 and 2 indicate that the US imports reported for 1968 and 1969 may have represented the peak of the number of *P. onca* skins in trade, although no data for years before 1957 have been found.

The volume of international trade involving the other spotted cat species prior to the early 1970s, remains largely unknown. The imports of 'ocelot' into the USA are known to have included other small spotted cats. The reported exports from Iquitos, Peru (detailed under the country section of the full report), include separate records of Margay *Felis wiedii* skins for the years 1946 to 1966. No skins of this species were reported to have been exported until 1961, after which exports increased to over 4000 skins in 1966; however details are not available for the subsequent years. Langenberger (in litt., 1986) reported that most of the skins in international trade were from *F. pardalis* and that the other small cats only appeared on the market as the numbers of *F. pardalis* skins available decreased. Furthermore, Grimwood (1969) stated that only *F. pardalis* skins had any commercial value in Peru until 1961 when *F. wiedii* skins began to enter trade; skins of the other small spotted cats were reportedly valueless throughout the 1960s. Therefore, although few records are available, owing to the use of the general heading 'ocelot' in Customs reports, it is unlikely that the skins of the other small spotted cats were traded in comparable numbers to those of *F. pardalis* before the early 1970s. However it is likely that such skins were included in small numbers in shipments of *F. pardalis* skins.

Table 1  
Official import of 'Ocelot' and Jaguar skins into the USA  
from Latin American countries, 1968-70 (No. of skins)

Source	Ocelot			% of total 1968-70	Jaguar			% of total 1968-70
	1968	1969	1970		1968	1969	1970	
Argentina	1253	5204	2704	3	201	278	482	3
Bolivia	16172	513	698	5	1190	51	20	4
Brazil	60499	81226	49528	55	8093	6389	4979	63
C. America	1612	2423	3824	2	343	339	342	3
Chile	-	-	972	<1	-	-	-	0
Colombia	28132	23823	11880	18	881	883	428	7
Ecuador	989	293	1532	1	33	24	46	<1
Guyana	187	160	161	<1	12	16	29	<1
Mexico	5603	6186	3692	4	592	452	236	4
Paraguay	4532	3293	2297	3	1797	585	605	10
Peru	3170	2938	4228	3	157	689	449	4
Venezuela	3777	4080	2796	3	25	91	36	<1
Others	3040	2930	5305	3	191	34	106	1
<b>TOTAL</b>	<b>128966</b>	<b>133069</b>	<b>87645</b>		<b>13516</b>	<b>9831</b>	<b>7758</b>	

Source: US Department of the Interior (Myers, 1973).

### Recent trade

International trade since the early 1970s is here regarded as recent trade. Generally, far more quantitative data are available for this period than for earlier years. The species involved and the number of skins traded have been increasingly influenced by national and international legislation in recent years. Furthermore there is evidence that the numbers in trade of some species involved declined because their populations had been over-exploited in some countries and hunters could no longer sustain their supply.

### Species

The following summarises recent trade by species. Most of this information has been based on CITES annual reports for the years 1976 to 1985. The most valuable data are for the years from 1977 onwards when both the USA and F.R. Germany were producing annual reports. The total net trade, calculated from CITES data, for each species is summarised in Table 3.

#### Pampas Cat *Felis colocolo*:

This species was not included in the study carried out by Melquist (1984). However considerable numbers are known to have entered international trade. Over 78 000 specimens were reported to have been exported from Buenos Aires, Argentina, in the period 1976 to 1979 inclusive, with a value of US\$1.8M; this represented less than one percent of the total value of wildlife exports during this period (Mares and Ojeda, 1984). The trade

reported by CITES Parties illustrates that the number of skins in trade decreased sharply after 1980. The only skins reported to have been traded after 1982 were some 360 which were re-exported from France to the Federal Republic of Germany and were then apparently returned to France in 1983. After 1981 the number of skins reported to have been traded was negligible. This is coincident with the instigation of legal protection for this species in Argentina. Before this the main sources of skins were Argentina and Paraguay. The main importing countries were F.R. Germany and, to a lesser extent, Switzerland and Spain.

Although these data show that a large number of skins of this species did enter trade during the 1970s, there is no evidence that large-scale commercial trade existed before that time and the trade seems to have declined sharply since 1980. Two sources of information in the German skin trade reported that this species had never been of great importance to the fur trade (Fehns, *in litt.*, 1986; Langenberger, *in litt.*, 1986).

#### Geoffroy's Cat *Felis geoffroyi*:

A study of the German skin trade (Caldwell, 1984) reported that *Felis geoffroyi* seemed to have been increasingly heavily exploited since 1978, when Paraguay replaced Brazil as the main supplier of skins to the world market. In 1981 over 70 000 skins of this species were imported into F.R. Germany. Caldwell (1984) noted however that, in 1982, there was a marked decrease in the number of these skins reported by CITES Parties as imports from Paraguay.

The major source of the skins in trade was Paraguay and to a lesser degree Argentina. The CITES data indicate that the decline in 1982, noted by Caldwell (1984), was temporary, and that over 78 000 skins mainly of Paraguayan origin were reported in trade in 1983. However, since 1982, the number of skins reported each year as direct exports from countries with wild populations of the species has decreased considerably, despite large numbers having been exported from Bolivia in 1984 and 1985.

The CITES data indicate that F.R. Germany was the major consumer of skins during recent years. The decrease in the number of skins imported in 1984 and 1985 reflects the lack of legal sources to supply the trade. However the recent Bolivian export ban did not enter into force until August 1985, so until 1986 trade data become available it will not be possible to conclude whether export bans have been effective.

Table 2  
Destination of Jaguar skins exported from Brazil  
1957-1969 (in kg)

Country	1957	1960	1963	1966	1969
F.R. Germany	68	379	315	3405	8762
Italy	8	68	-	-	-
UK	1037	869	75	2500	8615
USA	4480	3219	991	15243	30085

Source: Doughty and Myers (1971). From official Brazilian statistics.

### Kodkod Felis guigna:

With the exception of five 'scientific' specimens, this species has not been reported by CITES Parties to have been involved in international trade.

### Andean Cat Felis jacobita:

The export to Spain in 1976 of 84 skins of this species from the UK, origin South America, was the only report by CITES Parties of commercial trade between 1976 and 1985. The species is known to have been hunted for its skin (Mares and Ojeda, 1984), however there is no further evidence to suggest that significant commercial trade has taken place.

### Ocelot Felis pardalis:

Historically one of the most heavily exploited cats in international trade, Felis pardalis appeared in generally decreasing numbers in skin trade statistics after 1978 (Caldwell, 1984). However large numbers of skins were traded during the late 1970s. In 1975, the UK alone imported over 76 800 skins (Burton, 1976). The CITES data show a general decline after 1978, from a total net trade of about 34 520 skins in that year to only about 560 in 1985, although in 1983 the number reported increased to over 69 000 skins. The number of skins reported as direct exports from countries with wild populations of the species decreased significantly after 1980. The large number of skins in trade in 1983 was exported from France to F.R. Germany; these may have been in stock for some time and certainly without these skins a decline of the number in trade after 1978 is clear.

Paraguay was the major source of skins in trade but the only Ocelot which occurs in Paraguay is Felis pardalis mitis which is listed in CITES Appendix I. Therefore if the skins really did originate in Paraguay they should not have been in trade. Paraguay is known to feature as a re-exporter for large numbers of wildlife skins smuggled out of Brazil and, in any case, all exports of wildlife products have been illegal since 1975 (Fuller and Swift, 1985).

F.R. Germany was the major importer of skins during this period, although in 1984 it was a net exporter and France emerged as the main importer. Generally the majority of the trade went to western European countries.

### Little Spotted Cat Felis tigrina:

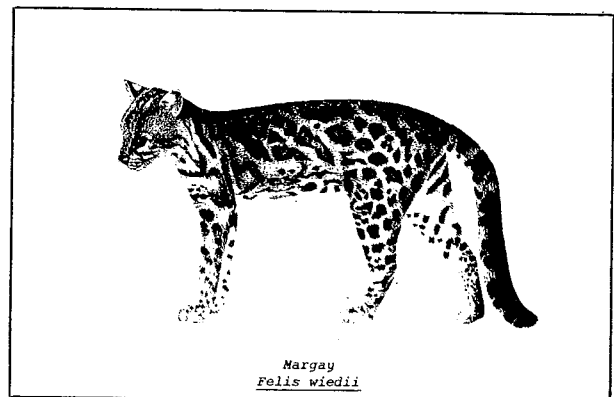
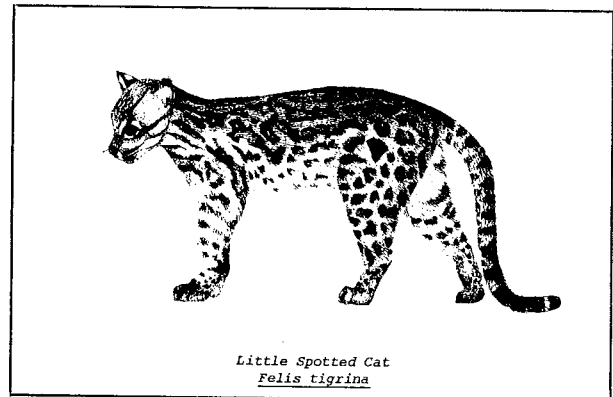
Skins of this species have often been confused with other spotted cat skins in trade, especially those of Felis wiedii. Analysis of CITES annual reports for 1977 showed that the trade comprised at least 13 000 skins (Anon, 1980). A report on South American cats in trade between 1976 and 1982 showed that this species was one of the four most heavily exploited small cats. Around 20 000 skins were reportedly exported from Paraguay in 1978, and the number from this source increased each year until 1983. By 1982 this species apparently supplied the great majority of the spotted cat skins in trade, replacing F. geoffroyi which had been most heavily exploited until then (Caldwell, 1984). Recent CITES data show that the number of skins in trade reached a peak in 1983 when the total net trade reported was nearly 84 500 skins; this number declined to around 35 000 in 1984 and 2000 in 1985.

Paraguay was the reported source of the majority of the skins in trade and the number of skins in trade reported as originating in this country increased each year until 1983. After 1982, however, most of the skins reported with this origin were reported as re-exports from other countries. The skins recorded by weight in Table 3 (606 kg in 1984 imported by Japan from Paraguay)

almost certainly match a shipment reported by number of skins, and so represent double counting and should be ignored.

An important point to note is the emergence of Bolivia as a major source of skins in 1984 and 1985, as there is no evidence that the species even occurs there and, in any case, all cat species are protected in the country (Fuller and Swift, 1985).

The vast majority of the skins in trade were imported into western Europe, F.R. Germany being the major importing country. Belgium imported a large number of skins in 1980, and France imported a large number in 1984 and some skins in 1985, most of which were reported to have been imported from Bolivia.



Illustrations by B. Gysin and P. Dollinger

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### Margay Felis wiedii:

An analysis of the international trade in Felidae in 1977, found that the trade during that year involved at least 30 000 skins of Felis wiedii, though the precise number was impossible to estimate owing to the large amount of unrecorded trade and smuggling, and to the lack of correlation between import and export figures for the countries involved (Anon., 1980). Data based on reported imports from Paraguay in the period 1978 to 1982 illustrated an overall decline in the trade (Caldwell, 1984). Recent CITES data confirm this overall decline to have been true for total world net trade. Over 20 000 skins of this species were reported in trade by CITES Parties in 1977 and 1978 but by 1985 the total trade was only 138 skins. The main source of skins is reported to have been Paraguay. The number of skins reported in trade decreased from 1980 to 1984, by which time hardly any skins were reported to have been exported from countries with wild populations of the species apart from Paraguay.

The bulk of the skins in trade were imported by western European countries. Up to 1982 F.R. Germany and Italy were the major importing countries, however in 1984 France was the main importer.

### Jaguar *Panthera onca*:

The trade in skins of *Panthera onca* had apparently already declined greatly by the late 1960s (McMahan, 1987). Inclusion in CITES Appendix I, and full protection in most countries where it occurred had reduced the trade to very low levels by the mid 1970s. CITES data indicate that legal trade was negligible for most years after 1976, but in both 1976 and 1980 large numbers of skins appeared in annual reports. In 1976, of 790 skins reported in trade, all except about 100 skins from Brazil were re-exports of potentially old stocks of skins. However the total net trade of 617 skins reported for 1980 was dominated by a reported import of 587 skins into Italy directly from Paraguay, annotated in the Italian annual report to CITES as 'goods imported under special contingencies'. An average of around 20 live animals were reported in trade each year. Most of these were captive-bred specimens, largely for zoological purposes. Although prized as a hunting trophy, reported trade in this species did not reflect any large amounts for this purpose.

### Total numbers in trade

Table 3 lists total net trade in all of the spotted cats species as reported by CITES Parties. Table 4 summarises the numbers of Felid skins included in the Customs reports and other overseas trade statistics that were analysed. One major problem encountered in attempting to analyse data from a number of such reports is the inconsistent reporting of countries of origin and export. For example the Customs report of F.R. Germany, under the title 'countries of export', gives the country of origin if it is known. Therefore if Paraguay exports skins to France, which are then re-exported to F.R. Germany, the skins are recorded in the German Customs report as having been imported from Paraguay. Unless this was a direct transit shipment, it is likely that these skins may also appear in the French report as imports from Paraguay. The situation is further complicated by the fact that if, in the previous example, the F.R. Germany authorities had not known the origin of the skins, they would have been reported as imports from France.

Other countries report trade by various criteria. The Belgian Customs report stated that the original source was given unless a commercial transaction involving the

shipments had taken place en route. The Netherlands Customs report stated that the country of provenance was the country of origin unless the shipment had been 'legally' stopped in transit. This confusion was not a problem in all cases; the UK Customs report included details of trade by country of origin and by country of consignment, therefore only the latter was extracted to minimise double counting of world trade.

In the case of trade in cat skins from Latin America, these problems do not totally invalidate the picture gained from published overseas trade statistics, as the trade has historically been dominated by direct imports into F.R. Germany. It is however apparent that as international wildlife trade legislation began to have significant effects on the trade, certainly after 1981-1982, more skins were imported into France and re-exported to F.R. Germany. Customs data indicate that F.R. Germany imported by far the majority of the skins included in the total trade figures extracted from Customs reports in every year. In 1982, 1983 and 1984 France also imported large numbers of skins. Over the ten-year period from 1976, Paraguay was by far the largest source of skins, although Brazil was an important source until 1980 and in 1985 the only major source of skins reported was Bolivia.

Considering the great potential for double counting when combining Customs data from different countries, and the different methods of reporting in Customs reports, great care must be taken in comparing the Customs data with those in the annual reports of CITES Parties. Further considerations to be taken into account are, that some of the skins in the Customs reports may have been held in a third country for a number of years before being imported, and that the CITES data for 1984 and 1985 do not include trade within the European Economic Community.

Overall the numbers of skins reported in trade in the Customs reports are larger than those included in the CITES data in most years, however the figures are reasonably comparable for some years, especially since 1980. Comparison of the sources of skins detailed in the Customs reports with the reported sources of all small Felid skins in the CITES data (Table 5) confirms the dominance of Paraguay as the major exporter during recent years. Other important sources indicated in both sets of data were Argentina, Brazil (until 1980), Bolivia (after 1982), Peru and Suriname.

Table 3  
Total net trade in skins of Latin American felidae, 1976-1985

Species	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Felidae spp.	-	2933	149286	-	-	-	-	-	-	-
<i>F. colocolo</i>	-	-	19	2730	11046	4299	42	361	-	-
<i>F. geoffroyi</i>	174	7137	42642	70168	66615	84900	22533	78278	22473	1751
	-	-	-	-	-	-	-	-	363 kg	-
<i>F. guigna</i>	-	-	-	-	-	-	-	-	-	-
<i>F. jacobita</i>	84	-	-	-	-	-	-	-	-	-
<i>F. pardalis</i>	12986	19342	34521	17088	30563	17730	9676	69294	4574	556
<i>F. tigrina</i>	8991	13420	48289	23545	33489	35058	68163	84493	35007	2053
	-	-	-	-	-	-	-	-	606 kg	-
<i>F. wiedii</i>	7127	22369	20048	12413	19981	17526	13200	8590	4155	138
<b>Total for Felis spp.</b>	<b>29362</b>	<b>65201</b>	<b>294805</b>	<b>125944</b>	<b>161694</b>	<b>159513</b>	<b>113614</b>	<b>241016</b>	<b>66209</b>	<b>4498</b>
	-	-	-	-	-	-	-	-	969 kg	-
<i>P. onca</i>	790	47	19	48	617	46	23	24	22	1

Source: CITES annual reports

Table 4  
Total imports of wild cat skins from Latin America  
included in all overseas trade (Customs) reports collected

Country	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Argentina	85213 1300kg	71049 -	47868 -	19940 -	6269 38kg	6225 -	- 535kg	13591 8kg	4503 153kg	- -
Belize	504	642	739	-	-	-	-	-	-	-
Bolivia	-	12390	10956	-	-	-	-	6166	19451	37152
Brazil	107919 1600kg	79257 3300kg	66970 -	83482 -	44546 -	- -	- -	1499 -	- -	- -
Colombia	15248	4456	2253	1483	3004	-	-	-	-	-
Ecuador	2096	-	482	-	-	-	-	-	-	-
El Salvador	809	-	-	-	-	-	-	-	-	-
Honduras	2222	899	654	-	-	-	-	-	-	-
Mexico	9017	12125	5985	698	1204	-	-	-	-	-
Nicaragua	5579	687	-	889	-	-	-	-	-	-
Panama	718	1349	1379	-	1456	-	-	-	-	-
Paraguay	28839	105529	180677	231555 6400kg	175012 3323kg	127098 9546kg	144283 14834kg	291717 592kg	71175 406kg	- 100kg
Peru	1275	13624	14775	6732	3867	-	-	-	-	-
Suriname	6581	10544	13502	9431	-	-	-	-	-	-
Uruguay	-	-	-	2677	-	-	-	7000	-	-
Venezuela	-	515	4833	7438	-	-	-	-	-	-
<b>TOTAL</b>	<b>266020</b> <b>2900kg</b>	<b>313066</b> <b>3300kg</b>	<b>351073</b> <b>-</b>	<b>364325</b> <b>6400kg</b>	<b>235358</b> <b>3361kg</b>	<b>133323</b> <b>9546kg</b>	<b>144283</b> <b>15369kg</b>	<b>319973</b> <b>600kg</b>	<b>95129</b> <b>559kg</b>	<b>37152</b> <b>100kg</b>

Sources: various Customs records - see full report for details.

With the exception of those from Bolivia, very few skins were reported by CITES Parties as being direct exports from Latin American countries in 1984 and 1985. The total numbers of skins in CITES and Customs data fell sharply by 1985, indicating a real decline in the international trade in small spotted cat skins from Latin America.

#### Illegal trade

The trade data analysed in the present report indicate that illegal trade in cat and otter skins has operated from a number of sources in recent years. Large numbers of skins have been recorded in trade, originating in countries such as Brazil and Paraguay, many years after trade bans had been implemented in the source countries. The exact extent of illegal trade, past and present, remains a largely unknown factor. Evidence suggests that in the past, large numbers of illegally obtained skins were traded openly by exploiting poor border controls in Latin America and by mis-reporting countries of origin on documentation. Such methods were especially easy to operate while a large number of legal source countries remained. CITES procedures have been blatantly abused; for example large numbers of *Felis pardalis* skins have been reported as originating in Paraguay which is apparently only inhabited by a CITES Appendix I subspecies which should therefore not appear in commercial trade. In theory, illegally obtained skins should be becoming increasingly difficult to launder as more countries implement export bans. By 1986, very few countries could be openly stated as legal sources of skins. This situation, although apparently facilitating greater control of the skin trade, may also have caused such commerce to operate wholly by smuggling without any documentation; if so, the extent of illegal trade could become far more difficult to assess.

There is little very recent evidence of illegal large-scale commercial trade in neotropical cat skins. However a number of seizures of skins have been reported. A survey of the confiscated skins held by IBDF offices in Brazil, carried out in 1982, revealed skins of *Felis pardalis*, *F. wiedii* and *Panthera onca*; these

confiscations were thought, by the researchers involved, to have indicated the continuance of hunting and trade in these species, over 15 years after such activities were prohibited by Brazilian legislation (Duarte and Rebelo, 1985). In March 1986, skins of *Felis geoffroyi* and *F. pardalis* were included in seizures of almost 6500 skins, 47 garments and 58 kg of skins from fur shops in Montevideo, Uruguay (Anon., 1986). Other reports have described attempts to launder skins obtained in Bolivia in the European market and, recently, Spanish Customs detained a shipment of 5000 cat skins which had already been refused entry by the authorities of F.R. Germany. The shipment, held by Spanish Customs, reportedly originated in Paraguay in 1982. However Paraguay banned the export of wildlife in 1975 (Anon., 1987b).

Reports of the decline in demand for cat skins in the major former markets and increased trade restrictions are reflected by the small numbers of skins recorded in legal trade in recent years. However financial incentives for trade almost certainly remain, as do problems with the control of international trade, such as the enforcement of border controls and poor implementation of CITES in some countries.

#### Summary and Conclusions

The available data provide evidence that the trade in Latin American cats reached a peak during the 1960s and 1970s. By 1985, a combination of trade controls at national and international levels, and some reduction in the demand for spotted cat skins, had caused a great decrease in the number of skins in legal trade, although the levels of illegal trade remain largely unknown. The species exploited by the fur trade seem to have changed in response to availability.

*Panthera onca*, although heavily hunted for the fur trade in the past, has apparently not been involved in international trade in significant numbers in recent years. Evidence from most countries suggests that this species may have been over-harvested and although the international fur trade is no longer a significant drain on populations, *P. onca* continues to suffer from persecution as a predator on livestock, and the area of suitable habitat is declining.

Table 5  
Reported sources of skins of Latin American small spotted cats in trade, 1976-1985

Country	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Argentina	779 (605)	9727 (5408)	41257 (40972)	16592 (16568)	11801 (10933)	6477 (5099)	3169 (1)	8 (8)	2024 (0)	-
Belize	-	195 (195)	593 (593)	264 (364)	341 (341)	2 (2)	68 (1)	28 (2)	1 (1)	-
Bolivia	-	-	2141 (510)	-	7 (7)	3 (3)	-	3314 (3314)	30826 (30826)	3790 (3318)
Brazil	11624 (7042)	4961 (3987)	1491 (0)	394 (0)	1 (1)	114 (2)	50 (0)	11 (1)	-	-
Colombia	3715 (0)	365 (365)	-	-	294 (6)	131 (15)	17 (17)	15 (11)	1 (1)	-
Costa Rica	-	-	-	-	1 (1)	-	-	1 (1)	1 (1)	-
Ecuador	-	-	416 (416)	-	3 (3)	9 (8)	26 (24)	3 (2)	3 (1)	-
El Salvador	-	-	-	-	- (1)	1	-	-	-	-
Guatemala	-	-	-	-	1 (1)	-	-	-	1 (1)	-
Guyana	-	-	-	-	-	1 (1)	-	1 (1)	-	-
Honduras	63 (63)	34 (34)	3335 (117)	261 (261)	1581 (1)	10 (10)	2 (2)	2 (2)	2 (2)	-
Mexico	1802 (418)	-	1456 (315)	-	5 (5)	17 (5)	16 (2)	12 (8)	12 (11)	-
Nicaragua	-	-	-	-	-	3 (3)	7 (7)	-	1 (1)	-
Panama	-	373 (373)	93 (93)	732 (549)	4081 (4081)	20 (20)	-	3 (1)	-	-
Paraguay	6531 (0)	18457 (11214)	180111 (180111)	96610 (93849)	141726 (139054)	151929 (126092)	111741 (70459)	246899 (34375)	30746 + 969 kg (2600) (969 kg)	460 (0)
Peru	22 (0)	14512 (14512)	19388 (19388)	7832 (7832)	3522 (2509)	38 (20)	3 (3)	9 (6)	-	-
S. America	9581 (0)	6272 (0)	28578 (0)	469 (0)	299 (0)	103 (0)	-	-	268 (0)	112 (0)
Suriname	4337 + 10 bags (4337) (+ 10 bags)	8718 (5019)	419 (0)	-	-	-	-	-	-	-
Uruguay	-	-	11531 (10171)	-	10 (0)	-	-	-	-	-
Venezuela	-	-	-	-	-	1 (1)	-	-	-	9 (9)

Figures in parentheses indicate direct trade from the country, in order to distinguish such trade from transactions where the country was recorded as the original source, but not the exporter.

Source: CITES annual reports.

*Felis guigna* and *F. jacobita* have been of little interest to the international fur trade, although their skins do appear in local trade and have been found in shipments of other species. Skins of *F. colocolo* appeared in trade for a number of years during the late 1970s and early 1980s. Little is known about populations of this species and the potential effects of harvest, however few skins appear to have been traded after 1981.

Of the remaining spotted cat species *Felis pardalis* was the main species involved in trade until the mid-1970s. Although most sources of information for earlier years include all small spotted cats under the name 'ocelot', trade representatives indicate that the vast majority of the skins in trade were skins of *F. pardalis* and that the other small spotted cat skins assumed more importance in trade in the late 1970s as *F. pardalis* skins became more difficult to obtain. Since the late 1970s, *F. geoffroyi*, *F. tigrina* and *F. wiedii* have all been reported in international trade in large numbers. By 1984, *F. geoffroyi* and *F. tigrina* skins were traded in the largest numbers. The trade in small spotted

cat skins decreased significantly by 1985 compared with the numbers involved in earlier years. Trade controls have apparently taken effect, however trade data for further years are required to confirm the decline.

#### Source countries

A number of countries were important sources for cat skins in international trade, the most important having been Brazil, Colombia, Bolivia, Paraguay, Peru and Argentina. Brazil was an important source of skins in the 1960s, and Paraguay was by far the largest source of skins during the late 1970s and early 1980s in spite of its ban on exports. Bolivia apparently exported the largest numbers of small cat skins in the most recent years. However, the lack of effective border controls and the evident ease of laundering skins through countries from which legal, or at least apparently legal, documentation can be obtained, limit the reliability of available trade data for indicating the exact sources of the skins in trade.



### Importers

F.R. Germany replaced the USA as the major importer of cat skins during the early 1970s. Some evidence suggests that the German market for spotted cat skins may have declined as a result of fashion trends and changing attitudes to wearing of spotted cat furs.

### Legislation

The species covered by this report are fully protected from commercial export in most of their countries of origin, furthermore they are all listed in CITES Appendices I or II. Although some channels do continue to allow trade outside these controls, the mechanism for effective control of the international movements of cat skins does exist. The recent ban on the issuance of permits for imports into the EEC of skins of Felis geoffroyi, F. pardalis, F. tigrina and F. wiedii (Anon., 1987a) effectively cuts the European market off from the only species traded in large numbers in recent years. The effect of this ban has already been illustrated by the refusal of EEC countries to allow the import of 82 500 cat skins legally exported from Argentina in early 1987. These skins have been exported from Argentina, but their final destination remains unknown.

### General conclusions

Future commercial harvest of spotted cat skins may be seen as acceptable or desirable if carried out on a sustainable basis. Melquist (1984) concluded that such harvest may be feasible for some species but that insufficient population information was available upon which proper regulation of hunting could be based. Information gathered for the present report supports this conclusion. Population information remains inadequate, however indications from trade data show that legislative controls have been effective in reducing the level of trade. This legislative framework will be invaluable in controlling possible future trade. Such trade would require a market to supply, therefore recent trends in the German fashion trade away from spotted cat skin garments and the changes in attitudes to the wearing of fur garments experienced in a number of countries, may not be a good sign for potential future trade. Nevertheless the fashion trade is adaptable and the financial benefits of controlled trade may become crucial to the survival of these species. Trophy hunting has been suggested as an important assurance for the survival of Panthera onca, however like the other species included here, insufficient quantitative data are available to ensure sustainable harvest. A recent report on the status of the Leopard Panthera pardus in sub-Saharan Africa (Martin and De Meulenaer, 1987) used population density and rainfall data to estimate the total population size. Furthermore a model was designed to predict the effects of exploitation on the population. Such investigation must be seen as a priority for the Latin American cats and others before any large scale utilisation is recommended.

The collection of such population data is obviously a major task; substantial funding will be needed and personnel with extensive experience will be required. Such investigations should be conducted within national research programmes wherever possible. The process will inevitably be inhibited by lack of time and money, therefore careful extrapolation of population levels from one area to another will be required.

The harvest and trade data presented are intended to provide a useful historical account of the levels of trade which have been thought to have caused these species generally to decline in numbers. Since other factors, such as habitat destruction and alteration, were also important influences on their populations, and population data remain inadequate, the trade data alone cannot safely be

used to indicate sustainable levels of trade for these species. However such information will be a crucial source of reference when calculating potentially sustainable harvest levels in the future, should useful population data become available and such exploitation be seen as desirable.

### RECOMMENDATIONS

On the basis of the recent report produced by WTMU and that produced by Melquist (1984), and in light of the findings of the recent study of the status of Panthera pardus (Martin and De Meulenaer, 1987), it is possible to make a number of general recommendations concerning the future conservation of the neotropical spotted cats, together with a number of more specific recommendations dealing with their harvest and trade. (In the full report referred to in the introduction, the same general recommendations were made with respect to the neotropical otter species).

As is recognised in the preamble of CITES, 'peoples and States are and should be the best protectors of their own wild fauna and flora'. It is therefore important that:

1. The range states should determine their own objectives and priorities for the conservation of their native cats.

Any proposed conservation measures must be based on agreements between the range states which the Latin American cats inhabit. Such co-operation should be seen as a priority in the future conservation and management of these species. Therefore:

2. Regional strategies for the conservation of the neotropical cats should be produced and endorsed by the range states.

The production of a strategy for the felids has already been identified as a priority for future action in the Manifesto on Cat Conservation which was recently prepared by the IUCN/SSC Cat Specialist Group.

If the future exploitation of some or all of the Neotropical spotted cat species is seen to be a desirable, or even an essential, aspect of their conservation, population data will be required to determine appropriate levels of exploitation. At present, insufficient information is available on the population size and dynamics of any of the Latin American cat species. Therefore:

3. Basic biological and ecological information on the species included in this report should be collected and analysed; priority should be given to those species for which some form of exploitation is identified as an objective.

Baseline information on each species must include, as a minimum, indications of population density, age structure, fecundity, longevity, sex ratio and mortality for populations inhabiting the different habitat types found within the range of each species. In addition information must be compiled on the extent of the different habitat types, rates of habitat destruction and alteration, and estimates of local population sizes. When sufficient baseline population data are available:

4. Comprehensive assessments of population information should be carried out to produce national and global estimates of population levels.
5. Population models should be constructed for each species involved and sustainable harvest levels should be determined for those species whose exploitation is desirable and feasible.

If it is subsequently decided to permit harvest and trade, on-going monitoring and control of the extent and effects of such exploitation should be ensured.

6. a. National export quotas should be established.
- b. Skin tagging and registration procedures should be initiated.
- c. Monitoring of the operation of these controls should be ensured by the CITES Secretariat.

Meanwhile:

7. In the absence of baseline population data, present trade controls should be maintained and their enforcement should be improved.

In particular:

- a. Suitable means of improving the enforcement of trade controls in the range states should be investigated.

Such means may include improving public awareness of national legislation and ensuring the provision of adequate resources for and training to enforcement personnel.

- b. The CITES Secretariat should remind the Parties of national legislation in effect in Latin American countries which protects cats.
- c. Importing countries should ensure adequate enforcement of trade controls and every effort should be made to respect the national legislation in effect in the exporting country before permitting trade in these species.

In the past, major trade problems have arisen because of the manner in which the Latin American cats were listed in the CITES Appendices. The listing of a number of cat species is still confused by the inclusion of certain subspecies in Appendix I (*Felis pardalis mearnsi*, *F.p. mitis*, *Felis tigrina oncilla*, *Felis wiedii nicaraguae* and *F.w. salvinia*). In light of the fact that the skins of the various subspecies of small spotted cat are extremely difficult to distinguish and the widely held belief that most of these subspecies would not survive a thorough systematic review:

8. The listings in the CITES Appendices of the neotropical spotted cats should be reviewed.

If such a review concludes that Appendix I listing of these populations should continue, it would seem far more appropriate to list geographically defined populations rather than subspecies. It must be noted that many of the cat species or subspecies currently included in Appendix I, were listed prior to the adoption by CITES Parties of the Berne criteria for the addition of species and other taxa to Appendices I or II (Resolution of the Conference of the Parties Conf. 1.1). Therefore any proposed downlisting to Appendix II may need to follow the procedures detailed by Conf. 5.21, which was adopted at the fifth meeting of the Conference of the Parties held in 1985.

One particular problem which requires urgent attention is the subject of domestic livestock predation by Jaguars. This has been identified as an immediate conflict in a number of countries resulting in widespread and uncontrolled hunting of Jaguars by ranchers (see e.g. Tello, 1986). Therefore:

9. The need to control Jaguars in some areas because of their predation of domestic livestock should be investigated and possible means of resolving the problem should be identified.

The extent of Jaguar predation on domestic livestock should be quantified. Certain individual countries already

have mechanisms for licensing control killing of Jaguar, the effectiveness of which should be studied. Possible solutions may involve controlled hunting or some form of compensation scheme.

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The full report The Harvest of and Trade in Latin American Spotted Cats (Felidae) and Otters (Lutrinae) was produced with the financial assistance of the International Fur Trade Federation. Copies are available from the CITES Secretariat, 6 rue du Maupas, Case postale 78, CH-1000 Lausanne 9, Switzerland. Price: £8 (US\$13) incl. postage.

## Publications Available

### A Feast in the Wild by Russell Kyle

1987. 210 pp. Price: £9.95 (£15.95 hardback) incl. postage. Available from KUDU Publishing, 1 Lyne Road, Kidlington, Oxford OX5 1AE, UK.

Of the world's 200 or so species of large herbivores, fewer than 15 domestic species contribute significantly to the global supply of animal protein. One of the principal reasons for this is man's natural conservatism, which inhibits him from trying new foods or from considering alternative ways of producing them. Russell Kyle's book, A Feast in the Wild, will go a long way to correcting this selective myopia by opening our eyes to the great range of possible ways in which large, wild mammals can be used to augment our food supply. And yet the author manages to curb his evident enthusiasm for the subject: he stops short of advocating that we should all burn our Brahmin cattle and slaughter our sheep to replace them with Eland and Cane Rats; instead retaining a realistic approach to the limitations of wildlife as future farm animals.

The book opens with a history of the domestication of the major species in the Middle East and then embarks on a tour of wildlife production successes, failures and possibilities around the world. It starts with the large game of Africa, then passes from the Bison and deer of North America to the tapirs, Capybara and camelids of South America. The reasons why few of the many large Asian mammals, other than the obscurer members of the cattle tribe, have been domesticated are examined. The history of deer farming in the Orient is described, culminating in its current spectacular success in New Zealand, and contrasting with the lack of progress in domesticating the Australian marsupials. Two remaining chapters mop up the assorted small rodents eaten in Africa and South America, and the Ostrich, turtles and crocodilians farmed in various countries. In each case, the biological advantages and disadvantages of the species involved are briefly assessed, and possible exploitation regimes, be they domestication, ranching or simply hunting, are evaluated. There are numerous black and white photographs of indifferent quality of reproduction and many excellent line illustrations.

The style of writing is relaxed and informative rather than unduly technical, although the sources of information are fully and unobtrusively referenced. Every opportunity is taken to lighten the text with amusing anecdotes, and I am now far better informed on such diverse topics as Peruvian table etiquette regarding Cavy ear bones and the ultimate fate of Walking Coyote, saviour of the North American Bison.

Above all, as its title implies, this is a book for the gourmet, though not the vegetarian. The author takes unashamed interest in the eating qualities of his subjects and few of even the more unlikely species escape such epicurean assessment. Thus the Patagonian Hare is described as "a plump and tasty 12 kg" and elephant meat is said to be "broad-grained and sweet-flavoured". Fittingly, the last chapter comprises a selection of recipes for the better appreciation of wildlife, from Grasscutter Rats to kangaroos. I sampled "Riney's Rat Recipe", though I was unable to obtain the meat of the West African variety as recommended, and found it to be delicious.

The benefits of providing a commercial incentive for the conservation of wildlife are highlighted, though there is less extensive treatment for the possible adverse effects. One is, however, warned that the killing of freshwater turtles in Brazil is prohibited and that only the meat of farmed animals may legally be consumed. Some of the information is out of date, some oversimplified and

some is wrong: Cayman Turtle Farm did not close in 1976 as claimed, but is still operating. Other suggestions are somewhat unrealistic, such as the advocacy of developing a game cropping scheme in the strife-stricken southern part of Sudan, or that the horse might be a good meat producing animal for North America. But within the limitations of space, the book gives a commendably comprehensive and certainly amusing introduction to the possibilities of meat production from wild animals.

*Richard Luxmoore*

### Recent US Imports of Certain Products From the African Elephant by Jorgen B. Thomsen

1987. 25 pp. Price US\$5 incl. postage. Available from TRAFFIC (USA), 1250 24th Street, NW, Washington, DC 20037, USA.

In July 1987 a bill was introduced before the US Senate which, if enacted, would prohibit the import into the USA of any product from the African Elephant *Loxodonta africana*. In response to requests for trade information from the US House Sub-committee on Fisheries and Wildlife Conservation and the Environment, Jorgen Thomsen of TRAFFIC (USA) has compiled a report outlining recent US imports of worked and raw ivory, and elephant leather. The principal sources of information were the US CITES annual report data for the years 1983-1985 and the US Fish and Wildlife Service (USFWS) Law Enforcement data for the years 1984 until mid-1987. Additional information for 1983 to mid-1987 was retrieved from Customs import declarations.

The report notes that, for raw ivory, there are a number of marked discrepancies between the USFWS information and the Customs data regarding both the source and quantity of ivory imported. However it appears that overall imports peaked in 1984 when they amounted to 9078 tusks and 2222 kg of tusks, and declined towards 1986 to a total of only 855 tusks and 238 kg of tusks. The main source countries were Botswana, Central African Republic, Tanzania, South Africa, Zaire and Zimbabwe. The report outlines areas where the US enforcement has been weak, particularly in following the guidelines for operating the CITES ivory quota system. Details are also provided of several apparently illegal imports of tusks from Zaire.

Regarding worked ivory, the report notes that the USA is the second largest importer of carved ivory, after Japan, and that imports peaked in 1985 with a declared import value of \$24.4 million. This fell to \$17.6 million in 1986. The largest supplier of carvings is Hong Kong and the report concludes that the "legality" of ivory imported as carvings is obscure and the number of elephants affected is impossible to determine.

Imports of elephant leather have apparently fallen since 1984 but this reflects a shortage of supply rather than a lack of demand. The US annual average import is around 500 000 square feet and may involve at least 11 000 elephants, however for 1986 the figure is nearer to 7000 animals. The countries supplying the leather all have well managed elephant populations, with very little poaching.

In conclusion the report notes that the US annual average declared import value of elephant products was \$29 million and, of this, carved ivory formed the greater part. Secondly, the USA is the world's largest importer of elephant leather and, finally, serious concern is expressed about the weaknesses of the national law enforcement system. The report suggests that an excise tax on imports of elephant products could provide significant revenues for improving elephant conservation.

The full report will be published in *Pachyderm*.

*John Caldwell*

## The TRAFFIC Network

- Wildlife Trade Monitoring Unit, IUCN Conservation Monitoring Centre,  
219c Huntingdon Road, CAMBRIDGE CB3 0DL, UK. Tel: (0223) 277427  
Tlx: 817036 SCMU G
- TRAFFIC (Austria), WWF-Austria, Ottakringerstr. 114-116/9, Postfach 1,  
1162 WIEN, Austria. Tel: 0222/461463  
Tlx: 114900 OBRAU A
- TRAFFIC (Belgium), Chaussée de Waterloo 608, B-1060 BRUSSELS, Belgium.  
Tel: (02) 347 01 11  
Tlx: 23986 WWFBEL B
- TRAFFIC (France), WWF-France, 14 rue de la Cure, 75016 PARIS, France.  
Tel: 527 58 02
- TRAFFIC (Germany), WWF-Deutschland, Sophienstrasse 44, D-6000 FRANKFURT  
AM MAIN 90, F.R. Germany. Tel: (069) 79 40 000  
Tlx: 4 13854 VDTD
- TRAFFIC (Italy), WWF-Italy, Via Salaria 290, 00199 ROME, Italy.  
Tel: (06) 852492-854892
- TRAFFIC (Japan), 7th Fl. Nihonseimei Akabanebashi Bldg., 3-1-14, Shiba,  
Minato-ku, 105, TOKYO, Japan. Tel: (03) 769 1716  
Tlx: 2428231 WWF JPN J
- TRAFFIC (Netherlands), Postbus 7, 3700 AA ZEIST, The Netherlands.  
Tel: (03404) 19438  
Tlx: 76122 WNF NL
- TRAFFIC (Oceania), PO Box 799, MANLY 2095 NSW, Australia.  
Tel: (02) 977 4786  
Tlx: 72577 FFASYD
- TRAFFIC (South America), Carlos Roxlo 1496/301, MONTEVIDEO, Uruguay.  
Tel: (02) 49 33 84  
Tlx: P. BOOTHUY 702 493384
- TRAFFIC (USA), 1250 24th Street, NW, WASHINGTON, DC 20037, USA.  
Tel: (202) 293 4800  
Tlx: 23 64505 PANDA
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