

Hawksbill Exploitation in Vietnam

Tanzania's Bird Trade Controls

The Journal of the TRAFFIC Network disseminates information on the trade in wild animal and plant resources

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Growing Initiatives to Eliminate Illegal Medicines

The sale and use of Tiger bone and other parts and derivatives of threatened species occurs worldwide and their use in medicinals is gaining a wider acceptance outside Asian communities.

In order to assess the extent of the demand for such products within the UK, TRAFFIC initiated a survey of oriental pharmacies and supermarkets in the cities of Birmingham, Liverpool, London and Manchester, in August 1994. Medicines in the form of wine tonics, pills and plasters that claimed to contain Tiger bone, rhino horn and bear bile, were found in 14 of the 28 businesses visited. The findings prompted an investigation by UK authorities that resulted in the seizure of illegal products on sale in London's Soho District and the Chinatowns of Birmingham and Manchester.

On 7 February 1995, TRAFFIC assisted in raids on 12 oriental pharmacies and supermarkets, which were undertaken simultaneously in all three cities in an investigation co-ordinated by the Metropolitan Police, Greater Manchester Police, West Midlands Constabularies, the Department of the Environment and HM Customs and Excise.

The operation, code named "Operation Charm", recovered half a rhino horn and, in each city, several containers with bones labelled as Tiger bone. Hundreds of manufactured medicines purporting to contain Tiger bone, rhino horn and/or bear bile were seized. Items thought to be bear gall bladders were found after forensic examination to be gall bladders from pigs.

According to Crawford Allan, Enforcement Assistance Officer¹ at TRAFFIC International "the trade in these medicines was not thought to be significant in the UK until TRAFFIC's investigation disproved this assumption. It was essential to inform the authorities who realized the seriousness of the issue and responded accordingly. While we try to be sensitive to cultural traditions, the dire status of the Tiger, rhino and many bear species, forced this firm action. The illegal trade in these species is bringing about their extinction and must cease."

Under EC regulations implementing CITES, the sale of a product claiming to contain derivatives of protected species is illegal, even if it does not contain such ingredients. Importation of such items into the UK also contravenes CITES, as does the trade in the parts of many bear species.

Although HM Customs and Excise had previously seized a number of such products and seek to prevent their importation, the medicines are clearly still being smuggled into the UK. Preventing their entry is crucial to stopping the trade, so attempts to determine methods of illegal entry and to identify smugglers should be pursued. TRAFFIC is assisting Customs authorities with this initiative.

¹The position of Enforcement Assistance Officer is made possible through joint funding from the UK Department of the Environment and WWF-UK.

Belgium was identified as a major destination of Tiger derivatives exported from China in 1992: export permits were issued for 250 000 pills and five containers of Chinese medicine containing Tiger (TRAFFIC>



A TRAFFIC investigator and a police officer examine alleged Tiger bones in a Chinese pharmacy, London, UK.

> Bulletin 14(3):99-106). In order to investigate Belgium's role in the trade, on 21 February raids similar to those carried out in the UK were conducted by Belgian authorities in seven cities. Customs officials were assisted by the Ministry of Agriculture and TRAFFIC in their search of 30 medicine shops: in 25 of these establishments they found products containing or purporting to contain ingredients that are banned from trade or require import permits: some 500 kg of medicines were seized. Examination of the accounts of some of these businesses enabled the authorities to establish the source, destination and volumes of many of the products in question.

One of the cities investigated was the port of Antwerp, which has the biggest Asian community in the country. Here Customs officers seized medicines from a company that repackages traditional Chinese medicinal items; ingredients listed included Tiger bone, Leopard *Panthera pardus* bone, rhino horn, bear bile, musk *Moschus*, pangolin *Manis*, and wild American Ginseng *Panax quinquefolius* root.

The demand for Tiger products in Australia has been demonstrated following an undercover investigation by TRAFFIC of traditional medicine outlets in Sydney, Melbourne and Brisbane. Of the 119 premises visited, some 14% were found to be in possession of products claiming to contain Tiger bones or other Tiger parts. Although importation of Tiger medicines is illegal under Australian law, the sale of such products once they have entered the country, illegally or otherwise, is not adequately restricted. TRAFFIC and WWF have called on the Australian Government to introduce wider controls to prohibit such activities; they stress that education initiatives are also imperative if prescribers and users of such medicines are to be persuaded to choose alternatives.

Similar initiatives are also underway in the New Zealand cities of Auckland and Wellington.

TRAFFIC International; TRAFFIC Europe; WWF Australia Press Release, 8 March 1995

... but Controls Urgently Needed in Japan

While many countries are making serious attempts to eliminate the sale and illegal possession of products derived from threatened species, in particular of Tiger bone and rhino horn, it is TRAFFIC's assessment that Japan remains an important consumer of both Tiger and rhino products, a concern that has recently been communicated by TRAFFIC to the CITES Standing Committee.

Although the official importation of rhino horn and Tiger bone to Japan has ceased, that country

remains an important consumer of these ingredients: according to China's Customs statistics, more than 71 000 kg of Tiger bone medicines were exported to Japan during 1990 to 1992 (after which time China ceased issuing export permits for Tiger and rhino products), and, in 1990, the province of Taiwan reported exporting 1900 kg of Tiger bone to Japan. Japan's import statistics for that period record only half the amount China reported exporting to Japan, and no imports of Tiger bone from Taiwan.

During 1994 and 1995, while researching the availability in Japan of Saiga Saiga tatarica horn (used in traditional medicine to reduce fever) and other medicines containing extracts of threatened animals and plants, TRAFFIC investigators came across at least 25 whole rhino horns in retail shops in Tokyo, Fukuoka, Kitakyushu, Kyoto and Osaka. Although owners of this horn claimed that they were not for sale, the public display of these horns runs counter to CITES Parties' expressed wish to eliminate the use of rhino horn in medicines. Evidence to suggest that such horns are in fact consumed was reinforced when sliced horn was discovered in five shops, and evidential test samples were purchased by the investigators in two. Wine and pills labelled as containing Tiger bone were also seen for sale.

With the recent election of the Government of Japan as the chair of the CITES Standing Committee, Japan is in a position to be viewed as a role model for the implementation of CITES and other efforts to stop illegal and unsustainable trade in wildlife and wildlife products. In this position, it will also be expected to honour the intent of former Standing Committee recommendations, which have included calls for Parties to control the illegal trade in rhino horn and Tigerrelated products. Japan's Law for the Conservation of Endangered Species of Wild Fauna and Flora, currently under review and scheduled to be enacted by July 1995, should include provision for regulating the sale and possession of traditional Chinese medicines, especially those containing rhino horn and Tiger bone. To this end, TRAFFIC presented its findings to the CITES Standing Committee in March 1995, and urged them to discuss with the relevant Japanese authorities the need for implementation of the following actions:

- a) revision of Japanese law to include a prohibition on the sale of derivatives of endangered species, including products that contain, or claim to contain rhino horn and Tiger bone;
- enacting a system of regulating the Chinese medicine industry in Japan so as to ensure that the medicinal use of wildlife as medicine remains sustainable and that healthy populations of the species involved persist in the wild;
- establishing specific Customs categories for wild fauna and flora popularly used in traditional Chinese medicine in Japan;
- d) launching a nationwide public-awareness campaign.

TRAFFIC East Asia

Bhutan Strengthens Measures to Protect Threatened Wildlife

Biological surveys in protected areas in Bhutan indicate the presence of more than 5000 species of vascular plants, 700 bird species and 200 mammal species. Many of these animal taxa are listed in the *IUCN Red Data Book* as threatened and include the Tiger *Panthera tigris*, Snow Leopard *Panthera uncia*, Indian Rhinoceros *Rhinoceros unicornis*, Asian Elephant *Elephas maximus*, the Himalayan Black Bear *Selenarctos thibetanus* and Takin *Budorcas taxicolor* (Groombridge, 1993). IUCN has also declared Himalayan Musk Deer *Moschus chrysogaster* as Vulnerable.

Field reports indicate that Musk Deer and other endangered species are being subjected to heavy poaching in certain areas of the country. Despite legislation that allows for the apprehension and prosecution of poachers, a shortage of trained manpower and inadequate facilities have, particularly in the more remote areas of the country, inhibited efforts to monitor illegal activities in this regard. The reduction of forestry staff from 1100 in 1987 to 650 in 1994 further weakened these efforts.

The Forestry Services Division of Bhutan and WWF jointly conducted a needs assessment in 1994. They developed an anti-poaching programme as part of that division's existing anti-poaching initiatives, to be implemented in areas identified as being in critical need: the programme will establish anti-poaching units in several territories.

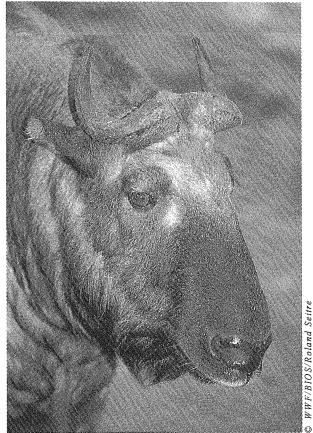
The Forestry Services Division will hold seminars on wildlife regulations for enforcement officers based in these areas. As well as developing a database on the distribution of vulnerable and endangered wildlife in Bhutan, their migration patterns, and threats to their survival, the programme will develop a nationwide education package to promote conservation and raise public awareness.

The project will be reviewed annually for three years after which time the overall effectiveness of these initiatives will be evaluated.

Reference

Groombridge, B. (ed.) (1993). 1994 IUCN Red List of Threatened Animals. World Conservation Monitoring Centre, Cambridge, UK. IUCN, Gland, Switzerland and Cambridge, UK. lv.+286pp.

WWF International



Takin *Budorcas taxicolor* is one of several species in Bhutan that are considered to be threatened.

CITES Focus in South Korea and India

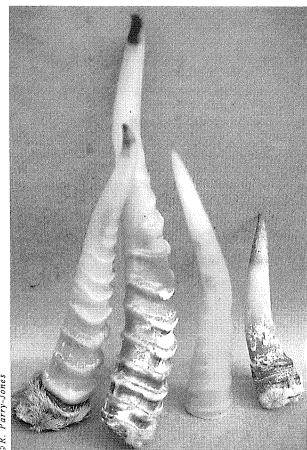
TRAFFIC East Asia, with support from WWF International and the UK Foreign and Commonwealth Office, convened the 'Seminar on the International Trade of Endangered Wild Fauna and Flora' at the National Institute of Environmental Research in Seoul, Republic of Korea, on 9 March 1995. The primary aim of the meeting was to create dialogue on the regulation of international and domestic trade in endangered species, with emphasis on CITES and its implications for traditional Chinese communities worldwide. More than 150 representatives of government agencies, the pharmaceutical industry and the traditional medicine community participated. Literature outlining the aims and mechanisms of CITES were distributed in Korean, along with a list of all species listed in the CITES Appendices. Presentations were given in Korean, English and Cantonese and translated simultaneously into Korean/English.

> A questionnaire distributed to each participant before and after the meeting to determine their perception of CITES and whether there had been any attitude change will be analysed and their findings published in both Korean and English, together with the final proceedings of the workshop. Copies will be sent to all participants, as well as to libraries, traditional medicine associations, medical schools and other interested parties in South Korea.

The seminar was jointly sponsored by the Ministry of Environment and the Ministry of Health and Welfare.

In February 1995, representatives from the CITES Secretariat and the US Fish & Wildlife Service's Division of Law Enforcement jointly conducted a CITES implementation workshop in Delhi, India. The five-day workshop, funded by the US Agency for International Development and the US Asia Environmental Partnership Program, was attended by members of the Indian CITES Management and Scientific Authorities, as well as law enforcement officials from various agencies responsible for CITES. The workshop focused on all aspects of CITES, including inspection, smuggling, and investigative techniques. It is the first of five such workshops planned for Asian countries during 1995.

TRAFFIC East Asia; US Fish & Wildlife Service, CITES Update No. 33, March 1995



TRAFFIC in Russia

On 1 April 1995, TRAFFIC Europe opened an office in Moscow, a development made possible thanks to generous support from WWF Germany.

Establishment of national TRAFFIC representation in Russia has been a high priority for the Network: Russia and the countries of the Commonwealth of Independent States are experiencing serious problems in the control and management of the trade in wildlife. Much of this exploitation involves a wide range of native species, from the endangered Siberian Tiger Panthera tigris and Markhor Capra falconeri, to the increasingly vulnerable Saiga Antelope Saiga tatarica, Sturgeon Acipenser, and a variety of plants. The creation of a permanent TRAFFIC presence in the country will allow closer monitoring of local wildlife markets, enable provision of assistance to CITES authorities, and facilitate investigation of the international trade in these species and their products.

Until further notice the office can be reached at the address provided on the back page.

Directorship Vacancy at TRAFFIC USA

The TRAFFIC programme is seeking candidates for the position of Director of TRAFFIC USA. For further details contact the Human Resources Department at WWF-US, 1250 24th Street, NW, Washington, DC 20037, USA.; or TRAFFIC International, 219c Huntingdon Road, Cambridge CB3 0DL, UK.

Srought back from the brink of extinction in the early 1900s, the Saiga Antelope Saiga tatarica (CITES Appendix II) is once again under threat as a result of uncontrolled poaching for its horn, valued in traditional oriental medicines for its purported cooling properties. Establishment of a TRAFFIC office in Russia will provide greater opportunities to ensure that trade in this species, and other wild animals and plants native to the region, is conducted according to national laws and international treaties.

Law of the Sea in Force

The United Nations Convention on the Law of the Sea (UNCLOS), which came into force on 16 November 1994, is expected to make a significant contribution to international security on the high seas. The binding treaty, which has been ratified by 60 Parties, provides for a 12-nautical-mile territorial sea limit and a 200-nautical-mile Extended Economic Zone (EEZ), inside which coastal states exercise control. It will be used as a mechanism for settling disputes concerning oceans' use, in particular by presiding over deep seabed mining beyond EEZs; it will also be concerned with fisheries, piracy and land-based sources of marine pollution.

Though the UNCLOS text was adopted and signed by 119 states in 1982, a number of industrialized countries refused to sign the treaty owing to differences over mining provisions. A compromise achieved last year on this issue has now made universal adherence to the Convention possible. While Germany and Australia have joined, other industrialized countries have yet to follow.

World Wide Fund for Nature Press Release, 16 November 1994; WWF Baltic Bulletin, 1/95

UK Support for the Fishing Industry

The UK Government announced on 18 January 1995 that the present decommissioning scheme for fishing vessels will be extended for a further two years beyond 1995-96, in order to secure the long-term efficiency and viability of the fishing industry.

Planned expenditure in 1995-96 will be increased by £4 million (US\$6.4 million) to £12 million and an additional £12 million will also be available in each of the years 1996-97 and 1997-98, bringing the total commitment of the Government to £53 million over a five-year period.

Ministry of Agriculture, Fisheries and Food News Release, 18 January 1995

'Sea Change' Needed to Resolve Fisheries Conflicts

Governments must co-operate to control overfishing by producing a strong, legally-binding and conservation-minded treaty to reverse the widespread decline of world fisheries, warned WWF at the opening of the UN Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks, held in New York, USA, from 27 March to 12 April 1995. Governments have had over eight months to consider a Draft Agreement on the management of species found both inside a country's 200-nautical-mile boundary and those in the high seas beyond, which are largely unregulated.

The meeting comes at a time of growing international conflict over countries' fishing rights to declining fish resources. Most prominent among these recent confrontations has been Canada's arrest at gunpoint of a Spanish trawler fishing in disputed waters in the Grand Banks off Newfoundland. The EU has called Canada's action a "flagrant violation" of the international law of the sea.

The Spanish trawler *Estai* was intercepted as it fished for Greenland Halibut *Reinhardtius hippoglossoides* just outside Canada's 200-nautical-mile exclusion zone. In May 1994, Canada enacted legislation extending its fisheries protection to cover the straddling stocks adjacent to but beyond its territorial limit, an area managed by the Northwest Atlantic Fisheries Organization (NAFO). The law enabled Canadian authorities to intercept any vessels fishing unlawfully in that area (see *TRAFFIC Bulletin*, 15(1):6), but the validity of this legislation has been questioned.

Canadian Minister of Fisheries, Brian Tobin, has defended his country's position by arguing that some of the Spanish vessels fishing in these seas have been using nets with a mesh size much smaller than the legal limit, resulting in catches that have allegedly more than doubled the entire annual quota of Greenland Halibut allocated by NAFO to EU Member States, as well as sweeping up large numbers of immature fish. This is the first year for which Greenland Halibut is subject to a Total Allowable Catch and the allocations, decided by NAFO, have been criticized by the EU: over 60% of the 27 000 t quota has been allocated to Canada, with the EU limited to 12.5%.

The *Estai* has been released but the EU and Canada are now in dispute over whether the vessel was breaching fisheries rules. Despite a call from some quarters for the EU to adopt economic sanctions against Canada, however, others - including Britain, Germany, the Netherlands, Denmark, Sweden and Finland - prefer to see the conflict resolved through negotiation.

Meanwhile, Spanish trawlermen have resumed fishing in the Grand Banks, and nets were cut on another Spanish vessel by Canadian coastguards on 26 March.

The Independent (UK), 29 March 1995; WWF Press Release, 27 March 1995; European Bureau for Conservation and Development Newsletter No. 1/95.

Market for Sea Moths in Medicinals

The five fish species in the family Pegasidae, known as sea moths or sea robins, are found only in the Indo-Pacific and are unfamiliar even to most fish biologists and fishers. These intriguing and attractive fish which measure less than 18 cm - swim with huge pectoral fins and use their rolled pelvic fins to walk. They inhabit primarily areas of open sand or mud near seagrasses and are well-camouflaged against the ocean floor. The sole study of live pegasids - in a Red Sea population not known to be exploited - discovered that these are sparsely distributed, site-faithful fishes living in discrete pairs (Herald and Clark, 1993).

These fish are used in traditional Chinese medicines for the treatment of lymph node ailments, to remove phlegm and to diminish "other abnormal internal secretions" and are traded in vast numbers. In China alone, nearly 15 million specimens of these fish were consumed in 1992, according to a senior official in the medicine trade in that country. In 1993, a kilogramme fetched RMB308 (US\$35), compared with RMB1 in China 30 years ago. Pegasids may also be purchased in Hong Kong for about US\$150 a kilogramme, and in other areas where there are ethnic Chinese communities. Rarely, they are sold as ornamental fish.

It seems highly unlikely that the huge trade in these groundfish can be sustained. The Fauna and Flora Preservation Society is currently funding a study of the biology, exploitation and conservation status of these fishes.

Reference

Herald, D. and Clark, E. (1993). Monogamy, spawning and skinshedding of the sea moth Eurypegasus dragonis (Pisces Pegasidae). Environmental Biology of Fishes Vol. 37. Pp. 219-

Amanda Vincent, Department of Zoology, University of Oxford, UK.

Shark Trade Study

Shark meat, skins, fins, cartilage, jaws and liver have been used by humans for centuries. In the last two decades, however, rising demand for luxury shark fins, meat and leather has brought about an escalation in shark fisheries worldwide. Many experts on shark fisheries and biology fear that this exploitation, much of which is unregulated and uncontrolled, is contributing to a decline in global shark stocks.

At the ninth meeting of the Conference of the Parties, in November 1994, CITES Parties adopted Resolution Conf. 9.17 which called on Parties and international fisheries organizations to improve the collection of data on shark fisheries and trade, in

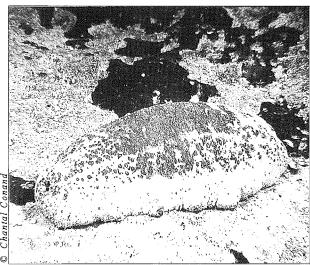
preparation for further discussions at the next (tenth) meeting of the Conference of the Parties (see page 69).

To assist these efforts, the TRAFFIC Network will undertake an in-depth investigation of the global trade of sharks and shark products. As part of the project, TRAFFIC Oceania will conduct research on shark trade in the eastern hemisphere, with emphasis on trade and conservation issues in the Oceania region, while investigation of the industry in the western hemisphere, in particular in the USA, Canada and Mexico, will be the undertaken by TRAFFIC USA. Other TRAFFIC offices will be conducting trade studies in their regions. The objective of the project is to compile information from field and market research in order to develop a comprehensive understanding of the shark trade, its impacts on shark stocks, and actions needed at the national and international levels to address the unsustainable exploitation of shark fisheries. The TRAFFIC study will be conducted in co-operation with the CITES Secretariat and the CITES Animals Committee, IUCN-The World Conservation Union and other agencies and organizations. The results of the 19-month study are scheduled to be released prior to the discussion of shark trade at the next CITES conference.

Any information on this topic will be gratefully received and should be sent to Glenn Sant at TRAF-FIC Oceania or Andrea Gaski at TRAFFIC USA (addresses back page).



A shark auction at an Asian fish market.



White Teat Fish *Holothuria fuscogilva* - considered to be one of the most commercially valuable sea cucumbers.

SEA CUCUMBERS: Galápagos fishery ban

The Government of Ecuador has banned the harvesting of sea cucumbers *Isostichopus fuscus* in the Galápagos Islands whilst scientific studies of the fishery are carried out. This decision follows international pressure from experts who fear that resumption of the harvest will almost certainly mean the commercial extinction of the species at the local level and degradation of the Galápagos' fragile ecology.

On 15 October 1994, a catch quota of 550 000 sea cucumbers (also known as bêche-de-mer) was established for a three-month season. In the following two months, however, it is estimated that between six and 12 million sea cucumbers were harvested (C. MacFarland, pers. comm., 1995). The fishing activities were carried out primarily in Bolivar Channel and around the islands of Fernandina and Isabela. Sea lions, sea horses, snails, sea urchins and black coral are also reported to have been taken in large numbers. The fishing vessels, some of which were moored only 6 m from land, are feared to have carried domestic animals, non-native rats, mice and insects, posing a serious risk to the islands' unique ecology.

This widespread abuse of the resource, and increasing international pressure to halt the fishery, prompted the Government to ban further harvesting with effect from mid-December 1994, pending technical investigation of the fishery. In protest, some 50-75 fishermen occupied the premises of the Charles Darwin Research Station and the offices of the National Parks Services, where they took control of access to the installation, threatened personnel and declared their intention to destroy wildlife. Responding to these threats, the director of the National Institute of Fisheries announced that the fishery could resume on 13 January until the end of March. However, pressure in turn from national and international environmental groups and scientists, as well as those involved in conserving

and promoting the islands' wildlife, persuaded the Minister to reconsider this decision. As a consequence, the Government has extended the period of investigation and the ban on the sea cucumber fishery remains in place. According to reports from independent observers, however, the fishing of sea cucumbers in the area continues.

Police and military personnel were brought in temporarily to protect staff and the wildlife that have been threatened by the fishermen. The Galápagos National Parks Services has increased patrols to the area to prevent incursions into the National Park.

M.Green in litt., to Dr M. James, 23 January 1995; Dr C. MacFarland, President, Charles Darwin Foundation for the Galápagos Isles, pers. comm., 10 April 1995; WWF International

Uncontrolled harvesting in Madagascar

Traditional fishing practices in Madagascar are reportedly being abandoned in favour of the more lucrative practice of fishing and processing sea cucumbers. According to a report in Bêche-de-mer Information Bulletin, an increase in demand for sea cucumbers has led to the entry of many unregistered collectors to the industry in Madagascar who are offering fishermen on the island almost double the usual price paid for these animals. According to Behra, in litt., (14 December 1994) certain species can fetch prices of Fmg80 000 (US\$20) a kilogramme, which, in December 1994, was twice as much as the official public sector minimum monthly wage. In their efforts to gain quick profits, some fishermen are not adhering to standard processing methods which, depending on species, entails lengthy periods of boiling, burying the animal in sand, cleaning, gutting and drying/smoking. These short cuts in processing have resulted in a product of inferior quality. In the northwest of the island fishermen are now having to dive up to 16 m to locate specimens. Boats are dropping up to 10 divers at sites and in certain areas up to 1000 specimens are collected each day (Behra, in litt., 14 December 1994).

These pressures on sea cucumber populations in Madagascar are compounded by the lack of a closed sea cucumber fishing season or a limit on the size, quantity or number of animals fished. As well as competition from illegal collectors, the report indicates, registered processing companies suffer from a shortage of manpower within the Fisheries Department to manage the industry. These problems must be addressed, along with enforcement of strict quality control and the provision of improved facilities and educational workshops for local fishing villages.

Mark Irving, MADEX SARL, Madagascar, cited in Bêchede-mer Information Bulletin of the Fisheries Program of South Pacific Commission, New Caledonia, No. 6, April 1994: TRAFFIC International

SEA CUCUMBERS: Medicinal properties of Malaysian species

Laboratory tests on a compound extracted from a species of sea cucumber has confirmed the analgesic and wound-healing activity that has long been associated with its use in traditional medicine in parts of Malaysia.

The results of a three-year study by pharmacologist Dr Hassan Yaccob and his colleagues at University Malaya indicate that the water and oil soluble extract derived from the sea cucumber is effective in healing wounds and killing pain, following clinical trials on guinea pigs; application of the extract on humans also demonstrates efficacy in healing incision wounds.

Known locally as gamat, the sea cucumber has long been prized by locals as a remedy for cuts, inflammation, peptic ulcers, chest pain and asthma; local communities living along the east and west coast of the peninsula are also reported to use ointment prepared from the extract in the treatment of back and joint pain.

A grant from the Ministry of Science, Technology and Environment through the Intensive Research on Priority Areas programme enabled Hassan and his team to investigate the biomedical properties of the dried sea cucumber. Of the 23 species of sea cucumber found in Malaysian waters, only one, Stichopus sp., is believed to possess the properties that the medical team sought. Initial investigations for the research were hampered by problems in locating any sea cucumbers at all, numbers in the region having been severely depleted by overfishing and pollution. Once the species had been found, and the active compound isolated from the processed sea cucumber, it was tested on mice and guinea pigs for its biological effects; the water soluble extract was found to contain pain-killing properties, effective for a longer duration than aspirin or morphine, and five- and eight-times safer, respectively, than either of these drugs; the most effective dosage was found to be 100 mg/kg. Ten milligrams/ kg of the oil soluble extract taken orally was found to be the most effective dosage for treating wounds and such healing properties of the extract were observed on humans. The results of the study were published in the Asia Pacific Journal of Pharmacology, 1994.

The medications have been manufactured into syrup, ointment, cream and tablets but are still on trial. A few pharmaceutical companies have expressed interest in purchasing the manufacturing and retailing rights to the drug. Dr Hassan would prefer to patent the drug in his own country but the costs for such an exercise are prohibitive, as are the costs for the further clinical trials that are needed. Hassan encourages attempts to commercially cultivate the Malaysian sea cucumber to allow the species to be harvested for its medicinal properties, enabling fishermen to be employed in culturing and harvesting these creatures in their natural habitat, while reducing pressure on wild stocks.

New Straits Times (Malaysia), 19 August 1994

Efforts to culture sea cucumbers in the Maldives offer hope for wild populations

Experiments to demonstrate the viability of producing sea cucumbers by artificial propagation may help reverse the present trend towards the depletion of the natural stocks of marketable sea cucumber species.

The Ministry of Fisheries and Agriculture in the Maldives has endorsed a project that aims to culture sea cucumbers. The project, initiated in November 1993, has identified nine commercial species on which to carry out research. Both the sexual and asexual forms of reproduction are being evaluated. The time and duration of spawning activity, fecundity and the weight at first sexual maturity, amongst other factors, are being analysed. Based upon the data collected, characteristics considered in the selection of the most suitable species will include biomass produced per unit area, survivorship and growth/regeneration rates.

The project is sponsored by the Oceanographic Society of Maldives and will be carried out over an initial two-year period. Once a species is selected, three Maldivian families will conduct pilot operations as part of a community-based mariculture development programme. It is hoped that successful artificial propagation of the sea cucumber will allow a sustainable harvest that will restore jobs and income which were provided by the fishery in the Maldives until stocks were depleted.

N. Reichenbach, S. Holloway and A. Shakrei, Oceanographic Society of Maldives, Male, Republic of Maldives, cited in Bêche-de-mer Information Bulletin of the Fisheries Program of South Pacific Commission New Caledonia, No. 6, April 1994.

Australia Lands Taiwanese Trawler

A Taiwanese fishing trawler was recently escorted into Darwin for fishing just inside Australia's national fishing zone in the Arafura Sea; on board were 50 t of fish, mainly shark. The 35 m vessel was based in Kaohsiung, Taiwan, but had a permit to fish on the Indonesian side of the zone. The trawler, which was fitted with satellite navigational equipment, was in breach of Australian fisheries laws. More than 70 foreign fishing vessels have been escorted to Darwin or Broome by navy or Customs vessels since September 1994.

West Australian (Australia), 18 November 1994

FIJI

With effect from March 1995, the commercial sale of sea turtles and related products in Fiji will be banned for a period of 12 months. Islanders will still be able to take turtles for customary, ceremonial and subsistence purposes.

At least five species of sea turtles are known to occur in Fiji: Green Turtle Chelonia mydas, Hawksbill Turtle Eretmochelys imbricata, Leatherback Turtle Dermochelys coriacea, Loggerhead Turtle Caretta caretta and Olive Ridley's Turtle Lepidochelys olivacea.

South Pacific Regional Environment Programme (SPREP)



HONG KONG

Persons found guilty of commercially trading in protected species and their derivatives, including rhino horn, Tiger parts, gall bladders and bile from protected bear species, face a maximum penalty of HK\$5 million (US\$640 000) and two years' imprisonment, following new legislation enacted on 11 January 1995 in Hong Kong. Non-commercial trade in such items without appropriate licences could make the owner liable to a fine of HK\$100 000 and a year in gaol. Previously, the maximum penalties for such offences were HK\$25 000 for a first offence and HK\$50 000 and six months' imprisonment for a second or subsequent offence.

The Animals and Plants (Protection of Endangered Species) Ordinance Cap. 187 also contains a provision for penalties for the illegal importation, export or possession of species considered to be less at risk. These range from HK\$500 000 and one year's imprisonment to a maximum penalty of HK\$50 000 and a six months' gaol sentence for non-commercial offences involving such species or their derivatives.

Agriculture & Fisheries Department, Hong Kong, 13 January 1995

SWEDEN

Sweden has enacted new legislation to improve the regulation of the trade in wild animals and plants. The law (SFS 1994:1818) will allow for EC Regulation 3626/82 to be implemented and strengthens five existing national laws.

Many of the provisions contained in the new law will not come into effect until January 1996, at which time domestic trade will be subject to inspection by Customs authorities and the police. Effective from January of this year, however, trade with countries outside the EU is subject to inspection at the country's borders. Persons found guilty of violating these regulations may be liable to a fine or imprisonment of up to two years in gaol.

WWF-Sweden

TAIWAN

In accordance with the newly amended Wildlife Conservation Law, the Council of Agriculture of Taiwan established a second period during which owners/holders of rhino horn were required to register their possessions (voluntary registration of rhino horn was organized by the Government in 1990). For the first time a full inventory was also made of Tiger parts privately-held on the island.

Initially set from 2 November to 2 December 1994, the second registration period was extended until 17 December; a total of over 457 kg of whole rhino horns (reported by 153 individuals), horn pieces (9 individuals) and powder (99 individuals) was registered (602 kg of rhino horn had been registered in 1990).

Tiger parts and products registered comprised Tiger bone (reported by 64 individuals) amounting to a total weight of 200 kg; Tiger skins (reported by 293 individuals); and 45 whole Tiger specimens.

All items have been inventoried, marked, measured, weighed and photographed. Owners must maintain these stocks for any future registrations and regular and random checks will be made by Government officials.

The Government has said that the reduction in the rhino horn figures since 1990 can be attributed to the possible theft or use of rhino horn stocks, or misreportings.

TRAFFIC East Asia

Four Years After the CITES Ban: Illegal Killing of Elephants, Ivory Trade and Stockpiles H.T. Dublin, T. Milliken and R.F.W. Barnes

A report of the IUCN/SSC African Elephant Specialist Group.

January 1995. 110pp. IUCN Species Survival Commission, TRAFFIC and WWF. Limited copies are available free of charge from WWF-International, CH-1196 Gland, Switzerland.

Probably the single most significant factor in why the international ivory trade ban has reduced international trade in ivory but failed to halt elephant poaching is the lack of funds, law enforcement budgets in many African Elephant range states having suffered dramatic declines since 1990. This is the conclusion presented in this study by the IUCN/SSC African Elephant Specialist Group and TRAFFIC of elephant poaching and the impact of the international ban on the trade in African Elephant ivory, which came into effect in 1990. The study, with support from the World Wide Fund for Nature and the US Fish and Wildlife Service, took place during six months of 1994 and examined data from 1988 to 1993 inclusive. Nine countries were targeted: Cameroon, Côte D'Ivoire, Gabon, Kenya, Malawi, Nigeria, Tanzania, Zambia and Zimbabwe. The situation in 16 other range states was also broadly examined.

The investigation found that in the seven countries for which data were available, law enforcement budgets for elephant protection has plummeted - in some countries by more than 90%. Law enforcement budgets in the majority of Africa's protected areas are less than 5% of the minimum US\$200 per square kilometre believed necessary to guarantee the integrity of such areas and protect the species within them. Staffing levels have fared no better, largely as a result of reforms in civil services.

Overall, poaching remains below pre-ban levels, but it has increased notably in most areas during the past two years. Kenya and Tanzania both showed a decline preceding the ban but the number of elephants poached subsequently increased: a total for both countries of 111 in 1990-91, rising to 208 in 1992-93.

Garamba National Park in northeastern Zaire illustrates this trend: approximately 17 elephants were lost to poachers in each of the two years preceding the ban, 10 per year in the two years afterwards, rising to 35 in both 1992 and 1993. Previously, Garamba's elephants were killed primarily by hungry refugees; today, there is evidence that they are once again being slaughtered for ivory.

This study also found an important link between rhino and elephant poaching, a correlation first noted prior to the ban by the former IUCN/SSC African Elephant and Rhino Specialist Group. Where large-scale rhino removal has taken place, elephants have become the next-preferred target of poachers. This relationship gives cause for concern in countries with significant rhino populations and important elephant populations, such as Namibia and South Africa.

There are indications that trade volumes have been reduced. Illicit ivory trade clearly continues, however: since the ban came into effect, an absolute minimum of 16 t of ivory was seized within the nine countries studied. Outside of Africa, more than 8700 ivory items originating in these countries were confiscated during the same period. All available evidence indicates that the largest pre-ban markets for ivory, such as Europe and the USA, have disappeared. Japan, historically an important consumer of raw ivory, now relies on its own pre-ban ivory stockpiles. However, confiscations of ivory in transit countries and intelligence information in producing countries suggest that Taiwan, China, Singapore and South Korea have been among the final destinations for illegal ivory from Africa in recent years. Taiwanese and South Koreans are appearing as the new middlemen in the illicit ivory trade, a post-ban development of major concern.

Another new development is the direct export by ivory-processing operations in Africa to traditional or new markets in Asia. The output, notably semi-worked ivory blocks for making name seals, has been documented in cases involving Cameroon, Côte D'Ivoire, Gabon, Kenya, Malawi and Tanzania.

The nine countries surveyed collectively hold nearly 100 t of ivory, with the largest stockpiles found in Tanzania and Zimbabwe. Where stockpiles are well-managed, as they generally are in east and southern Africa, they are increasing at a rate of one to six tonnes each year as a result of seizures, management programmes and natural elephant deaths. In some west and central African countries, however, ivory stockpiles are negligible because there is no clear practice of storing ivory, which in most cases is disposed of on the local market - officially or otherwise.

The conflict between humans and elephants has increased in the majority of range states. In certain parts of Kenya and northern Cameroon, for example, it has become particularly acute, resulting in an increasing number of problem elephants being killed by either government authorities or local communities. A further prospect of commercial ivory poachers working in concert with disenchanted local communities could have serious ramifications for the elephant populations concerned.

The report concludes that elephant numbers may increase within some protected areas in the short-term, but that it may be unrealistic to expect that elephants will ever recover to historical levels, even with effective control of illegal elephant killings. Current human demographic trends across the continent indicate that such a recovery may be impossible.

The Implementation and Enforcement of CITES in the European Union

Elizabeth Fleming

TRAFFIC Europe Discussion Paper

January 1995 (updated). 31pp. BFr.250 (US\$8). Available from TRAFFIC Europe (address back page).

One of the three largest legal wildlife markets for CITES-listed species of animals and plants in the world (along with the USA and Japan), the European Union, with its unique political and economic structure, represents a special case for the problems of CITES implementation. Over the past decade, a series of legislative and administrative changes have entered into force in the Community to prepare for the completion of the Single Market in 1993. Some of these changes have significantly affected the control of wildlife trade in this region and with the formal establishment of the Single Market, the EU is now faced with the twin challenges of ensuring barrier-free trade throughout the Community, while ensuring that trade in wild animal and plant species is adequately controlled. This report examines the implementation and enforcement of CITES and EU wildlife trade regulations during this period and offers recommendations for adoption of improved regulations and their subsequent implementation.

South Africa's Trade in African Grey Parrots Teresa A. Mulliken

TRAFFIC East/Southern Africa Report

1995. 30pp. R30 (US\$8.50). Available from TRAF-FIC East/Southern Africa (South Africa) (address back page).

South Africa plays a relatively small but nevertheless significant role in the international trade in wild birds. Although the export of native birds is banned, this country serves as an important import market for several avian species, most notably African Grey Parrots Psittacus erithacus. Over the past decade, more African Grey Parrots have been imported into South Africa than any other species of bird. As many as half of those birds were reported as coming from countries with limited African Grey Parrot populations, or where the export of this species was prohibited. This report explores South Africa's role in the African Grey Parrot trade, documents the number and source of birds reported in trade, examines import controls and their implementation within the country, as well as the captive-breeding and export of this species.

From Steppe to Store: The Trade in Saiga Antelope Horn

Simba Chan, Anatoly V. Maksimuk and Lir V. Zhirnov. Compiled by Stephen Nash.

May 1995. £5 (US\$10). Species in Danger report. Available from TRAFFIC International.

The demand for Saiga Antelope Saiga tatarica horn in traditional oriental medicine has emerged as the greatest threat to the Saiga's survival on the steppes of Central Asia, with the Mongolian population already all but lost. This report examines the history and present use of Saiga horn in Chinese medicine, status and commercial harvesting of the Saiga in its range states and the trade in Saiga Antelope horn in East and Southeast Asia.

Investigations into Tortoise and Freshwater Turtle Trade in Vietnam

Le Dien Duc and Steven Broad

1995. 34pp. IUCN Species Survival Commission. For details of availability, contact IUCN/SSC, 219c Huntingdon Road, Cambridge, CB3 0DL, UK.

Of the hundreds of thousands of freshwater turtles and tortoises traded in Vietnam each year, the vast majority are taken from the wild. Although some of this trade occurs within the country, the trade is dominated by the demand for these reptiles in China, where they are used for food and in the preparation of tonics and medicines. This massive export trade is a serious concern for the conservation of all chelonian species in Vietnam and this report, based on a study carried out in 1993, raises particular concerns about certain species, where even low levels of exploitation could pose a serious problem for their long-term survival. The report is a contribution to a regional review of trade in these species in Southeast Asia that will be published by TRAFFIC in July 1995.

Wildlife Trade: A Handbook for Enforcement Staff TRAFFIC India

1994. 42pp. Limited copies are available from TRAFFIC India (address back page).

This handbook is designed as an accompaniment to the *Indian Identification Manual*, and aims to aid identification of some of the most threatened and vulnerable animals and plants and their products found in trade. A concise text accompanied by line drawings and photographs are provided on, for example, furs and mammalian skins, musk, bear bile, reptiles, live birds, and ornamental and medicinal plants. A brief outline of the laws governing wildlife trade in India and the requirements of CITES is included.



Ninth Meeting of the Conference of the Parties to CITES

Bobbie Jo Kelso

The ninth meeting of the Conference of the Parties to CITES took place in Florida, USA, from 7 to 18 November 1994. The meeting drew a record number of Parties and observers, with 119 Parties (96%), several non-Party governments and 221 non-governmental observers attending. The following summary contains what TRAFFIC considers to be the most significant actions taken at the meeting. Some details have therefore been omitted. Official proceedings will be published by the CITES Secretariat.

Mollie M. Beattie, Director of the US Fish and Wildlife Service, opened the meeting. She said CITES must continue to build on its successes. She made special reference to the importance of efforts to conserve Tigers and rhinos and the need to improve enforcement of the Convention. She said that while the international ivory trade ban must continue, the USA recognized that African countries had been forced to give up a valuable source of revenue and therefore needed additional financial assistance for anti-poaching efforts and the development of sustainable uses of elephants, such as eco-tourism and sport hunting. Further opening remarks were given by Elizabeth Dowdeswell, Executive Director of the United Nations Environment Programme (UNEP). She said that local communities must be more involved in the management of natural resources and that if this point were weakened or missed at the meeting, it could lead to a loss of support for CITES from citizens in developing countries. She noted that the CITES Secretariat remained underfunded and that it was having to consider cuts in several projects as a result. In addition to the official opening of the meeting, Bruce Babbitt, US Secretary of the Interior, spoke at a special session of the Plenary on the fourth day. He, too, spoke of the need to retain the ban on international trade in ivory products. He also focused on enforcement, an area in which he believed the Convention had not been successful. He said black markets had flourished and made a mockery of governmental enforcement efforts. In particular, he noted the continuing decline of Tigers and Black Rhinos because of illegal trade and the use of Tiger bone and rhino horn in traditional oriental medicines.

The Parties adopted a new procedure for voting by secret ballot as part of the new Rules of Procedure. As proposed by the UK, the new procedure requires that voting can be secret only if a Party requests it; if the presiding officer does not veto the request, 10 other Parties must second the request. Previously any representative could propose a secret ballot, which, if seconded, would be voted upon and accepted by simple majority. After the new secret ballot rule won approval, the delegations of Australia, the USA and Zimbabwe stated that their votes would always be made public. The new procedure would be used later in the meeting in relation to a timber proposal.

The Standing Committee presented a report on major issues it had addressed since the eighth meeting of the Conference of the Parties (Doc. 9.5). These included revision of the criteria for listing species in the Appendices, consolidation of existing resolutions, and the illegal trade in rhino horn and Tiger parts. Malawi presented a resolution to better balance regional representation on the Committee. The final successful resolution (Resolution Conf. 9.1), drafted by a working group at the meeting, provides that membership of the Committee will now include a maximum of three representatives for a region, depending on the number of Parties within a region. Previously each region was allowed only one member regardless of the number of Parties. Africa is now represented by Senegal, Namibia and the Sudan; Asia by Japan and Thailand; Europe by the UK and the Russian Federation; North America by Mexico; Oceania by Papua New Guinea; and South and Central America and the Caribbean by Argentina and Trinidad and Tobago. Japan is the new chair.

The Chairman of the Animals Committee presented a summary report (Doc. 9.13) of the Committee's work since the 1992 CITES meeting. The Committee had met five times and much activity focused on assisting in the development of new criteria for amending the Appendices. The report drew particular attention to the Committee's continuing review of significantly traded Appendix II species; the Ten-Year Review of Species Listed in the Appendices; Tiger and rhino conservation; a universal tagging system for crocodilian skins; commercial captive breeding; guidelines for ranching marine turtles; review of the implementation of Appendix III; disposal of confiscated specimens; and, improving the effectiveness of Scientific Authorities. The Chairman cautioned that if the Parties continue to allocate so many tasks to the Committee, it would need significantly more funding. The Parties adopted a resolution (Resolution Conf.

9.1) to increase regional representation on the Committee from the regions of Africa, Asia, South and Central America and the Caribbean. Each region will be allowed to add one more representative.

The Chairman of the Plants Committee outlined its work of the past two years (Doc. 9.14). This included contributing to the development of new criteria for the Appendices; a draft resolution on nursery registration; the ten-year review project; trade in medicinal plants; tropical timber listings; and the relationship between CITES and the International Tropical Timber Organization (ITTO). The Chairman said that despite attempts to establish closer relations with ITTO, it appeared that the organization was not truly committed to close collaboration with CITES. He said ITTO recently expressed the belief that CITES was exceeding its purview by evaluating trade in major commercial timber species. Nonetheless, he recommended that the Secretariat continue efforts towards more constructive collaboration with the organization. Afterwards, the delegations of Japan and Malaysia said that the Chairman's comments inaccurately reflected ITTO's effort to consider the work of CITES.

Proposed increases to the CITES budget for 1996-97 were largely denied. Funds for staffing were the hardest hit, with reductions of CHF250 000 for 1996 and CHF325 000 for 1997. The Secretariat will also be forced to cut back nomenclature and significant trade studies, and its work on identification manuals, among other activities. CHF30 000 will be sliced from the allocation for enforcement seminars in both 1996 and 1997. A budget line of CHF30 000 was added for the African Elephant Panel of Experts. Despite cuts to the proposed budget, the average yearly increase for the biennium 1996-97 still rose 14.5% over the triennium 1993-95. The total approved budget for 1996-97 is CHF12 012 465. The Secretary General pointed out that notwithstanding the expressed wish at the meeting to increase support for enforcement measures, the budget allocation for enforcement had been seriously cut. He also stressed the importance of Parties' annual contributions. In November, a considerable number of Parties had yet to pay their contribution for 1993 and only 34% had paid for 1994.

The Parties gave approval for an independent study on how to improve the effectiveness of the Convention based on a proposal (Doc. 9.18) submitted by Canada as the representative of North America on the Standing Committee. The action followed long debate in which the delegation of New Zealand expressed concern about a review being conducted by a profitmaking consultancy and proposed that the Parties review the implementation of the Convention and identify urgent priorities themselves. This view was supported by the delegations of Costa Rica, France, Senegal, the UK and the USA. Canada, Norway and Zimbabwe supported the idea of hiring an independent

consultant, with the first two countries offering financial support. The independent review won approval after a working group considered the issue. The Standing Committee will choose the consultant and two members of the review team. The first phase will examine the Convention's objectives; the roles of those involved in its implementation; the extent to which the status of selected species has been affected since their listing in the Appendices and how much CITES contributed; and, the relationship of CITES to other conservation instruments. The findings and recommendations will be presented at the tenth meeting of the Conference of the Parties.

The Secretariat introduced a comprehensive review of alleged infractions and other problems of enforcement of the Convention (Doc. 9.22). In a written statement accompanying the review, the Secretariat stated that the control of trade in CITES-listed species was improving but continued to be inadequate. It noted that governments often either failed to realize or chose to ignore the potential long-term economic and intrinsic value of their wildlife or that of other countries. The review addressed infractions relating to the regulation of trade in CITES-listed species; re-export of specimens of illegal origin but legally imported; issuance and acceptance of incomplete, and therefore invalid, permits and certificates; exemptions incorrectly granted for specimens in transit, and specimens claimed to be pre-Convention, artificially propagated or captive-bred; poor national legislation; failure to submit annual reports; and other implementation problems. The Secretariat started the discussion by congratulating Indonesia on its improved implementation of the Convention and stated that no further action was required for it to satisfy past recommendations by the Standing Committee on the issue of implementation. In addition, the delegation of India announced that it had briefly discussed the matter of illegal fur trade in Kathmandu with the Nepal delegation, as directed to by the Standing Committee. The delegation said that the two had agreed to discuss formally a possible highlevel meeting on this issue. The infractions report elicited comments from Parties about problems they had regarding others refusing to issue import permits for hunting trophies with export permits, commercial airlines refusing to transport live bird shipments, provisions applying to falconers and their birds, and other trade matters. The Parties agreed to the Secretariat's recommendations for new provisions relating to transit controls and Scientific Authorities and a resolution on Confiscation of Specimens Exported or Re-exported in Violation of the Convention (Resolution Conf. 9.9). The Parties agreed that importing Parties should seize illegally exported or re-exported specimens rather than refuse their importation. The Resolution recommends that Parties notify the Management Authority of the originating country about the specimens and any enforcement action; in cases where specimens cannot be seized by an importing country,

the country from which the shipment was consigned must take measures to ensure that the specimens are not re-entered into illegal trade, including the monitoring of their return to the country and providing for their confiscation.

The Secretariat introduced a report (Doc. 9.23) on CITES implementation in the European Union, stating that a more detailed report would be forthcoming after review by EU Member States. The report was prepared using information from the Secretariat and a report by TRAFFIC on this issue. The Secretariat stressed that the current document was produced with EU assistance and was meant to help the EU develop effective wildlife legislation rather than to be construed as an exposé of problems. It said that future studies would focus on other regions of the world. The report noted that national legislation to implement CITES and the nature and severity of penalties for violations differed among EU Member States. However, the report stressed that the main problem was that the EU implements the Convention as if it were a single State, yet its Management Authorities were virtually independent, and procedures and the degree of implementation varied among the States. On behalf of the EU, the delegation of Germany complained that the report contained many factual errors and that the EU was being singled out in a discriminatory manner. The Secretariat, which had been directed by the Parties at the eighth meeting of the Conference of the Parties to review CITES implementation in the EU, countered that there were problems unique to the EU related to the open borders between States and invited the delegation to discuss the report further outside the meeting. The delegations of Argentina and Trinidad and Tobago said a resolution should be developed based on the Secretariat's report, a view strenuously objected to by Germany, on behalf of EU Member States. No action was taken as a result. In a later development, however, the delegation of Germany proposed an amendment to Resolution Conf. 8.2 on CITES implementation in the EU. The delegation said it believed that parts of the original text discriminated against the EU, a comment that drew support from the delegations of Brazil, Cyprus, Switzerland, the USA and Zimbabwe. The amendment was then adopted deleting the Resolution's recommendation that Parties accepting a re-export document for live animals or reptile skins issued by an EU Member State needed to check its validity with the Management Authorities of the declared country of origin or the Secretariat.

The Secretariat introduced a report on national laws for implementation of CITES (Doc. 9.24). The report outlined the results of an analysis by TRAFFIC and the IUCN Environmental Law Centre of the national legislation of 81 Parties with high levels of trade in CITES specimens. The analysis, commissioned by the Secretariat, found that only 15 of those Parties had national legislation that generally met all of the re-

quirements of the Convention and 27 Parties and a territory of another Party had national legislation that generally did not meet any of the requirements. The Parties adopted a decision recommending that Parties with inadequate legislation take steps to address the problems identified prior to the next meeting and report progress to the Secretariat. For certain Parties whose national legislation was believed generally not to meet the requirements for implementation of CITES, failure to take positive steps before the next meeting could result in the adoption by the Parties of measures such as restrictions on trade in listed species. All affected Parties have been given the opportunity to correct any inaccuracies in the legislative review. The second phase of the review will begin this year.

The Parties adopted a resolution on enforcement (Resolution Conf. 9.8) urging that additional financial support be found for the Enforcement Project of the Secretariat. These funds would go towards the appointment of additional enforcement officers, assistance with development and implementation of regional law enforcement agreements, and provision of training and technical assistance to Parties. The Resolution - modified from separate, draft resolutions by the UK and Ghana (Docs. 9.25 and 9.25.1 respectively) - urges Parties to offer enforcement officers on secondment to the Secretariat and directs the Secretariat to seek closer ties with intergovernmental bodies, such as the World Customs Organization and Interpol. It further recommends that Management Authorities co-ordinate with governmental agencies through the establishment of national inter-agency committees. It recommends that Parties promote incentives to secure the support and co-operation of local and rural communities in managing natural resources and thereby combating illegal trade, and that Parties consider forming specialized wildlife enforcement units at national level. Once again, the Parties rejected establishment of a Law Enforcement Working Group because of concerns about confidentiality and sovereignty, among other things.

The Parties amended Resolution Conf. 8.10 on export quotas for Leopard hunting trophies and skins based on document Doc. 9.26 prepared by the Secretariat. The final text adopted recommended that each country with such an export quota submit to the Secretariat, by 31 March each year, a special report detailing the number of trophies and skins so exported during the previous quota year; and, that optional information include details on permit numbers, identification numbers of the tags attached to the skins, the countries of destination and the numbers of import permits. The Secretariat must continue to provide a report on this issue at each regular meeting of the Parties, and call upon Parties to suspend imports of Leopard hunting trophies and skins from a country that has been granted an annual export quota but failed to submit such an annual report. Previously, countries granted export quotas for this Appendix I species were recommended to report the number of Leopard hunting trophies and skins exported, but many did not and there was no mechanism to address this failure. To date, 11 African countries hold annual export quotas for Leopard skins. In addition, the Parties agreed to increase Botswana's annual quota for Leopard skins from 100 to 130.

The Secretariat and the IUCN/SSC Rhino Specialist Group introduced reports on the status of rhinoceroses worldwide and efforts to date to stop illegal trade (Docs. 9.26 and 9.35). The world population of rhinos had been reduced by more than 90% since 1970, to fewer than 12 000. The specialist group said current problems hindering success in rhino conservation included inadequate funding, lack of performance assessment for existing initiatives, and failure to consider all viable options. The Parties adopted an extensive resolution (Resolution Conf. 9.14) prepared by the specialist group that recognizes the need for urgent and new approaches to stop the continuing decline in rhino numbers. It urges Parties to implement adequate legislation to reduce illegal trade in rhino products and to work with traditional medicine communities to eliminate consumption. The Resolution directs the Standing Committee to evaluate the effectiveness of actions to reduce illegal trade and to develop standardized indicators of success to measure any changes in the levels of illegal hunting and the status of rhino populations. It also urges Parties with rhino horn stocks to identify, mark, register and secure these stocks - overturning the recommendation made in 1987 for these stocks to be destroyed (Resolution Conf. 6.10, which was repealed). The current Resolution notes that Parties view destruction as being no longer appropriate. This new view is based on findings that the destruction of horn stocks can actually cause prices to escalate as the perceived supply diminishes, and could lead to new poaching for rhino horn to replace the destroyed stock. The new Resolution urges donors to help range states financially to implement rhino recovery plans and directs the Secretariat to report on the Resolution's implementation and progress at the next CITES meeting.

The main producing and consuming countries of Tiger bone and Tiger bone medicines came together in an unprecedented coalition with a resolution on the conservation of and trade in Tigers. The successful Resolution (Conf. 9.13) urges Parties to strengthen or adopt national legislation to control the illegal killing of Tigers and prohibit the sale of products claiming to contain Tiger-derived substances. The Resolution by the 10 countries - China, India, Indonesia, Japan, Malaysia, Nepal, Republic of Korea, Singapore, Thailand and Vietnam - calls for governments to consolidate their Tiger bone stocks, participate in the Global Tiger Forum, develop regional networks to help control illegal trade in Tiger bone and derivatives and establish co-operative agreements for management

and protection of shared Tiger populations and habitats. The Resolution further urges all governments to work with traditional Chinese medicine communities to develop strategies for eliminating the use of Tiger parts and derivatives and to conduct public-awareness campaigns to promote the use of alternatives. As part of the discussion related to Tigers, the Standing Committee introduced a report updating the Parties on actions taken on Tiger conservation since the last Conference (Doc. 9.29). It noted that despite its inclusion in Appendix I, the Tiger continued on a perilous decline as a result of poaching and smuggling to supply illegal markets, mainly for traditional oriental medicine which uses Tiger bone primarily to treat rheumatism. It stated that Tigers worldwide may number 4600 or fewer. The delegation of the Republic of Korea reported that it had prohibited all sales of Tiger bone from November 1994 and a ban on the sale of Tiger bone derivatives was to follow in March 1995. The delegation of China reported that it, too, soon planned to ban domestic trade in products derived from Tigers and rhino horn.

Guidelines on the registration of nurseries exporting artificially propagated specimens of Appendix I species were also adopted in a resolution (Resolution Conf. 9.19). The Resolution is primarily aimed at nurseries that produce large quantities of plants that are exported mainly to other nurseries or plant sellers, and nurseries that produce for the retail market. However, the new guidelines may also apply to small traders. The guidelines, prepared by the Secretariat under the guidance of the Plants Committee and submitted as Doc. 9.30, are meant to facilitate trade in artificially propagated Appendix I plants by simplifying procedures for issuing export permits, including preissuance of export permits by Management Authorities for pre-defined species. Unregistered nurseries must continue exporting under the standard procedures. The Secretariat stated that making it easier for permits to be granted to reliable nurseries was the only way to prevent the nurseries from giving up artificial propagation altogether or to stop them from exporting Appendix I plants under false names. Further, it hoped that the new system of nursery registration would help to equalize the competition between nurseries in range States and those in importing countries.

A resolution on a universal tagging system for the identification of crocodilian skins was adopted by the Parties. Resolution Conf. 9.22, prepared by the Animals Committee and modified by a working group at the meeting, recommends that countries of origin use such a system, with general application of non-reusable tags to identify all raw, tanned and finished crocodilian skins entering international trade. As a minimum, the tags should have the ISO code for the country of origin, a unique serial identification number and a species code, and other characteristics including heat resistance

and a self-locking mechanism. This action by the Parties repealed Resolution Conf. 8.14, which had also made provisions for a universal tagging system but had since been found to be impracticable.

The Parties also addressed the issue of the transport of live animals, transferring the responsibility for this to the Animals Committee at the request of the Working Group on Transport of Live Specimens (Resolution Conf. 9.23). In introducing a report on the working group's work and its recommendations for addressing this issue in the future (Doc. 9.39), the Chairman of the working group said that the transfer of responsibility to a permanent committee would improve the focus on this issue and provide greater opportunity for regional input. The group also recommended continued training on the transport of live animals. In the Resolution on this issue, the Parties also directed the Secretariat to explore with the Customs Co-operation Council ways to improve cross-border controls of CITES animals in travelling exhibitions and to work with the Animals Committee to prepare a resolution to resolve problems regarding exemptions under Article VII for specimens bred in captivity.

The Parties adopted a resolution with six Annexes setting out new criteria for the amendment of Appendices I and II (Resolution Conf. 9.24). In doing so, they repealed the Berne Criteria, which had been adopted at the first meeting of the Conference of the Parties in 1976. The action also caused 11 other resolutions related to the listing of species in the Appendices to be revoked. Draft new criteria (Doc. 9.41) prepared as part of an extensive development process under the direction of the Standing Committee, with technical assistance from the CITES Plants and Animals Committees and IUCN-The World Conservation Union were considered, with an alternate draft by the USA (Doc. 9.41.1), by a working group, which included Parties and non-governmental organizations from each region, as well as an IUCN representative. The new criteria establish a provision to allow a species to be included in Appendix I if it "is or may be affected by trade" and meets at least one of three new biological criteria related to the population size, distribution and rate of decline or a fourth criteria that the status of the species is such that if it were not included in Appendix I, it would likely satisfy one of the other three criteria within five years. The new criteria require that a species be included in Appendix II if it is "known, inferred or projected" that to not include it would result in the species soon meeting the new biological criteria for listing in Appendix I; or if the harvesting of the species in the wild for international trade has or may have a detrimental impact by either exceeding, over an extended period, the level that can be continued in perpetuity, or reducing it to a population level at which its survival would be threatened by other influences. The criteria further set restrictions on including a species in more than one Appendix and

state that species of which all specimens in trade have been bred in captivity or artificially propagated should not be included if there is no probability of trade in specimens from the wild. Removal of species from the Appendices and transfer from one Appendix to the other are governed by strict precautionary measures, including that no Appendix I species be removed from the Appendices without first being included in Appendix II for the purposes of monitoring. In addition, even if a species does not meet the biological criteria, it should be retained in Appendix I if certain conditions to ensure adequate management are not met. In some cases, these conditions would include an export quota or ranching scheme. The Resolution recommends that the new criteria and accompanying Annexes be reviewed before the twelfth meeting of the Conference of the Parties with regard to their scientific validity and applicability to different groups of organisms.

The Parties adopted a resolution (Resolution Conf. 9.20) on guidelines for evaluating marine turtle ranching proposals recommending that Parties seeking to trade internationally in products of ranched marine turtles satisfy all standing requirements for trade in and ranching of Appendix I species and the new guidelines. Prior to the decision, the delegation of the USA voiced concern about reopening international trade in marine turtles and suggested that Parties formulate regional management plans rather than just national ones as proposed in the draft resolution. The final guidelines recommend effective implementation of a national management plan and adequate local and national enforcement. They also recommend that information be provided on the ranching operation, the biology, management and geographic extent of the population that will be affected, a description of benefits to the population, development of co-operative regional management, and measures for monitoring and reporting. Parties must include up-to-date information on the above subjects in their annual reports.

In regard to hunting trophies of Appendix I species, the Parties agreed to create a standard that the Scientific Authority of the importing country should accept the findings of its counterpart in the exporting country that the export is not detrimental to the survival of the species, unless scientific or management data indicate otherwise. The approval amended Resolution Conf. 2.11.

Also related to Appendix I species, the delegation of Namibia introduced a document on the interpretation and application of quotas (Doc. 9.51) and proposed some changes to prior text on this issue, a move supported by the delegation of Tanzania. Discussion focused on how Parties often received insufficient notice of quotas prior to the meeting, as well as insufficient time to question proposed quotas or for consultation between importing and exporting coun-

tries. A working group was then formed and returned with a new draft of the resolution that was approved by the Parties (Resolution Conf. 9.21). It includes that a Party desiring a quota for an Appendix I species must submit a proposal with supporting information to the Secretariat at least 150 days before a CITES meeting. It further states that when the Parties approve an export quota for an Appendix I species, the required non-detrimental finding by a Scientific Authority has been met and that the purposes of the importation will not be detrimental to the survival of the species, provided that the quota is not exceeded and no new information indicates that the quota is unsustainable.

The Parties agreed to direct the Standing Committee to establish a temporary working group to address technical and practical problems associated with implementing the listing of timber species in the Appendices. The group, which will be headed by the Plants Committee Chairman and will report back at the tenth meeting of the Conference of the Parties, will address issues relating to temperate, boreal and tropical forest products. The proposal (Doc. 9.52) from the UK and Northern Ireland to establish the working group noted that while tree species had been listed in the Appendices since the very beginning, the Parties first addressed the issue of significantly traded timber species at the 1992 meeting of the Conference of the Parties, when commercial species, such as Afrormosia Pericopsis elata, were listed in the Appendices. It said that these listings revealed problems in monitoring and enforcing restrictions on timber trade. For example, importers and importing countries may be different to those named on export permits because timber may be sold at sea or divided into multiple lots on arrival in a Customs-free zone. The delegation of Malaysia strongly opposed the proposal, stating that instead the Plants Committee should establish links with the International Tropical Timber Organization (ITTO), the United Nations Commission for Sustainable Development, and the Food and Agriculture Organization of the United Nations (FAO) to seek a more comprehensive approach to studying timber trade. They also proposed that the Plants Committee consult with range state experts on an ad hoc basis. Brazil stated that the Committee on Trade and Environment of the World Trade Organization should be among those collaborating with the Plants Committee. As a result, the delegations of Australia and Zimbabwe introduced an amended proposal. It included that the Chairman of the working group should, in consultation with the Standing Committee, define the working group's relationship with international organizations already addressing the problem of sustainable use of timber resources. Further, it directs the Chairman to ensure that experts from range states are involved in the working group and that expertise is the key issue when deciding upon who else should participate. The amended proposal was accepted 74 in favour, 10 against.

The Parties adopted a resolution on disposal of confiscated live animals with separate guidelines on which factors should be taken into consideration by Parties when deciding on what action to take with a confiscated animal, and how to develop a national Action Plan on this issue (Resolution Conf. 9.11). The decision came after a working group, with the Netherlands acting as chair, considered a draft resolution and guidelines prepared by the CITES Animals Committee (Doc. 9.55) as well as the various intricacies of this issue. Its approval resulted in the repeal of three previous Resolutions concerning the disposal of confiscated live specimens. In notes accompanying the original draft resolution, the Secretariat stated that setting criteria for return of confiscated live animals to the wild was outside the Convention's purview. It therefore suggested that guidelines on this issue be limited to conditions for return of these animals to the country of export or origin, and disposal in the country where the animals are confiscated. The final resolution recommends that Management Authorities consult with their Scientific Authorities and, if possible, other experts and the Scientific Authority of the exporting country before deciding on the final disposition of confiscated animals. Their decision should aim to maximize the conservation value of the animals without endangering wild or captive populations or that of other species; discourage further illegal trade; and provide a humane solution, whether this be captivity, return to the wild or euthanasia. The Resolution recommends that Parties inform the Secretariat about their decision in case it concerns animal species that are listed in Appendix I or the confiscation and seizure involves a large number of Appendix II or III animals. It further recommends that Parties develop Action Plans on this issue in consultation with their Scientific and Management Authorities. The guidelines, based on those in preparation by the IUCN/SSC Reintroductions Specialist Group, include 'decision tree' analysis to assist decisions on how best to handle confiscated live animals. Some aspects of the guidelines extend beyond the scope of CITES but will be useful for the conservation of wild species and are likely to improve the animals' welfare if implemented. The action on this issue was of particular importance because the lack of specific guidelines had resulted in confiscated animals being disposed of in a variety of ways inconsistent with conservation objectives. The Plants Committee is expected to present a resolution and guidelines on disposal of confiscated plants at the tenth meeting of the Conference of the Parties.

The US delegation introduced a document on illegal trade in whale meat (Doc. 9.57) outlining actions taken by CITES and the International Whaling Commission (IWC) on this issue. It detailed how governments have seized more than 1000 tonnes of illegal or suspect whale meat since 1980. The most recent incident cited occurred in May 1994 when at the same

time discussions on this issue were taking place at the IWC's annual meeting. In this case, Japanese Customs agents detained a Korean freighter trying to smuggle 11 tonnes of whale meat out of the country.

The adopted resolution (Resolution Conf. 9.12) calls for Parties to co-operate to prevent illegal trade in whale meat and to report any development regarding this to the Secretariat, which will share the information with the IWC.

Shark conservation was discussed for the first time in the Convention's history. This development was prompted by a discussion paper from the USA (Doc. 9.58) stating that the trade in shark fins has become worldwide and lucrative, with shark fisheries expanding and new ones forming to meet demand - especially in the Asian food market. To date, however, the trade and status of sharks is largely undocumented and unknown. The discussion paper included a draft resolution calling for analysis of these factors. The delegation of Japan objected to any initiative on species not included in the Appendices, preferring the issue to be left to international fisheries agreements. It suggested that the FAO be requested to analyse data and collect further information. This view was supported by the delegations of Indonesia, the Republic of Korea, Malaysia, Singapore, and Zimbabwe, but the delegations of Australia, Cuba, Ecuador, Germany, Jordan, Netherlands, New Zealand and the UK supported the resolution. The issue was then addressed by a working group. The resolution that finally won approval (Resolution Conf. 9.17) urges Parties to provide information to the Secretariat on the trade and biological status of sharks. The Animals Committee will review this and any other information received, and present a discussion paper to the tenth meeting of the Conference of the Parties. FAO will be requested to submit information on this topic to the eleventh CITES meeting.

Other Proposals:

African Elephant Loxodonta africana

The South African delegation presented a proposal to transfer the country's African Elephant population from Appendix I to Appendix II with an annotation that would only allow trade in elephant products other than ivory. The spokesman stressed that South Africa understood the sensitivity of the issues involved, but requested understanding from African colleagues about the well-being and sound management of elephants in South Africa. He said the majority of elephant hides and meat would come from an already existing elephant management programme and the revenue earned would be reinvested in conservation. He affirmed that if the proposal was accepted, South Africa would withdraw its reservation on the 1989 Appendix I listing that allows the country to legally trade in elephant products,

including ivory, with non-CITES Parties and others with the same reservation.

A Panel of Experts, established specifically for review of such proposals, found that the proposal met the criteria as adopted by the Parties for downlisting of elephant populations. The panel's report concluded that the South African elephant population was sustainably managed; the country had demonstrated its ability to effectively monitor the population; current anti-poaching measures were effective; and that allowing a limited trade in elephant hide and meat would not provide new opportunities for illegal trade in ivory. In addition, the panel's report noted that the South African population had been one of those that did not meet the criteria for inclusion in Appendix I at the time all African Elephant populations were transferred in 1989. The spokesman said that if South Africa's proposal were rejected, Parties should consider repealing the Resolution (Resolution Conf. 7.9) that established the procedures for downlisting elephants.

The USA spokesperson said it recognized that South Africa's proposal met the criteria needed for approval, that the USA believed that South Africa would not trade in ivory, and that its trade in non-ivory products would not stimulate increased poaching. The spokesperson said that the delegation therefore could not vote against the proposal, but went on to note that because of a lack of unity on the proposal among African elephant range states, her delegation would have to abstain from voting. The delegation of Germany said that EU Member States would also abstain because of dissension from other countries in Africa. Australia, Canada and Japan voiced support for the proposal, with the Canadian delegation stating that acceptance of the proposal would allow the effects of such a transfer to Appendix II to be tested. India, Kenya, Togo and Zambia objected to the proposal, expressing fear that approving it would lead to increased poaching by sending a signal to poachers that ivory would soon be allowed in trade again. Togo's representative expressed the wish that all African Elephant populations remain in Appendix I until the fifteenth meeting of the Conference of the Parties. Kenya's delegation stated that it could not support the proposal because of the lack of consensus among range states. Further, it said that oversimplification of the debate surrounding this proposal had seemingly led to an upsurge in poaching in Kenya. South Africa then withdrew its proposal, stressing that it did so in a spirit of cooperation and understanding. Kenya followed with a proposal for intra-African dialogue to review elephantrelated issues raised at the meeting. The USA and UNEP pledged financial and logistical support to enable these African countries to meet, and hoped that a consensus on the way forward could be found by the next meeting of the Conference of the Parties.

In a related move, the delegation of Sudan withdrew its separate proposal to transfer Sudan's population of the African Elephant to Appendix II. The country had hoped to win approval to sell its stockpile of ivory previously registered under the CITES Ivory Export Quota System in 1988. The Panel of Experts had found that the proposal did not meet the criteria for approval, a fact that the Sudan delegation said it foresaw. The delegation's statement stressed that it had simply wanted the issue of ivory stockpiles addressed and this had been achieved. The delegations of Burundi, Rwanda and Switzerland endorsed the suggestion to review the question of stockpiles. The US delegation proposed that the review take place within the intra-African meetings proposed by Kenya, which subsequently proposed that the African range states draw up their own work agenda. The Secretariat suggested that these upcoming discussions in Africa include a review of Resolution Conf. 7.9. since it no longer seemed to meet the Parties' needs.

Southern White Rhinoceros Ceratotherium simum simum

South Africa won approval to transfer its population of Southern White Rhinoceros to Appendix II for sale of live animals to appropriate and acceptable destinations and as hunting trophies only. While the status of this species in other countries is dire, South Africa is home to the largest and most stable population in Africa. Some Parties, such as Germany and Zaire, said they would support the transfer if South Africa agreed that it would be valid only until the next meeting, at which time it would be reviewed. The South African delegation agreed to this condition and further allayed some concerns by stating that, by "appropriate and acceptable destinations", it meant that South Africa would revise its list of trading partners if it discovered an importing country using rhino exports from South Africa against the spirit of the proposal.

Hippopotamus Hippopotamus amphibius

The delegations of Belgium, Benin and France successfully proposed an Appendix II listing for the Hippopotamus, utilized throughout much of its range and traded internationally as a source of skins and ivory from its teeth. The proponents noted that the species was declining throughout its range and may disappear from some western African countries in the near future. The delegations of Burkina Faso, Cameroon, Ethiopia, Ghana, Mali, Nigeria, Senegal, Togo, Tanzania, Zaire and Zambia voiced support for the proposal. While the proposal noted that populations of the species in Botswana were in decline, the Botswana delegation said it was not threatened there and asked for the country's population to be exempted from the listing. The delegations of Namibia and Zimbabwe asked for their populations to be exempted as well, but the drafters of the original proposal were unwilling to exempt any of the southern African populations, which were the most numerous on the continent. The proposal was adopted.

Minke Whale Balaenoptera acutorostrata

The delegation of Norway presented a proposal to transfer the northeastern and central North Atlantic stocks of Minke Whale from Appendix I to Appendix II, stating that it believed neither of the stocks nor the species in general met the criteria for inclusion in Appendix I. The delegation of Japan said it believed the proposal was based on good scientific principles and that the existing International Whaling Commission (IWC) moratorium on whaling would prevent the resumption of international trade. The Canadian delegation stated that the IWC and CITES were fundamentally different and even the most pessimistic population estimates would not support the Appendix I listing. The delegations of Botswana, Poland, Tanzania, Venezuela and Zimbabwe also supported the proposal. However, seven other delegations voiced opposition, pointing out that the IWC is expected to deliberate on the population issue in May 1995 and any change in the Appendices should await IWC's decision. Norway then amended its proposal so that the transfer would be approved pending scientific confirmation within the IWC framework indicating abundance of these populations. The delegation of Germany, speaking on behalf of the EU, stated that the amended proposal could still not be supported because the Minke Whale stocks should be strictly protected by the IWC and CITES should follow that organization's lead. The delegations of Australia, Chile, India, Israel, Mexico, New Zealand, and the USA also voiced opposition. The proposal was rejected, 48 against, 16 in favour.

Swiftlets Collocalia spp.

Italy withdrew a proposal to list all species of swiftlets in Appendix II after the main exporting countries and representatives of the birds' nest industry developed a resolution that set a schedule for national management reviews, and proposed an international meeting in early 1995 to develop appropriate conservation measures for this genus. The trade is not in the Asian cave-dwelling birds themselves, but in their nests which are made wholly or in part from the birds' saliva and are revered in traditional Chinese cuisine and medicine for their purported recuperative properties. However, harvesting of the nests might be threatening swiftlets in some areas. Four species alone are the basis of a multi-million dollar wildlife trade. A TRAFFIC study found that Hong Kong, the major market and processing centre, has increased its imports threefold in the past 30 years.

Timber and trees

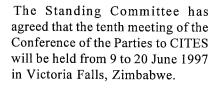
The Parties rejected a recommendation by the Netherlands calling for range states of Ramin Gonystylus bancanus to co-operate with each other and consuming countries to develop measures to ensure the sustainability of trade in this species. Ramin occurs in Brunei Darussalam, Indonesia and Malaysia and sporadically in Myanmar and the Philippines. The Netherlands' recommendation (Doc. 9.53) invited the range and consumer countries to develop jointly a proposal for listing the species in the Appendices at the next CITES meeting. The Netherlands had withdrawn just such a listing proposal at the eighth meeting of the Conference of the Parties when it

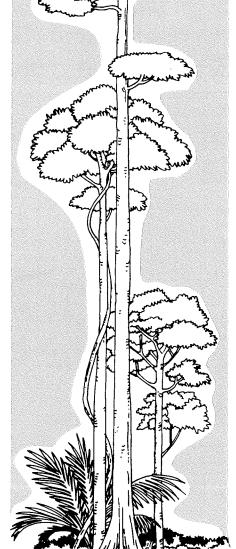
became clear that the range states would not support it. The Malaysia delegation recalled the 1992 proposal and said that its resurrection amounted to harassment. The delegation questioned the accuracy of data in the proposal and stressed the importance of the sovereign rights of range states. It also offered to meet with the delegation of the Netherlands for more discussion. More than a dozen Parties also voiced concerns about accepting the Netherlands' proposal. The Chairman called \vec{z} for a vote on the acceptability of the document. None was cast in for a vote on the acceptability of favour. A later attempt by the Netherlands to reopen the debate failed.

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Germany withdrew proposals to list African Mahogany, Khaya spp. and Entandrophragma spp., after Cameroon stated that the concerns of range states must be taken into consideration and that it would prefer co-operation on management in the taxa rather than a CITES listing. Earlier, the Minister of Forests and Fisheries of Congo had pointed out that certain proposals did not have the support of range states and that no decision to list a timber species should be made without prior approval of ITTO. Germany also # withdrew a proposal to list Mun Ebony Diospyros mun, because of insufficient trade information, and a joint proposal with Kenya to list African Blackwood Dalà bergia melanoxylon. The latter was withdrawn because range states met prior to the proposal's introduction and agreed to investigate trade in the species and consider bringing a proposal for listing the species in the Appendices to the next meeting. A proposal by the Netherlands to include Big-leafed Mahogany Swietenia macrophylla in Appendix II narrowly lost in a secret ballot proposed by Venezuela by only six votes short of the two-thirds needed for adoption. Foreseeing a split between range states, the Netherlands had offered to amend its proposal to exempt the populations in Bolivia, Brazil and Peru. Nonetheless, a working group on the amendment failed to reach a consensus, with Central America, Colombia and Venezuela supporting and Bolivia and Brazil still opposed. Brazil is the world's largest exporter of Bigleafed Mahogany, which is used throughout its range and exported for the manufacturing of furniture, joinery

and carving. In opposing the proposal, the Brazil delegation said the species was not threatened and that exports were strictly controlled and decreasing, a view countered by the statements of other Parties. In 1992, Brazil had supported a proposal to include S. macrophylla in Appendix II, but other range states had successfully opposed it. Faced with no opposition, proposals to include African Stinkwood Prunus africana and Himalayan Yew Taxus wallichiana in Appendix II were approved. In a surprise move after its narrow defeat earlier in the meeting, the Parties unanimously approved a proposal by India to include Red Sanders Pterocarpus santalinus in Appendix II. The listing was annotated to include only logs, wood chips and broken unprocessed materials so it exempts finished musical instruments and derivatives. Another proposal by India to list Agarwood Aquilaria malaccensis in Appendix II also won approval, despite opposition from other range states. The tree is threatened by indiscriminate felling for extraction of fungal-infected wood that is used in incense, perfume and traditional medicines.





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The following pages summarize the proposals that were adopted, rejected and withdrawn at the ninth meeting of the Conference of the Parties to CITES. The amendments entered into force on 16 February 1995.

RANCHING PROPOSALS

Number	Species	Proposal	Proponent	Result
1	Black Caiman, EC pop. Melanosuchus niger	App.I → App.II	Ecuador	Accepted, with a zero quota for the first two years.
2	Nile Crocodile, ZA pop. Crocodylus niloticus	Maintain App.II	South Africa	Accepted.
3	Saltwater Crocodile, ID pop. Crocodylus porosus	Maintain App.II	Indonesia	Accepted; amended with a zero quota.

TEN-YEAR REVIEW PROPOSALS

Number	Species	Proposal	Proponent	Result
1	Urial Sheep Ovis vignei (excl. O.v. vignei)	App.I → App.II	USA	Withdrawn, referred to Animals & Nomenclature Cttes.
2	Pearly Mussels Unionidae spp.	incl. App.I	USA	Withdrawn.
3	Wabash Riffleshell Epioblasma sampsoni	App.I annotation	USA	Withdrawn.
4	White Catspaw Mussel Epioblasma sulcata peroblique	App.I → App.II	USA	Withdrawn.
5	Sandback Pocketbook Mussel Lampsilis satura	App.I → App.II	USA	Withdrawn.
6	Pachypodium namaquanum	App.I → App.II	Switzerland	Accepted.
7	Alocasia sanderiana	del. App.II	Switzerland	Accepted.
8	Star Cactus Astrophytum asterias	$App.I \rightarrow App.II$	Mexico and Switzerland	Withdrawn.
9	Agave Cactus Leuchtenbergia principis	App.I → App.II	Mexico and Switzerland	Accepted.
10	Feather Cactus Mammillaria plumosa	App.I → App.II	Mexico and Switzerland	Accepted.
11	Aloe Vera Aloe vera (barbadensis)	del. App.II	Switzerland	Accepted.
12	Christmas Orchid Cattleya skinneri	App.I → App.II	Mexico and Switzerland	Accepted.
13	Didiciea cunninghamii	App.I → App.II	Switzerland	Accepted.
14	White Nun Orchid Lycaste skinneri var. alba	App.I → App.II	Mexico and Switzerland	Accepted.
15	Golden Camellia Camellia chrysantha	del. App.II	Switzerland	Withdrawn.

EXPORT QUOTA PROPOSALS

Number	Species	Proposal	Proponent	Result
1	Asian Bonytongue Scleropages formosus	App.II → App.I	Indonesia	Accepted. Pop. of ID.
2	Nile Crocodile, MG pop. Crocodylus niloticus	Maintain App.II	Madagascar	Accepted as a quota proposal; amended.

OTHER PROPOSALS

Number	Species	Proposal	Proponent	Result
1	Golden-capped Fruit Bat Acerodon jubatus	App.II → App.I	Philippines	Accepted.
2	Panay Giant Fruit Bat Acerodon lucifer	App.II → App.I	Philippines	Accepted; amended with p.e. annotation
3	Armadillo Chaetophractus (Euphractus) nationi	incl. App.II	Chile	Rejected.
4	Armadillo Chaetophractus (Euphractus) vellerosus			Rejected.
5	Armadillo Chaetophractus (Euphractus) villosus	-		Rejected.
6	Armadillo Zaedyus (Euphractus) pichiy	_		Rejected.
7	Pangolins Manis spp. (3 species)	incl. App.II	Switzerland	Accepted.
8	Cape Pangolin Manis temminckii	App.I → App.II	Switzerland	Accepted.
9	Chinchillas Chinchilla spp.	Amend annotation	Chile	Accepted. ²
10	Minke Whale Balaenoptera acutorostrata	App.I → App.II	Norway	Rejected.
11	Red Panda Ailurus fulgens	App.II → App.I	Netherlands	Accepted.
12	Hog-nose Skunks Conepatus spp.	incl. App.II	Chile	Withdrawn.
13	Brown Hyaena Hyaena brunnea	App.I → App.II	Switzerland	Accepted.
14	Leopard Cat Felis bengalensis bengalensis	App.I → App.II	Switzerland	Accepted; amended to exclude populations of Bangladesh, India and
15	African Elephant, ZA pop. Loxodonta africana	App.I → App.II	South Africa	Thailand. Withdrawn.
16	African Elephant, SD pop. Loxodonta africana	App.I → App.II	Sudan	Withdrawn.
17	White Rhinoceros, ZA pop. Ceratotherium simum simum	App.I → App.II	South Africa	Accepted, with an annotation to include live animals and hunting trophies only; only until CoP10.
18	Hippopotamus Hippopotamus amphibius	incl. App.II	Benin Belgium France	Accepted.
19	Vicuña, PE pop. Vicugna Vicugna	Amend annotation	Chile	Accepted; amended.3
20	Vicuña, CL pop. Vicugna vicugna	App.I → App.II	Peru	Accepted.
21	Giant Muntjac Megamuntiacus vuquanghensis	incl. App.I	Vietnam	Accepted.
22	Vu Quang Ox Pseudoryx nghetinhensis	incl. App.I	Denmark	Accepted.
23	Saiga Antelope Saiga tatarica	incl. App.II	USA	Accepted.
24	Saiga Antelope Saiga tatarica mongolica	incl. App.I	USA	Rejected.
25	Kiwis Apteryx spp.	incl. App.I	New Zealand	Rejected.
26	Red-winged Tinamou Rhynchotus rufescens maculicollis	del. App.II	Uruguay	Accepted (10-year Review)
27	Red-winged Tinamou Rhynchotus rufescens pallescens			Accepted (10-year Review)
28	Red-winged Tinamou Rhynchotus rufescens rufescens			Accepted (10-year Review)

OTHER PROPOSALS CTD.

29	Auckland Island Teal	App.II → App.I	New Zealand	Accepted.
	Anas aucklandica aucklandica			
30	Brown Teal Anas aucklandica chlorotis			Accepted.
31	Campbell Island Teal Anas aucklandica nesiotis	App.I revision (A. nesiotis in lieu.)	New Zealand	Accepted.
32	Udzungwa Forest Partridge Xenoperdix udzungwensis	incl. App.I	Denmark	Withdrawn.
33	Black Crowned-Crane Balearica pavonina	App.II → App.I	Netherlands	Withdrawn.
34	Tanimbar Corella Cacatua goffini	App.I → App.II	Indonesia	Withdrawn.
35	Orange-fronted Parakeet Cyanoramphus malherbi	App.II → App.I	New Zealand	Withdrawn, referred to Animals Committee.
36	Red-fronted Parakeet Cyanoramphus novaezelandiae	App.I → App.II	New Zealand	Withdrawn, referred to Animals Committee.
37	Red-and-blue Lory Eos histrio	App.II → App.I	Indonesia	Accepted.
38	African Grey Parrot, Sao Tomé & Príncipe pop. Psittacus erithacus	incl. App.I	United Kingdom	Withdrawn.
39	African Grey Parrot Psittacus erithacus princeps	App.I → App.II	United Kingdom	Accepted.
40	Turacos, Plantain-eaters, Go-away Birds <i>Musophagidae</i> spp.	incl. App.II	Netherlands	Accepted; amended for <i>Tauraco</i> spp. only.
41	Swiftlets Collacalia spp.	incl. App.II	Italy	Withdrawn; Resolution adopted for an intersessional study.
42	Saffron-cowled Blackbird Agelaius flavus	incl. App.I	Uruguay	Accepted.
43	Box Turtles Terrapene spp. (except T. coahuila)	incl. App.II	USA, Netherlands	Accepted.
44	Egyptian Tortoise Testudo kleinmanni	App.II → App.I	Egypt	Accepted.
45	Indian Flap-shell Turtle Lissemys punctata	incl. App.II	Switzerland	Accepted.
46	Indian Flap-shell Turtle Lissemys punctata punctata	del. App.I	Switzerland	Accepted.
47	Nile Crocodile, TZ pop. Crocodylus niloticus	Maintain App.II with quota	Tanzania	Accepted; amended with quota of 1000, + 100 sport hunting.
48	Saltwater Crocodile, AU pop. Crocodylus porosus	Maintain App.II	Australia	Accepted.
49	Tuataras (entire genus) Sphenodon spp.	incl. App.I	New Zealand	Accepted.
50	Phymaturus flagellifer	incl. App.II	Chile	Rejected.
51	Pristidactylus alvaroi	incl. App.II	Chile	Withdrawn.
52	Pristidactylus torquatus	incl. App.II	Chile	Withdrawn.
53	Pristidactylus valeriae			Withdrawn.
54	Pristidactylus volcanensis			Withdrawn.
55	Chilean Dwarf Tegu Callopistes palluma	incl. App.II	Chile	Withdrawn.
56	Indian Monitor, BD pop. Varanus bengalensis	App.I → App.II	Bangladesh	Withdrawn.
57	Yellow Monitor, BD pop. Varanus flavescens			Withdrawn.
58	Golden Toad Bufo periglenes	incl. App.I	Netherlands	Accepted.
59	Golden Mantella Mantella aurantiaca	incl. App.I	Netherlands	Withdrawn, combined with (60)
60	Golden Mantella Mantella aurantiaca	incl. App.II	Germany	Accepted.

OTHER PROPOSALS CTD.

61	Cape Stag Beetles Colophon spp.	incl. App.I	Netherlands	Withdrawn, to be
62	Emperor Scorpions Pandinus dictator	incl. App.II	Ghana	listed in App. III (ZA) Accepted.
63	Emperor Scorpions Pandinus gambiensis			Accepted.
64	Emperor Scorpions Pandinus imperator			Accepted.
65	Tarantulas Brachypelma spp.	incl. App.II	USA	
66	New Zealand Flax Snails	incl. App.II	New Zealand	Accepted. Withdrawn.
	Placostylus spp.		New Zealand	windrawn.
67	New Zealand Paryphantas Powelliphanta spp.			Withdrawn.
68	Giant Triton Charonia tritonis	incl. App.II	Australia	Withdrawn.
69	Seedlings and tissue cultures	Replace annotation	Germany	Accepted; amended. ⁴
70	Pachypodium ambongense	App.II → App.I	Madagascar,	Accepted, amended. Accepted.
			Switzerland	Accepted.
71	Pachypodium brevicaule	App.I → App.II	Madagascar,	Accepted; amended
72	New Zealand Wood Rose	incl. App.I	Switzerland	with zero quota.
	Parasite Dactylanthus taylorii	mer. App.1	New Zealand	Rejected.
73	Berberis aristata	incl. App.II	India	Rejected.
74	Mun Ebony Diospyros mun	incl. App.II	Germany	Withdrawn,
75	Euphorbia cremersii	App.II → App.I	Madagascar	Accepted.
76	Euphorbia primulifolia	App.I → App.II	Madagascar	Accepted.
77	Indian Gentian Gentiana kurroo	incl. App.II	India	Withdrawn, referred to Plants Committee.
78	African Blackwood, Mpingo Dalbergia melanoxylon	incl. App.II	Germany, Kenya	Withdrawn.
79	Red Sanders Pterocarpus santalinus	incl. App.II	India	Accepted, annotated for primary products
80	Aloe albiflora	App.II → App.I	Madagascar,	only.
81	Aloe alfredii	т.рр.п - т.рр.1	Switzerland	Accepted.
82	Aloe bakeri		Switzerland	Accepted. Accepted.
83	Aloe bellatula			Accepted. Accepted.
84	Aloe calcairophila		}	Accepted.
85	Aloe compressa (incl. var.			Accepted. Accepted.
	rugosquamosa and schistophila)			riccopicu,
86	Aloe delphinensis			Accepted.
87	Aloe descoingsii			Accepted.
88	Aloe fragilis			Accepted.
89	Aloe haworthioides (incl. var. aurantiaca)			Accepted.
90	Aloe helenae		-	A coopte d
91	Aloe laeta (incl. var. maniensis)			Accepted.
92	Aloe parallelifolia			Accepted. Accepted.
93	Aloe parvula			Accepted.
94	Aloe rauhii			Accepted.
95	Aloe suzannae		-	Accepted.
96	Aloe versicolor		-	Accepted.
97	Colchicum luteum	incl. App.II	India	Withdrawn, referred to
		rr	III III	the Plants Committee.

OTHER PROPOSALS CTD.

98	African Mahogany Entandrophragma spp.	incl. App.II	Germany	Withdrawn.
99	Khaya, African Mahogany Khaya spp.	incl. App.II	Germany	Withdrawn.
100	Big-leafed Mahogany Swietenia spp.	incl. App.II	Netherlands	Rejected.
101	Lady Slipper Orchid Cypripedium cordigerum	App.II → App.I	India	Rejected.
102	Lady Slipper Orchid Cypripedium elegans	App.II → App.I	India	Rejected.
103	Lady Slipper Orchid Cypripedium himalaicum			Rejected.
104	Lady Slipper Orchid Cypripedium tibeticum			Rejected.
105	Dendrobium cruentum	App.II → App.I	Thailand	Accepted.
106	Himalayan Rhubarb Rheum australe	incl. App.II	India	Withdrawn, referred to Plants Committee.
107	Indian Aconite Aconitum deinorrhizum	incl. App.II	India	Withdrawn, referred to Plants Committee.
108	Indian Aconite Aconitum ferox	incl. App.II	India	Withdrawn, referred to the Plants Committee.
109	Aconitum heterophyllum	incl. App.II	India	Withdrawn, referred to the Plants Committee.
110	Coptis teeta	incl. App.II	India	Withdrawn, referred to the Plants Committee.
111	African Stinkwood Prunus africana	incl. App.II	Kenya	Accepted.
112	Picrorhiza kurrooa	incl. App.II	India	Withdrawn, referred to the Plants Committee.
113	Himalayan Yew Taxus wallichiana	incl. App.II	India	Accepted, annotated to exclude medicinal products.
114	Agarwood Aquilaria malaccensis	incl. App.II	India	Accepted.
115	Spikenard Nardostachys grandiflora	incl. App.II	India	Withdrawn, referred to the Plants Committee.

¹p.e. - possibly extinct.

²the annotation that indicates that the population of South America of *Chinchilla* spp. is included in Appendix I (populations outside South America are not included in the Appendices) is replaced by an annotation indicating that the domesticated specimens of *Chinchilla* spp. are not subject to the provisions of the Convention.

³the annotation that indicates the conditions under which certain populations of *Vicugna vicugna* are included in Appendix II is amended to allow also the trade in wool sheared from live Vicuñas, as well as in the extant stock in Peru of 3249 kg of wool.

⁴the annotations that indicate that tissue cultures and flasked seedling cultures of species of flora included in Appendix II and of species of Orchidaceae included in Appendix I are not subject to the provisions of the Convention, are replaced to read "seedling or tissue cultures obtained *in vitro*, in solid or liquid media, transported in sterile containers are not subject to the provisions of the Convention".

The following country abbreviations have been used in this report:

AU - Australia MG - Madagascar
BD - Bangladesh PE - Peru
CL - Chile SD - Sudan
EC - Ecuador TZ - Tanzania
ID - Indonesia ZA - South Africa

Exploitation of Hawksbill Turtles in Vietnam

Le Dien Duc and Steven Broad

Hawksbill Turtles have long been exploited in Vietnam for food, for the production of ornamental items crafted from their shells and for use in the preparation of medicinal products. In recent years the amount of stuffed Hawksbill Turtles and tortoiseshell products on sale in the country has increased enormously, in parallel to the opening up of the country's economy and to the growing number of tourists who visit Vietnam and buy these items.

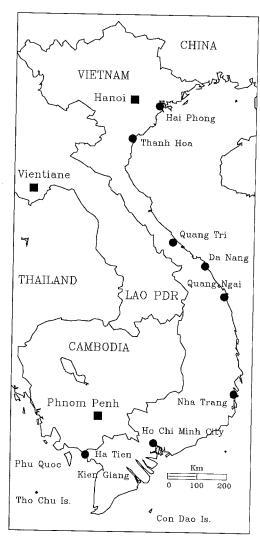
Prompted by concern about the effect of this trade on Hawksbill populations in Vietnam, TRAFFIC, in collaboration with the Centre for Natural Resources and Environmental Studies of the University of Hanoi, undertook a study of their harvest and trade in the country in 1993/1994 with a view to developing recommendations for the Government of Vietnam on steps to be taken to conserve this Appendix I-listed species. The study indicates that the trade, compounded by the alteration of coastal habitats, is having a deleterious effect on Hawksbill populations in Vietnam.

Introduction

The Hawksbill Turtle Eretmochelys imbricata is a widespread marine reptile species, known to nest in at least 60 countries in the tropics and sub-tropics, but suspected to be in decline in many parts of its range (Groombridge and Luxmoore, 1989). It is listed in the 1994 IUCN Red List of Threatened Animals as "Endangered" globally (Groombridge, 1993), its populations having suffered large-scale exploitation for eggs and tortoiseshell. Pacific populations of the species were transferred from CITES Appendix II to Appendix I in 1977.

One of 30 species of chelonians native to Vietnam, the Hawksbill Turtle was reportedly common and found all along the coast in the early part of the present century (Bourret, 1941). However, after decades of habitat disturbance and direct exploitation, it is now listed in The Red Data Book of Vietnam as "Endangered", though still thought to be widely distributed along the coasts and around the islands of the country - from Quang Ninh, Hai Phong (Cat Ba), to Thanh Hoa, Quang Tri (Cua Tung), Quang Nam-Da Nang, Quang Ngai, Binh Dinh, Khanh Hoa, Binh Thuan, Ninh Thuan, Kien Giang (Ha Tien, Phu Quoc, Tho Chu), Con Dao, Hoang Sa and Truong Sa archipelagos (MoSTE, 1992). Nesting appears to have been limited mainly to the islands, but little detailed information is available (Groombridge and Luxmoore, 1989).

Historically, the species has been heavily exploited in Vietnam, principally for the production of tortoiseshell goods, but also for food (both eggs and meat) and



Map showing some of the primary sites for the collection and processing of Hawksbill Turtles in Vietnam.

preparation of medicinal products. Over-exploitation is not solely a recent trend - in the 1920s population reductions were attributed to excessive egg collection and harvesting in some areas was halted for a number of years (Le Poulain, 1941). However, Vietnam did not figure as a prominent supplier to the Japanese tortoiseshell (known there as "bekko") industry, the major user of this product in recent decades (Groombridge and Luxmoore, 1989).

Outside a small number of protected areas, the killing and sale of Hawksbill Turtles and products is not prohibited in Vietnam and this trade has increased enormously in recent years. Table 1 shows the numbers of such items observed in tourist shops along Dong Khoi Street in Ho Chi Minh City during one day in May 1993 (CRES, 1994), and observations by TRAF-FIC Southeast Asia during 1993 and 1994 have revealed similar quantities for sale in the city. The trade is supplied through the capture of adult animals and the collection of eggs and juveniles from nesting beaches for rearing purposes (CRES, 1994).

Item	Quantity	Price (US\$) each
Bangle	250	2
Spectacle frames	120	80
Fan	150	80
Comb	142	29
Knife	53	10
Small box	75	54

Table 1. Hawksbill Turtle products on sale in Ho Chi Minh City, May 1993.

Source: CRES, 1994.

Anecdotal reports received in 1992 during general surveys of wildlife trade in Vietnam (CRES, 1994), suggested that exploitation was exerting enormous pressure on Hawksbill Turtle populations in Vietnam and that, together with development pressure at nesting beaches, this harvest was a serious threat to the species' survival in the country.

In response to these concerns, TRAFFIC Southeast Asia initiated an investigation into Hawksbill Turtle exploitation in collaboration with the Centre for Natural Resources Management and Environmental Studies (CRES) of the University of Hanoi. The aim of the study was to obtain baseline information on the harvest of and trade in this species, in order to develop recommendations for the Government of Vietnam on steps that should be taken to conserve the Hawksbill Turtle in the context of the long-term economic development of Vietnam. The project complemented simultaneous investigation of trade in tortoises and freshwater turtles in the country, the results of which have been published separately (see page 62).

METHODS

Preliminary research indicated the importance to the study of three sites, all in central and southern Vietnam: Kien Giang, Con Dao and Nha Trang. The aim was to document the harvest and use of Hawksbill Turtles in these areas, through interviews with fishermen, traders and tortoiseshell processors. The research was carried out from September to November 1993, at a time when the rainy season conditions caused some logistical problems.

RESULTS

KIEN GIANG PROVINCE

Kien Giang Province is situated along the south-western coastline of Vietnam, directly adjacent to Cambodia. The human population was estimated at 1 266 000 in 1991, thought to be growing in number at a rate of around 2.4% a year. Owing to its long coastline and numerous islands, Kien Giang has well-developed industries in agroforestry and fisheries. Approximately 15% of the population is situated in

rural coastal areas, and is largely dependent on fishing. The coastal habitats cover at least 13 000 ha and Hawksbill Turtles are believed to have been quite common in many parts of the province in the past.

During the war in Vietnam in the 1960s and early 1970s, coastal forests in the province were severely damaged and large areas destroyed as a result of intensive attacks with napalm and toxic chemicals, mainly Agent Orange. This is thought to have adversely affected the size of the Hawksbill Turtle population through direct poisoning and alteration of habitat. Additionally, after the war there was an increased demand for curios and jewellery made from Hawksbill shell: eggs and juveniles were removed from nesting beaches for captive-rearing and adult females were killed and sold as stuffed specimens or processed into tortoiseshell. As a result, the species has become increasingly rare in the province.

At present, Hawksbill Turtles are found mainly in the districts of Ha Tien, Phu Quoc and Kien Hai, especially on the islands of Hai Tac, Nam Du and Tho Chu and northern Phu Quoc. There are three Hawksbill ranching sites in the province: two in Ha Tien district and one on Hon Mot island, located in Phu Quoc district.

Hawksbill Turtle exploitation in Kien Giang province

Captive-rearing

The investigation revealed a total of 173 young Hawksbill Turtles being raised in captivity in 1993, although significantly higher numbers were reported to have been raised in earlier years. The animals are collected in the wild as eggs or juveniles and no captive-breeding is known to take place in these facilities.

Ha Tien district: in August 1993, 20 Hawksbills were being raised at a ranch in My Duc village, established in 1981 by a private owner. Previously, the owner had a ranch in Tran Hau, also located in Ha Tien district, where he raised about 200 Hawksbills. However, the site was abandoned because the source of juveniles became less fruitful and the water quality was no longer suitable for raising the turtles.

A second Hawksbill ranch, also in My Duc village, was established in 1990 by another private owner. In that year, some 100 Hawksbills were being raised, but many of these were killed as a result of flooding and a high incidence of infectious diseases. In August 1993, 21 Hawksbills were being raised here.

Phu Quoc district: a ranch in Xa Moi village, established in 1992 by a private owner, had 113 Hawksbills in November 1993. The owner collects eggs from nesting beaches for captive-rearing purposes. In March 1993, he collected 241 eggs from 2 clutches at the Hon Co Rong, and Hon Ong Hon Ba

islands in Cambodian waters. Of these, 201 hatched, but only 113 survived. In 1991, he collected 4 clutches of eggs, containing a total of 250 eggs from the Tho Chu islands and the Hon Ong Hon Ba islands.

Prior to 1992, the owner was contracted by a trading company to establish two Hawksbill raising basins (ponds in which the turtles are raised) at Xa Moi village, where he reared about 500 Hawksbills. However, this ranch no longer operates because of the decline in the number of wild Hawksbills available and the dissolution of the trading company.

In addition, there are several small raising sites located in various households in Phu Quoc district. Recently, five households captured 13 young Hawksbills from the wild to raise for personal ornamental purposes.

Kien Hai district: a small ranch was established in this district in 1990. In 1993, there were only six Hawksbills which were being raised as personal pets and not for sale.

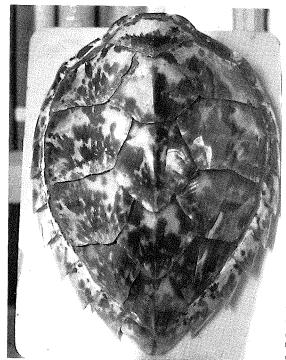
Capture of adult Hawksbills

In addition to the eggs and juvenile turtles captured for captive-rearing, interviews revealed that in 1993, 56 adult Hawksbills were captured for direct use of their shells - 30 in Ha Tien and 26 in Phu Quoc districts. The total weight of Hawksbill shell sold by local fishermen in Kien Giang in that year was reportedly 50.4 kg. One kilogramme of marketable shell per animal can be expected (Groombridge and Luxmoore, 1989), although no specific data for Vietnam are available. A further 20 kg were imported from Cambodia. In addition, 32 adult Hawksbills - 10 in Ha Tien and 22 in Phu Quoc - were captured for sale to tourists as stuffed specimens.

Local fishermen reported that female Hawksbills are sometimes intercepted just prior to nesting. In early 1993, a female Hawksbill on her way to find a nesting site was captured by naval forces on Rong beach, Tho Chu Island. From June to December 1993, 9 nesting females are known to have been captured and killed by naval forces personnel and local fishermen.

Processing of Hawksbill products

Tortoiseshell is derived from the thick plates of the Hawksbill carapace, the marginal scutes (the scales along the rim of the shell) and the bony plates that form the ventral part of the shell. The plates are strikingly-patterned and are fashioned into ornamental items, jewellery, and spectacle frames. In addition, some specimens are stuffed and sold as curios. Turtle collectors sell tortoiseshell and stuffed specimens of both wild-caught and captive-raised turtles direct to the processing establishments, rather than through middlemen.



Polished shell of the Hawksbill Turtle *Eretmochelys imbricata*, prized for its use in the production of tortoiseshell items.

In 1993, there were two Hawksbill processing centres in Kien Giang province. The total monetary value of the annual production of these operations was approximately 20 million dong (US\$2000) and the total production of and wholesale value of items processed by those facilities in that year is summarized in Table 2.

One of these operations is located in Ha Tien town and was established before 1950. The operation processes both stuffed turtles and tortoiseshell; in 1993, 40 kg of scales were produced, of which 20 kg had been imported from Cambodia. The second operation, in Ham Ninh town, Phu Quoc district, usually manufactures items in response to specific orders; in 1993, 2 kg of scales were processed and 10 stuffed specimens were polished. A small number of stuffed Hawksbills were used for local display or sold to other traders.

The value of unprocessed tortoiseshell depends upon the colour and 'vein' quality. In 1993, three classes of scale were priced as follows:

First-class: 3 500 000 dong/kg (US\$350) Second-class: 2 500 000 dong/kg (US\$250) Third-class: 1 500 000 dong/kg (US\$150)

In addition to the manufacture of jewellery and curios, some Hawksbill shell is used as an ingredient in traditional medicine: the shell, renowned for its sweet taste, is apparently effective as an antidote, antipyretic and antispasmodic in cases of blood poisoning, smallpox, heat convulsions and febrile delirium. A normal dose is 3 g to 8 g (Keys, 1976).

Product	Proces establi	sing shments	Total	Price (dong/item)
F	Ha Tien	Phu Quoc		
	Number	Number		
Comb	18	12	30	30 000-100 000
Hand fan	12	2	13	300 000
Bracelet	32	19	51	30 000
Hairpin	24	12	36	25 000
Hairslide	16	27	43	10 000-20 000
Match box	4	27	4	35 000
Cosmetic box	6	27	6	80 000
Framed spectacle	s 18	27	18	30 000
Ring	32	4	6	20 000
Earring	25	4	25	18 000
Stuffed Hawksbil	1 9	8	17	300 000-600 000

Table 2. Hawksbill Turtle products processed in Kien Giang Province in 1993 (10 000 dong = US\$1).

Retail trade in Hawksbill products

Surveys of tourist shops in Kien Giang province in August 1993 revealed a total of 59 stuffed Hawksbills on sale; much of this trade and the sale of other Hawksbill products in the province is concentrated in Phu Quoc and Ha Tien. A specimen with a carapace of 10 cm in diameter is valued at about 100 000-150 000 dong. Larger specimens may range in price from 350 000 to 600 000 dong.

Hawksbill products are also transported for sale in Ho Chi Minh City, but they are not known to be directly exported out of the country from this province.

Conservation of Hawksbills in Kien Giang province

The prospect for Hawksbill populations in Kien Giang province is very poor owing to habitat disturbance and direct exploitation through egg-collection and the capture of juveniles and adults. Anecdotal reports suggest that many nesting beaches in the province have been abandoned by nesting turtles. There is an urgent need for the development of conservation measures to protect potential nesting beaches and prevent uncontrolled collection of eggs and capture of nesting females. If captive-rearing operations are to continue (for supply of the domestic market), strong control will need to be exerted on the collection of stock in future.

CON DAO ISLANDS

The Con Dao archipelago consists of 16 islands with a total area of about 7570 ha. The islands are situated to the east of the southern tip of Vietnam, approximately 315 km south of Ho Chi Minh City. The site of a major prison complex for over a century,

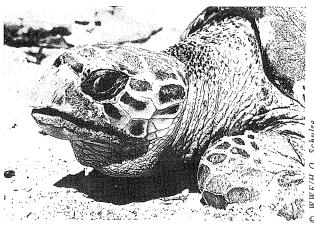
the islands' natural resources suffered intensive exploitation during that period. Many of the coral reefs around the islands were destroyed for use as building material and a wide range of marine species were harvested for local consumption and for sale to mainland markets.

Since the closure of the prison in the 1970s, attempts have been made to protect the islands' unique flora and fauna. In 1984 the archipelago was declared a nature reserve and a National Park in 1992 (covering 14 of the islands and a 4 km-wide buffer zone around the coast).

According to local sources, Hawksbill Turtles were once abundant in the Con Dao archipelago, but collection for tortoiseshell production disturbed nesting and drastically reduced numbers in the islands' waters. However, since the introduction of protection measures, nesting has been recorded on the beaches of four of the islands.

Hawksbill Turtle exploitation on Con Dao islands

The Con Dao islands were reportedly the site of a flourishing industry for the extraction of Green Turtle Chelonia mydas oil around the end of the 17th century (Parsons, 1962). No detailed historical accounts of Hawksbill Turtle exploitation in the Con Dao archipelago exist, but information about more recent harvesting is available. Between the late 1970s and 1985, a handicraft operation based in the archipelago produced jewellery made from Hawksbill carapace which it offered for sale to visitors to the islands. The enterprise also had a captive-rearing facility. When juveniles had reached about 20 cm-30 cm in size, they were slaughtered and stuffed: 50-100 were reportedly sold each year. However, this business was closeddown in 1985 when the first protective measures were introduced in the islands. No Hawksbill processing plants have operated on Con Dao islands since that time.



Conservation of Hawksbills on Con Dao islands

Since 1987, specific protection has been afforded to sea turtles around the islands. Beaches on islands where nesting has been recorded (Hon Tre Lon, Hon Bai Canh, Hon Cau and Hon Tai Lon) are monitored and protected from hunters and egg collectors by National Park rangers who have recorded the laying of a total of over 30 clutches a month (nesting takes place between March and August). The Board of Directors of the Con Dao National Park and the local government authority have passed a specific regulation which prohibits marine turtle hunting; violators may be penalized and made to return Hawksbills to the sea.

NHA TRANG

Nha Trang, 450 km north of Ho Chi Minh City, is the capital of Khanh Hoa province and its population of over 200 000 people benefits from a thriving fishing industry and the town's growing popularity as a beach resort.

Hawksbill Turtles inhabit most of the coastal area of Khanh Hoa province, but are more concentrated around the islands that have large fish populations, such as Dai Lanh, Hon Cha La, Hon Tre, Cam Ranh and, in particular, Hon Noi and Hon Noc, the latter island being the largest source of fish in the area. No detailed information on the status of populations is available though.

Hawksbill Turtle exploitation in Nha Trang

Some of the turtles processed and sold in Nha Trang are collected in the province, but others are purchased from Kien Giang province and from Da Nang, a major port/city over 500 km north of Nha Trang. Locally-caught specimens are believed to produce a total of 150 kg-200 kg of tortoiseshell annually.

Processing of Hawksbill products

There are many Hawksbill processing operations in Nha Trang, but four businesses dominate the market for the processing of stuffed specimens and carapaces. During visits by the investigators in November 1993, 53 Hawksbills were found in the store of one operation. Traders at these establishments claimed that they sought carapaces of at least 40 cm in diameter for processing; a carapace of that size was reported to be worth 600 000 dong (US\$60). Wholesale prices in Nha Trang for finished products were quoted as follows:

Bracelets:

15 000-50 000 dong/US\$1.50-US\$5)/item

Fans:

150 000-200 000 dong/item

Spectacle

frames:

400 000 dong/item

Retail trade in Hawksbill products

There are four main retail stores in the city that sell stuffed Hawksbills. Shop owners reported that they each sell 200 to 300 specimens a year. In addition, 10 smaller stores reportedly sell between 10 and 20 specimens each a year. These figures would suggest that between 900 and 1400 stuffed turtles are sold annually in Nha Trang. The average retail price per specimen was 1 000 000 dong.

Interestingly, retailers claimed that stuffed turtles are seldom bought by foreign tourists because of the difficulty in transporting the specimens. Instead they are reportedly bought by government institutions and private businesses as presents. During November 1993, a company from Hanoi was observed to buy 12 stuffed Hawksbills with carapace diameters of over 30 cm. Products made from Hawksbill shell are sold locally to visitors (including foreign tourists) or transported to Ho Chi Minh City for sale.

Overall, interviews with traders indicated that as many as 2000 Hawksbill Turtles are traded annually in Nha Trang, both as stuffed specimens and for processing into products.

One informant claimed that Hawksbill carapaces are sometimes purchased from Singapore.

CONCLUSIONS AND RECOMMENDATIONS

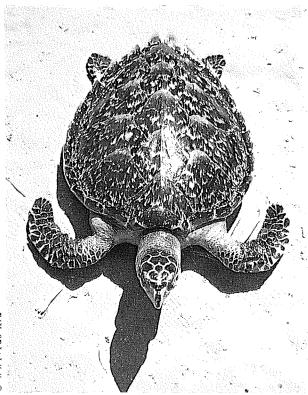
Hawksbill Turtles are being extensively exploited in Vietnam through egg collection on nesting beaches and capture of both juveniles and adults. The turtles are killed, sometimes after a period of captive-rearing, for use largely in the production of jewellery, decorative curios, and as an ingredient in traditional medicine. This exploitation, together with destruction and alteration of coastal habitats essential for nesting, has resulted in dramatic reductions in population numbers.

Protection measures are urgently required in order to safeguard the future of the species in the country and to conform with the requirements of CITES, of which Vietnam has been a Party since April 1993. These measures should include:

 a status of full-protection conferred on the Hawksbill Turtle under the country's wildlife protection legislation, until populations can be adequately assessed and in order to provide a basis for the enforcement of a ban on harvest and trade;

- publication of Government instructions and regulations;
- · regulations for the prosecution of offenders;
- encouragement of fishermen and processors currently involved in the trade to suspend exploitation of the species whilst populations are being assessed;
- discouragement of foreign tourists and local buyers from purchasing Hawksbill products.

In conclusion, the plight of the Hawksbill Turtle in Vietnam needs urgent attention through legislative action and subsequent enforcement of a suspension on commercial use of its products. The example of the conservation measures introduced in the Con Dao archipelago illustrates the fact that protection of Hawksbills in Vietnam can be successful, but the challenge of extending this security to all of the species' populations in Vietnam will be far greater. Measures taken to halt the trade must be complemented by a thorough assessment of the populations of Hawksbill Turtles, in order that long-term management strategies can be developed.



Hawksbill Turtle Eretmochelys imbricata

ACKNOWLEDGEMENTS

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Implementation of Tanzania's New Policy on Trade in Live Birds

Alison M. Rosser and Tom Milliken

Tanzania is one of Africa's major sources of wild-caught birds for the international market. In response to increasing concern over the scale of the trade in live birds, the Government of Tanzania has introduced a series of measures since 1988 to improve management and regulation of the trade. In 1993, the Department of Wildlife adopted the Policy and Management Plan for Tanzania's Avifauna, with Special Reference to the Live Bird Trade and completely revised the live bird export quotas for 1994. The present analysis by TRAFFIC aims to assist the implementation of Tanzania's new live bird trade policy by drawing attention to a number of issues which undermined the implementation of the revised quota in 1994. Many of these issues still need to be addressed.

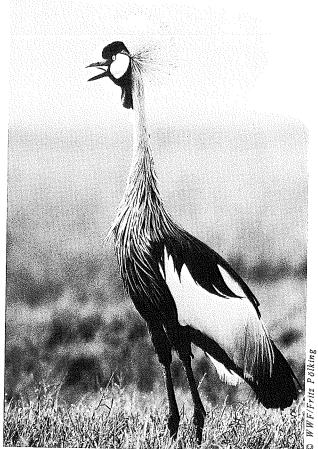
Introduction

The scale of Tanzania's live bird trade has been causing concern since the early 1980s (Howell, 1984; Baker and Boswell, 1989; Moreton and Bhatia, 1992). For the relatively few species listed in Appendices I and II, CITES annual reports from 1982 to 1990 show that trade volumes increased steadily to 1987, followed by a decline until 1990 (Edwards and Broad, 1992; PAWM, 1991). However, the full range of bird species and the volumes traded over this period are not known (PAWM, 1991).

Since the late 1980s, the Wildlife Division of the Ministry of Tourism, Natural Resources, and Environment (hereafter referred to as the Wildlife Division) has consulted TRAFFIC on the formulation of a strategy for the management of Tanzania's live bird trade. This paper charts the steps taken by Tanzania over this period to improve the management of its live bird trade and assesses the success of the new management initiatives with reference to implementation of the 1994 quota. Recommendations based on findings from examination of these sets of data have been passed to Tanzania's CITES Management Authority to allow remedial actions during 1995.

METHODS

In order to evaluate the impact of Tanzania's 1993 management plan and 1994 quota system on the bird trade, TRAFFIC collaborated with the Wildlife Division to analyse data on exports of wild-caught birds. The Wildlife Division tracks live animal exports by issuing CITES export permits for all species listed in Appendices I and II, and Trophy Export Certificates for all other species. All permits and certificates are issued by one of the two CITES Management Authority offices, located in Dar es Salaam and Arusha.



Grey Crowned-Crane Balearica regulorum.

Since these documents may be cancelled for various reasons, or simply not used, or because of the time-lag between permit/certificate issuance and actual shipment, such data may not correspond to actual exports. However, in late 1993 the Wildlife Division started to keep a record of the numbers and destination of all live animal exports leaving Dar es Salaam International Airport, thus allowing a more accurate calculation of the numbers of birds actually exported.

This paper presents data based on permits/certificates issued by the CITES Management Authority office in Dar es Salaam and on exports recorded at Dar es Salaam International Airport from January to October 1994. Similar data from the Management Authority in Arusha and from Kilimanjaro International Airport are not currently available.

TRADE CONTROLS AND BIRD TRADE POLICY

Legislation

The Wildlife Conservation Act has governed the regulation of wildlife trade in Tanzania since 1974. Regulations for the collection of live birds from the wild are clearly laid out in the Act, which requires the possession of Capture Permits for this purpose, to be

issued only when there is evidence of a firm order for the birds in question. Following capture, details of numbers and species of live birds must be transferred onto Ownership Certificates. Capture of live birds is not allowed in national parks, game reserves and protected forest reserves, which cover some 16% of the surface area of Tanzania.

The Act and its subsidiary legislation lay down regulations for the licensing of trophy dealers, including dealers in live birds, and promulgate strict conditions for the renewal of Trophy Dealer's Licences. The Act requires wildlife officers to inspect holding grounds on a quarterly basis, and dealers to maintain a register of the number of birds owned at the end of each month. The Act further contains comprehensive rules regarding transport conditions for live birds.

Control of the export of CITES-listed species is also governed by the Wildlife Conservation Act. Although Tanzania did not accede to the Convention until 1982, a draft list of species proposed for inclusion in Appendices I and II at the signing of the treaty in 1973 were included in the eighth schedule of the Wildlife Conservation (Dealing in Trophies) Regulations, 1974, and provision was made for their trade to be regulated. Subsequent amendments in the Appendices can also be incorporated into the legal framework, as all species listed on international conventions are classed as National Game, which should not be captured without the written permission of the Director of Wildlife, pursuant to the Wildlife Conservation (National Game) Order, 1974. Species listed in Appendix I and II of CITES must be traded with valid CITES permits, while all other species should be exported with a Trophy Export Certificate, which also indicates the country of origin for species listed in Appendix III.

Quota system

The export of live birds was first managed according to a quota system in 1988 (PAWM, 1991). Species not given a quota were prohibited from trade, although such species have no formal recognition in the Wildlife Conservation Act, which lacks a category for protected species. This quota system introduced a number of problems to the regulation of the live bird trade in Tanzania. The first problem was that, although quotas were set at species level for many birds, others were listed by higher taxa groupings only, affording inadequate protection to threatened species within those groups (Baker and Boswell, 1989). For example, the use of the category "Other Weavers" on the quota could have allowed the capture of three endemic weaver species and other endangered or restricted weavers which should all have been excluded from trade. A second problem was that each licensed dealer was granted the full quota, with no pre-set limit to the number of licensed dealers trading in live birds for any given year. As the number of licensed bird dealers increased from 28 in 1984 to 119 in 1991, the number of birds eligible for export rose from nearly 0.75 million in 1988 to almost 2 million in 1991, an increase of 167% (PAWM, 1991). As a consequence, some species were harvested beyond the levels of sustainability. A third problem was that the value of individual bird species was not specified on the quota, and therefore only about 2% to 3% of the true economic value of each bird caught was estimated to return to Tanzania in 1990 (PAWM, 1991).

Species banned from trade

In November 1991, the Tanzanian CITES Management Authority informally requested the UK CITES Management Authority to assist in monitoring Tanzanian exports of 13 species or species groups that it wished to ban from future trade (Table 3). Although having no formal recognition in the Wildlife Conservation Act, these species and species groups of so-called "banned birds" have not appeared in export quotas since that time.

Control of document fraud

In 1991 and 1992, the discovery of a series of forged CITES permits resulted in the revocation of the licences of 20 bird dealers. The Wildlife Division informed Parties, via the Secretariat, that the companies involved had been banned from further trade in live animals and thus any permits bearing their names should not be accepted (Anon., 1992). In late 1992, the Management Authority introduced CITES permits printed on security paper from the CITES Secretariat and this appears to have greatly reduced the incidence of document fraud.



Secretary-bird Sagittarius serpentarius.

DEVELOPMENT OF A NEW POLICY AND MANAGE-MENT PLAN FOR TRADE IN LIVE BIRDS

The development of a comprehensive policy for the live bird trade was assigned by the Wildlife Division to the USAID-funded Planning and Assessment for Wildlife Management (PAWM) in 1991. PAWM engaged TRAFFIC in December 1991 to help run a two-day workshop for government wildlife officers, bird dealers, conservationists and veterinarians. Following the workshop, PAWM produced an official draft policy and management plan for the live bird trade, which addressed many of the problems associated with the regulation of Tanzania's live bird trade in the past. Specifically, the plan required that:

- quotas for live birds be established at species level, rather than at higher taxa or species groupings;
- the total number of each species available for export nationally be divided between the number of companies issued with a Trophy Dealer's Licence, as opposed to the prior practice of increasing the national quota in line with the number of licensed companies wishing to export that species;
- to the extent possible, quotas be set at sustainable levels, and take into account post-capture mortality; and that
- the number of companies dealing in live birds be reduced to around 30, with one holding ground per company. Where necessary, dealers were encouraged to amalgamate their businesses to increase capital resources for the improvement of holding facilities.

On 17 June 1993, the Policy and Management Plan for Tanzania's Avifauna, with Special Reference to the Live Bird Trade was given official approval by the Minister of Natural Resources, Tourism and Environment (Anon., 1993).

Revised quotas

In accordance with the new management plan, fully revised quotas were drawn up by PAWM and approved by the Minister. Although the management plan stated that "the national quota will be applied to the number of birds actually caught rather than the number exported", the actual quota document is entitled "Live Bird and Animal Export Quota for 1994". In overall terms, the quotas authorized the annual export of nearly 100 000 specimens of 131 species of birds (Table 1). A number of species that had been traded previously were recommended for removal from the quota because of documented concern about the biological impact of the trade (Baker and Boswell, 1989; Baker, 1991). These included most species of psittacine and Fischer's Lovebird Agapornis fischeri,



White-bellied Bustard Eupodotis senegalensis.

the latter species identified by the CITES Animals Committee in 1991 as an Appendix II species that appeared to be subject to excessive levels of trade and which recommended a suspension of exports of this species from Tanzania (Inskipp and Corrigan, 1992). On the other hand, Red-billed Quelea Quelea quelea, recognized as Tanzania's only agricultural pest species, is not subject to a quota and may be exported in unlimited numbers (Anon., 1993; 1994). An upper limit was applied to numbers of a given species that could be exported from each region of Tanzania (outside protected areas), in order to attempt to spread capture evenly over the full range of each species. Finally, a minimum US dollar value for remittance to the Bank of Tanzania was assigned to each species to ensure that economic benefits to the country were not lost through deliberate under-pricing and that capital would be locally available for dealers to improve their holding facilities (Anon., 1993; 1994).

	Quota (Permits/ Certificates	Exports
Total species	131	154	116
Number of identified birds	95 400	309 486	182 703
Unidentified birds			4658
Number of species for which			
quota exceeded		33	23
Unused quota species	46		

Table 1. Summary of quotas, export permits/certificates and bird exports from Dar es Salaam International Airport, January to October 1994.

Country	No. of species	No. of birds
Germany	60	30 897
Vetherlands	73	29 630
JSA	36	21 745
France	4	20 371
taly	52	18 621
South Africa	30	13 680
Belgium	30	13 567
JK	21	5640
Spain	28	5525
Sweden	27	4303
Portugal	33	3577
Saudi Arabia	11	2032
Thailand	18	1820
Singapore	9	1360
Malaysia	7	1000
Zimbabwe	10	725
Pakistan	9	510
apan	10	360
Oman	1	265
Hong Kong	3	208
Zzech Republic		206
Taiwan	1	50
Destination unk	nown	11 269

Table 2. Destination of birds exported from Dar es Salaam International Airport, January to October 1994.

IMPLEMENTATION OF THE 1994 BIRD TRADE QUOTA SYSTEM

A total of 444 Trophy Export Certificates and 383 CITES permits were issued by the CITES Management Authority office in Dar es Salaam during January to October 1994 for the export of live birds. Of these, almost 31% of CITES permits and 18% of Trophy Export Certificates were recorded as having been cancelled for the same period. The remaining permits/certificates were for the export of over 300 000 birds of 154 species (Table 1), as compared with an overall quota of 100 000 specimens of 131 species. The actual exports recorded at Dar es Salaam International Airport during January to October 1994 accounted for over 180 000 birds, representing 116 species (Table 1).

Neither set of data records accurately the number of live birds exported during 1994, but the data from Dar es Salaam International Airport (although certainly an underestimate) probably give a more realistic picture of the number of birds exported than do records of permits/certificates issued for the same period. The available data do not include permits/certificates issued by the CITES Management Authority in Arusha or exports from Kilimanjaro International Airport, and therefore represent a very conservative estimate of species and volumes traded in 1994.

Between January and October 1994, Europe and North America were the reported destinations of over 88% of the birds exported via Dar es Salaam's International Airport. The five major destinations for Tanzanian birds in 1994 were countries of the European Union and the USA: Germany and the Netherlands were recorded as destinations for around 30 000 birds

each, while the USA, France and Italy were each recorded as the destinations for some 18 000 to 21 000 birds (Table 2). Since the lifting of trade sanctions, South Africa has become the sixth-largest destination for Tanzanian wild-caught birds, and accounted for over 13 000 birds (Table 2).

Thirty-five per cent of species listed on the 1994 quota did not appear to be in demand, as they were neither requested by dealers on permits/certificates, nor exported from Dar es Salaam International Airport (Table 1).

Problems Identified in Quota Implementation

The available data show that the promising new start heralded for Tanzania's bird trade policy in 1994 failed to prevent widespread problems with the quota system during its first year of implementation. A number of fundamental problems outlined below were identified in the implementation of the quota system:



Saddle-billed Stork Ephippiorhynchus senegalensis.

Trade in banned species

A number of specimens of the 13 species or species groups that were banned from export in 1991 were temporarily allowed to be exported during early 1993 (Table 3). However, the Wildlife Division notified dealers in September 1993 that no further specimens of these species were to be captured for export. Even so, many specimens of these species were still being traded in 1994 accompanied by the appropriate permits/certificates, on the basis that such birds had been caught prior to the reintroduction of the ban. The species most affected by this development were Grey Crowned-Cranes Balearica regulorum, White-bellied Bustards Eupodotis senegalensis, Saddle-billed Storks Ephippiorhynchus senegalensis and Secretary-birds Sagittarius serpentarius. It is probable that the levels of these exports (Table 3) do not represent any actual increase in trade, but merely reflect species whose presence in trade was formerly covered by fraudulent documents until CITES permits printed on security paper were introduced.

Trade in other non-quota species

Specimens of species on previous quotas, but not on the 1994 quota, were also exported during 1994. Permits/certificates were issued for 72 such species, 49 of which were apparently exported via Dar es Salaam International Airport. Large numbers of some parrot species, notably Red-bellied Parrot Poicephalus rufiventris, were included among the specimens exported. These specimens were classified as 1993 stock, and their export during 1994 was justified on the basis that they had been captured under the 1993 quota and required disposal. However, there was no readily available inventory of 1993 stock to check these claims, despite the obligation for dealers to maintain a register of stock. Furthermore, Capture Permits issued for specific species should only have been issued on the basis of firm orders. Hence, birds caught in 1993 should all have been exported by March 1994, at least.

_	ermits/ tificates	Exports
Yellow-collared Lovebird		
Agapornis personatus	0	112
Grey Crowned-Crane		
Balearica regulorum	1968	874
Brown-necked Parrot		
Poicephalus robustus	1259	272
African Grey Parrot		
Psittacus erithacus	0	0
Saddle-billed Stork		
Ephippiorhynchus senegalensis	347	99
Shoebill		
Balaeniceps rex	0	0
Purple-crested Turaco		
Musophaga porphyreolopha	0	0
Secretary-bird		
Sagittarius serpentarius	28	12
African Fish-Eagle		
Haliaeetus vocifer	0	0
Ostrich		
Struthio camelus	0	0
Hartlaub's Bustard		
Eupodotis hartlaubii	0	0
Black-bellied Bustard		
Eupodotis melanogaster	0	0
Red-crested Bustard		
Eupodotis ruficrista	0	0
White-bellied Bustard		
Eupodotis senegalensis	348	285
Stanley Bustard		
Neotis denhami	0	0
Kori Bustard		
Ardeotis kori	109	4
Crested Guineafowl		
Guttera pucherani	75	47
Goliath Heron		
Ardea goliath	30	0

Table 3. Record of permits/certificates issued and exports recorded at Dar es Salaam International Airport from January to October 1994 of birds banned from export in 1991 and temporarily allowed to enter trade during 1993.

Source: Department of Wildlife Notification to UK CITES Management Authority, November 1991

Zebra Waxbill	Amandava subflava
Crimson-rumped Waxbill	Estrilda rhodopyga
Peter's Twinspot	Hypargos niveoguttatus
African Firefinch	Lagonosticta rubricata
Lesser Masked Weaver	Ploceus intermedius
Green-winged Pytilia	Pytilia melba
Southern Yellow-rumped Seedeater	Serinus atrogularis
Yellow-fronted Canary	Serinus mozambicus
Brimstone Canary	Serinus sulphuratus
Superb Starling	Lamprotornis superbus
Hartlaub's Turaco	Tauraco hartlaubii
Red-cheeked Cordonbleu	Uraeginthus bengalus
Blue-capped Cordonbleu	Uraeginthus cyanocephalus
Purple Grenadier	Uraeginthus ianthinogaster
Eastern Paradise-Whydah	Vidua paradisaea

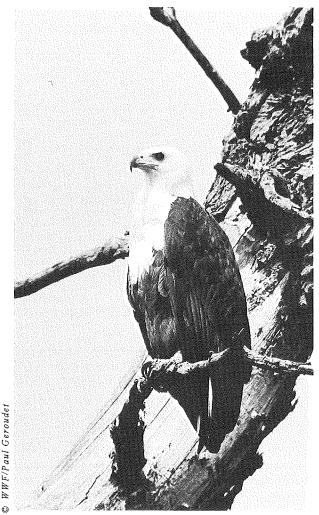
Table 4. Species for which exports from Dar es Salaam International Airport in 1994 were double the 1994 quota.

Exports in excess of quota

The complete data for 1994 are not yet available for Dar es Salaam and Kilimanjaro International Airports. It is clear, however, that the exports of a number of species listed on the 1994 quota have exceeded the quota levels. Permits/certificates issued were found to have exceeded the quota specifications in 25% of cases, while exports from Dar es Salaam International Airport exceeded the quotas in around 18% of cases (Table 1). The actual exports from Dar es Salaam International Airport during January to October 1994 were at least double the number set by the quota for 15 species, mainly the smaller-bodied waxbills and canaries (Table 4). Some larger species, such as Hartlaub's Turaco Tauraco hartlaubii and Superb Starlings Lamprotornis superbus, have also been exported in greater numbers than allowed by the 1994 quota. When the full set of data is available from Dar es Salaam and Kilimanjaro International Airports, it is likely that the quota will be shown to have been exceeded for many more species than those in Table 4.

Limiting numbers of exporters

The limitation of the number of licensed exporters required in the bird trade policy was only partially successful in 1994. Only 34 companies were issued with a Trophy Dealer's Licence to trade in live birds at the start of that year. However, over 60 companies were eventually issued with either CITES or Trophy Export Certificates, of which only 23 were actually licensed to deal in live birds in 1994. The remainder were issued with export permits/certificates to dispose of 1993 stock on the basis that they had been licensed in that year.



African Fish-Eagle Haliaeethus vocifer.

CONCLUSIONS

Since 1988 Tanzania has taken a number of important and commendable steps to improve the management and regulation of its wild bird trade. Particularly notable has been the approval of the *Policy and Management Plan for Tanzania's Avifauna, with Special Reference to the Live Bird Trade*, the complete revision of the quota for 1994, and the measures adopted to curb document fraud. These measures provide a firm basis upon which to move forward with managing and regulating the live bird trade on a sustainable basis in line with Tanzania's overall policies of wildlife conservation and utilization.

However, upon introduction, these measures have not been entirely or immediately successful. This is not altogether surprising, given the complexity of regulating trade and CITES requirements in a developing country like Tanzania. The data so far available for 1994 highlight several problems with implementing the new quota system. Many problems have arisen from the introduction of radical changes in the management of the live bird trade in 1994, without corresponding action on the part of the various players

involved. For example, dealers continued to collect species in which they wished to trade, and the Government did not give clear guidelines on the disposal of stock at the end of 1993, to cater for such situations as the non-renewal of a Trophy Dealer's Licence, or the removal of a species from the new quota. In the event, the most cost-effective solution for both the Wildlife Division and dealers to such problems has been to classify the birds as 1993 stock and to continue issuing export documents. This practice in effect allowed the unused quota of 1993 to be added to the 1994 quota. However, sustainable quotas should be set on an annual basis, and any increase in the sanctioned annual offtake could potentially have detrimental consequences for the species in question. Moreover, dealers did not have to produce stock records in order for their claims to be validated.

The Wildlife Division has recognized that the introduction of a revised quota and the reduction in the number of licensed trophy dealers led to a number of shortcomings in practice, and has already proposed some solutions for 1995: for example, the export of any specimens of the stock held from the previous year will no longer be sanctioned, except during the specified grace period allowed according to CITES permits.

The problems faced by the Tanzanian authorities in fully implementing the 1994 quota system could be better addressed through the wider circulation of the quotas allowed for export. It is also important for Tanzania to receive the assistance of CITES Management Authorities in importing countries to monitor its exports.

If the problems outlined above are not fully resolved in 1995, Tanzania's bird trade will once again come under international scrutiny, with the consequence that key markets may be closed.

RECOMMENDATIONS

In view of the numerous problems of implementing Tanzania's new management plan and quota system for wild-caught birds cited above, the following have been recommended by TRAFFIC to the Wildlife Division for adoption in 1995:

- the Wildlife Division should prepare the national annual quota for the export of live birds and a list of licensed dealers for approval by the Ministry, on or around 1 December of the previous year, to come into effect on 1 January of the year in question;
- the adoption of the national quota and the licensing of dealers should be published in the national press;
- the Wildlife Division should communicate this information to CITES Parties through a formal Notification issued by the CITES Secretariat;

- the practice of allowing the commercial export of species for which there are no quotas should cease, while the Parties to CITES should be requested not to accept documentation for non-quota species;
- the practice of carrying over unused quotas to subsequent years should cease; that is, traders should be directed to ensure that all exports take place in the calendar year of capture;
- the Wildlife Division should require that all dealers submit an annual inventory of their unused stocks by 1 January, and that any future export of this stock, falling out of the period of validity of the relevant permits/certificates, should be applied against the quota for the following year;
- dealers holding stocks of bird species slated for removal from the quota for the subsequent year must obtain export permits/certificates by the end of December, or completely lose the option of trading the species;
- similarly, companies whose licence is to be withdrawn in the subsequent year must obtain permits/ certificates to dispose of their stock by export by the end of December of the year prior to proposed withdrawal; and,
- levels of export for individual species should be monitored carefully as export permits/certificates are issued, in order to ensure that the national quota is not exceeded.

It is hoped that by implementing the above actions, Tanzania's avifauna will be sustainably managed for the benefit of present and future generations of Tanzanians, as outlined in the *Policy and Management Plan for Tanzania's Avifauna, with Special Reference to the Live Bird Trade.*

ACKNOWLEDGEMENTS

The Wildlife Division kindly invited TRAFFIC to establish an office in Tanzania. Thanks are owed to Seth Ayo, Benjamin Andulege and Miriam Zacharia, who have all cheerfully assisted with data collection. Jumila Ramole has computerized the data efficiently, despite considerable logistical difficulties.

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Alison Rosser, National Representative, TRAFFIC East/ Southern Africa (Tanzania), October 1992 to February 1995; Tom Milliken, Director, TRAFFIC East/Southern Africa.

Australia Renews Woodchip Export Licences

Australian conservation groups are deeply concerned about a decision by the Australian Government in December 1994 to allow many old-growth eucalypt Eucalypt forest areas to be clearcut for the woodchip industry. The clearcut forests will be seeded and regenerated as native forests but their conservation value is reduced as forest structure and species composition are fundamentally altered. Not only is the Government's decision contrary to the Environment Minister's recent recommendation for interim protection of these forests, but completely disregards Australia's National Forest Policy Statement (NFPS) which states that the conservation values of the forests should be scientifically assessed prior to the allocation of logging licences. While not a law, the NFPS purports to establish the guiding principles of forest management in Australia. This policy has been lauded by the Australian Government in international fora as providing "a vision for the ecologically sustainable management of Australia's forests".

Under Australian law the Environment Minister provides advice to the Resources Minister, who administers forests, on the environmental conditions that should apply before woodchip export licences can be issued. In this case, the Environment Minister recommended that 1297 logging sites of varying size be given interim protection. The Resources Minister initially acted to protect only a very few of these areas from logging. Following a national outcry the Prime Minister intervened to increase the number of protected sites to 509.

The commitment to scientific assessment stems from the objective outlined in the NFPS to establish, by the end of 1995, "a comprehensive, adequate and representative reserve system to protect old growth forest and wilderness values". It appears, however, that many areas that should be included in the reserve system will now be destroyed.

If Australia, as a relatively wealthy industrialized nation, fails to assess the conservation values of its forests, it can be foreseen that Pacific island countries with scant economic resources may attach little weight to calls for conservation. At the 25th South Pacific Forum meeting in August the Australian Prime Minister made an ardent appeal for the conservation and sustainable management of indigenous forests. Further, in a draft chapter of Australia's national report to this year's meeting of the UN Commission on Sustainable Development, the Resources Department claims that the NFPS "...is currently developing draft criteria based on scientific assessments of the requirements to protect the nature and conservation values of forests...". In the decision to ignore the Environment Minister's interim protection recommendation, the NFPS claim has been shown to be false. There would appear to be no sense in developing these criteria if areas identified as being of potentially high conservation value are clearcut over the next few months. (Most logging is conducted during Australia's summer.)

Political pressure is mounting in Australia to reverse the Government's decision. While a revocation might entail considerable difficulties, there are indications that most of the licences may be found invalid if subject to legal challenge. The Prime Minister has, therefore, invited logging companies to give up their newly issued licences voluntarily in exchange for a licence that is less likely to be successfully contested in the courts. At the time of writing (early February) these companies were resisting such action, and the fate of the licences, woodchip exports, and many of Australia's old-growth forests which are of high conservation value remain in the balance.

Michael Rae, Ecologically Sustainable Development Program Manager, WWF-Australia

US Plant Rescue Centres

Plants legally abandoned or which have been forfeited to the US Government following noncompliance with CITES regulations have been deposited with volunteer plant rescue centres in the USA since 1978, as part of a scheme established in collaboration with the US Department of Agriculture's Animal and Plant Health Inspection Service and the US Fish & Wildlife Service (USFWS). The Plant Rescue (PRC) Program has enlisted the aid of 49 centres and, in 1994 these establishments were assigned 581 abandoned or forfeited CITES plant shipments containing 7972 plants; these consisted mostly of orchids, cacti, and bromeliads. In that year, the USFWS, the country's designated CITES Management and Scientific Authority, also returned nine abandoned or forfeited CITES plant shipments, containing 270 plants (142 cacti, 126 orchids and two agave specimens) to the countries from where the shipments had been consigned.

Office of Management Authority, US Fish & Wildlife Service, CITES Update No. 33, March 1995

For the Record...

Customs authorities at Bombay, Calcutta, Madras, Cochin, Delhi and Nhava Sheva, in India, have been instructed to ask plant exporters to declare both the botanical and the local name of plant specimens on the invoice and shipping bill. The authorities have also been advised to make a record of these details.

Ministry of Finance, Government of India, in litt. to TRAFFIC India, 1 July 1994

Dutch/US Labelling Requirements

Plants taken from the wild and offered for sale in the USA must now bear labels indicating that they have been wild-collected. This decision, announced in February, follows implementation of the final stage of the Dutch Bulb Labelling Agreement which requires labels of origin on all Dutch bulbs exported to the USA with effect from 1 January 1995.

The lack of US labelling requirements for plant bulbs has been hindering efforts to implement the Dutch agreement, initiated in 1990 to inform consumers of the origin of bulbs exported from the Netherlands (i.e. whether wild-collected or artificially propagated), while attempting to stem the harvest of threatened bulbs in the wild (see *TRAFFIC Bulletin*, 11(4):63): although most of the billions of flower bulbs that are exported each year from the Netherlands are artificially propagated, a small percentage are taken from the wild, mainly in Portugal, Spain, northern Africa, the Middle East and central Asia, and include threatened species.

TRAFFIC USA, the Natural Resources Defense Council (NRDC) and the Garden Club of America (GCA) have been monitoring the implementation of this labelling system in the USA since its inception. Despite discovering a few instances of unlabelled or poorly labelled packages of bulbs during a joint survey of 11 retail garden centres in the country in October 1994, fewer cases of inaccurate or lack of labelling were recorded than had been observed during similar surveys the year before (see *TRAFFIC Bulletin* 14(3): 112).

The labelling agreement that requires Dutch dealers to provide information on the origin and identity of their bulb exports to the USA does not extend to requiring US dealers to follow suit, however. Federal guidelines have stipulated only that bulbs grown in the nursery bed for at least one growing season before being distributed for sale be labelled as "nursery grown". The purpose of such labelling was, in part, to inform and assure customers that they were buying plants cared for by a nursery which had in some way promoted their propagation and growth, and also to protect consumers from purchasing inferior plant specimens such as freshly collected wild plants, which often do not survive owing to their weakened post-harvest condition.

Although most of the bulbs imported from the Netherlands are labelled correctly, many Dutch bulbs are repackaged by American brokers for US sales, resulting in the original labels often being replaced with ones that do not accurately reflect the origin of the bulbs. Further, the names of many US distributors are Dutch or Dutch facsimiles, making it difficult to determine whether Dutch or US labelling requirements apply to their bulbs.

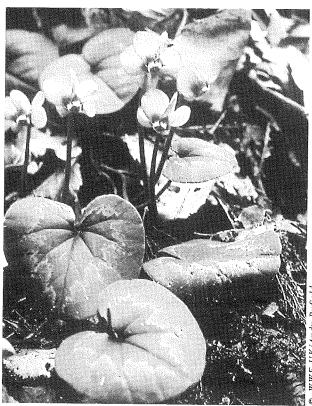
The absence of clear plant labelling requirements prompted a consortium of conservation organizations to petition for an amendment to the Guides for the

Nursery Industry, guidelines established by the Federal Trade Commission in 1979 for the administration of US nurseries. The petitioners complained that the term "nursery grown" did not reflect the true origin of those plants that had been collected from the wild; they also called for clearer descriptions on labels and in catalogues regarding the origin of bulbs.

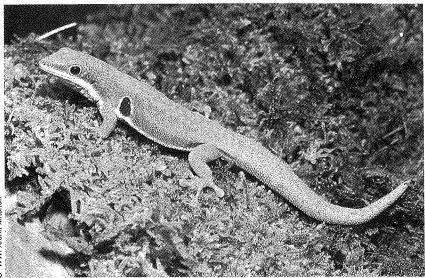
On 13 February 1995, the Guides for the Nursery Industry were revised. US nurseries and plant distributors, including wholesale dealers and mail order catalogues, are now required to disclose whether the plants they sell were collected from the wild, even if wild-harvested plants have been transplanted and grown in a nursery bed. Aside from compulsory wild-origin disclosure, vendors may voluntarily indicate whether wild-collected plants have been grown in a nursery for a full growing season. If plants have been reproduced and grown under cultivation in nurseries from legally collected plants, seeds, or cuttings of wild origin, sellers may also choose to label them as "nursery propagated".

With these changes, US consumers will now be better able to make informed and educated decisions about the plants they purchase for their gardens. To ensure the new guidelines are implemented, TRAFFIC USA, GCA and NRDC will be monitoring wild-collected bulbs and plants packaged and distributed in the USA. Further checks will also be made by these groups to determine the extent to which the final stage of the Dutch Bulb Labelling Agreement has been implemented.

TRAFFIC USA



Cyclamen Cyclamen coum



Four-spot Day Gecko *Phelsuma quadriocellata* (App. II) - over 200 specimens from Madagascar were seized in Belgium, in transit to the Netherlands.

EUROPE

BELGIUM

On 30 November 1994, at Zaventem airport, a shipment of reptiles travelling from Madagascar to the Netherlands, was seized whilst in transit. Three of four gecko *Phelsuma* species included in the cargo exceeded in number the allocated permit allowance of 200 for each species.

Some 369 Side-striped Day Geckos *Phelsuma lineata*, 218 Four-spot Day Geckos *P. quadriocellata* and 213 *P. madagascariensis grandis*, along with 37 Gold-dust Geckos *P. laticauda* (all App. II), were seized. The specimens of *P. lineata* and *P. laticauda* had been placed together in 10 sacks. Thirty of the specimens perished on arrival and others have subsequently died. Attempts to repatriate the surviving animals failed and they are currently at a centre in the Netherlands.

On 12 January 1995, while Customs officers were inspecting a shop in Brussels, a man in possession of a rhino horn entered and offered the item for sale to the owner. He indicated that he had another horn which belonged to his mother who was in need of money and had heard on the radio of the value of rhino horn. The item was seized by the officers, who also seized the second horn the following day. No papers to prove the legal origin of the horns could be produced. The case is pending.

In February 1995, medicines that listed protected wildlife products amongst their ingredients were seized from traditional oriental pharmacies in various cities (see pages 52-53).

TRAFFIC Europe

FRANCE

In December 1994, head ornaments constructed of birds' feathers were seized by the Office Na-

tional de la Chasse following a tip-off from TRAF-FIC Europe that these items were being offered for sale at a Parisian art gallery.

The articles had been made by Amazonian Indians in Brazil and comprised feathers of the following CITES-listed species: Hyacinth Macaw Anodorhynchus hyacinthinus, Scarlet Macaw Ara macao, Blue-winged Macaw A. maracana and Harpy Eagle Harpia harpyja (all App. I); Toco Toucan Ramphastos toco, Channel-billed Toucan R. vitellinus, Blue-and-yellow Macaw Ara ararauna and Red-and-green Macaw A. chloropterus (all App. II). No CITES documents had been issued by Brazil or France for these items.

The case is under investigation.

TRAFFIC Europe

GERMANY

On 20 February 1995, German Customs officials at Düsseldorf airport seized 370 Yellow-banded Poison-arrow Frogs *Dendrobates leucomelas* (App. II) which were being transported without a CITES permit in the luggage of a German citizen arriving from Caracas, Venezuela, via Madrid, Spain. The amphibians had been packed in 40 paper cups and concealed in several suitcases.

Five specimens were dead on arrival and a further 17 have since perished. The frogs have been identified by their markings as coming from an extremely localized population of the species in Venezuela. The case is under investigation.

German CITES Management Authority

ITALY

On 12 February 1995, following information received from TRAFFIC, officers of the Forest Corps - the CITES enforcement team attached to the Ministry of Agriculture - seized a Chimpanzee Pantroglodytes (App. I) from a travelling circus in Messina. The 3-year old female was being used to pose with customers for photographs and had previously belonged to another photographer from whom 6 Chimpanzees have been seized in the

past (see *TRAFFIC Bulletin*, 11(2/3):31;13(1): 34; 14(2):75). The number of Chimpanzees seized by the Forest Corps since 1992 amounts to 23: 18 of these were seized from circuses and 5 from photographers.

On 5 March 1995, officers of the Forest Corps and Customs officers at Fiumicino airport seized 3 young Black-tufted-ear Marmosets *Callithrix penicillata* (App. II). The animals were discovered in the luggage of a tourist returning from Brazil. Two of the animals died at the airport and the surviving specimen was placed with Rome Zoo.

TRAFFIC Europe

UK

In October 1994, a suitcase that arrived in error at Leeds/Bradford airport was found by X-ray security staff to contain 6.5 kg of carved ivory. The goods had been routed to Ecuador from Nigeria via Amsterdam, Netherlands. The carvings have been donated to Leeds City Museum.

During a routine inspection in January 1995, UK Customs officers seized a pair of Palm Cockatoos *Probosciger aterrimus* (App. I), 4 Salmon-crested Cockatoos *Cacatua moluccensis* (App. I) and 13 Yellow-crested Cockatoos *C. sulphurea* (App. II) from a Ukrainian ship at Glasgow docks. The birds had been bought in Indonesia.

A UK-based leather tanning company that imported over 110 000 reptile skins using false documentation, was found guilty in February 1995 of provision of false documents with the intention to deceive; the company was found not guilty of smuggling.

Mr Anil Ajani, owner of A & A International, imported skins of 31 000 Indian Spectacled Cobras Naja naja (App. II), 73 000 Chequered Keelbacks Xenochrophis piscator (App. III/India) and 7500 Rat Snakes Ptyas mucosus (App. II) from Singapore in December 1992. The skins have been retained by Customs and the company was fined £500 (US\$800).

On 8 December 1994, 16 Australian black cockatoos were seized from the private residence of Alan Vaughan Griffiths of Llandysul, South Wales, following several months of investigations by the UK Customs authorities, in co-operation with the Australian Customs Service, and based on information provided by TRAFFIC who assisted in the raids.

Eight Red-tailed Black-Cockatoos Calyptorhynchus banksii, 7 White-tailed Black-Cockatoos C. baudinii and 1 Yellow-tailed Black-Cockatoo C. funereus (all in App. II) are alleged to have been illegally exported from Australia as eggs and carried by couriers wearing specially designed vests to protect and maintain the eggs at the correct temperature.

Six people have been arrested in connection with the incident. Christopher Owen, a courier, is the first person to be tried for his involvement in the international egg smuggling operation, as a result of information supplied by TRAFFIC to >

UK ctd

>relevant authorities (see Australia). It is alleged that Owen had been in the employ of Griffiths, who is alleged to have raised the birds from eggs. Included with Griffiths in the conspiracy charge are Owen's two daughters - Nicola and Denise Owen, David Trevor Raymond Farmer of Haverfordwest, and Terence David Arthur Owen of Llanybydder, all of whom await trial.

TRAFFIC International; Portcullis, November 1994

Certain medicines purported to contain extracts of protected species were seized from traditional medicine shops in a number of UK cities in February 1995 (see page 52).

AFRICA

MALAWI

On 8 February 1995, a number of skins being offered for sale in Lilongwe city centre were seized by officials of the Department of National Parks and Wildlife. These included skins of 7 Servals Felis serval (App. II), 1 African Civet Civettictis civetta, 2 Meller's Mongooses Rhnchogale melleri, 1 Marsh Mongoose Atilax paludinosus, 2 Egyptian Mongooses Herpestes ichneumon and 1 mongoose Bdeogale sp. One person has been arrested and is awaiting trial in connection with the incident.

TRAFFIC East/Southern Africa

SOUTH AFRICA

On 3 March 1995, a combined operation of police special units uncovered an illicit ivory carving shop in Midrand, near Pretoria. The Endangered Species Protection Unit seized 397 cubes of ivory, 20 kg of ivory bead necklaces and machinery used to cut tusks; the ivory is estimated to have come from at least 29 elephants. A search of a storeroom adjacent to the property led to the discovery of more than 100 frozen abalone *Haliotis* pieces (a permit is required to fish this species). Three suspects have been arrested, one of whom was arrested in 1992 on similar charges; it was his illegal return to the country that prompted the current investigation.

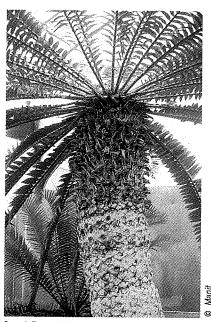
On 1 December 1994, Danie Kluyts and John Alberts of Uitenhage, near Port Elizabeth, were arrested and charged with possession and dealing in 81 wild-collected cycads *Encephalartos horridus*. The plants were aliegedly removed from Kluyts' farm. All cycads are protected in South Africa (and listed in CITES Appendix I) and may not be removed without permission, even from private land. The pair were arrested after police observed the cycads being loaded onto a lorry. The men appeared in court but were released on a caution. They will appear in court again on 4/5 May 1995.

Solly Sanders, who purchased the cycads from Kluyts, appeared in Springs Regional Court on 13/

14 March. He was found guilty and sentenced to a fine of R2000 (US\$530) or 6 months' imprisonment and 3 months' imprisonment suspended for 5 years.

In mid-December 1994, the owner of a cycad nursery in Pretoria was arrested on charges of illegal possession and sale of 39 wild-collected *Encephalartos cycadifolius*. She was released on bail of R5000 (US\$1600) and was to have appeared in court on 17 March 1995; the State withdrew the charges pending further investigation, however.

TRAFFIC East/Southern Africa; Weekend Star (South Africa), 4-5 March 1995



Cycad Encephalartos altensteinii (App. I).

TANZANIA

In July 1994, the case against two Dar es Salaam businessmen, charged in May 1993 with unlawful possession of 546 elephant tusks, 2122 pieces of Hippopotamus *Hippopotamus amphibius* (App. II) ivory and 45.5 kg of sea shells, was withdrawn by the State (see *TRAFFIC Bulletin*, 14(2):76).

TRAFFIC East/Southern Africa

ZAMBIA

It has been brought to our attention that we mistakenly identified the Species Protection Department (SPD) as the body responsible for the seizure of 216 elephant tusks confiscated in July 1994 (TRAFFIC Bulletin (15(1):39). We would like to point out that three officers of the Department of National Parks and Wildlife Service, assisted by police officers, were in fact responsible for these actions; the SPD were involved in the follow-up investigation of this case. We would like to apologize for this error (Ed.)

ASIA

HONG KONG

In two operations carried out in October 1994, the Agriculture and Fisheries Department (AFD), acting on information provided by Customs, seized medicines claiming to contain Tiger *Panthera tigris* ingredients.

Whilst carrying out a random check at the General Post Office on 1 October, Customs officers intercepted 3 cartons containing 948 packets of medicines purported to contain Tiger products, that had arrived from Malaysia. AFD staff then conducted a search of the premises believed to be the offices of the consignee and seized a further 20 500 packets of claimed Tiger medicines, 2 packets of claimed rhino/Tiger medicines and 2 phials of claimed bear gall bladder powder.

In the second investigation, conducted jointly by AFD and police officials on 14 October, a woman who had been under observation by the authorities was stopped at Tak Tin Street Bus Terminus, Lam Tin, and 21 packets of medicines labelled as containing Tiger products were seized from her. A subsequent search of her premises resulted in the seizure of a further 101 packets of the medicine. The same woman had been stopped at Lowu checkpoint in July for bringing in 99 packets of purported Tiger medicine from China.

On 16 November 1994, AFD officers seized suspected bear gall bladders and musk *Moschus* pods, weighing 6.8 kg and 5.2 kg respectively, from premises in Sheung Wan that are believed to be used for the wholesale of traditional Chinese medicine.

Further searches of local medicine shops in the first two weeks of November resulted in the seizure of preparations claiming to contain rhino and Tiger ingredients, pangolin *Manis* scales and dried crocodile meat.

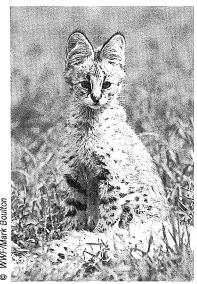
Press Releases of the Agriculture & Fisheries Department, Hong Kong, 14/25 October; 17 November 1994

INDIA

On 29 December 1994, police in north Bengal arrested 4 persons following the seizure of 89 Leopard *Panthera pardus* skins (App. I), 1 Tiger skin *Panthera tigris* (App. I) and 9 pieces of otter skins. Under interrogation, the accused stated that the consignment had arrived from the state of Uttar Pradesh and was bound for Nepal. The case is under investigation.

On 12 January 1995, Delhi police seized 5 Leopard skins that had originated in Himachal Pradesh.
One person is helping police with their enquiries.

On 27 January, further seizures by the police included 1018 skins contained in 7 sacks that were being despatched by train to Kanpur for tanning. The skins were of 800 Bengal Foxes Vulpes bengalensis and 218 Desert Cats Felis libyca, all of which had originated in the Bikaner region in western Rajasthan. Two Kashmiri nationals were arrested and the case is under investigation.



Serval Cat Felis serval (App. II) skins were recently seized in Malawi.

> All cat species are protected under Indian legislation. According to Ginsberg and Macdonald (1990), the Bengal Fox has been eliminated by non-commercial killing from most of the plains where it is not protected, except in areas where rocky outcroppings provide denning sites for small populations. No significant population can be found within a protected area in India. Animals are patchily distributed with a density of approximately one animal per 10 km².

Ginsberg, J.R. and Macdonald, D.W. (1990). Foxes, Wolves, Jackals, and Dogs. An Action Plan for the Conservation of Canids. IUCN, Gland, Switzerland.

Wildlife Protection Society of India; TRAFFIC International

JAPAN

On 26 October 1994, a police officer at Narita airport, Tokyo, seized 15 Black Pond Turtles *Geoclemys hamiltonii* (App. I) and 100 Star Tortoises *Geochelone elegans* (App. II) from 2 Japanese nationals who were attempting to import the specimens from Thailand. The reptiles had been purchased at a market in Bangkok and each measured 5 cm-10 cm in length.

TRAFFIC East Asia

SINGAPORE

On 5 October 1994, Avifauna Breeding and Research Pte Ltd and the manager of that establishment were each fined S\$5000 (US\$3600) following an attempt to re-export 10 Salmon-crested Cockatoos Cacatua moluccensis, (App. I), 25 Tanimbar Cockatoos C. goffini (App. I) and 1 Yellow-crested Cockatoo C. sulphurea (App. II) without the required permits.

In November 1993, staff at the company sent 2 boxes containing birds to the Changi Animal and Plant Quarantine Centre to be checked by the Primary Production Department before export.

The PPD confirmed that the birds tallied with the number and species recorded on the permit. The boxes were sealed and sent to a freight-forwarding company. When PPD made a routine check on the boxes some 45 minutes later they found that two extra boxes containing the 36 birds had been strapped to the consignment.

Straits Times (Singapore), 8 October 1994; Primary Production Department in litt., to TRAFFIC Southeast Asia, 21 April 1995

TAIWAN

On 27 January 1995, Customs officers seized 1043 kg of ivory carvings. The items had been smuggled into the southern port city of Kaohsiung from Johannesburg, South Africa, via Singapore, 15 days earlier but had not been claimed.

China Post, 29 January 1995

OCEANIA

AUSTRALIA

On 5 January 1995, Nicholaas Peter Peters, a Dutch national residing in the UK, was intercepted at Sydney Kingsford-Smith airport as he attempted to leave the country with a specimen (skin and feathers intact) of a Superb Fairy Wren Malurus cyaneus, a bird endemic to southeastern Australia; the skull and beak of another unknown bird and a cicada (Order Hemiptera) were also found. Peters claimed that the specimens had been found dead by the roadside. On 6 January he was fined A\$350 (US\$260) under Section 21b of the Wildlife Protection (Regulation of Exports & Imports) Act 1982.

On 31 January 1995, at Perth District Court, Jean-Ulric Rechsteiner, a Swiss national, and Edith Gumpelmayer, of Austria, both residents of Switzerland, were fined A\$16 500 (US\$12 300) and A\$14 500 respectively, plus costs, for attempting to smuggle Australian native reptiles out of the country.

Both pleaded guilty to attempting to export without requisite permits 27 Shingleback Lizards *Trachydosaurus rugosus*, 5 Ring-Tailed Dragons *Ctenophorus caudicinctus*, 1 Dwarf Bearded Dragon *Pogona minor* and 1 Marbled Velvet Gecko *Oedura lesueurii* from locations in Geraldton, Mullewa, Newman and Port Hedland on six occasions in October and November 1994.

The two were each fined A\$1500 for five separate charges under the Wildlife Protection (Regulation of Exports & Imports) Act 1982 of the attempted export and A\$5000 for one charge of export. Rechsteiner was also convicted and fined A\$1000 for each of 4 State charges under the Wildlife Conservation Act 1950 of taking wildlife; Gumplemayer was fined A\$1000 for each of 2 State charges.

Three months spent in remand was taken into account when sentencing.

On 10 March 1995, at Perth District Court, William Alan Michael Grumball pleaded guilty to two charges of conspiracy to illegally export eggs of Australian native birds between September and October 1994. He was sentenced to a total of 18 months' imprisonment for both charges, to be served concurrently. The eggs, which had been contained in an incubator, were of both native and exotic birds and included 4 White-tailed Black-Cockatoos Calyptorhynchus baudinii, 3 Bronzewinged Parrots Pionus chalcopterus, 2 Pink Cockatoos Cacatua leadbeateri, 2 Galahs Eolophus roseicapillus, 2 Blue-fronted Parrots Amazona aestiva, 2 Red-crowned Parrots A. viridigenalis, 2 Goldie's Lorikeets Psitteuteles goldiei, and 1 Yellow-streaked Lory Chalcopsitta sintillata. A further 17 eggs have not been identified.

An associate, Christopher Arthur John Owen, a UK citizen, was apprehended in October 1994 as he boarded a flight to London via Singapore with 29 birds' eggs sewn into a singlet; these were 21 Galahs, 5 Slender-billed Black Cockatoos Calyptorhynchus latirostris, 1 Pink Cockatoo and 2 unidentified eggs. Owen was given a 6-month prison sentence and received a fine of A\$1000 (US\$750).

A third associate, Michael Francis Graves of New Zealand, was caught at Grumball's home wearing a singlet containing 27 birds' eggs that were to be smuggled to New Zealand; these included 21 Galahs, 3 White-tailed Black-Cockatoos, 1 Pink Cockatoo, 2 Eclectus Parrots *Eclectus roratus* and a further 17 unidentified birds' eggs. In February 1995, Graves was gaoled for 5 months. All charges and convictions were in relation to breaches of the *Wildlife Protection (Regulation of Exports & Imports) Act 1982*. All above species are listed in Appendix II. (See also UK for related case).

On 5 January 1995, two Japanese nationals were apprehended at Christmas Island airport after reports that they had been trapping butterflies and other insects in the Christmas Island National Park. Members of the Australian Federal Police and the Australian Nature Conservation Agency found sophisticated apparatus and material used for insect collection contained in their luggage. During a subsequent interview it emerged that the men, one of whom is the director of a private insect museum in Singapore, had visited the island with the intention of collecting samples of the island's insect fauna to take back to Japan and Singapore for their private collections. They admitted to having collected insects throughout Southeast Asia, USA, Africa and Japan, over a long period and one of the defendants also admitted to having been apprehended previously by wildlife authorities in Japan.

On 6 January, in the Christmas Island Magistrates' Court, Kazuya Nakamoto and Masayuki Fujioka were charged under the *National Parks* and *Wildlife Conservation Act* 1975 and each fined A\$4500 (US\$3355).

TRAFFIC Oceania; Australian Customs Service, TRAFFIC International; Australian Nature Conservation Agency Media Release; Business Times (Singapore), 11 January 1995

AMERICAS

CANADA

On 31 October 1994, Ben Le, owner of a Chinese herbal shop, was fined CA\$1750 (US\$1255) after pleading guilty to possession of a 5 g bear gall bladder, in violation of the *Wildlife Act*. The gall bladder was found after a Fish and Wildlife Officer obtained a warrant to search the shop.

On 1 December 1994, Therese Hui became the first-known person in Canada to be convicted of smuggling ivory into the country.

Hui, immigrating to Canada in February 1994, was found by Edmonton Customs officers to have 605 pieces of undeclared elephant ivory contained in her luggage. Hui, who is in the jewellery business, was fined CA\$15 000 (US\$11 000) and gaoled for one day.

Edmonton Journal (Canada), 1 November 1994 The Edmonton Sun (Canada), 2 December 1994

GUIANA

In December 1994, following a complaint by WWF, Mr Hort, a shop owner selling contraband wildlife items in Sinamary, was prosecuted by the tribunal of Cayenne. This is reportedly the first-ever incidence of CITES enforcement in the country.

Hort was charged with displaying for sale feathers of Red Ibis *Eudocimus ruber* (App. II and protected under Guianese decree) and assorted parrot feathers, big cats' teeth, and an undisclosed number of turtle shells. He was fined US\$1000 and US\$600 damages.

TRAFFIC Europe

USA

On 28 November 1994, in the Northern District of California, Harto Kolopaking of Indonesia pleaded guilty to charges of smuggling over 1500 Asian lady's slipper orchids *Paphiopedilum* (App. I) into northern California in 1992 and 1993. This is the first prosecution concerning the illegal importation of endangered orchids into the country.

The case against Kolopaking was initiated in May 1993 when a US Department of Agriculture (USDA) employee discovered lady's slipper orchids in packages at a postal distribution centre in Oakland. The packages were from Kolopaking in Indonesia and labelled "sample material"; no CITES documents accompanied the consignments. Some 60 parcels were found to have entered the country during 1992 and 1993. A joint investigation with the US Fish & Wildlife Service (USFWS) and the USDA led to Kolopaking's arrest in September 1994 whilst he was in the USA negotiating further shipments with collectors of the rare plants. He unwittingly sold 216 rare orchids to an undercover USFWS agent who was posing as an orchid collector. The case is under investigation,

On 14 December 1994, Tony Silva, his mother Gila Daoud, and two others were charged at the Northern District Court of Illinois with conspiracy to smuggle endangered and protected birds, primarily psittacines, into the USA. Several coconspirators allegedly hired to supply birds and other animals from Argentina, Bolivia, Brazil, Ecuador, Mexico, Paraguay and the Philippines, have been named in the indictment.

Silva, an aviculturist and author of numerous books on the subject of birds, is accused of involvement in the smuggling, purchase and offering for sale protected birds, including, amongst others, 186 Hyacinth Macaws Anodorhynchus hyacinthinus, Yellow-shouldered Parrots Amazona barbadensis, Vinaceous Parrots A. vinacea, Golden Parakeets Aratinga guarouba, Blue-throated Parakeets Pyrrhura cruentata and Red-vented Cockatoos Cacatua haematuropygia (all App. I). Daoud is alleged to have assisted in the operations in the USA. Gisela Caseres, of Ascunción, Paraguay, is alleged to have supplied Silva and Daoud with many of the parrots from South America, while Hector Ugalde, of Florida, is charged with smuggling birds received from Caseres into the USA.

The enquiry covers alleged illegal activity over a period of 9 years and has been the subject of an undercover investigation by the USFWS and Justice Department. The indictment includes charges of violating CITES, US federal laws and laws of several other countries. The case is pending.

On 16 December 1994, in Maryland, Roberto Daverio was sentenced to 6 months' imprisonment and subsequent deportation to his native Argentina following his attempt to smuggle reptiles into the country.

Daverio had been arrested on 28 August as he entered the country at Baltimore-Washington International airport. Customs officers discovered 215 Argentine Tortoises Geochelone chilensis (App. II), 71 Argentine Spot-bellied Sideneck Turtles Phrynops hilarii and 1 Argentine Snakeneck Turtle Hydromedusa tectifera (all protected in Argentina) wrapped in towels inside cloth bags contained in his luggage.

At less than 100 cm in length, their importation also contravened public health laws.

On 28 December 1994, Manuel Frade was arrested at Miami International airport after inspection of his luggage revealed a number of CITES-listed reptiles and amphibians, and other animals. Frade, who had arrived from Caracas, Venezuela, had signed a Customs Declaration Form to indicate that he was not in possession of live animals.

Concealed in cloth bags inside a pair of jeans in the defendant's luggage were 3 Rainbow Boas Epicrates cenchria, 5 Boa Constrictors Boa constrictor constrictor and 6 Cook's Tree Boas Corallus enydris. Approximately 300 Yellow-banded Poison-arrow Frogs Dendrobates leucomelas were contained in 3 bottles labelled "horse shampoo". All the species are listed in App. II. Also found in plastic containers were over 200 bird-eating spiders and 6 egg sacks containing some 450-600 eggs, thought to be bird-eating spiders.

Frade was charged with violating the Endangered Species Act and awaits trial.

On 9 February 1995, Daniel and Francis Gonzalez, of Miami, were convicted of selling sea turtle Cheloniidae eggs in violation of the *Endangered Species Act*. Francis Gonzalez had admitted knowing it was illegal to trade in and sell the eggs.

The activities of the defendants were brought to the attention of federal wildlife agents by an informant, and resulted in the couple unwittingly offering the eggs for sale to USFWS undercover agents at the defendants' restaurant. The eggs had been provided by a Nicaraguan national who was separately prosecuted for smuggling the eggs through Miami International airport after arriving on an international flight from Managua.

The pair were sentenced to six months' house arrest, one year's probation and a US\$1000 fine.



F. Antr

Boelen's Python Python boeleni (App. II).

On 24 February 1995, at Akron Federal District Court, Edmund Celebucki of Parma, Ohio, was charged with conspiracy to smuggle protected reptiles from Papua New Guinea to the USA. The animals were to be sold as captive-bred specimens to collectors and reptile retailers.

Celebucki, who pleaded guilty to the two-count indictment on 26 May 1994, was involved in travelling with associates to Papua New Guinea over an 8-year period. On the occasion of Celebucki's arrest he was in possession of Bismarck Ringed Pythons Liasis boa, Boelen's Pythons Morelia boeleni (App. II), Olive Pythons Morelia [Liasis] olivacea (App. II), Green Tree Pythons Morelia [Chondropython] viridis, Amethystine Pythons M. amethistina amethistina (all App. II), and other reptiles.

Celebucki was sentenced to 15 months' imprisonment for contravening CITES and the US *Lacey Act* and for violation of a ban governing exports of certain reptiles from Papua New Guinea.

US District Court, Northern District of Illinois, Eastern Division; Psittascene 7(1). US Department of Justice News Releases, 29 November 1994; 16/29 December 1994; 9/27 February 1995

Agarwood Harvesting in Vietnam

Steven Broad

Introduction

For centuries considered to be the source of one of the most valuable non-timber forest products in Asia, agarwood Aguilaria has suffered serious over-exploitation in some parts of its wide range. A study of the exploitation of A. malaccensis and trade in its valuable fungal-infected wood, carried out by TRAFFIC India during 1992-1993, raised serious concerns about levels of illegal trade and over-exploitation of this species in India (Chakrabarti, et al., 1994). The same study revealed strong demand in key consuming countries in the Middle East and indications that agarwood was being imported in large quantities from certain Southeast Asian countries. In response to these findings, the Indian Government proposed A. malaccensis for listing in CITES Appendix II at the ninth meeting of the Conference of the Parties, and received support for the listing to be accepted. This report presents the findings of a brief study carried out in September 1994 of the trade in agarwood Aquilaria crassna in Vietnam, where populations have been severely depleted as a result of harvesting.

BACKGROUND

Historically, India and China have been significant suppliers of agarwood, prized for the oil derived from a fungal infection in its heartwood that is used in the production of incense, perfume and certain traditional medicines. Chakrabarti et al., (1994) revealed that India's legal exports of agarwood ranged from between 40 and 425 tonnes (t) a year during the late 1980s, mostly destined for the Middle East, and also for Europe. The same report notes that declining legal supplies from India were leading Middle East traders to seek agarwood increasingly from Southeast Asian countries during the 1980s. Traders in Vietnam reported that demand for agarwood from their country increased dramatically after 1983. Here, agarwood A. crassna is considered to be of a particularly high quality and a small domestic trade in this wood already existed. By 1987, a thriving industry in agarwood extraction quickly resulted in a drastic reduction in the country's supply, leading to a Government ban on extraction of and trade in agarwood. The high returns to be gained from agarwood harvesting, however, meant that extraction continued, albeit on a smaller scale and despite national efforts to regulate this harvest.

PRODUCTION IN VIETNAM

The main trade centres for agarwood were concentrated in the cities and ports of Ho Chi Minh City, Hue, Da Nang, Hai Phong, Quy Nhon and Hanoi. Prior to the ban in 1987, State-run companies and a forest produce export company administered by the Ministry of Forestry were also involved in agarwood extraction: according to these sources, and the Foreign Commercial Companies of Binh Tri Thien and Phu Khanh Provinces, agarwood production in Vietnam from 1983 to 1989 was 300 t. There was, however, a flourishing illegal trade that bypassed the State-run companies. Further, much waste was incurred during harvesting: the industry had attracted many unskilled workers who were unable to recognize the external features of fungal infestation, the result being that many healthy trees, which are of limited economic value, were felled and often discarded. Since the

ban, small-scale illegal trade in Vietnam has continued although supplies in trade appear to rely on agarwood harvests in neighbouring states, in particular Lao PDR and Cambodia. A brief investigation in Lao PDR in 1993 revealed that a substantial trade was taking place from Sekong Province into Vietnam, despite a harvest ban and regular arrests of smugglers (Baird, 1993).

PRICES AND OVERSEAS MARKETS

The price of agarwood is determined by the concentration of oleoresin deposits, manifested in the wood as fragrant, brown stains - the darker stains being the most valuable. Traders reported that the mean value during 1983 to 1989 was approximately US\$93 a kg. Prices of extracted oil reportedly reach US\$15 000 to US\$18 000 a kg.

Prior to the 1987 export ban, the main overseas buyers were from Singapore, Hong Kong, Taiwan and Japan; from these countries high-grade wood would be re-exported to the Middle East and, to a lesser extent, some European countries to make incense and high-grade perfume. Since 1987, traders from a number of Middle East and European countries have approached Vietnamese exporters seeking further supplies of agarwood.

Grade	US\$ per kg
I	1200 - 1650
II	750 - 1100
Ш	150 - 185
IV	65 - 80
V	16 - 25

Table 1. The price of agarwood in Vietnam, 1983 to 1989.

Source: Nguyen Hong Lam Company for Special Forest Product Export, Ministry of Forestry, Vietnam.

CONSERVATION MEASURES

Fears about over-exploitation led the Vietnamese Council of Ministers and the Ministry of Forestry to issue an Instruction forbidding the extraction of and trade in agarwood in 1987. However, enforcement of that restriction is reportedly poor. In order to reduce the pressure on the dwindling wild populations, the Ministry of Forestry established a plantation in Ha Tinh province of 200 A. crassna trees, inoculated with certain fungi; there are plans to extend this area and to establish further plantations in other provinces.

This information from Vietnam demonstrates that other *Aquilaria* species are employed in the agarwood trade and that at least one has suffered similar over-exploitation to that documented for *A. malaccensis*. *Aquilaria crassna* and possibly other species of the genus may be worthy of consideration for inclusion in the CITES Appendices justifiable both for their conservation and to support the listing of *A. malaccensis* which may prove hard to enforce owing to the likely difficulty of distinguishing its products in trade from those of unlisted species.

The information in this report is based on a study prepared for TRAFFIC Southeast Asia by the Centre for Natural Resources and Environmental Studies (CRES), University of Hanoi, Vietnam.

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India's Illegal Trade in Alexandrine Parakeets

Abrar Ahmed and Vivek Menon

Introduction

Four parakeet species comprise the bulk of the exports of psittacines from India: Plum-headed Parakeet Psittacula cyanocephala, Red-breasted Parakeet P. alexandrae, Rose-ringed Parakeet P. krameri and the Alexandrine Parakeet P. eupatria. Of these, the Alexandrine Parakeet is preferred as a cage-bird owing to its ability to mimic the human voice and adapt well to captive conditions. Of a predominantly green hue, it is distinguished from the Rose-ringed Parakeet by its large size and distinctive red shoulder patch. It has a wide distribution across the country and is common in certain areas. There is concern, however, that trade might be affecting some populations and in some areas a decline in numbers is reported to have been observed.

Despite a ban on domestic trade in all wild birds and a prohibition on bird exports being in effect since 1991, there is a sizeable trade in the species within India and specimens continue to be exported on a large scale. Prior to the ban, Alexandrine Parakeets were regularly exported: some 20 000 specimens between the years 1985 and 1990 inclusive (Figure 1). The Netherlands was the major importing country for 1989 to 1990, followed by Italy and Japan; Germany and the UK were also major importers of the species (Figure 2).

This paper is based on a study by TRAFFIC India of the trade in all live birds in India between March 1992 and October 1994 and forms part of an ongoing study that aims to monitor and document such trade in selected parts of the country.

Methods

A total of 75 markets in 47 locations were surveyed during the study period, of which 15 were inspected on several occasions. The survey methodology involved close monitoring of the trade and of activities at the trading establishments/stalls, so as to minimize duplication in counting or recounting unsold birds on subsequent market visits.

TRAPPING TECHNIQUES

The techniques most commonly employed for trapping Alexandrine Parakeets are:

Clap trap: a simple trap is set on the ground into which are placed one or several decoy birds that are tied to the ground with a length of string attached to their leg; cages containing several other birds are hung from nearby branches. Their repeated calls

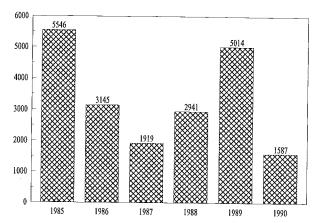


Figure 1. Numbers of Alexandrine Parakeets exported from India annually, 1985-1990.

Source: CITES annual reports for India

attract birds in search of food. The trapper pulls the cord of the net which falls, capturing the birds.

Hanging nets: cotton nets, about 30 metres in length, are hung from nylon string at the birds' roosting sites. The trapper holds one end of the string and by whistling to imitate a raptor's alarm call, startles the birds, causing them to fly into the net; the bird's habit of grasping hold of the net with its claws facilitates such methods of capture.

Latex: used to capture both adult and fledglings during the fruiting season of, in particular, Zizyphus, Morus and Melis spp., whose low, fruit-bearing branches allow trappers ready access to feeding birds. The birds are reached with a stick, the end of which has been smeared with a sticky plant latex. From the observations of the authors, this method has a high mortality rate as the young and weak chicks, ensnared by the glue, often die either from a fall, shock, or asphyxiation.

Removal from nest holes: a favoured method for removing young chicks. A curved wire hook is used to probe nest holes and retrieve the chick. This is a destructive technique as trees are cut to gain access to the holes, resulting in a shortage of nesting sites.

TRAPPING CENTRES

The majority of birds in trade originate in the states of Haryana (in particular Ambala and Jagadhiri) and from Jammu and surrounding areas in the state of Jammu and Kashmir. Probably as a result of methods of capture and care, birds trapped in the Punjab (Jalandhar, Ludhiana, Amritsar and Hoshiarpur districts) are more docile than specimens found elsewhere, and are much-valued for their talking abilities. To a lesser extent, birds are also trapped in the states of Bihar and Orissa, and in the districts of Dehradun and Haridawar, in Uttar Pradesh; birds in passage from Nepal are also caught in this region.

TRANSPORTATION AND CARE

Within India, the birds are transported by rail or bus. In view of its short, deeply hooked red bill, the Alexandrine Parakeet is confined to cages constructed of strong wire mesh which contain two or three folding shelves to minimize damage or injury to the birds; their heads are sometimes individually covered with cotton cloth caps to prevent fighting. Birds obtained in the Punjab are less vocal and pugnacious in captivity and thus more easy to transport. Young chicks are generally accompanied by a trader for the duration of the journey as they have to be fed at least twice a day; after two months the juveniles can travel unaccompanied and are force-fed once every two days.

Alexandrine Parakeets are fed mainly on millet, corn, paddy (unrefined rice) and groundnut; chicks less than 20 days old are nourished with a wheat flour solution, progressing to soaked gram mixed with wheat flour, or wheat flour in tablet form alone. Chicks caught in Bihar and West Bengal are fed on boiled rice. It has been observed that birds adapted to a millet diet are the hardiest in captivity, while individuals raised on paddy show the highest mortality; these observations have not been proven scientifically.

PRICES AND NUMBER OF BIRDS OBSERVED

In Punjab and Uttar Pradesh, adult birds are purchased from the trappers for Rs.35-Rs.40 (US\$1-US\$1.20) each; the dealers then sell the birds to middlemen in Ambala and Ludhiana. From these locations the stock is sent to Meerut, a primary collection centre, and sold for a retail price of Rs.70-Rs.125 each; birds are also sent to Lucknow, Bombay and Delhi, where they are sold at similar retail prices.

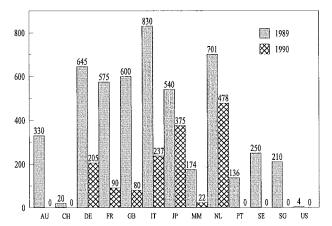


Figure 2. Destination of Alexandrine Parakeets exported from India, 1989-1990.

Source: CITES annual reports for India

AU-Australia; CH-Switzerland; DE-Germany; FR-France; GB-Great Britain; IT-Italy; JP-Japan; MM-Myanmar; NL-Netherlands; PT-Portugal; SE-Sweden; SG-Singapore; US-USA

Middlemen pay an average of Rs.40-Rs.50 for chicks collected from Jalandhar and Lucknow; once they reach Bombay and Delhi they can fetch up to Rs.100 for the retailers. Chicks obtained in Orissa and Bihar (for Rs.50-Rs.60) and from Ludhiana (*circa* Rs.100) can command Rs.200-Rs.400 retail in Calcutta. Stock reaching Delhi is sold in Jama Masjid market for a retail price of Rs.150-Rs.200 per bird.

Alexandrine Parakeets were seen on 68 occasions during the survey period, and a total figure of more than 6000 specimens were recorded: at Hathibagan market, Calcutta, between 150 and 200 birds were observed on most of the 11 occasions the market was visited during the 12 months following March 1993; between 300 and 500 were observed at each of half a dozen other markets surveyed; fewer than 100 specimens were seen at the remaining outlets visited.

SEIZURES

A total of 778 Alexandrine Parakeets were seized in Delhi and in the state of Maharashtra in 28 separate incidents over the period 1989 to 1994, including 230 specimens in 1990 alone; the total number of birds seized is likely to be higher when records for all regions have been incorporated into the database currently being compiled by TRAFFIC India.

CONCLUSION

After the Rose-ringed Parakeet, the Alexandrine Parakeet was and continues to be the most commonly traded psittacine in India, despite a current ban on the domestic trade and export of wild birds. There is evidence of a decline in the species in certain areas. Steps to ensure that the trade is brought under control in accordance with India's legislation should include:

- inspection by enforcement authorities of all markets surveyed for this study;
- extra vigilance at airports and land borders to foil attempts to smuggle specimens out of the country;
- a more detailed population study of this oncecommon species, whose decline in recent years is being overlooked.

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Babirusa Skulls on Sale in South Sulawesi

Roland Melisch

The Babirusa Babyrousa babyrussa is one of two wild pig species endemic to Sulawesi, Indonesia, (the other being the Sulawesi Pig Sus celebensis). It is protected by Indonesian law (Anon., 1981), and is listed as Vulnerable by IUCN (Groombridge, 1993); it is also listed in Appendix I of CITES and thus prohibited from international commercial trade. The male of the species produces upper canines that pierce the flesh of the snout and curve towards the head; a set of lower canines grows over the face.

Babirusa once formed an important part of the diet of prehistoric communities (Delsman, 1951) and to date, local poaching of Babirusa as a food resource (for non-Muslim communities) still poses a threat to this species (L. Clayton, pers. comm., to TRAFFIC International, 1995). However, it is the demand for their skulls as souvenirs that is believed to have increased hunting pressure on Babirusa populations.



Babirusa skull Babyrousa babyrussa

In order to gauge the level of trade in Babirusa skulls in south Sulawesi, a survey of souvenir shops in the tourist area of Rantepao, Tana Toraja, was carried out by the author during a private visit to the island in October 1993. A total of 22 shops were visited, six (27%) of which were found to sell male Babirusa skulls, each shop holding an average of 3.5 skulls. Twenty skulls were of adult males, and one was of a sub-adult male. Shop assistants were asked about the age and origin of the skulls and about their knowledge of any laws governing the sale of such items. Half of the salesmen stated that the skulls were new, having been purchased from hunters within the previous few months (the remaining salesmen were not able to provide any information). The mountains around Nanggala, Quarles Mountains, Telondokalondo Mountain, and the montane forests between Rantepao and Palopo, all located in the north of south Sulawesi province, were cited as the specimens' areas of origin. Staff claimed not to be aware that the species is protected by law and the sale of specimens illegal.

Two dealers in Rantepao asked Rupiah 60 000 (US\$29) and Rupiah 90 000, respectively, for a single skull (October 1993 exchange rate). The latter price is equivalent to twice the average monthly income of a rural Sulawesi worker. As the author did not wish to express too much interest in purchasing a skull, the common practice of bargaining to reduce the asking price was not made; such figures are

therefore unreliable. It was not clear whether trade in Babirusa skulls is a longstanding tradition or a recent development. As well as viewing skulls for sale, on two occasions the author observed a complete tusk and single tusks of Babirusa attached to a beam in traditional Torajan houses north of Rantepao.

Villagers in Tana Toraja stated that the Babirusa is most commonly killed by spear after being tracked by the hunter with the aid of five or six dogs. This method would appear to be very effective as the Babirusa has not developed specific defence skills against dog attacks, nor does it have a big litter size to buffer such predation (MacKinnon 1981; Whitten et al., 1987): this is most probably owing to the absence on the island of any indigenous mammalian predator, with the exception of the Sulawesi Palm Civet Macrogalidia musschenbroekii which has not been reported to feed on Babirusa (Wemmer and Watling 1986; Whitten et al., 1987). While similar hunting methods are reported to be used by villagers of Bada Valley and Lariang River Valley, in the vicinity of Lore Lindu National Park, central Sulawesi, no Babirusa trophies were seen and no skulls offered for sale in these places.

Improved law enforcement of the trade in souvenirs is strongly recommended. The local branch of the Directorate General of Forest Protection and Nature Conservation (PHPA), which serves as the CITES Management Authority and is responsible for enforcing wildlife trade regulations, has not yet been able to develop successful action against the trade in Babirusa, despite their efforts and some success in reducing trade in protected butterflies and birds (spokesperson of the Rantepao PHPA office, pers. comm., 1993).

Rantepao (and Makale 17 km further south), both well-connected by air and overland transport, are the main starting points for excursions to Torajan villages and might therefore play a key role in promoting public awareness to prevent further exploitation of the Babirusa for souvenirs. The tourist board and local municipalities, as well as travel agents and tourist guides can also play an important part in disseminating information to tourists by instructing them not to buy these and other endangered species, thereby supporting PHPA in Tana Toraja in its efforts to protect this unique pig species.

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