

Elephant crisis

by Jonathan Barzdo

African elephant conservation has reached a critical point. It is critical for the elephants because decisions made in October this year will have a profound effect on the world population of elephants in the next 50 years. It is also critical for the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) because these decisions, to be made at the biennial conference, will severely test the effectiveness of the Convention to curtail the trade in a species whose use is both economically and politically important, and which is disappearing over much of its range.

In the last 10 years, there have been some enormous declines in African elephant populations. Douglas-Hamilton and Barnes (1989) state that the total population has been more or less halved and is now estimated at roughly 625,000 animals. Some observers remark that a population of this size is obviously not endangered. This simplistic thinking, however, takes no account of the high level of trade and the persistent demand for ivory, the continued poaching and smuggling driven by the high value of the product (at over US\$150/kg) and the effects of trade on the breeding potential of elephant family groups (see article in this issue). These factors need to be understood and to be tackled now in order to prevent disaster for the African elephant. For this reason, IUCN/SSC's African Elephant and Rhino Specialist Group, last year, brought together an *ad hoc* group of experts in economics, trade control and monitoring and population ecology, the Ivory Trade Review Group (ITRG), to conduct a broad investigation of the ivory trade and its impacts, in co-operation with the CITES Secretariat. The ITRG presented its interim report to the CITES African Elephant Working Group meeting in Gaborone, Botswana, 4–8 July 1989. This document represents the most comprehensive assemblage of information on the ivory trade and its effects ever compiled.

The African elephant was listed in CITES Appendix II in 1977. From that time, all shipments to or from a CITES Party have had to be covered by an export document. This applies not only to ivory but also to elephant skin and other parts and

products. In the case of exports from the African country of origin, the permit may be granted only when the designated government authority is satisfied that the specimens were legally obtained and that the export will not be detrimental to the species's survival. In practice, there has been an enormous trade in ivory of illegal origin, estimated by some to have formed as much as 80 per cent of the world trade in 1985. Passionate debate on this subject at the CITES Conference that year led to the adoption of a special control system for raw ivory, in an attempt to reduce the illegal trade. Agreement on this system was greeted as the greatest success of the Conference of the Parties.

Under this 'ivory quota control system', since 1 January 1986, African states wishing to export raw ivory have had to set an export quota. Each whole ivory tusk and cut piece being exported or re-exported has had to be individually, indelibly marked with a unique code number, including information on its country of origin and its weight. Before the export could take place, the export document, accompanied by a list of the related tusks, has had to be verified by the CITES Secretariat's specially established Ivory Unit. This task is facilitated by the computerization of all tusk data at the World Conservation Monitoring Centre's Wildlife Trade Monitoring Unit (WTMU), enabling a rapid check that duplicate numbers are not being used and that the details of tusks for re-export are acceptable (e.g. a tusk should not have suddenly doubled in weight).

Many traders have complained how cumbersome this system is; but it has probably had some effect. An analysis by WTMU, of the declared countries of origin in Customs and CITES trade statistics (Luxmoore *et al.*, 1989), indicates that Africa's exports of ivory, using this measure, had already declined from over 1000 tonnes in 1983 to around 700–800 tonnes in 1985 and (according to preliminary figures) fell to less than 400 tonnes in 1987. This includes all ivory recorded by Customs departments, even if it originally left Africa without the proper CITES documents. Obviously, it does not include ivory smuggled directly to a carving country or other unrecorded shipments. Even so, the 1987 figure accounts for some 40,000 elephants.

News and views

This level of trade evidently represented a hunting mortality, for the whole of Africa, of about 6.3 per cent, according to a study for ITRG by the Renewable Resources Assessment Group (Beddington *et al.*, 1989). Their analysis used the data on sizes of tusks in trade and suggested that the hunting mortality would have to be reduced to a maximum of 2 per cent to allow populations to stop declining and begin recovery. In other words, even the 1987 level of trade was three times higher than the African elephant population could bear.

These figures were contested at the Botswana meeting. Nonetheless, seven nations were already so concerned about the drop in elephant numbers and the continuing trade that they had proposed the inclusion of the African elephant in Appendix I of CITES. This is the proposition that faces the seventh meeting of the Conference of the Parties to CITES when it meets in Lausanne, Switzerland, 9–20 October 1989. If approved, it would effectively prohibit all commercial international trade in elephant ivory.

In support of the proposal, and in anticipation of a spate of poaching and stockpiling to beat the ban, an unprecedented series of trade prohibitions has been introduced by some of the key ivory-importing countries. These include the USA, the EEC and Hong Kong; Japan banned imports of all worked ivory and of raw ivory from non-producer countries. Reportedly, an import ban has also been introduced in the United Arab Emirates, which had become known as a major conduit for illegal ivory trade and which withdrew from CITES two years ago.

The reasons being put forward to support the listing of African elephant in CITES Appendix I are very straightforward: on a global scale the species is in serious trouble and, at present trade levels, many populations are heading for extinction; CITES only contains one measure for dealing with a species in this parlous state and that is to list it in Appendix I to allow trade only in exceptional circumstances; if a legal trade in ivory from healthy populations were allowed to continue, it would provide a cover for illegal trade from other populations. The ITRG concluded that no other measure would be sufficiently unambiguous to clarify the law enforcement re-

quirements in trading centres around the world.

However, as they also recognized, this action could have certain negative consequences. First, a ban is likely to lead to an increase in price for black-market ivory, which would provide an incentive for further poaching and smuggling. Secondly, ivory carvers may turn for their needs to other sources, such as hippopotamus teeth (already carved by some of the same factories), and tusks of narwhal, walrus and warhog. Moreover, countries that feel that they would be economically, socially or in any other way disadvantaged by an Appendix I listing of the African elephant can quite legitimately choose not to be bound by this decision. They can make this choice within 90 days after the CITES meeting and then 'enter a reservation' so that, for international trade in this species, they are not party to the Convention and may trade ivory uncontrolled.

Some countries would be quite justified in entering a reservation. The ITRG predictions, above, relate to the world population of African elephants but several regional populations are actually increasing in size. While current trends predict elephant extinction in most countries north of the Zambezi, populations south of this river seem to be secure unless, of course, poaching efforts become concentrated in this area, as happened with the black rhinoceros. Not surprisingly, a number of these southern African countries, including Botswana, South Africa and Zimbabwe, wish to retain their elephant populations in Appendix II. Such a step would be entirely possible under the Convention and, moreover, would be biologically justified if the regional populations were considered separately. In Zimbabwe, the wildlife management department has long had an elephant culling scheme, introduced because the elephants exceeded the carrying capacity of their environment; the resulting meat is used within the country and the hides and ivory are sold for local manufacture or export, providing funds for the department's conservation and research work.

If ivory trade were allowed from southern Africa, it would certainly make more difficult the enforcement of export prohibitions in less elephant-rich countries; Appendix I ivory could be misdeclared as coming from Appendix II elephants. On the

Oryx Vol 23 No 4, October 1989

News and views

other hand, if the southern African populations are prohibited from trade, the national conservation efforts could be adversely affected by the resulting loss of income. The countries concerned might also opt out of the controls, although they clearly do not wish to do this; but they are equally clearly tired of being dictated-to by rich 'western' industrialized nations.

The ivory trade exists for two main reasons. First, there is a demand for manufactured ivory items, in spite of the continually rising prices. They have a cachet, as well as a quality, not shared by the cheaper substitutes. TRAFFIC's reports to ITRG indicate that there has been a decline in demand. This must be largely in response to growing concern and publicity about the decline of elephants, the generally cruel way in which they are poached and the illegality of much of the trade. At least in Europe and the USA, an atmosphere has been created in which it is becoming less acceptable to flaunt the teeth of the world's largest land mammal in the face of its looming extinction. Still, the principal market for ivory is in east Asia, and the demand, though reduced, is strong. Second, there is a profit to be made from killing elephants and dealing in ivory. Between 1979 and 1986 the annual value of raw ivory exports from Africa (as declared in the importing states) fluctuated between roughly \$US30 million and \$US40 million, according to estimates by the London Environmental Economics Centre (Pearce and Burgess, 1989). Intuition says this must be economically important to Africa, but in fact the export value for each country (with the possible exception of Central African Republic) is insignificant in terms of its national budget. Moreover, and perhaps more importantly, Africa is not the beneficiary of the exploitation of its own resources. Much of the money to buy ivory is reportedly paid to private bank accounts outside Africa. This must be especially the case for illegal trade involving both Africans and non-Africans. The press is littered with reports of diplomats and civil servants in Africa who organize or help in the illegal ivory trade for the purpose of acquiring hard currency.

The significance of these points is that even if the African elephant were listed in CITES Appendix I, it would not stop the killing of elephants or the

News and views

ivory trade, much of which is already carried on contrary to the legal controls.

The big challenge facing the CITES meeting is to reconcile two of the main tenets of the Convention, 'that peoples and States are and should be the best protectors of their own wild fauna and flora' and 'that international co-operation is essential for the protection of certain species of wild fauna and flora against over-exploitation through international trade'. The question for southern Africa is, at what stage does international co-operation become international intervention? The Parties must try to find a compromise to Appendix I listing of all African elephant populations, and try again to find the best way to control the ivory trade and to save the species.

Meanwhile, wealthy countries and organizations who are genuinely concerned about the plight of this species should first help those African countries who want help to protect their elephants *in situ*. If there are only half as many elephants in 50 years as there are now we will be very lucky.

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Whaling 1989/1990

Delegates at the annual meeting of the International Whaling Commission in San Diego, California, in June, heard that the numbers of great whales in the southern hemisphere were far lower than had been calculated previously. Only 22 individuals of the blue whale *Balaenoptera musculus* have been seen in the last six years and the total population is estimated at 200–1100, which may be too low for recovery. Other whales that may be on the verge of extinction are the fin whale *B. physalus*, estimated at 2000, the sperm whale *Physeter catodon*, estimated at 10,000, and the humpback *Megaptera novaeangliae*, believed to number 4000.

Iceland, Japan and Norway all intend to continue whaling under scientific permits for the next year. Japan agreed to reconsider its research, which allows for a catch of up to 825 minke whales *Balaenoptera acutorostrata* in the Antarctic, but it appears that Japanese scientists will almost certainly take at least 400 during the 1989/1990 season. Iceland had earlier announced plans to take 80 fin whales and 10 sei whales *Balaenoptera borealis*, but during the meeting agreed to take no more than 68 fin whales, the same number as it caught last year. Norway's planned take of 20 minke whales from the north-east Atlantic is part of a pilot study for a much larger investigation that could require the killing of 300 or more minke whales a year. The IWC's scientific committee condemns the lethal aspects of all three scientific whaling programmes because they do not provide data essential to a comprehensive review of all stocks of whales and they fail to produce the information needed to improve rational management of whale stocks.

The moratorium is to be reviewed in 1990 and there is a possibility that commercial whaling could be resumed. However, there are two factors that might prevent, or at least delay, that. Firstly, there is a core of good conservationist commissioners in the IWC, including Britain's Alison Blackburn, and although Japan is notorious for its efforts to gain support from small and vulnerable countries, the whalers would need a three-quarters majority to get the moratorium overturned. On the darker side, some conservationist nations, India for example, might be

forced to withdraw from the IWC because of the difficulty of paying their dues.

Secondly, before whaling could be resumed, the IWC would need to be assured that a revised management procedure would satisfy three criteria: it must not allow wild fluctuations in catch from year to year; it must have an acceptably low risk of seriously depleting the stock; and it should enable the highest possible yield from the stock. It is not going to be easy to do this. The current New Management Procedure, which was introduced in 1974 and is in abeyance during the moratorium, continued to allow stocks to decline. Its failure was due to the enormous difficulties in measuring the biological parameters involved and these still have to be overcome.

ITTO meets in Ivory Coast by Sara Oldfield

The International Tropical Timber Organization (ITTO) met in Abidjan, Ivory Coast, 18–24 May, for the first of its two full sessions this year. The organization now has over 40 members, both tropical timber producer and consumer countries, which between them account for around 95 per cent of the world's tropical timber trade. This trade amounts to over US\$6 billion annually, with virtually all the wood derived from natural forests, which are inadequately managed for timber production. The wood entering into international trade from plantation sources is minimal and is derived from a limited number of hardwood species.

Improving natural forest management for sustainable tropical timber production is one of the main priorities of ITTO. This is seen as an important aspect of the long-term conservation of tropical forest resources, which is included in the remit of the organization. One of the provisions of the International Tropical Timber Agreement (ITTA) under which ITTO operates is 'to encourage the development of national policies aimed at sustainable utilization and conservation of tropical forests and their genetic resources, and at maintaining the ecological balance in the regions concerned'.

Oryx Vol 23 No 4, October 1989

News and views

At the Abidjan meeting it was agreed that ITTO should prepare a work programme to promote the sustainable management of natural forests and conservation through: the development of guidelines of 'best practice', development of the economic case and incentives, strengthening forestry policy initiatives, increasing awareness and developing demonstration models.

The work of ITTO is hampered by inadequate funding, but work is already under way on some important forest-based projects. Conservation groups are watching with particular interest a project to develop sustainable forest management in the State of Acre in Brazil. At present over 90 per cent of Acre remains forested and over half the State's population live in the forest. Brazil nut *Bertholettia excelsa* and rubber *Hevea brasiliensis* are valuable natural products and there is great local demand to establish 'extractive reserves' for these species. But time is short to develop sustainable forest management, with road development, rapid colonization and developing timber exploitation leading to accelerating deforestation. The ITTO project based in the State Forest of Antimari aims to provide a new development model based on conservation and sustainable utilization of the forest resources.

A similar project is planned for the Chimanes forests in the department of Beni, Bolivia, with funding agreed at the Abidjan meeting. Over 50 per cent of Bolivia is covered by natural forest. At present forest resources are not being utilized rationally, mainly because of lack of land-use classification and planning, inadequate legal controls, and uncontrolled clearance for agriculture. Bolivia's forestry sector is poorly developed and contributes little to the national economy. In 1987 timber accounted for 6.6 per cent of the country's exports. Exploitation of the forests for timber is concentrated in a few local areas that have good transport access. In the Santa Cruz area valuable timbers such as mahogany or mara *Swietenia macrophylla* have been worked out. Mahogany is one of the most important timbers in Bolivia, providing 84 per cent of timber production, 64 per cent of which is for export.

Commercial timber extraction has been relatively recent in the Beni department, developing
News and views

in the 1970s with the opening of new roads and the near-extinction of valuable timbers in Santa Cruz. Twenty-one per cent of the concession area of Beni is within the Chimanes forests and industrial timber production began there in 1986. Mahogany is the main timber utilized and its extraction increased sixfold between 1977 and 1987. Over 50 other species are of potential value, of which 14 have been identified for the international market.

In 1986 578,000 ha of Chimanes was designated as Permanent Production Forest. Adjacent to this are the Biological Station of Beni and the Yucuma National Park. The Chimanes project, supported by ITTO, incorporates conservation and sustainable utilization for the area as a whole. The project will be important as a demonstration project for Bolivia and neighbouring countries of the Amazon.

At present logging throughout tropical forest areas concentrates on a very limited number of species, particularly for the international market. Heavily exploited timbers such as afrormosia, mahoganies, ebonies, paduaks, and rosewoods are suffering genetic erosion and potential extinction in various parts of the world. Sustainable management of forests for timber production must take into account the threats to individual timber species as well as the bio-diversity of the forests as a whole. The ITTO is considering the best way to promote conservation of tropical timber species and has commissioned two studies to guide policy development and action.

A study of the conservation status of rare tropical timbers in trade is being carried out by the World Conservation Monitoring Centre in Cambridge. A related project looking at the conservation implications of timber diversification in trade is being undertaken by the International Institute for Environment and Development. The findings of these studies should help to strengthen the role of ITTO in tropical forest conservation. But ultimately ITTO's success depends on the will and financial commitment of member governments. At present there is little sense of urgency in the bureaucratic debates.

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News and views

Christmas Island National Park

by David J. Du Puy

Christmas Island, an Australian territory in the Indian Ocean, is the last remaining nesting site for the Abbott's booby *Sula abbotti*. It also provides nesting sites for large colonies of seabirds, including the endemic Christmas Island frigate bird *Fregata andrewsii*. Christmas Island National Park was established in February 1980, and extensions were made in January 1986, so that it now covers some 23.7 sq km, or c. 17.5 per cent of the island. It has been set up in the most isolated part of the island's open-cast phosphate mining industry. Almost all of the surviving endemic species of plants and animals have been recorded from the park, and large populations of seabirds nest within its boundaries. It is indeed a valuable contribution to conservation.

Nevertheless, it covers a relatively small area and several important aspects of the island's natural history are missing. The most important of these are the absence of significant areas of primary plateau rain forest, the exclusion of most nesting areas of Abbott's booby, and the absence of nesting sites of the Christmas Island frigate bird within the park. Furthermore, only small counts of the golden bosun *Phaethon lepturus fulvus*, an endemic, the greater frigate bird *Fregata minor minor* and the noddy tern *Anous stolidus* have been recorded. The unique areas containing mangrove species (*Bruguiera*) growing in fresh water are also excluded.

Following the curtailment of phosphate mining operations, the Australian National Parks and Wildlife Service have announced further proposed extensions to the Christmas Island National Park. This is a major opportunity to protect the natural resources upon which a wildlife-orientated tourist industry could be based.

It is vital that sufficiently large and well-chosen areas are protected to ensure the continued, sustainable survival of the unique and valuable forest and fauna represented on the island. The possibility of renewed mining exploitation and the expansion of tourism still potentially threaten the Christmas Island environment. Only through the official recognition of areas of high conservation priority and their declaration as part of the national park can their safety be ensured. Present

and future developments on Christmas Island should be closely monitored by international conservation bodies.

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Enforcement of CITES takes a blow at Court of Appeal

by Mike Read

When, in June this year, orchid trader Henry Azadehdel was sentenced at the Old Bailey for illegal import, harbouring and selling of endangered wild orchids (see p. 220 of this issue) it looked as though the protection of plants through enforcement of CITES legislation had finally taken a step forward. A very great deal of effort had been put into bringing the case, especially by Her Majesty's Customs and Excise, ably assisted by staff from the Royal Botanic Gardens, Kew. Azadehdel had made a small fortune from trading in wild orchids, especially extremely rare south-east Asian slipper orchids from the genus *Paphiopedilum*, which can fetch several thousand pounds apiece. However, the Court of Appeal turned what was a small but significant victory for the conservation of plants endangered by international trade into a disaster that threatens to set plant conservation back years. A fine of £10,000 was set aside, and costs reduced from £10,000 to £2500. The prison sentence was also considerably reduced and Azadehdel immediately walked free.

The Court of Appeal judges' decision is disturbing, especially given their justification of needing to leave leeway for greater punishment for traders in rhino horns, ivory or skins. The assumption that a plant species is less worthy of protection from extinction than an animal species does not stand up to scrutiny in either conservation or ecological terms. Furthermore the Customs and Excise had commendably expended a lot of resources in investigating and bringing the case and will now clearly be reviewing whether they would do so again given the outcome of the appeal. It is to be hoped that they will not give up their valuable efforts.

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Oryx Vol 23 No 4, October 1989

Successful ICBP conference in Turkey by John Temple Lang

The conference of the European section of the International Council for Bird Preservation (ICBP) in Adana, Turkey, in May, coincided with the publication of *Important Bird Areas in Europe**. This lists sites in Europe that should be made into bird reserves and the conference discussed how to achieve this. It is hoped that bodies such as the Council of Europe will recognize the lists officially. Meanwhile, ornithologists need to monitor the areas for threats, keep count data up to date, and study the ecology of areas in more detail. Teams of ornithologists may be needed in countries like Turkey, which has many immensely important areas and relatively few ornithologists. Surveys are also needed to locate newly important areas and areas about which not enough was known to justify inclusion. While the main objective is to have all these sites protected in the 32 countries covered, this would need to be supplemented by measures to protect larger areas of habitat for bird species that are not concentrated in large numbers in specific areas: this will be one of ICBP's next tasks in Europe.

The conference was organized by the Society for the Protection of Wildlife (DHKD), which received a United Nations Environment Programme award during the conference. The meeting began with a symposium on the great importance of Turkey for bird conservation in Europe; Dr Sancar Baris pointed out that 93 of the 180 species endangered in Europe breed in Turkey, and large proportions of the Western Palearctic populations of storks, large raptors and pelicans migrate through Turkey. The country has a greater range of habitats than any other European country, except Russia, and a correspondingly wide variety of breeding species. Substantial proportions of the world populations of Dalmatian pelican *Pelecanus crispus* and imperial eagle *Aquila heliaca* breed in Turkey, and up to three-fifths of the world's white-headed ducks *Oxyura leucocephala*

winter on one lake. Turkey is on both north-south and east-west flyways, and many of the remaining small lakes in Anatolia are crowded with waterfowl during migration. The conservation problems are enormous, largely due to hundreds of years of over-grazing in Anatolia. Paul Rose reported serious declines in many wintering waterfowl, and Gernant Magnin reported his findings on large scale taking and killing of raptors in the north-east. Max Kasperek examined 79 Turkish sites listed in Important Bird Areas in Europe, of which 62 are wetlands. Few of these are protected, and most are threatened; 80 per cent of all the waterfowl wintering in Turkey occur in only eight wetlands. An official spokesman said that the authorities would soon consider ratifying the Ramsar Convention, but much discussion inevitably concerned the disappointing record of the Turkish government in wildlife conservation to date. The huge south-east Anatolia dams and irrigation project has so far been carried out without an environmental impact assessment. Two important wetlands, the Cukurova delta and the splendid Sultan marshes are still subject to threats. Especially sad news was that there is now only one wild bald or hermit ibis *Geronticus eremita* left in the wild in Turkey, in spite of years of conservation effort; there is still a population in Morocco, but the species is now extinct in the wild in the Palearctic. A second symposium dealt with aspects of ICBP's migratory birds programme in Europe and Africa.

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**Important Bird Areas in Europe* compiled by R. F. A. Grimmet and T. A. Jones, with illustrations by N. Arlott, is published by ICBP (Technical Publication No. 9) in collaboration with the International Waterfowl and Wetlands Research Bureau and was sponsored by the Royal Society for the Protection of Birds. Its 888 pages are packed with information on 2444 sites in 32 countries and represents the first-ever proposal for a continent-wide network of sites that must be protected. It is available from ICBP, 32 Cambridge Road, Girton, Cambridge CB3 0PJ, UK for £19.50 plus £2.00 postage and packing.