

International

New Parties to CITES

Kazakhstan, Slovenia and Croatia are the latest countries to have acceded to the Convention on International Trade in Endangered Species (CITES) of Wild Fauna and Flora. Their accessions came into force on 19 April, 23 April and 12 June 2000, respectively, making them the 149th, 150th and 151st Parties to CITES.

Source: CITES Secretariat, 16 February and 23 March 2000.

Biodiversity 'hotspot' site controversy

According to a recent study by Norman Myers *et al.*, 25 fragments of land that together cover just 2.1 million sq km contain the remaining habitats for up to 50 per cent of the planet's terrestrial species. Myers *et al.* (*Nature* (2000), 403, 853–858) suggest that 44 per cent of all plant species and 35 per cent of land vertebrates are endemic to these 25 hotspots. Of the 25 hotspots, 15 are tropical rain forests and 9 are islands, and include the Andes Mountains, Madagascar, the Atlantic forests of eastern Brazil, the Philippines and New Caledonia. Controversially, the authors argue that funding for biodiversity conservation should target these hotspots. Many other conservationists, however, make the case for conserving representative samples of the world's habitats and associated species as well as the hotspots characterized by high endemism and major threats to the integrity of the habitat.

Source: *New Scientist* (2000), 26 February, 12.

IKEA announces new policy on forest products

In February, the furniture chain IKEA announced a new policy on forest products and donated \$US 2.5 million to Global Forest Watch, an initiative of the World Resources Institute, to help map the world's remaining intact natural forests. The money will support Global Forest Watch's work in 10 countries, including Canada, Latvia,

Estonia and Russia. IKEA's new policy includes demands on all its suppliers of solid wood products to ensure that the timber has been produced in compliance with current laws and forest practice codes in the country concerned and that the timber has not been taken from ancient forests, or other forests of high conservation value, unless the forest area is FSC-certified or equivalent. IKEA will require implementation of the new policy by 1 September 2000.

Source: *Taiga-News* (2000), 31, 2.

Protecting ancient forests

Buying Destruction, a new report from Greenpeace International, names more than 150 companies producing or trading in forest products coming from ancient forests in Canada, Brazil, Guyana, Suriname, Chile, Russia, Cameroon, Gabon, Indonesia, Papua New Guinea and the Solomon Islands. The report suggests that at least 7.2 million ha of frontier or other ancient forests are logged each year and that 72 per cent of 'frontier forests' are threatened by logging. Most of the annual loss is from clear-cut operations in Canada and Russia. There are, however, some signs of change. In Russia, a moratorium on old-growth logging in Karelia and the Murmansk Oblast has been supported by an increasing number of Swedish and Finnish logging companies since its inception in 1996, although attempts to expand this to the old-growth forests of Arkhangelsk and Komi have been less successful.

Source: *IUCN Arborvitae* (2000), 13, 3.

First genetic evidence for a third species of elephant

Researchers at the Natural History Museum in Paris claim that an elephant called Coco—the last surviving forest elephant in a European zoo—at Vincennes Zoo and his forest-dwelling relatives in Africa are genetically different enough from their savanna cousins to be classed as a separate species alongside the Asian elephant. For many years, some zoologists have speculated that this

might be the case because African forest elephants tend to be stockier than savanna elephants and have straighter tusks and rounder ears. To date, however, no one has confirmed the theory. Molecular biologists at the museum tested DNA from Coco's mitochondria and preliminary results showed that his mitochondria differ from those of savanna elephants as much as they do from Indian elephants. Moreover, their latest research, not yet published, shows that differences of a similar magnitude also exist between the animals' nuclear DNA. These results suggest that there are probably two species of elephant in Africa, but more individuals need to be tested to confirm whether this is the case.

Source: *New Scientist* (2000), 1 April, 15.

Freshwater species decline dramatically

According to WWF's 1999 *Living Planet Report*, 51 per cent of the world's freshwater species, from fish and frogs to river dolphins, are declining in numbers. Substantial losses of amphibians have been recorded in national parks and nature reserves, indicating pervasive threats even in protected areas. The golden toad has disappeared in Costa Rica owing to climatic changes, while some 20 frog species have been decimated by a fungus in Australia, Panama and the USA. Deformities in amphibians, caused by pesticides, fertilizers and other agricultural chemicals, are also widespread. These findings indicate the extent of the deterioration in the quality of the world's rivers, lakes and wetlands.

Source: *Our Living World* (2000), December 1999–January 2000, 16.

Concern over Internet trade in endangered species

Concern is growing over the ease at which products made from endangered species can be bought illegally over the Internet. The appearance of several products appearing on the on-line world-wide

'bring and buy' shopping site, E-Bay.com, has worried federal agencies and conservation groups. A spokesperson for E-Bay stated that they have a page notifying users about the laws regarding the sale of animals and their products, but with over 7.7 million registered users, they agree that the system is open to abuse. The US Fish & Wildlife Service do not have the resources to police the site. *Source: Wildlife Conservation* (2000), April, 9.

Global biodiversity information facility

A database that pools all the recorded, but widely scattered, data about the earth's flora and fauna is to be established by the 29 countries that make up the Organization for Economic Co-operation and Development (OECD). With an initial budget of \$US 3 million, the aim is to create a database available world-wide via the Internet for use by scientists and policy-makers. *Source: Biodiversity* (2000), 1(1), 29.

Recovery after extinction

An analysis of extinction and origination throughout the fossil record has shown that the rate of extinction of species is not correlated with the rate of subsequent origination. Instead, the rate of extinction was found to correlate with rates of origin around 10 million years later. This time-lag persists even when mass extinctions are excluded, and after allowing for the incompleteness of the record. The implication, regardless of the severity of extinction processes, is that there is an intrinsic limit to the rate at which ecology can bounce back from disaster. *Source: Weil, A. & Kirchner, J.W.* (2000) *Nature*, 404, 177–180.

Bear numbers plummeting

WWF's latest Species Status Report, *Bears in the Wild*, indicates that the numbers of almost all bear species have dramatically declined in recent decades, mainly owing to trade in their body parts, habitat destruction and conflict with humans. All bears appear in the Red List of Threatened Species of IUCN—The World Conservation Union, with the giant panda listed as Endangered. Hunting

has devastated Asia's bears and more American bears are being killed to satisfy world-wide demand for bear parts. South and Central American bears have also been seriously affected by logging, cattle ranching and clearance for poppy and cocoa fields, which feeds the lucrative drug trade. The only bear population that still lives throughout its original range, and whose populations in some areas has doubled, is the polar bear. *Source: Our Living World* (2000), December 1999–January 2000, 17.

Larger petrels at risk from longlining

The two giant petrels *Macronectes* sp. and five petrels of the genus *Procellaria* have been added to Appendix II of the Bonn Convention for the Conservation of Migratory Species of Wild Animals after research showed that they, like the Southern Ocean albatrosses, are at risk from longlining. BirdLife has offered strong support to an adopted resolution led by Australia to encourage speedy action towards finalizing a Southern Ocean Albatross Agreement. (See also *Albatross conservation plan from Australia* [Australia/New Zealand/Antarctica].) *Source: World Birdwatch* (2000), 22(1), 3.

Europe

European forest scorecards

WWF has produced forest scorecards for all European countries based on international and regional agreements. They are made up of 99 separate elements covering a wide range of issues including timber and other production, environmental care and quality, social and cultural aspects of forest care, protected areas and pollution. They therefore provide comparable information on how Europe treats its forests. *Source: Taiga-News* (2000), 30, 3.

Climate variability could affect North Sea cod

The stock of North Sea cod is at risk from a decline in the production of young cod that has paralleled warming of the North Sea over the past 10 years, as well as over-fishing pressure. The combination of a diminished stock and the possible

persistence of adverse warm conditions is endangering the long-term sustainability of cod in the North Sea. The recruitment of cod spawned in 1997 was the lowest for 30 years. Cod in the North Sea has been a valuable fishery, yielding an average of 200,000 tonnes per year. Nowadays, the catch is dominated by fish that are younger than 3 years old, most of which are immature. The International Council for the Exploration of the Sea advises that catches should be reduced by 40–60 per cent. Taking account of the dependence of recruitment on stock size alone, it has been proposed that the collapse of this stock may be imminent.

Source: O'Brien, C.M. (2000) *Nature*, 404, 142.

Saving the woodpecker in Sweden

The white-backed woodpecker is one of the most endangered forest-living species in Sweden, whose breeding range decreased more than 90 per cent during the twentieth century. It is an important umbrella species for other species sharing the same habitat of deciduous or mixed forests with a high proportion of dying and dead trees. Suitable habitats with high numbers of wood boring and bark-living insects have decreased dramatically during the modern forestry period. This has been linked to changes in forest management practices and fragmentation of habitats.

Source: Taiga-News (2000), 30, 8.

Birds threatened by intensive farming

According to a new BirdLife International survey, one-third of Europe's top wild bird areas and many of its birds are under threat from intensive farming. The report, compiled over 4 years, contains data on 3619 important sites in 51 European countries from the Republic of Ireland to Turkey. Of the 1200 sites identified as being at risk, 25 are in the UK. Birds such as skylarks, corncrakes, great bustards, red-breasted geese, red-backed chrikes, the golden eagle, osprey and capercaillies are at risk. Commenting on the findings of the report, the Royal Society for the Protection of Birds (RSPB), a British NGO, blamed

food production subsidies for encouraging environmentally damaging farming methods. Other factors contributing to the decline in bird populations in the UK include land neglect, excessive water abstraction, land drainage, housing and industrial developments.
 Source: *The Daily Telegraph* (2000), 30 March, 25.

UK to fight wildlife crime

On 16 February 2000, the UK Environment Minister announced that the British Government is to establish a National Wildlife Crime Unit in order to help combat wildlife crime. The focus of the unit will be to combat crime in relation to species of greatest conservation concern, mainly CITES trade issues and rare native species. The initiative came about as a response to the need for closer co-operation at a national level to overcome problems of duplication of effort, poor co-ordination and territoriality with respect to information gathering. The effectiveness of similar units in other countries has shown that sharing the resources and powers of several agencies to tackle the issue of wildlife crime produces rapid results and overcomes past difficulties.
 Source: *TRAFFIC Bulletin* (2000), 18(2), 49.

Farm-scale evaluations of GMOs to continue

The UK's independent Scientific Steering Committee has advised that sufficient sites are available for continuing trials of genetically modified crops to be scientifically sound. The crops will be grown in the spring of 2000 to test the effects of crop management on biodiversity. There will be 80 sites in total and researchers will examine differences in weeds and insects between genetically modified (GM) and non-GM sections of the site. Pollen transfer and cross-pollination will also be monitored. The programme will continue until 2003.
 Source: *Department of the Environment Transport and the Regions*, 17 March 2000.

Threats to capercaillie population in Scotland

A study examining the cause of declining numbers of capercaillie in Scotland has concluded that low reproductive rates rather than adult mortality are the main cause for concern. However, adult mortality was increased by the large number of juveniles dying from fence strikes. The current rate of decline is calculated at an average of 16 per cent of the surviving population per year. Estimates of the reproductive rate required to maintain a constant population size were lower than required on average, but considerable variation in breeding success has occurred. However, if current trends continue, a second extinction of this reintroduced bird is a tangible risk.
 Source: Moss, R. *et al.* (2000) *Ibis*, 142, 259–267.

Mediterranean whale sanctuary created

A treaty was signed in Switzerland at the end of November 1999, finalizing the creation of the Marine Sanctuary in the Mediterranean Sea. The Whale Sanctuary will be the largest marine protected area in the Mediterranean and covers around 84,000 sq km. It lies between the French Côte d'Azur, Monaco, the Ligurian coast in Italy and the islands of Corsica and Sardinia. The three signatory governments are committed to co-ordinating monitoring activities and to intensifying actions against land-based and marine sources of pollution in the sanctuary area. In addition, the treaty recognizes the need of the three signatories to co-ordinate research programmes and public awareness campaigns about these marine mammals and their environment. Although the agreement focuses on cetaceans, the new measures will benefit many other marine species and help the conservation of the whole environment.
 Source: *Marine Pollution Bulletin* (2000), 40(1), 4.

French oil spill disaster

On 12 December 1999, the tanker *Erika* broke up in stormy weather south of Brittany, spilling 15,000 tonnes of highly viscous oil. Bad weather

hindered the immediate rescue operation, and the first birds were picked up 3 days after the spill. At least 61,000 oiled seabirds have been collected, of which 52,000 were dead. The main species affected were guillemots *Uria aalge*, razorbills *Alca torda* and gannets *Morus bassanus*, with smaller numbers of puffins *Fratercula arctica*, cormorants *Phalacrocorax carbo* and shags *P. aristotelis*. The oil spill has now spread along more than 450 km of coast. The number of birds affected is far greater than in the *Amoco Cadiz* disaster, when 5000 birds were retrieved after 230,000 tonnes of oil were spilled.
 Source: *BirdLife in Europe* (2000), 5(1), 1.

Hungary's Great Bustard Protection Programme under threat

The Hungarian Ministry of the Environment has rejected all applications for continuing finance for the MME (BirdLife in Hungary) Great Bustard Protection Programme. The great bustard is globally threatened and is covered by several international conventions. It is considered amongst the top priorities for nature conservation in Hungary. The MME Programme has been running successfully for 11 years, co-ordinating and undertaking practical conservation work such as the active protection of nest sites at risk from agricultural practices.
 Source: *World Birdwatch* (2000), 22(1), 3.

Danube cyanide spill

A cyanide spill at the Baia-Mare gold mine in north-west Romania has polluted the River Danube. The spill occurred on 30 January, resulting in the pollution of the Tisza, Szamos and Danube Rivers, and wiping out all aquatic life along the way. According to the Hungarian Environment Protection Ministry, around 100 tonnes of cyanide and 100 tonnes of heavy metals were spilled. At the request of the Governments of Romania and Hungary, the United Nations Environment Programme (UNEP) and the European Environment Commission immediately sent a team of scientists to the affected area. The team from the joint UNEP/Office for the Co-ordination of Humanitarian Affairs Environment Unit was made up of international experts using

mobile laboratories to carry out sampling and monitoring activities as part of an objective and scientifically based analysis of the damage to affected areas. A joint commission of experts is currently investigating the cause of the spill.

Source: *Marine Pollution Bulletin* (2000), 40(4), 289.

Major conservation success in Spain

More than 100,000 ha in the Monegros area of Spain have been designated as a Special Protection Area under European Union legislation. The Monegros area, which includes four Important Bird Areas (IBAs), has been threatened since the 1980s by severe damage from huge irrigation schemes. After 7 years of campaigning for this area to be conserved at regional, national and EU levels, its protection has finally been ensured. Monegros is among the most significant IBAs in Spain. It is important for several steppe species, including the globally threatened great bustard *Otis tarda* and lesser kestrel *Falco naumanni*.

Source: *BirdLife in Europe* (2000), 5(1), 4.

Transboundary park created

Albania, Greece and Macedonia have announced the creation of the first transboundary protected area in the Balkans. Prespa Park covers 55,830 ha, including wetlands and the two Prespa lakes, which are breeding grounds for rare waterbirds such as Dalmatian pelicans and pygmy cormorants.

Source: *BBC Wildlife* (2000), 18(4), 58.

National marine park of Zakynthos

A national park to protect marine turtles has been established on the island of Zakynthos, Greece. Zakynthos is the single most important nesting area for the loggerhead sea turtle *Caretta caretta* in the Mediterranean, with an average of 1300 nests per season along 5 km of beach.

Source: *Marine Turtle Newsletter* (2000), 87, 23.

North Eurasia

Wildlife trade in Russian Far East under scrutiny

An *International Workshop on Enforcing Wildlife Trade Controls in the Russian Far East and North East Asia* was held in Vladivostok, Russia in November 1999, bringing together over 40 delegates and wildlife trade experts from the Russian Federation, the People's Republic of China, the Republic of Korea (all of which are signatory parties to CITES) and various international NGOs. In the Russian Far East, poaching of the Siberian tiger and the amur leopard for Asian wildlife medicines and trophies, as well as intensive subsistence hunting, over-fishing and exploitation of forestry resources, are of serious concern. A large proportion of these wildlife resources are destined for markets in China, Japan, Korea and other Asian countries. Illegal trade in the brown bear, the Asiatic black bear and the musk deer has also been investigated. Participants agreed to co-operate effectively at a national and regional level to strengthen the implementation of CITES and to stop illegal trade of CITES-listed species.

Source: *TRAFFIC Dispatches* (2000), 13, 10.

North Africa and Middle East

New Ramsar site established in Iran

The Islamic Republic of Iran has designated Govater Bay and Hur-e-Bahu (75,000 ha in total) its 19th Wetland of International Importance. The area comprises the riverine and estuarine wetlands of the lower Sarbaz River, including permanent freshwater pools and marshes, mangrove swamps and intertidal mudflats, as well as the adjacent Gulf of Oman coast in the extreme south-east of Iran to the border with Pakistan. The site is important for the marsh crocodile *Crocodylus palustris* and wintering waterfowl, notably *Pelecanus crispus*, shorebirds, gulls and terns. It is also a BirdLife International IBA. Govater Bay is the 1006th Ramsar site and

brings Iran's total protected surface area to 1,432,150 ha.

Source: *Crocodile Specialist Group Newsletter* (2000), 19(1), 10.

Concerns voiced over pollution levels in the Caspian Sea

The Director General of the State Environmental Protection Organization in Iran has said that industrial pollution is threatening 23 species found in the Caspian Sea, including the sturgeon, responsible for producing over 90 per cent of the world's caviar. He claimed that the petroleum content of Azerbaijan's waters can exceed the permitted norm by as much as 5 times in some areas and that Russia dumps 12 billion cubic metres of sewage each year. He has called for a ban on fishing to allow released sturgeon to reach maturity to breed.

Source: *Sea Wind* (1999), 13(4), 21–22.

Sub-Saharan Africa

African tree close to extinction

Prunus africana, an evergreen tree found only in Africa, is within 5–10 years of extinction. 'Bark poachers' are stripping the trees of their bark, leaving them to die, while others are cutting down entire trees just for the bark, which is much sought after as a remedy for prostrate disorders. *Prunus* preparations, which are the best natural remedies for such disorders, fetched some \$US 220 million in retail sales last year. In 1980, 200 tonnes of *Prunus* bark were stripped; by 1999 this figure had increased to 3500 tonnes. Although the tree is protected under Appendix II of CITES, which allows only restricted trade, policing is hard because the tree grows in mountainous areas. Growth is slow: it takes 15–20 years for a tree to produce seeds in the wild and almost as long to produce the bark. Measures to harvest the bark in a sustainable manner—without killing the trees—are, therefore, urgently needed if the tree is not to become extinct.

Source: *The Economist* (2000), 15 April, 98.

Relict Nile crocodiles found in the Sahara

A recent expedition to the Sahara Desert recorded 74 species of reptile, including four Nile crocodiles *Crocodylus niloticus*, which were discovered in the caves of a mountain plateau in Mauritania. This species was once abundant in northern Africa from the River Nile to the Atlantic coast. The four Nile crocodiles are thought to be relicts of an ancient population. The team from the Alexander Koenig Museum in Germany is now planning further research and a conservation project to protect the Nile crocodile population living in the mountain caves of Mauritania.

Source: *BBC Wildlife* (2000), 18(4), 40.

New locality for Mount Kupe bush-shrike

The critically endangered Mount Kupe bush-shrike *Telophorus kepeensis* has been found at a new locality at around 1400 m altitude in the southern sector of the Banyang Mbo Wildlife Sanctuary, Cameroon by a BirdLife representative. Previously, the species was known only from Mount Kupe and two areas in the Bakossi region.

Source: *BirdLife International Africa* (2000), 2(1), 5.

Djibouti Government implements controls on wildlife trade

The Government of Djibouti acceded to CITES in 1992, but until 1999 it had not taken any steps to restrict wildlife trade. However, on 1 April 1999, a local veterinarian enlisted the help of the authorities to confiscate three young cheetah cubs that were being offered for sale in Djibouti-ville by two nomadic pastoralists. The animals had been severely maltreated and two cubs subsequently died from gangrenous infections of the legs having been tethered with wire. The surviving cub was placed under the auspices of the Direction de l'Environnement. During the summer of 1999, a second cheetah cub was confiscated and placed with the first. On 6 December 1999, both cubs were exported—with CITES-export permits—to a cheetah conservation centre in Dubai. These events were filmed and broadcast in full on Djibouti television, and were covered

in the national newspaper. This is the first time that concrete steps have been taken to control the wildlife trade in Djibouti.

Source: *TRAFFIC Bulletin* (2000), 18(2), 58.

Disease kills flamingos in Kenya

Large numbers of flamingos are dying at Lake Nakuru and Bogoria National Parks in Kenya's Rift Valley province. Disease seems to be the underlying cause, but there is as yet no indication as to the type of pathogen involved. Fears are rising that the numbers of deaths could increase further and could wipe out the local population in a few weeks. The numbers of flamingos have dropped from 500,000 to 10,000 over the last few years. The problems seemed to start after the recent El Niño-induced rains. The high levels of water directly affected the growth of algae, which are the main food source for the flamingos. The algae are also affected by industrial waste effluent, which is freely emptied into the lake from Nakuru's town-based industries. Many birds have been forced to migrate to other feeding areas because of the shortage of algae.

Source: *Marine Pollution Bulletin* (2000), 40(4), 290.

Deforestation and fuelwood consumption in Kenya

Marsabit Tropical Dry Forest, which covers c. 15,281 ha and has been designated an ecologically sensitive site, is losing 56,000 tonnes or 1.6 ha of woodland a year as a result of deforestation for fuelwood. Fuelwood and charcoal constitute 95–98 per cent of the total energy demand for cooking in the arid and semi-arid lands of Kenya to meet cooking, lighting and heating requirements.

Source: Kirubi, C. *et al.* (2000) *African Journal of Ecology*, 38, 47–52.

War exacerbates hunting and poaching in Kahuzi-Biega National Park

Persistent war in the Democratic Republic of Congo, Rwanda and Uganda has had a negative effect on the natural resources and socio-economic structures of these countries. Hunting and poaching of wildlife, by locals and foreigners alike,

are a side-effect of war and constitute major causes of species and habitat depletion. African elephants *Loxodonta africana*, Grauer's gorillas *Gorilla gorilla fraueri*, chimpanzees *Pan troglodytes*, guenon species *Cercocebus ascanius* and *C. mitis*, *Cercocebus polykomos* and *C. albigena*, *Cephalophus monticola* and *C. nigrifrons*, and wild pigs *Hylochoerus meinertzhageni* are all killed for meat, either for local consumption or for export. In addition, African elephants are killed for their ivory and baby Grauer's gorillas and chimpanzees are sold on the international market. Stem barks of the medicinal plant *Pygeum africana* are sold on European markets. Furthermore, habitats have been destroyed by mining activities, timber extraction, logging and farming practices. Protection of the park is difficult because of the presence of militias and indigenous warrior groups. (See also *A survey of bonobos and other large mammals in Salonga National Park, Democratic Republic of Congo* by Ellen Van Krunkelsven, Inogwabini Bila-Isia and Dirk Draulans, *Oryx* 34 (3), 180–187.)

Source: information supplied by Chifundera Kusamba, Forum des Organisations Non Gouvernementales de Conservation de l'Environnement (FONCE) Regional Network, PO Box 293 Cyangugu, Rwanda. E-mail: infobukavu@bushnet.net

Site added to World Heritage in Danger list

UNESCO's World Heritage Committee added the Ruwenzori Mountains in Uganda to its List of World Heritage in Danger in November 1999. The Ruwenzori Mountains have been occupied by rebels since 1997, preventing any conservation activity in the region. The List of World Heritage in Danger now totals 27 sites.

Source: *IUCN Arborevitae* (2000), 13, 10.

Tanzania's bird exports drop as reptile exports increase

Reptiles accounted for nearly 70 per cent of live exports from Tanzania during the past decade, with Bibron's thick-toed gecko *Pachydactylus bironii*, East African spiny-tailed lizard *Cordylus tropidosternum* and yellow-throated pated lizard

Gerrhosaurus flavigularis being the most commonly exported species. By contrast, live bird exports from Tanzania—previously one of the largest exporters of live birds in Africa—have declined by more than three-quarters since 1994 as a result of trade restrictions imposed by the Tanzanian Government, CITES, importing nations and airlines. Source: *TRAFFIC Bulletin* (2000), 18(2), 58.

First ivory sale after lifting of CITES ban

Zimbabwe generated \$US 24 million from its first experimental sale of raw elephant tusks to Japan in April last year after CITES lifted the 10-year ban on the ivory trade. The country's elephants were downlisted from Appendix I to II to allow sustainable use and development of the country's natural resources and its wildlife heritage.

Source: *Zimbabwe Wildlife* (2000), January–March, 9.

Controversy over use of hunting dogs to hunt leopard

The Wildlife Society of Zimbabwe has condemned the use of specialist hunting dogs, imported from the USA and South Africa, by professional hunters to hunt leopard in Hawange National Park. The dogs corner the leopards before the hunters are driven to the location to kill the animal in order to save the amount of walking required. The Department of National Parks and Wildlife Management is currently making moves to have the practice outlawed.

Source: *Zimbabwe Wildlife* (2000), January–March, 25.

Okavango Delta designated UNESCO Biosphere Reserve

Botswana's Okavango Delta has been included on UNESCO's Biosphere Reserve list. According to the environmental organization Preserve, the Delta's inclusion on the Heritage List will create a biosphere reserve of more than 100,000 sq km, the largest in the world. Representing some 95 per cent of the surface water in Botswana, the Delta is threatened by increasing water abstraction, both domestically and in neighbouring countries Namibia and Angola. It is

hoped that the new reserve status will help to conserve the rich faunal diversity of the area. According to Preserve, large numbers of elephants, zebras and buffalo have suffered through reduced access to delta waters, caused by the erection of barriers to protect livestock herds. Source: *Marine Pollution Bulletin* (2000), 40(3), 210–202.

Extinct species of African iris rediscovered

A species of Africa iris was discovered in September 1999 near Worcester in the Western Cape, 16 years after the only known locality had disappeared under urban sprawl. Characterized by bright purple stars, the *Moraea worcesterensis* is an unusual member of the large genus *Moraea*. It was first discovered in 1983 on the outskirts of an expanding suburb and disappeared from the locality within a few years. The plant is now growing on a shale outcrop, within sight of its original locality.

Source: *Africa—Environment & Wildlife* (2000), 8(1), 16.

Twenty-year sentence for poaching

On 22 December 1999, the longest-ever sentence for poaching was imposed at a regional court when a poacher was given a 20-year sentence following his arrest in July in Kruger National Park. The poacher was found in possession of elephant meat, an automatic rifle and ammunition in the park. He was sentenced to 10 years' imprisonment for killing an elephant and 10 years for arms-related offences. In addition, the poacher received a further 10-year sentence for an earlier poaching offence, namely killing a black rhinoceros *Diceros bicornis* in the park in 1998. Both terms will run concurrently.

Source: *TRAFFIC Bulletin* (2000), 18(2), 75.

New park for Madagascar

A new 31,160 ha national park, Andringitra, was designated in Madagascar in October 1999. The new park lies between the Ranomafan and Isalo National Parks, and includes a range of habitats from moist forests to dense montane forests and high mountain prairies. Inhabitants from nearly 200 villages in the area have

participated in making the decision to conserve and develop the park.

Source: *IUCN Arborvitae* (2000), 13, 10.

Reintroduced lemurs successfully breeding in the wild

A black and white ruffed lemur that was reared in captivity and released back into the wild in Madagascar's Betampona Natural Reserve has given birth to triplets. A young male that had been missing for the past year has also reappeared, accompanied by a wild female. The animals were born and raised at Duke University Primate Centre, and nine animals were released between 1997 and 1998. Only six of the lemurs have survived, but the latest findings demonstrate the lemurs can be introduced into the wild and integrate successfully with the wild population. The goal of the project is both to bolster the endangered lemur population and to test the feasibility of infusing fresh genetic material into other small, isolated populations of lemurs—a common problem in the fragmented habitats remaining in Madagascar. Source: *Wildlife Conservation* (2000), April, 18.

Recovery of Mauritius kestrel

The Mauritius kestrel has shown a remarkable recovery, starting from a single wild breeding pair in 1974 to over 200 pairs today. A recent study has found that ancestral genetic variation was remarkably highly similar to that shown in continental kestrel species. This suggests the resilience of the population is unlikely to be explained either by benefits from an undetected remnant population or a reduction of the inbreeding genetic load by a history of a small population size. The results suggest that, at least in some species, populations may recover from bottlenecks even after a considerable loss in genetic variation.

Source: Groombridge, J.J. *et al.* (2000), *Nature*, 403, 616.

Mauritian coral reefs in poor condition

A US-based World Resources Institute report has declared the Mauritius coral reefs to be in poor condition. The report claims that the reefs to the north-east, east and south-east of the

island are severely damaged. The Albion Fisheries Research Centre in Mauritius contradicts the report's findings. Their interpretation, based on research conducted by the Centre, is more positive and claims that bleaching of the reefs, attributed to global warming, is not serious. Local environmental non-governmental groups, however, are less positive about the health of the coral reefs. According to the Mauritian Marine Conservation Society, plans to set aside marine parks around the island had been discussed since 1997, but no specific action has been taken to date. *Source: Marine Pollution Bulletin* (2000), 40(1), 6.

South and South-east Asia

Confusion over identification of the melaka tree

Confusion has long reigned regarding the identity of the melaka tree, after which the ancient city of Melaka was named. The tree *Phyllanthus emblica* L. is well known in India. However, the identity of the tree in Malaysia and Singapore has been badly confused because of the existence of another species *Phyllanthus pectinatus* Hk. F., named by J.D. Hooker in 1890, based on specimens from Parak, Singapore and Malacca. Hooker also recognized *P. emblica* and gave its geographical distribution as India, Ceylon, Malacca, the Malay Islands and Java. Subsequent researchers, however, have considered them to be one species and many now consider the names to be synonymous. It is now proposed that the natural range of *P. emblica* is India, Sri Lanka, Myanmar, Thailand, Indochina and South China. The species is thought to occur in the Peninsula down to Singapore only as an introduced cultivar. The natural range of *P. pectinatus* is the Malay Peninsula and Sumatra; the boundary between the two ranges appears to run through Perlis. *Source: Ng, F.S.P. (2000) Malaysian Naturalist*, 53(3), 32–35.

Agarwood: threatened multi-cultural resource?

International trade in agarwood (a fragrant wood of *Aquilaria* species)

dates back at least 800 years and currently threatens six of the 15 tree species in this Indomalayan genus. The wood is used for incense, perfumery and medicine. *A. malaccensis* was listed in CITES Appendix II in 1995. The CITES Plants Committee identify the listing as a priority under the CITES Significant Trade process for the period 1998–2000.

Source: TRAFFIC Dispatches (2000), 13, 11.

Indian seizures and prosecutions

In early December 1999, police seized 600 Indian star tortoises and five Alexandrine parakeets (both CITES Appendix II) from the house of a suspected smuggler. In the same month, two of the largest seizures of leopard skins were made. The haul included 50 leopard skins and three tiger skins. The skins were found near Delhi, in a lorry carrying denim cloth to east India. The absence of bullet marks indicated that the animals had been poisoned, snared or electrocuted. Three arrests were made and further leads are being followed up. A further haul was made in Uttar Pradesh where 70 leopard and four tiger skins were found along with more than 18,000 leopard claws and 221 black buck skins. They were recovered from a taxidermy workshop. Seven arrests have been made.

Source: TRAFFIC Bulletin (2000), 18(2), 74.

Hairy-nosed otters survive in Thailand

For the first time in years, the hairy-nosed otter *Lutra sumatrana* has been observed and photographed. The species is one of the most threatened of the world's 13 otter species. Once found throughout South-east Asia from southern Indochina and Thailand to Malaysia and Indonesia, there had been no confirmed sightings of the species for many years. According to the International Otter Survival Fund (IOSF), working with colleagues in Asia, small populations still exist. During a biodiversity survey in Phru Toa Dang Swamp Forest in southern Thailand, researchers from the Wildlife Research Division of Thailand's Royal Forest Department observed otters crossing the road between the peat swamp forest and the surrounding *Melaleuca* forest. IOSF is now funding a 3-year study of the hairy-nosed otter

in this part of Thailand in order to collect information on its behaviour, habitat requirements and population dynamics—such information is vital for the future protection of this species.

Source: BBC Wildlife (2000), 18(4), 40.

Vietnam's Tram Chim National Park under threat

The construction of six canals at Tram Chim National Park, Dong Thap province, Vietnam, threatens to destroy the habitat where 60 per cent of the world's population of the eastern subspecies, *sharpii*, of the near-threatened sarus crane spends its dry season. It is also an important breeding site for waterbirds and other wildlife. The canals are being constructed as a fire prevention measure. The area was decreed a national park in 1998 and comprises 7740 ha that include large areas of seasonally inundated grassland and *Melaleuca* forest. It is one of the few places where wild rice still grows and recent survey work has discovered nesting Bengal floricans, a globally threatened bird species. The new canals will fragment the landscape and alter the habitat as well as allowing more ready access to the area.

Source: World Birdwatch (2000), 22(1), 8.

Environmental NGO appointed independent monitor of forestry sector

Global Witness, the British environmental and human rights group, has been appointed as the official independent monitor of Cambodia's forestry sector. The need for independent monitoring was identified at the 1999 Consultative Group meeting in Tokyo, made up of Cambodia's donors, to ensure compliance with promised forestry reforms. The IMF's re-engagement and the World Bank's new Structural Adjustment Credit were conditional on the signing of the deal. The project, funded by Britain's Department for International Development (DFID) and AusAID, the Australian Government's overseas aid programme, will allow Global Witness to open an office in Phnom Penh and to take on local staff. (See also *Conservation News*.)

Source: IUCN Arborvitae (2000), 13, 4.

New altitudinal range of the striped bulbul in peninsular Malaysia

The striped bulbul was sighted on 13 May 1999 at the summit (1770 m) of Gunung Ulu Kali—the highest-known altitudinal range of the species in peninsular Malaysia. The bird may have expanded its range to higher altitudes by taking advantage of clearings along roadsides; it is typically a forest edge species confined to scrub vegetation and forest edge clearings.

Source: Aliuddin, M.A. (2000) *Malaysian Naturalist*, 53(3), 41.

Satellite tracking of green turtles from the Sarawak Turtle Islands, Malaysia

On 30 September 1999, the Malaysian Minister of Science, Technology and Environment launched the Sarawak Turtle Satellite Tracking Project at Pulau Talang-Talang Besar, one of the three Turtle Islands in Sarawak. Since then, eight turtles carrying satellite transmitters (or Platform Transmitter Terminals (PTTs)) have been released. Although nesting turtles have been flipper-tagged since the 1950s, this is the first such project to be implemented in Sarawak. The study will help to determine migratory paths of the turtles and should provide information on the location of their feeding grounds, thus allowing better management of the population. The migration of the turtles can be followed on the Web:

www.upmt.edu.my/seatru

Source: *Marine Turtle Newsletter* (2000), 87, 20.

New species of hawk-owl from Indonesia

A distinctive new species, the Cinnabar hawk-owl *Ninox ios*, has been described from Dumoga-Bone National Park, north Sulawesi. It was named from a single specimen collected in 1985 by F.G. Rozendaal, when it was then believed to be the Ochre-bellied hawk-owl. However, the new bird differs from that species by its bright rufous colour and in numerous details of its plumage and structure. The Cinnabar hawk-owl is probably limited to montane forests above the altitudes regularly visited by birders to Dumoga-Bone. Dr Pamela Rasmussen, of the Smithsonian Institution and Michigan State

University Museum, recognized the specimen of *Ninox ios* as an undescribed species. Further data on the vocalizations, distribution and conservation status of the new species are urgently required.

Source: *World Birdwatch* (2000), 22(1), 8.

Deforestation in Indonesia quantified

The Department of Forestry and Plantations has published new forest cover maps for the islands of Kalimantan, Sulawesi and Sumatra, compiled from 1997 satellite images. Almost 17 million ha of Indonesian forests have disappeared in the last 12 years: a quarter of the forest cover in 1985. The annual deforestation rate is estimated to be at least 1.5 million ha, with lowland forests disappearing fastest. Indonesia's forestry minister recently acknowledged in public that the country's forests are badly degraded and that over-capacity in the wood producing industries is a major cause of illegal logging. According to independent auditors, Ernst & Young—appointed by the forestry department—the Indonesian wood-processing industry is dependent on illegal logging for more than 50 per cent of its domestic raw timber consumption.

Source: *Down to Earth* (2000), 44, 1–5.

Illegal log exports from Mentawai Islands

The Pedang-based NGO, Pakis, has exposed two cases of log smuggling from the Pagai islands, part of the Mentawai chain off the west coast of Sumatra. The shipments of more than 13,000 cubic metres of tropical hardwoods were worth \$US 2 billion on the international market, plus the taxes and levies due to the Indonesian Government. The timber company involved in both cases—PT Minas Pagai Lumber Corps (MPLC)—has a logging concession on North and South Pagai. Unlike Siberut to the north, the forests of the Pagai islands are not protected and have been subjected to heavy logging since the 1970s. Local forestry officials withdrew MPLC's permits to sell timber in October 1999 and the company has not been able to market its logs since that time.

Source: *Down to Earth* (2000), 44, 5–6.

Sumatran tigers killed by poachers

According to a new report by the WWF, 20 per cent of Sumatran tigers, one of the world's most endangered tiger populations, have been killed in Sumatra in the past 2 years. Investigators, who visited 52 villages, found that 66 tigers had been killed and that one-third of all killings took place within Bukit Barasan, one of Indonesia's most important national parks. Poachers snared a total of 37 tigers within national parks. The report observes that anti-poaching patrols have been completely ineffective, and have even been carried out at the wrong time of year. The primary markets for tiger products within Indonesia are for traditional teeth and claw amulets as good luck charms, and trade in tiger skins. The report calls on Indonesia, Cambodia, Vietnam, Myanmar and Laos to clamp down on the tiger trade.

Source: *The Daily Telegraph* (2000), 30 March, 24.

Philippine Crocodile Recovery Team formed

The Philippine Crocodile *Crocodylus mindorensis* is recognized by the Crocodile Specialist Group as arguably the most threatened species of crocodile in the world, with the general consensus being that there are less than 100 adults remaining in the wild. Following extensive discussion with many stakeholders, the Secretary of the Department of Environment & Natural Resources (DENR) signed DENR Special Order No. 2000-231 on 3 March 2000, officially creating the Philippine Crocodile Recovery Team. The Special Order notes that the team has been created to address the continuing decline of the Philippine crocodile and to strengthen international co-operation and partnerships in the conservation of the species. The team has developed a draft *National Recovery Plan for the Philippine Crocodile* (*Crocodylus mindorensis*) that will serve as the basic framework in addressing the causal factors in the population decline of the species.

Source: *Philippine Crocodile Recovery Team*. (Sent by Chris Banks, Curator of Herpetofauna, Invertebrates and

Education Animals, Melbourne Zoo, PO Box 74, Parkville, Victoria 3052, Australia. E-mail: cbanks@zoo.org.au

East Asia

Cloning the giant panda takes focus off halting deforestation in China?

Some conservation biologists are concerned that the 'quick-fix' solution of cloning the endangered giant panda could divert funding for panda conservation as well as take the focus off the more pressing issue of halting deforestation in China. Deforestation, human encroachment, poaching and large die-offs of bamboo have led to the animal's rapid decline. There are roughly 1000 pandas left in the wild and close to 100 in captivity. Remaining wild pandas live in 32 fragmented populations with no corridors for genetic exchange. Some of those populations are very small and extremely vulnerable to extinction. Although some say the idea of cloning is an unrealistic and costly solution to a long-term problem, others believe the development of such technology could aid conservation of this and other rare species.

Source: *Wildlife Conservation* (2000), February, 10.

Firearm management reduces hunting pressure in China

Since the mid-1990s, it has become illegal in China to privately own and hold at home any kind of guns, including shotguns for hunting game. Because a special permit is now required to allow the use of a shotgun for game hunting, it appears many people do not want to take the trouble and, as a result, they have reduced their hunting activities. This has led to a great decline in hunting pressure on Chinese wildlife.

Source: *Tragopan* (2000), 12, 5.

Japanese seizures and prosecutions

A petshop dealer who brought 92 tortoises, including 83 Indian star tortoises, into Japan was arrested at Narita Airport. Later in the year, a further 65 tortoises were seized, including seven radiated tortoises and

58 Indian star tortoises. They had been purchased in Bangkok.

Source: *TRAFFIC Bulletin* (2000), 18(2), 74.

North America

Eider numbers in decline

King and common eiders that winter off the west coast of North America appear to be declining, according to counts conducted from a point on their migration route over the last 47 years. Counts were conducted in 1953, 1970, 1976, 1987, 1994 and 1996 at Point Barrow, a stage of the migration route of the eiders on their way to their breeding grounds in Alaska and north-west Canada across the Beaufort Sea. The king eider population, although stable between 1953 and 1976, has been declining ever since, with numbers now 56 per cent down on original estimates at about 350,000 birds. The common eider has faced a similar decline with numbers down by 53 per cent to c. 72,600 birds. The reasons for the declines are unknown. Source: *Suydam, R.S. et al.* (2000), *Condor*, 102, 219–222.

Clayoquot Sound rain forest declared World Biosphere Reserve

Rain forest in Clayoquot Sound, the site of much controversy over clear-cut logging, has been declared a World Biosphere Reserve. Lying on the west coast of Vancouver Island, the reserve covers about 3500 sq km, much of which is coastal old-growth temperate rain forest. While UNESCO's designation of the site does not protect the land, it does promote sustainable development. Clear-cut logging will continue, but under closer scrutiny. Source: *BBC Wildlife* (2000), 18(4), 58.

Lakes reserve established

The Little Grand Lakes Reserves, encompassing more than 149,000 ha of land, has recently been established by the Government of Newfoundland and Labrador, despite the area's high mineral potential. The newly protected area includes one ecological, one public and two wilderness reserves. The 74,200 ha core ecological reserve will

protect prime habitat for a viable population of endangered pine marten. Source: *Nature Canada* (2000), Winter, 46.

Oregon spotted frog declared Endangered

The Oregon spotted frog *Rana pretiosa* was declared an Endangered species in an emergency designation by the Committee on the Status of Endangered Wildlife in Canada on 1 November 1999. The species has declined dramatically over its entire range, probably owing to predation by two introduced species—the bull frog and the green frog. The problem persists in US populations, where 80 per cent of known sites are now devoid of the species.

Source: *Nature Matters, Nature Canada* (2000), Winter, 1.

Additional tuna labelling requirements

In future, tuna labelled as 'dolphin safe' in the USA will have to meet internationally adopted standards for protecting dolphins in the eastern tropical Pacific Ocean. Under the new regulations, tuna products can be imported into the USA only if they are harvested in compliance with the International Dolphin Conservation Program Act. Voluntary international action supporting the International Dolphin Conservation Program Act enabled the number of dolphin deaths to drop from more than 133,000 in 1986 to fewer than 2000 in 1998. Countries, including the USA, that participated voluntarily in the International Dolphin Conservation Program have now entered into a binding, international agreement limiting dolphin mortalities associated with tuna fishing to fewer than 5000 dolphins per year, with additional restrictions to ensure that no individual stock is affected adversely. Source: *Marine Pollution Bulletin* (2000), 40(3), 201.

Funding for wetland protection

The US Environmental Protection Agency announced that more than \$US 1.3 million in grant funds have been awarded in the Pacific Northwest and Alaska to support wetland protection. Twenty-eight state, tribal and local government projects were selected to enhance existing

programmes or to develop new ones. The grants will help to increase the quantity and quality of wetlands by providing resources to all levels of government for planning, scientific study, stakeholder development and public information.

Source: *Marine Pollution Bulletin* (2000), 40(3), 203.

Successful prosecution for trade in coral

On 2 December 1999, in the first successful felony prosecution in the USA for illegal trade in corals, Petros Leventis was sentenced in the district court, Tampa, Florida, to 18 months' imprisonment for illegally importing corals and seashells from the Philippines. He was further sentenced to 3 years' supervised release and fined \$US 5000 for his role in a smuggling operation that used false declarations, invoices and documents to circumvent trade restrictions. His company, Greek Island Imports Inc., a giftshop selling ocean products, was fined \$US 25,000 and given 5 years' probation. The species targeted by Leventis included blue coral *Heliopora* spp., organ-pipe coral *Tubipora* spp., staghorn *Acropora* spp., brown stem coral *Pocillopera* spp., mushroom and feather corals Fungiidae (all CITES Appendix II). The Philippines banned the export of coral in 1997 and the USA bars importation without a valid export permit from the country of origin.

Source: *TRAFFIC Bulletin* (2000), 18(2), 76.

Man arrested for illegal importation of red-footed tortoises

A Barbados pet store owner was arrested on 3 December 1999 for attempting to smuggle 55 endangered red-footed tortoises into the USA. The turtles can be bought in Barbados for \$US 5, but sell for \$US 75 each in the USA. The offender was caught by customs officers who discovered all 55 tortoises stuffed inside his trousers.

Source: *National Parks* (2000), January–February, 26.

Wild cat born after first inter-species frozen embryo transfer

A rare African wild cat was born in November 1999 at the Audubon Institute's Centre for Endangered

Species—the result of the first successful inter-species frozen embryo transfer. The sperm of a male African wild cat was combined with the egg of a female house cat; the embryo was grown in an incubator for 5 days and then frozen. The embryo was later thawed and implanted in the house cat. The kitten was born 70 days later. Source: *Audubon* (2000), March–April, 18–19.

Hand-reared cranes show higher survival levels

A 4-year study has demonstrated that hand-reared Mississippi sandhill cranes show higher rates of survival on reintroduction than their counterparts reared by their parents. Furthermore, individuals survive better if released in a mixed flock of hand-reared and parent-reared birds than in either flocks of hand-reared birds only or flocks of parental-reared birds only. The Mississippi Sandhill Crane Reintroduction Program started releasing birds in 1981 when the population was estimated to be between 25 and 60 birds. Survival rate has been high, with c. 80 per cent of released birds surviving their first year. The population is now estimated to be composed of c. 130 individuals. Source: Ellis, D. *et al.* (2000) *Condor*, 102, 104–112.

Alaskan road development halted

The campaign to halt the planned road to Juneau, Alaska, has been successful. Instead, a new high-speed ferry connecting Juneau (Auke Bay), Haines and Skagway will be purchased. This news follows the recent court hearing, which upheld the US Forest Service's 18-month moratorium on inventoried but undeveloped forest areas. The court also ruled that the timber industry lacked the authority to raise arguments against a moratorium. Source: *Taiga-News* (2000), 30, 3.

Eaglet capture for religious ceremonies under review

The National Park Service (NPS) is seeking permission to amend its policy on protection of natural resources in Wupatki National Monument. The request is to enable a group of American Indians, the Hopis, to capture golden eaglets for use in

religious ceremonies. The golden eagle is not endangered, but NPS regulations prohibit 'the taking, use or possession of fish, wildlife or plants for ceremonial purposes except where specifically authorized by federal statutory law (or) treaty rights'. Park officials are, however, torn between NPS legislation, the federal laws relating to respect for American Indian religious practice and their wish to respect the cultural traditions of the Indians. The legal implications of the request are currently being reviewed by the Department of the Interior. Source: *National Parks* (2000), March–April, 12–13.

Reprieve for Yellowstone wolves

A court ruling that demanded the removal of c. 120 reintroduced grey wolves from Yellowstone National Park and Central Idaho has been overturned. The wolves, introduced in 1995 and 1996, sparked a row over the interpretation of a section of the Endangered Species Act (ESA). Passed by Congress in 1982, the ESA stipulated that reintroduced experimental populations had to be 'wholly separate geographically from existing populations'. Controversy arose when the American Farm Bureau and its state affiliates argued that the occasional occurrence of individual wolves in Yellowstone and Idaho disqualified these areas for reintroduction. The Court of Appeal ruled that the reintroduction programme, developed by the US Fish & Wildlife Service, was consistent with the intent of the ESA. There are now c. 120 wolves in some 10–14 packs in each of the two areas.

Source: *Wildlife Conservation* (2000), April, 8.

Sierra Nevada bighorn sheep listed as Endangered

The Sierra Nevada bighorn sheep has been listed as Endangered under the Endangered Species Act after a petition was filed last year. Approximately 125 animals remain in the Sierra Nevada range encompassing parts of Yosemite, Sequoia and King's Canyon National Parks. Their main threats are disease spread from domestic sheep and predation by mountain lions.

Source: *National Parks* (2000), March–April, 18.

New conservation areas increase protection in California and Arizona

The entire 840-mile California coast has been safeguarded, along with a further 1.1 million acres of federal land in Arizona and California, through the creation of three new national monuments and the expansion of a fourth. President Clinton announced the three new parks in January. They are the Grand Canyon-Parashant, Agua Fria and the California Coastal National Monuments. The president also added 8000 acres to the Pinnacles National Monument. Some governors and congressional members, however, are concerned that restrictions will negatively affect local ranches and businesses. Seven Arizona state representatives have sued the federal government over the creation of the Grand Canyon-Parashant site and the plaintiffs are seeking an injunction prohibiting the creation of the monument.

Source: *National Parks* (2000), March–April, 12–13.

Mining rights withdrawn to add protection for New Mexico park

The Bureau of Land Management has closed 8470 acres of land adjacent to Carlsbad Caverns National Park in New Mexico to new mining and oil and gas drilling activities. It aims to strengthen a protection zone around c. 80 caves, including Lechuguilla Cave, one of the country's longest and deepest caves. The reserve was designated a World Heritage Site in 1995. The mineral withdrawal does not affect grazing or recreation and will be reviewed in 20 years time.

Source: *National Parks* (2000), March–April, 19.

Final assessment for new reserve completed

After planning for nearly a decade, the final environmental assessment for the proposed O'ahu Forest National Wildlife Refuge in Hawaii has been completed. The proposed refuge will encompass 7112 acres of what is considered some of the best remaining native forests on the leeward slopes of the Ko'olau Mountains. At least nine native communities have been identified and the area supports at least 17 endangered plants, four endangered snails and several birds on

the proposed list for Endangered status. The next step is to formalize a purchase agreement and the US Fish & Wildlife Service hope the refuge will be fully established within a year.

Source: *'Elepaio, Journal of the Hawaii Audubon Society* (2000), 60(3), 23.

Federal court reaffirms landmark Endangered Species Act decision

On 13 October 1999, a US District Court judge rejected the attempt by hunters and the Hawaii State Department of Land and Natural Resources (DLNR) to end court-ordered eradication of sheep in the critical habitat of the endangered palila *Loxiodes bailleui* in Mauna Kea. The hunters and DLNR sought to have the mountain revert to a game management area for sheep hunting. Over 20 years ago, the court found that the state was violating the Endangered Species Act by failing to remove the introduced sheep, which push the palila closer to extinction by browsing on mamane shoots and trees, the bird's primary source of food. Since the ruling, DLNR has been required to remove all feral sheep from the bird's critical habitat. In his ruling, the judge observed that the state's efforts would be better spent on setting aside areas for hunting that are not critical to the survival of Hawaii's endangered species.

Source: *'Elepaio, Journal of the Hawaii Audubon Society* (1999), 59(8), 79.

Two Hawaiian cave animals added to the Endangered Species list

On 14 January, the US Fish & Wildlife Service listed two small, blind Hawaiian cave animals—the Kaua'i cave wolf spider and the Kaua'i cave amphipod—as Endangered under the Endangered Species Act. The two species exist in a predator–prey relationship in moist lava tubes and adjacent crevices in the Koloa lava flows in southeastern Kaua'i. The Kaua'i cave wolf spider is a small sightless hunting spider adapted to life in the lava tubes. Only three populations of this spider are known to exist. The Kaua'i cave amphipod is a small, pale landhopper that resembles as shrimp; it has no eyes and feeds on the decaying roots of surface vegetation that reach into the cave system and other plant materials.

This amphipod, believed to be the primary prey of the Kaua'i cave wolf spider, is known from only five populations. The two animals are threatened by the deterioration of their cave habitat caused by activities associated with development and agriculture.

Source: *'Elepaio, Journal of the Hawaii Audubon Society* (2000), 60(1), 6.

Sphinx moth added to the Endangered Species list

On 1 February, the US Fish & Wildlife Service designated the Blackburn's sphinx moth, Hawaii's largest insect, as Endangered under the Endangered Species Act. Once found on six Hawaiian islands, the moth now exists on only three—Maui, Kaho'olawe and Hawai'i—and faces extinction. It is the first Hawaiian insect to be protected under the Act. Threats to the moth include introduced ants and parasitic wasps that prey on its eggs and caterpillars, and the loss of its native plant host, a dryland forest tree. The species is also vulnerable to over-collection and trade.

Source: *'Elepaio, Journal of the Hawaii Audubon Society* (2000), 60(2), 15.

Central America and Caribbean

Neotropical Sea Turtles Information Network established

A Neotropical Sea Turtles Information Network has been created to collate information about sea turtle projects in Latin America and to involve those countries that have no tradition for marine turtle conservation. The network co-ordinators are calling for information regarding sea turtle projects in Latin America. For further information, contact Alejandro Fallabrino, Grupo de Tortugas Marinas Mexico, Guanajuato 40-8, Col. Roma – 06700, Mexico D.F. Tel.: + 52 5 5840485; e-mail: afalla@adinet.com.uy; Web: www.geocities.com/thetropics/8517/ttmn.html

Source: *Marine Turtle Newsletter* (2000), 87, 17.

UNESCO adds more sites to World Heritage List

The UNESCO World Heritage Committee has inscribed 48 new cultural sites on the World Heritage List, bringing the total to 630 sites of 'outstanding universal value' in 118 countries. The additions include 35 cultural sites, 11 natural sites and two mixed cultural–natural sites. The Area de Conservación Guanacaste in Costa Rica was one of the sites recently designated by the World Heritage Committee. This conservation area contains important natural habitats for the conservation of biological diversity, including the best dry forest habitats from Central America to northern Mexico and key habitat for endangered or rare plant and animal species. It also contains significant sea turtle nesting habitat and mating ground offshore all along its coast. Playa Nancite, an important olive ridley turtle arribada nesting beach, is located in the conservation area. Playa Naranjo, a beach where leatherback turtles come ashore to lay their eggs, is also in the conservation area. *Source: Marine Turtle Newsletter* (2000), 87, 24.

WWF Gift to the Earth awarded to Central American governments

In February, WWF honoured four Central American governments for their high-level commitment to the conservation and wise use of the world's second largest coral reef system. The commitment by Belize, Guatemala, Honduras and Mexico to manage co-operatively the 450-mile Mesoamerican Caribbean Reef system was recognized as a Gift to the Earth under the auspices of WWF's Living Planet Campaign. The Mesoamerican Caribbean Reef system extends from the northern tip of the Yucatan Peninsula in Mexico to the Bay Islands off the coast of Honduras. It is unique in the Western Hemisphere for its size and because of the great diversity—almost 60 species—of coral species found there. The ecoregion is also home to threatened species such as loggerhead, hawksbill and green sea turtles, and the endangered American crocodile. *Source: Marine Pollution Bulletin* (2000), 40(4), 291.

New national park in the Caribbean

Morne National Park on the Caribbean island of Dominica was designated on 21 January 2000. Encircling the highest volcanic peak of the Caribbean, the 10,000-acre reserve occupies more than 5 per cent of Dominica's land mass. Funded by the Dominican Government, as well as by private and charitable donors, the reserve encompasses a prime stretch of old-growth forest, which is prime habitat for parrots. Among its 160 species of bird and 55 species of butterflies, the park protects two rare species of parrot—the red-necked parrot and the Amazon parrot, which now numbers fewer than 200 wild birds. *Source: Wildlife Conservation* (2000), April, 13.

South America

Effects of large trees heighten problems of forest fragmentation

Fragmentation of the rain forest is having a disproportionately adverse effect on large trees. Large tropical emergent and canopy trees are crucial sources of fruits, flowers and shelter for animal populations. They are also reproductively dominant and strongly influence forest structure, composition, gap dynamics, hydrology and carbon storage. However, large trees are more vulnerable to uprooting, infestation by parasitic woody vines and desiccation near forest edges. The rapid rate of mortality of large trees may markedly reduce the fecundity of canopy and emergent species, diminish forest volume and structural complexity, promote the proliferation of short-lived pioneer species, and alter carbon cycling and greenhouse gas emissions. Moreover, because large trees range in age from a century to well over 1000 years old, their populations in fragmented landscapes may never recover. *Source: Laurance, W.F. et al.* (2000), *Nature*, 404, 836.

Claims in Brazilian national park

The Pataxo indigenous people in Brazil are laying claim to the territory of the Monte Pascoal National Park. The Pataxo were expelled from the

territory of the protected area and from surrounding land that has been converted into a number of cattle ranches. The National Park is part of the Mata Atlantica forest, currently the forest region of Brazil under the most extreme threat.

Source: IUCN Arborvitae (2000), 13, 3.

Fires threaten Brazil's forests

More than 2000 new fires lit each day are threatening to burn much of Brazil's forests to the ground. The fires are lit by ranchers to clear forests for livestock farming and other agricultural uses. The most affected region is the Pantanal wetland, home to the largest concentration of tropical wildlife outside Africa. The world's largest collection of wading birds and the endangered giant river otter, spotted jaguar and giant ant-eater are all found here. WWF's Pantanal Project is monitoring the situation in this globally important ecoregion and calling on the Brazilian Government to take action to prevent further burning of the forests.

Source: Our Living World (2000), December 1999–January 2000, 17.

Pacific

Evidence for a previously unrecognized species of owlet-nightjar

A paper has called for the owlet-nightjar *Aegotheles insignis tatei*—a fawn-coloured lowland form of *A. insignis*—to be designated a separate species from *Aegotheles insignis insignis*, found in more montane habitat. The lowland form is distinguishable by its small size and seven plumage characteristics. The name of 'starry owlet-nightjar' has been proposed on the basis of its plumage. *Source: Pratt, T.K.* (2000), *The Auk*, 117, 1–11.

Australia/New Zealand/Antarctica

New environmental legislation to be introduced in Australia

Comprehensive new Australian

environmental legislation has been passed to consolidate the nation's environmental and wildlife legislation. The new Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act 1999), which will be enacted on 16 July 2000, aims to unify and expand upon existing environmental legislation, and in particular to strengthen provisions dealing with impacts on areas of national significance and on threatened species. The Wildlife Protection (Regulation of Exports and Imports) Act 1992, the law that addresses Australia's international obligations to CITES, has recently been reviewed during the process of its incorporation into the new EPBC Act 1999; this review is scheduled to be addressed by the Australian Senate later in the year.

Source: *TRAFFIC Bulletin* (2000), **18**(2), 56.

Increased protection for Great Barrier Reef

The Australian Government is to provide greater protection for the Great Barrier Reef with new restrictions extending bans on mining. Under the changes, mining has been banned in the Great Barrier Reef Region, an area that is much larger than the actual Marine Park. The Great Barrier Reef Region covers the entire park and all areas that could be potentially added to it. The Great Barrier Reef Region (Prohibition of Mining) Regulations 1999 will offer protection to 28 significant areas along the Queensland coast that are not yet included in the park. Previous legislation prohibited all mining in the Marine Park, but in the wider region it banned only drilling for petroleum. The new regulations extend the prohibition of all mining to the entire Great Barrier Reef Region. Enactment of the regulations gives effect to the Federal Government's policy of providing protection for the Great Barrier Reef.

Source: *Marine Pollution Bulletin* (2000), **40**(2), 95.

Albatross conservation plan from Australia

Australia is to lead the development of an international agreement for the conservation of Southern Hemisphere

albatrosses under the Convention on the Conservation of Migratory Species of Wild Animals (the Bonn Convention). Tens of thousands of albatrosses and other seabirds are killed each year in Southern Ocean tuna and toothfish longline fisheries. The Australian Government is working actively with the fishing industry, conservationists and researchers to implement a threat abatement plan aimed at reducing by 90 per cent seabird deaths caused by longline fishing within Australia's jurisdiction. Many of these seabirds, however, are highly migratory, flying thousands of kilometres across the Indian, Atlantic and Pacific Oceans. It is, therefore, very important that the albatross is listed under the Bonn Convention. The Australian *Recovery Plan for Albatrosses and Giant Petrels* aims to minimize all threats to these birds to ensure their complete recovery in the wild. Twenty-three species are incorporated in the plan, of which 21 are albatross species and two are giant petrel species. (See also *Larger petrels at risk from longlining* [International] and *Albatross population in decline* [later in this section].) Source: *Marine Pollution Bulletin* (2000), **40**(1), 4.

Macquarie Island Marine Park declared

The Australian Government has announced the declaration of Macquarie Island Marine Park, covering more than 16 million ha. The park is in the Southern Ocean, 1500 km south-east of Tasmania, and is one of the world's largest protected zones. The primary purposes of the park is to protect the conservation values of the region from human-induced disturbance and to protect the pristine habitat for threatened species such as the royal penguin, rockhopper penguin, Subantarctic fur seal, southern elephant seal and five species of albatross, including the wandering albatross. The Marine Park includes two management zones. The central core of 5.8 million ha will be managed as a Highly Protected Zone in which fishing, and petroleum and mineral exploration will be prohibited. The northern and southern sectors of the park (10.4 million ha) will be managed

as a Species/Habitat Management Zone for habitat protection; scientific research will be a primary activity in this zone.

Source: *Marine Pollution Bulletin* (2000), **40**(1), 4.

Massive habitat destruction in Australia

Following intense lobbying from environmental groups, the Queensland Government has finally passed laws to control land clearance in the state. When implemented, these laws will protect an estimated 4.7 million ha of woodland, forest and wetland. In the meantime, however, panic land clearing is taking place in Queensland. Habitat destruction is a major problem: a new report by the Australian Conservation Foundation shows that land clearing for agriculture remains Australia's biggest threat to biodiversity. Australia is the only industrialized nation that still clears more than 100,000 ha of land annually. Local and regional extinctions are increasing in Southern Australia as small, unviable bird populations die out in the woodland pockets that remain. Threatened species include the grey-crowned babbler, hooded robin and diamond firetail.

Source: *World Birdwatch* (2000), **22**(1), 5.

Tasmanian coast initiatives

Tackling marine pollution and protection of whales, dolphins and giant kelp beds are among 11 new Natural Heritage Trust projects for Tasmania that have received a total of \$A 860,932 from the Australian Trust's Coasts and Clean Seas initiative. These new projects will address a range of issues throughout the state, including marine biodiversity, coastal and marine planning, water quality and storm-water and wastewater pollution. The Australian Trust's \$A 1141 million Coasts and Clean Seas initiative aims to support the conservation, repair and sustainable use of the country's coastal and marine environment.

Source: *Marine Pollution Bulletin* (2000), **40**(2), 95.

New Zealand's first marine reserve under pressure

Commonly known as 'Goat Island', New Zealand's first marine reserve, the Cape Rodney to Okakari Point Reserve, is suffering from its own success. Protected species such as kina, crayfish, snapper and blue cod are being exploited by tourists, divers and fishermen who claim they were not aware of the reserve's status. A litter problem has occurred owing to visitors feeding fish scraps of food; snorkellers use kina as fish bait and crayfish have been taken by divers. Illegal fishing is also taking place. Increased visitor and diver education, as well as increased surveillance of the reserve, are planned in order to allow tourists to enjoy the full benefits of the reserve and continue to do so in the future, although management is presently under-funded.

Source: *Forest & Bird* (2000), 295, 5.

Toothfish extraction scheme introduced

Mounting evidence of illegal, unreported and unregulated (IUU) fishing in the Southern Ocean has forced the hand of the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) in the consideration of trade-based measures to halt the over-exploitation of these seas. Over the past 3 years, IUU fishing for toothfish *Dissostichus* spp. in the Southern Ocean has been in the order of 90,000 tonnes, more than twice the level of toothfish catches taken in CCAMLR-regulated fisheries. This rate of extraction is unsustainable and has led to a significant depletion of toothfish stocks in some areas. On 4 November 1999, CCAMLR agreed to the implementation of a Catch Documentation Scheme, which will be implemented on 4 May 2000. The objectives of the scheme are to monitor the international trade in toothfish, identify the origins of toothfish imported into or exported from the territories of the CCAMLR Contracting Parties, determine whether toothfish catches are conducted in a manner consistent with CCAMLR Conservation Measures, and gather catch data for the scientific evaluation of the stocks.

Source: *TRAFFIC Bulletin* (2000), 18(2), 56.

Whaling fleet ends its Antarctic season

A four-ship whaling fleet returned to the Japanese port of Shimonoseki early in April after a 5.5-month voyage to the Indian Ocean sector of the Antarctic. Media reports indicate that a total of 439 minke whales were taken over the season, 50 more than in the 1998–99 season. The permit issued by the Japanese Minister of Agriculture, Forestry and Fisheries for the 1999–2000 operation states that the vessels can catch up to 400 minke whales, but adds that up to 440 individuals can be taken if necessary 'for research purposes'.

Source: *Antarctic Non-Government Activity News (ANAN)*, 19(08). (Received by e-mail.)

Albatross population in decline

The world's albatross population is facing dramatic declines. Research conducted by Falklands Conservation has shown a 30 per cent fall in the population over the last two decades. These declines have been recorded at both northern and southern breeding colonies in the Falkland Islands, as well as on Beauchene and Saunders Islands. The black-browed albatross is one of the most important species breeding in the Islands, which hold 75 per cent of its entire breeding population. Falklands Conservation has launched an appeal to fund in-depth research to identify the reasons for the decline and to develop an island-wide strategy to reverse this trend. (See also *Albatross conservation plan from Australia*.)

Source: *Falklands Conservation Press Release*, 31 March 2000. For further information, please contact Becky Ingham: e-mail: conservation@horizon.co.fk

People

The eminent ethonobotanist, **Tony Cunningham**, has been awarded the Peter Scott Award for Conservation Merit. The award commends both his own research and his role in the IUCN/SSC Medicinal Plant Specialist Group, which acts to survey priorities

in medicinal plant conservation and to provide technical advice to CITES. His own work has played an important role in the conservation of plant resources in Africa.

Alexander Peal of Liberia has been awarded the Goldman Environmental Prize. Current President of the Society for the Conservation of Nature in Liberia and founder, in 1976, of the Wildlife and National Parks Section of the Liberian Forestry Department, Alexander Peal has worked tirelessly for conservation in Liberia. He initiated the 1978 nation-wide survey to identify suitable areas for national parks and nature reserves, and his collaboration with both WWF and IUCN resulted in the establishment of Liberia's only conservation area, the Sapo National Park, in 1983. More recently, Alexander Peal has led efforts to enact Liberia's wildlife and national park laws and he is also responsible for the ratification of CITES in the country.

Professor Ruud Lubbers, the former Prime Minister of the Netherlands (1982–94) is to be the new President of WWF International.

Carla Pastore has taken over from Dr Nancy Morin as Executive Director of the American Association of Botanical Gardens and Arboreta (AABGA). She has joined the organization from the US Botanic Garden in Washington DC where she was supervisory horticulturalist for the past 8 years. Dr Morin has moved to Arizona to become the Executive Director of the Arboretum in Flagstaff.

The *Briefly* section in this issue was written by Emma Cunningham (Department of Zoology, University of Cambridge), Nikki Djokić and Camilla Erskine. Contributions from authoritative published sources (including reliable Web sites) are always welcome. Please send to Camilla Erskine, Fauna & Flora International, Great Eastern House, Tenison Road, Cambridge, CB1 2TT, UK, or e-mail to camillaffi@talk21.com.