International

CITES trade suspension against Fiji and Viet Nam lifted

The April 2002 issue of *Oryx* reported that all CITES trade with Fiji, Viet Nam and Yemen was suspended from 14 January 2002 because necessary national legislation to meet the requirements of CITES had not been implemented by December 2001. However, the appropriate legislation was in force in Viet Nam by mid-February 2002, and the trade suspension has now been lifted. The suspension against Fiji was lifted in response to the country's pledge to table national CITES legislation in June 2002 and to have this legislation enacted before the end of the year. Fiji will also set trade quotas for coral species at 50% of last year's exports, and introduce a plan of action to address the unsustainable levels of coral harvesting and export.

Source: http://www.cites.org/eng/news/cuttings/2002/0318_ens.shtml

Mammal population losses and the extinction crisis

A comparison of historical and present day distributions of 173 declining mammal species from six continents has shown that these species have collectively lost over 50% of their historical range area, mostly where human activities are intensive. As the disappearance of populations is a prelude to species extinction this signals a substantial threat to species diversity and implies a serious loss of ecosystem services and goods. Population extinctions are concentrated where human populations are dense, as in South-east Asia, or where other human impacts from agriculture and hunting have been severe.

Source: Science (2002), 296, 904-907.

Habitat loss and extinction in the hotspots of biodiversity

Using inclusion on IUCN Red Lists as an indication of threat of extinction, between one-half and two-thirds of all threatened plants and 57% of all threatened terrestrial vertebrate species are endemic to 25 'hotspots' of biodiversity.

Historically these hotspots covered 12% of the land surface, but today their intact habitat covers only 1.4% of the land. An examination of extinctions and habitat loss in the hotspots indicates that the eastern arc and coastal forests of Tanzania-Kenya, the Philippines and Polynesia-Micronesia can least afford to lose more habitat and that, if current deforestation rates continue, the Caribbean, Tropical Andes, Philippines, Mesoamerica, Sundaland, Indo-Burma, Madagascar, and Chocó-Darién-Western Ecuador will lose the most species in the near future.

Source: Conservation Biology (2002), **16**(4), 909–923.

Acid rain threatens forests in more ways than previously thought

Acid rain, by leaching essential metal nutrients such as potassium, calcium and magnesium from topsoil, may pose a far graver threat to forests than has been previously estimated. In unperturbed natural ecosystems a very small pool of these nutrients is available and this comes from the atmosphere, mostly as dilute amounts dissolved in rain that then get deposited in topsoil, rather than from weathered rock as previously thought. If deprived of a certain critical nutrient, such as calcium, a tree faces the risk of dying. In parts of Germany, for example, trees are already dying not from the direct effects of acid rain, but from magnesium deficiency. Magnesium is leached from the soil by acid rain. Such leaching results in the loss of topsoil nutrients to groundwater and eventually to rivers.

Source: Proceedings of the National Academy of Sciences (2002), **99**(15), 9639–9644.

Europe

Hunting tourism on the increase in Eastern Europe and Central Asia

A new report by TRAFFIC, The Lion's Share of the Hunt – Trophy Hunting and

Conservation: A Review of the Legal Eurasian Tourist Hunting Market and Trophy Trade Under CITES, presents for the first time data on the overall economic relevance of European hunting tourism. It shows that the importance of trophy hunting to a country's income is overrated. For example even in Hungary, which is a major supplier of trophy hunting, the economic impact of this is limited to 0.0005% of GNP. There is also a lack of transparency of money flow generated by foreign sport hunters in poorer areas of Eurasia. The report shows that 20-30% of European hunters travel abroad for hunting, mostly to countries close to home. Different nationalities prefer hunting different species. While the report focused on legal hunting there were highlighted examples of illegal hunting of rare and protected species such as tigers, argali (wild sheep) and urial (wild goat). The report urges for hunting to be integrated into conservation schemes and for an increased dialogue between tourist hunting stakeholders. Source: http://www.traffic.org/news/ trophyhunting.html

Organized gangs move into wildlife trafficking

A new report from WWF and TRAFFIC reveals that the illegal trade in wildlife is becoming attractive to organized criminal gangs who are using existing smuggling routes to make additional profit. The report International Wildlife Trade and Organized Crime states that in the UK an estimated 50% of criminals prosecuted for illegal trade in wildlife over a period of 12 months have previously been convicted for crimes including drugs and firearms. The evidence shows that the link between illegal wildlife trafficking and organised crime is a global issue. For example, in Miami a shipment of boa constrictors from Colombia were found with 39 kg of cocaine inserted inside 225 of the snakes, all of which died. The laws surrounding wildlife trade are often poorly enforced and fail to reflect the global threat that this issue poses to biodiversity. The report recommends action at national, EU and

international levels to combat this trade, by identifying the markets, people and networks involved and by strengthening the legislation and enhancing its enforcement.

Source: http://www.wwf.org.uk/ News/n_0000000589.asp

Efforts to protect Britain's only native crayfish

In April 2002 the Midlands Environment Agency launched a leaflet Protecting Native Crayfish in the Midlands that encourages people to protect the white-clawed crayfish, Britain's only native species. The Midlands is a stronghold of the species, which is declining in numbers. The white-clawed crayfish is vulnerable to pollution, disturbance, loss of habitat and threats from other non-native crayfish such as the North American signal crayfish, an aggressive species that has been illegally introduced into the wild. Most seriously, introduced crayfish may carry a deadly disease, crayfish plague, which spreads rapidly amongst native populations. The leaflet includes a 'Crayfish Code' that provides simple guidelines that people can follow to protect the white-clawed crayfish and its habitat. Source: UK Environment Agency (http:// www.environment-agency.gov.uk), News Release, 10 April 2002.

New signatory to CITES

Yugoslavia has acceded to CITES, bringing to 158 the number of Parties to the Convention on International Trade in Endangered Species of Wild Fauna and Flora. This accession entered into force on 28 May 2002.

Source: CITES Secretariat (http://www.cites.org), 27 March 2002.

British beaches are the cleanest

A recent report by the Marine Conservation Society (MCS) lists 341 UK beaches that are good enough to be included in their *Good Beach Guide*. This is 66 more than in 2001 and is the largest ever annual increase. The number of beaches failing the minimum EC standard for bathing quality has declined from 90 in 2001 to 61 in 2002. The main reason for the improvement is better sewage treatment. The MCS criteria are stringent and the society will only recommend

beaches for the guide if they meet the highest European water quality standard and are not at all affected by inadequately treated sewage.

Source: Marine Pollution Bulletin (2002), 44(6), ix.

Ruddy duck control trial conclusions published

The ruddy duck is a North American species imported into wildfowl collections in the UK. Some birds escaped and formed a free flying population that now numbers c. 6,000. They interbreed with the Endangered white-headed duck, whose western European population of an estimated 2,700 birds are all found in Spain. The interbred offspring are fertile and therefore pose an increasing threat to the white-headed duck. Without the presence of ruddy ducks the whiteheaded duck population in Spain is thought to be self-sustaining. The ruddy duck control trial was undertaken as part of the UK Government's commitment to the European White-headed Duck Action Plan. Reducing the UK ruddy duck population to fewer than 175 individuals will take 4-6 years, if access is available to the principal wintering sites, and will cost up to £5.4 million.

Source: http://www.defra.gov.uk/ wildlife-countryside/scientific/ruddy/ ruddy1/index.htm

North Eurasia

Assessment of remaining forests in European Russia

Global Forest Watch, an initiative of the World Resources Institute, has produced an assessment of the forests remaining in European Russia. The main finding is that only 14% or 31.7 million ha of the boreal forests (including the Ural Mountains) remain intact. Most of these areas are in the most remote regions of the far north and no intact forest landscapes remain in central and southern European Russia. Not all of the remaining forests are protected and there is a risk that even their isolation and low productivity will not be enough to prevent their exploitation. The report's authors do however conclude that remaining examples can be protected even under the very restrictive Russian budget for nature conservation.

Source: Arborvitae (2002), 19, 3.

North Africa and Middle East

'Extinct' ibis breeding in Syria

The Critically Endangered northern bald ibis Geronticus eremita was formerly widespread across the Mediterranean region, but has suffered long-term decline and now has an extremely small population. The reasons for the decline include human persecution, loss of steppe and nonintensive agricultural areas, pesticide poisoning, human disturbance and dam construction. The total world population was previously estimated at 220 individual birds, confined to two colonies in north-west Morocco. A new colony of three pairs, which were discovered incubating eggs, and a seventh adult, was discovered in spring 2002 in a desertic steppe area of central Syria. This is the first evidence of the continued breeding of northern bald ibises in the Middle East since a colony at Birecek in Turkey became extinct in 1989. Since then there have been sporadic sightings in Saudi Arabia and Eritrea, suggesting that a breeding population still existed somewhere in the region

Source: http://www.birdlife.net/news/pritem_display.cfm?NewRecID = 557&NewType = P

Help pledged for Kabul Zoo

Reports in the USA about conditions in Kabul Zoo in Afghanistan led to \$100,000 being pledged by zoos, aquariums and the public. The North Carolina Zoological Society spearheaded a campaign by the American Zoo and Aquarium Association to provide food, shelter and supplies for the 100 animals. The Zoo had received little support under the Taliban and more than 10 years of civil war had taken its toll on staff and animals. Civil strife, drought, the US bombing campaign and the refugee crisis have also taken their toll on native wildlife and habitats. Environmental scientists in Pakistan have reported that the number of migrating birds flying over the area has dropped by 85%. Source: Wildlife Conservation (2002), 105(2), 18.

Briefly 315

Sub-Saharan Africa

Effectiveness of conservation proposals at conserving African vertebrates

Recent initiatives have been focused on identifying those areas where conservation efforts could result in the maximum number of species being conserved. Researchers have used a database documenting the distribution of birds, mammals, amphibians and snakes across one degree squares of mainland sub-Saharan Africa to quantify how many of these vertebrates are potentially catered for by recent large-scale conservation proposals. Priority areas proposed by various groups, including BirdLife International, WWF, IUCN, Conservation International, and the World Resources Institute, contain between 45 and 93% of 3,752 species of birds, mammals, snakes and amphibians breeding in this area. Gaps in the coverage of vertebrates were found in all large-scale proposals, particularly species typical of the Sahel and southern Sahara. However, the results do show that most of the conservation proposals perform better than random selection of similarsized areas of Africa, with the proposals focused on species performing more efficiently than schemes based on large areas of intact habitat or process-related criteria.

Source: Biological Conservation (2002), **107**, 327–339.

Ethiopian wolf deaths

The task of conserving the Ethiopian wolf, the rarest member of the canid family, has recently taken a serious turn. In a bout of poisoning in the Bale Mountains, allegedly targeting spotted hyaenas, two Ethiopian wolves were killed in addition to five hyaenas and a common jackal. The poisoning occurred in the Gaysay valley, which is the northernmost point of the Bale Mountains National Park, an area that harbours over half of the global population of 500 wolves and represents the species' stronghold. In the Gaysay valley monitoring by the Ethiopian Wolf Conservation Programme shows that there is one pack of wolves made up of eight mature individuals, including three pups born earlier this year. As adult wolves take food back to the dens to feed the pups, the pups could have been inadvertently

fed poisoned meat by the adult male and sub-adult female before they died. The use of poison to kill wild predators is widespread in East Africa, and has led to the near eradication of lion and hyaena populations in the lowlands of southern Ethiopia and northern Kenya. The recent poisoning incident was the first on record in the Bale Mountains. If the poisoning of wild predators continues in this area, the threat to the Ethiopian wolf will be devastating. Source: http://www.bornfree.org.uk/wolf/wolfnews004.htm

Mane variation in African lions

Manes are considered to be a typical characteristic of all adult male lions Panthera leo. But adult males in Tsavo National Park, Kenya, lack the large flowing manes reported from other lion populations, only having sparse blond hair forming a dorsal crest, beard and sideburns. These lions also exhibit a slightly different social structure to lions elsewhere: only a single adult male was observed in each of five prides (unlike coalitions of 2-4 in other groups). Female group size was large (7-8 females), comparable to that documented in the Serengeti and elsewhere. Although evidence is required, one suggested hypothesis is that elevated levels of testosterone in these individual territorial lions may be contributing to a case of 'male pattern baldness' and, concomitantly, raising aggression to such a level that solitary males can fend off challengers.

Source: Canadian Journal of Zoology (2002), **80**, 471–478.

Kenyan fish kill explained

An explanation has been found for the recent massive fish kill in Kenyan waters, as reported in the July 2002 issue of Oryx. The organism identified as the cause is an alga that produces neurotoxins. In this case an enormous population explosion of this alga caused a 'red tide' that killed a wide variety of organisms including red snapper, trigger fish, sturgeon and moray eels. It also affected octopus, sharks, manta rays, sea turtles and sea snails. Similar events were also reported in Omani and Yemeni waters, and South Africa reported its worst ever red tide in February 2002. Previous die-offs had affected only fish, but this event killed the entire range of

the region's sea creatures. Scientists are still unsure as to what caused this event. *Source: Marine Pollution Bulletin* (2002), 44(4), 266–267.

Tuskless in Addo

Increases in tusklessness in several African elephant populations, such as that in Ruaha National Park, Tanzania, have been directly attributed to selective hunting for ivory. The majority of the 174 female elephants in South Africa's Addo Elephant National Park are tuskless, with only four possessing tusks. A recent study has used long-term records to assess trends in tusklessness in this elephant population throughout the last century. Results show that neither selective hunting nor attributes of the region's vegetation are likely to be the primary reasons for the observed tusklessness. Non-selective genetic changes resulting from the population's isolation and small size may be primarily responsible for tusklessness.

Source: Journal of Zoology (2002), **257**(2), 249–254.

South and South-east Asia

Cambodia suspends all logging operations

The prime minister of Cambodia, Hun Sen, suspended all logging operations in the country from 1 January 2002 as a result of a review of forest concession management by the Cambodian Ministry of Agriculture Forestry and Fisheries. The review had been called after the Asian Development Bank demanded that concessions faced termination unless they undertook radical reforms by 30 September 2001. Initially 16 concessions covering just over 2.4 million ha of forest land were cancelled. None of the remaining 17 concessions were able to fulfil the necessary requirements, and logging operations were halted until the requirements were satisfied. In 2000 Cambodia experienced its worst flooding for 70 years and the UN cited deforestation as a major underlying cause of the floods, which cost the country an estimated US \$156 million.

Source: Arborvitae (2002), 19, 4.

India and Bangladesh agree to jointly protect the Sundarban

At a meeting in Dhaka in May, India and Bangladesh agreed to work together to protect the ecology of the Sundarban mangrove forest that is home to a large population of tigers. The Sundarban covers an area of 10,000 km², twothirds of which is in Bangladesh. Almost 4,000 km² of the area is included as World Heritage sites in both countries. The exact number of tigers in the Sundarban is unknown, although recent research suggests the number may be fewer than 200. Tiger research programmes began in the early 1970s but these were cut short by the Indo-Pakistan war that led to the creation of Bangladesh. Until an ecological study began in Bangladesh in 2001 research had been limited.

Source: Cat News (2002), 36, 5.

Boost for tiger protection in central Indo-China

In December 2001 TRAFFIC Southeast Asia Indochina undertook a CITES and wildlife law enforcement workshop for officials in the border area of Cambodia, Laos and Viet Nam. This is an area of international importance for tigers, and where there is a high level of illegal trade in wild species. The workshop included sessions on border trade controls and international cooperation, domestic legislation, CITES and the identification of tiger products in trade. It was attended by 37 wildlife enforcement officials representing five provinces in three countries. The workshop was successful in establishing links between workers in different countries, and participants asked for it to be made an annual event with alternating country locations.

Source: TRAFFIC Dispatches (2002), **19**, 11 (also at http://www.traffic.org/dispatches/dispno19.pdf).

WWF Thailand launches certification programme

WWF Thailand has launched a programme for certifying souvenir shops that support sustainable use and to educate both buyers and sellers about legal and illegal wildlife trade. It is hoped that the programme will boost sales of products from captive-bred crocodiles and eradicate other crocodilian products in the market. Groups that will be

specifically targeted by the programme include tourists from Europe and East Asia, hotels, souvenir shops, wildlife farms and zoos. In order to obtain certificates, sellers will have to show that all crocodile skins, leather products, meat and all products derived from crocodiles are from CITES-permitted captive breeding operations in Thailand. Source: Crocodile Specialist Group Newsletter (2002), 21(1), 8–9.

New species of conifer discovered in Viet Nam

A new species of conifer has been discovered in Vietnam, giving rise to a new genus and some name changes. Xanthocyparis vietnamensis (golden Vietnamese cypress) is the first new genus of conifer to be found since Wollemia nobilis was discovered in Australia in 1994, and only the third since 1948. The new species was found growing on inaccessible cliffs and ledges in an area of karst scenery. Although it is producing fertile seed and regenerating, there are concerns about its future. Forests in the region have been exploited for timber and, although confined to inaccessible situations, only a few hundred individuals of the new species have been found.

Source: http://www.rhs.org.uk/publications/pubs/garden0202/newsconifer.asp

Turtle campaign in Brunei shows positive results

After 1 year the Brunei Fisheries Department's marine turtle campaign has shown positive results. The department is working with other ASEAN countries to launch further programmes that will see more turtles landing and nesting on Brunei's beaches. More than 50 olive ridley turtles between 2 and 4 months old were recently released on a beach in Brunei. Olive ridley, green and hawksbill turtles swim into Brunei's waters to lay their eggs, but those that do make it ashore are threatened by having their eggs stolen or their habitats destroyed by jeeps. Turtles are covered by the Wildlife Protection Act, with fines or imprisonment for those found taking or killing turtles or collecting their

Source: Marine Turtle Newsletter (2002), 96, 34 (also at http://www.seaturtle.org/mtn)

Siamese crocodile reintroduced in Viet Nam

On 18 December 2001 10 Siamese crocodiles Crocodylus siamensis were released in the Bau Sau wetlands in Cat Tien National Park in Vietnam, an area that was known to have crocodiles in the past but where none have been seen in the past 7 years. The crocodiles are part of a larger number donated by the Hoa Ca crocodile farm in Ho Chi Minh City. The released animals have been certified as genetically 'pure' by DNA tests at Queensland University. A further 25 animals remain at Cat Tien National Park headquarters awaiting DNA testing. These will be released over an estimated period of 3 years.

Source: Crocodile Specialist Group Newsletter (2002), **21**(1), 9–10.

Philippines aims to regain control of its marine resources

The Philippine Government is making a major push to regain control of its marine resources and ensure that they are managed in a sustainable manner. The government has published a proposed law called The Philippine Exclusive Economic Zone Act of 2001 that will ensure far more precise control over the country's resources. Future development and utilization of natural resources within territorial waters will be under full control and supervision of the state. Overfishing and other marine problems will be tackled through the establishment of marine sanctuaries, where no fishing will be allowed. Strong measures will also be taken to control the sizes of catches and any vessel may be boarded by government inspectors.

Source: Marine Pollution Bulletin (2002), 44(4), 267.

East Asia

Threatened chelonians smuggled on industrial scale

In December 2001 the Hong Kong Government confiscated an illegal shipment of over 9,500 Asian terrapins and tortoises, weighing an estimated 4.5 tons, bound for restaurants in China. The chelonians were in four containers on a river trade

vessel from Macau, where they had been flown from Singapore. Eleven species were found, including the Critically Endangered Batagur baska and the Endangered Orlitia borneensis, Hieremys annandalii, Heosemys spinosa and Manouria emys. Many were dead or dying, but 7,544 survivors responded to emergency care at Kadoorie Farm and Botanic Garden, Hong Kong, and longer-term housing was urgently sought. Following an appeal through the Turtle Survival Alliance, an IUCN partnership working toward captive management of freshwater turtles and tortoises, more than 4,200 were flown to centres in North America and Europe. It is hoped they will help contribute to captive breeding programmes for these species, whose survival in the wild is doubtful unless the trade can be more effectively controlled.

Source: Living Forests (2002), **4**, 6–7 (also http://www.turtlesurvival.org and http://www.kfbg.org).

WWF denounces Japanese plans for sei whale harvest

Japan is to increase its planned catches of northern minke whales by 50% this year and is also planning to catch 50 sei whales for 'scientific' purposes, a move condemned by WWF. The sei whale is listed as Endangered on the IUCN Red List, and current estimates put the North Pacific population at 9,000 individuals. It is thought that the extra 50 northern minke whales to be caught this year will be allocated to fishermen from smallscale whaling villages, thus completely bypassing International Whaling Commission rules. WWF is also concerned by Norway's announcement that they plan to hunt 674 northern minkes this year, up from 549 in 2001, with the expectation of making large profits from reopening the export trade to Japan. Source: Marine Pollution Bulletin (2002), 44(5), 357.

First local BSAP for China

China's first local Biodiversity Strategy and Action Plan (BSAP) was launched in August 2001 in Dujiangyan, Sichuan Province, by the Biodiversity Working Group/China Council for International Cooperation on Environment and Development. In January 2002 a workshop on sectoral participatory development was held in the town, supported by Fauna & Flora International. The meeting sought to clarify the importance and relevance of biodiversity to different sectors of Government, how to achieve better cooperation in conserving biodiversity, and how different stakeholders benefit from conservation. Many sectors participated in the seminar, including departments responsible for tourism, agriculture, law, planning, economic development, forestry, environmental protection, water and land resources, technology, animal and plant propagation, and education. Almost 80 participants contributed to refining the Dujiangyan BSAP. This participatory model will serve as a model for other regional BSAPs in China.

Source: Living Forests (2002), 4, 2-3.

North America

Forest management company praised by WWF

Lisaak Forest Resources Ltd., a native-controlled company operating in Clayoqout Sound, British Columbia, Canada, has been recognized by WWF for outstanding environmental and social commitment. The company is establishing a linked network of ecologically sensitive areas before identifying where careful logging can occur. The company was formed after clashes between loggers and environmentalists, and earned FSC certification in July 2001 following cooperation with WWF Canada. Source: Arborvitae (2002), 19, 4.

Polar bears victims of inaction on global warming

A new study from WWF has shown that global warming threatens to destroy important polar bear habitat, and that climate change is the number one long-term threat to the survival of the world's largest terrestrial carnivore. According to the Intergovernmental Panel on Climate Change climate change in the polar region is expected to be the greatest of anywhere on Earth. The WWF report finds that there is evidence that global warming is already affecting the condition of polar bears in the Hudson Bay in Canada. Canada is home to 60%

of the world's 22,000 polar bears. As sea ice is being reduced in the area, the polar bear's basis for survival is being threatened. The sea ice is melting earlier in the spring, sending the polar bears to land earlier without them having developed sufficient fat reserves for the ice-free season, and potentially affecting their ability to reproduce.

Source: Polar Bears at Risk (May 2002)

WWF International Arctic Programme (also at http://www.panda.org/resources/publications/species/polarbears/Polar_Bears_at_Risk.pdf).

Snowmobile activity stresses wolves and elk

Measurements of faecal glucocorticoid level, a measure of physiological stress, in wolves and elk in various national parks in the USA have shown that stress is higher in areas and times of heavy snowmobile use. Although there is presently no evidence that current levels of snowmobile activity are affecting the population dynamics of either species, laboratory studies have demonstrated that prolonged increases in glucocorticoid levels reduce survival and reproduction. *Source: Conservation Biology* (2002), **16**(3), 809–814.

Bush's budget does not do enough for national parks

President Bush's recently proposed budget does not do enough for national parks according to critics. Although funding for national parks has been slightly increased the budget does not adequately tackle the issue of clearing a backlog of \$5 billion of deferred maintenance payments by 2006. Under the proposal the operating budget of the National Park Service would rise \$109 million to \$1.64 billion but the Americans for National Parks campaign coalition is seeking a \$280 million expansion in the Park Service's 2003 budget, primarily to protect resources and fund visitor education.

Source: National Parks (2002), 76(3-4), 11.

Call for increased protection for loggerhead turtles

Environmental organizations have filed a formal petition with US government agencies to have two populations of loggerhead turtles 'up-listed' from

Threatened to Endangered under the US Endangered Species Act. The petition calls for listing both the northern population, stretching from North Carolina south to north-east Florida and the Florida panhandle nesting population. The northern population has declined dramatically over the past 20 years at many of the nesting sites, particularly in South Carolina and Georgia.

Source: Marine Turtle Newsletter (2002), 96, 33 (also at http://www.seaturtle.org/ mtn).

Possible regulations to protect marine mammals from human harassment

The US National Marine Fisheries Service is considering developing regulations to protect marine mammals from human interference. There are concerns about the growing number of people who attempt to closely approach, swim with, touch or otherwise interact with marine mammals. There have been complaints about people chasing or swimming with wild dolphins and whales, using vessels to make dolphins ride the bow wave or surf the stern wake, throwing objects at seals and sea lions to make them 'pose' for pictures, and attempting to pet, touch or feed the animals. The Marine Mammal Protection Act already provides general prohibitions on harassing marine mammals. The current proposal will clarify which kinds of activities can be disruptive.

Source: Marine Pollution Bulletin (2002), 44(4), 268.

Environmentally friendly marine engines now available

The US Environmental Protection Agency (EPA), the Rhode Island Department of Environmental Management and Marine Trade Association, the National Marine Manufacturers Association and the Marine Retailers Association of America have announced a voluntary initiative to encourage sales of low-polluting outboard motors and personal watercraft engines in Rhode Island where there are more than 41,000 registered boats. Traditional small boat engines are twostroke carburetted engines from which up to 30% of unburned or partially burned fuel can be released directly into the air or water. Engines that meet EPA low-pollution requirements reduce air

pollution by 75% or more, lower fuel discharges to the water, improve fuel efficiency by 35-50% and use up to 50% less oil. The Rhode Island programme is modelled on a successful one in New Hampshire in which 75% of the engines sold in 2001 by three dozen participating dealers were 'clean'.

Source: Marine Pollution Bulletin (2002), 44(4), 268.

Crackdown on big cat trade in the

The US Government has brought charges against 17 people for buying and killing tigers, leopards and snow leopards and selling their parts. Hides, meat, skulls and teeth of tigers, leopards and other big cats can fetch \$5,000-20,000 from collectors, and tiger bones are worth up to \$250 a pound. While owning live big cats is not an offence, selling them or their parts, hides or meat in interstate commerce is barred under the Lacey Act. Violations of this Act carry a maximum penalty of 5 years in prison and \$250,000 fine. In May 2002 the operator of an Arkansas animal park was sentenced to 6 months home confinement, 3 years probation and ordered to pay \$10,000 to the Fish and Wildlife Fund's Save the Tiger Fund.

Source: Cat News (2002), 36, 24.

Sea otters disappearing from

There have been serious declines in sea otter populations in south-western Alaska in recent years. In the Aleutian Islands aerial surveys have highlighted a 70% decline over the past 10 years, and on the southern coast of Alaska there was a 90% decline between 1986 and 2001. The cause of the decline appears to be predation by killer whales; an estimated 40,000-45,000 otters have been taken by killer whales in one area of south-west Alaska since 1990. It has been suggested that killer whales are moving closer inshore because populations of their regular prey, Steller sea lions and harbor seals, have recently collapsed. Declines in otter populations have lead to increases in urchin populations and subsequently decline in kelp forests. The cause of the decline in sea lion and seal populations is unknown. Source: Wildlife Conservation (2002), 105(3), 26.

Snow leopard summit

In May 2002 leading world specialists on the snow leopard Uncia uncia met in Seattle in the USA to develop a survival strategy for this Endangered species. The meeting was organized by the International Snow Leopard Trust and included 52 experts from 17 countries, 12 of them range states. The next draft of the Snow Leopard Survival Strategy will be completed in summer 2002. As well as agreeing on in-country follow-up measures to the strategy, participants established a formal group, the Snow Leopard Network. One activity of the Network will be to develop snow leopard conservation agreements with range state governments under various international treaties such as the Bonn Convention.

Source: Cat News (2002), 36, 29.

Jet skis banned from towns on **Cape Cod**

Massachusetts officials have approved ordinances that will ban the use of jet skis in four towns surrounding the seashore at Cape Cod. In early February 2002 the director of the Massachusetts Environmental Police approved the ordinances in Eastham, Orleans, Chatham and Harwich. This followed a lengthy campaign by local people. The use of jet skis has increased in the past few years and there have been concerns over pollution, noise and safety. Jet skis are banned in most national parks but there are exemptions for 21 parks, mostly seashores and lake shores. These exempt parks must now issue environmental impact statements or issue rulings allowing jet skis otherwise they must ban their use.

Source: National Parks (2002), 76(3-4), 16.

Coal plant proposal threatens **Mammoth Cave National Park**

The Commonwealth of Kentucky has issued a draft permit for a large, coal-fired power plant just 80 km from Mammoth Cave National Park. Opponents of the scheme are concerned that the plant could release thousands of tons of pollutants annually. Mammoth Cave is already thought to be one of the most polluted parks in the country, with problems of haze, smog and acid deposition. The Kentucky Division of Air Quality has given the project preliminary approval despite concerns raised by the National

Parks Service. It has been suggested that emissions could hamper visibility at Mammoth Cave up to 25 days a year and adversely impact 12 federally listed endangered species.

Source: National Parks (2002), 76(3-4), 14.

Public will be involved in future management of Colorado River

The public will once again have a say in how the 365 km section of the Colorado River that runs through the Grand Canyon will be managed. A public planning process that would shape future management of part of the river and 444,000 ha of proposed wilderness within the park will now resume following suspension because of legal action. The Park Service has agreed to consider the impact of motorized boat and helicopter use on the proposed wilderness area as well as ways to improve access for self-guided boaters. The management plan must be completed by 2004. Source: National Parks (2002), 76(3-4), 10.

California condor egg found

On 18 February 2002 biologists found the egg of a California condor at a nest site in Ventura County, southern California. This was the first wild egg of the 2002 breeding season and only the third confirmed egg laid by California condors raised in captivity and released into the wild. The egg was produced by a pair released 7 years ago. There are now 64 condors living in the wild in California and Arizona, 18 in field pens awaiting release and 100 in captivity in Los Angeles Zoo, San Diego Wild Animal Park and the Peregrine Fund's World Center for Birds of Prey in Boise, Idaho. Source: International Zoo News (2002), **49**(4), 231 (also at http:// www.zoonews.ws).

Jaguar spotted in southern US

Scientists working for the Wildlife Conservation Society in Arizona have obtained a photograph of a jaguar, the first time this species has been seen in the USA since August 1996. Although jaguars have never been plentiful in the south-western USA, they did inhabit the area until they were driven out by human persecution. Fewer than 20 sightings of jaguars have been confirmed since the mid-1800s. A recent study has

suggested that half of the jaguar's former habitat has been lost in the past century. The latest sighting was near Tuscon, 135 miles north of the closest known population in the Sierra Madre of Mexico. Source: Cat News (2002), 36, 11.

New programme to recycle fishing

Nvlon monofilament fishing line is a serious threat to wildlife when it is discarded by anglers. However, in northeast Florida anglers will now find it easier to dispose of fishing line thanks to a Monofilament Recycling Project. A University of Florida researcher has begun installing recycling stations at marine fishing spots and it is hoped that there will be 100 such stations in place by the end of 2002. Discarded monofilament line takes up to 600 years to degrade in the marine environment. Marine turtles sometimes mistake floating tangles of monofilament line for jellyfish and eat them, causing intestinal

Source: Marine Turtle Newsletter (2002), **96,** 31 (http://www.seaturtle.org/mtn).

USA may designate largest ever conservation area

The National Oceanic and Atmospheric Administration (NOAA) is to hold public meetings to discuss whether the Northwestern Hawaiian Islands Coral Reef Ecosystem should become a national marine sanctuary. The north-western Hawaiian Islands is a chain of smaller islands, atolls, submerged banks and reefs located approximately 100 nautical miles west of the main Hawaiian Islands. If designated, this will be the largest conservation area in the USA, containing 2.7 million acres of coral reef, 14 million nesting seabirds and 250 fish species, many of which are only found in Hawaiian waters.

Source: Marine Pollution Bulletin (2002), 44(5), 358.

Critical habitat proposed for endemic snail in Hawai'i

Newcomb's snail *Erinna newcombi* is one of four freshwater snail species native to Hawai'i. It is restricted to small sites located along six streams in the interior of the island of Kauai'i. The current population is estimated at 6,000–7,000

individuals, although more than 90% are found in two populations in small areas along the Kalalau Stream and Lumaha'i River. It is threatened by alien species, habitat alteration and natural disasters. On 28 January 2002 the US Fish and Wildlife Service designated segments of nine streams and tributaries on Kauai'i as critical habitat for Newcomb's snail. The habitat includes the six streams where the snails are currently found and three others where they were once found but no longer exist. Critical habitat refers to geographic areas that are essential to the conservation of a threatened or endangered species and that may require special management considerations.

Source: 'Elepaio (2002), 62(3), 112.

Central America and Caribbean

Costa Rica cracks down on illegal turtle trade

The Costa Rican Sea Turtle Conservation Network, in collaboration with the Ministry of the Environment and the National Coastguard, have confiscated more than 2,700 hawksbill turtle jewelry items from local artisans in two separate operations. These were preceded by an education campaign warning of the threatened status of the turtles and the illegal nature of the activity. Although most artisans were aware their actions were illegal, they did not cease their activity.

Source: Marine Turtle Newsletter (2002), 96, 32 (also at http://www.seaturtle.org/mtn).

Jamaica imposes record fines on turtle poachers

In January 2002 Her Honour Joyce Bennett handed down the highest fines ever imposed in Jamaica for an environmental crime. Two Hondurans were each fined J \$1 million (US \$22,100) or 12 months in prison for unlawfully handling, harvesting and processing conch without a licence. In addition the two received fines of J \$80,000 and J \$60,000 or 6 months in prison for possessing a hawksbill turtle, a protected species. Source: Marine Turtle Newsletter (2002), 96, 33 (also at http://www.seaturtle.org/mtn).

South America

El Niño on the way?

Ecuador and Peru have recently been hit by a gentle yet massive swell of warm water travelling from around Indonesia towards the Americas, strong evidence that an El Niño is on the way. The National Oceanic and Atmospheric Administration (NOAA) also announced that ocean surface temperatures warmed 2°C in the eastern equatorial Pacific near the South American coast in February. The warming has been accompanied by an increase in rainfall, again a sign of El Niño. These episodes happen roughly every 4-5 years and can last 12-18 months. The last El Niño was in 1997-98, during which coastal villages in South America were hit by torrential rain whilst Indonesia suffered severe droughts and

Source: Marine Pollution Bulletin (2002), **44**(5), 356.

Two new titi monkeys in the **Brazilian Amazon**

Two new species of titi monkey have been described from the Brazilian Amazon. Two live specimens of Callicebus bernhardi, named after His Royal Highness Prince Bernhard of the Netherlands in recognition of his contributions to nature conservation, were first collected in 1996 from Santa Cruz, a village on the Rio Mariepauá. Callicebus stephennashi, named in honour of the wildlife illustrator Stephen Nash, was discovered in 2000 by a fisherman. Although the exact location has not been ascertained the provisional range has been given as the region between the Rios Purús, Ipixuna, Madeira and Mucuím. Neither of the new species occur in protected areas, but their ranges are remote, they are not hunted, and there are no reasons to consider that they are threatened. Source: Neotropical Primates, 10(suppl.),

Parrot threatened by Easter celebrations in Colombia

1-52.

The Critically Endangered yellow-eared parrot Ognorhunchus icterotis was feared extinct until it was rediscovered in central Colombia in the 1990s. In 2001 a second population was discovered in western Colombia. However, it was soon evident that this population was threatened because the wax palms (Ceroxylon

spp.) on which the parrots are totally dependent were being felled at an alarming rate. The wax palm is Colombia's national tree but unfortunately its fronds are the most popular for use during Palm Sunday celebrations. Despite efforts to encourage the use of the far commoner Wettinia palm, wax palms are still heavily used. A local organization Proyecto Ognorhynchus is intensifying educational awareness and conservation activities to try and avoid future damage to wax palms. Parrots in the area where they were initially rediscovered are not threatened by use of wax palms since FARC guerillas are active there and do not permit the felling of live palms. Source: International Zoo News (2002), 49(2), 99-100 (also at http://

www.zoonews.ws).

Brazil prepares plan to reduce incidental capture of turtles in fisheries

Tackling the issue of mortality of sea turtles due to incidental catches in fisheries operations has been a major problem in recent years. In Brazil the TAMAR/IBAMA project has been working on this issue for the past 21 years, and towards the end of 2001 it was agreed that a group of strategies would be developed constituting an Action Plan for the Reduction of Incidental Sea Capture in Fisheries. The plan is being developed with a range of institutional, governmental and non-governmental partners. The Plan will be implemented in a cyclical annual framework and will be monitored, evaluated and reformulated throughout the process of implementation, based on an analysis of results and detected problems as well as discussions with partner organizations.

Source: Marine Turtle Newsletter (2002), 96, 24-25 (also at http://www.seaturtle.org/ mtn).

Toothfish conservation may benefit from CITES listing

Illegal fishing of the highly valuable Patagonian toothfish could be controlled by listing the species on Appendix II of CITES according to a report produced by TRAFFIC. Uncharted Waters: Implementation Issues and Potential Benefits of Listing Toothfish in Appendix II of CITES outlines the benefits that a CITES listing would bring. The Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) is responsible for the conservation and management of toothfish in the southern oceans and has argued that illegal, unreported and unregulated fishing could reduce stocks to levels from which they cannot recover. The listing under CITES of marine fish taken by large-scale commercial fisheries is however a controversial issue. The report concludes that a close working relationship between CCAMLR and CITES would be essential to achieve the mutual objective of the long-term sustainable use of toothfish resources.

Source: TRAFFIC (http://www.traffic.org) Press Release, 19 April 2002.

Pacific

Endangered Guam species closer to critical habitat protection

On 16 April 2002 the Marianas Audubon Society and Center for Biological Diversity formally settled their lawsuit against the Secretary of the Interior and the US Fish and Wildlife Service (USFWS) over the latter's refusal to designate critical habitat for six endangered species on Guam and the Northern Mariana Islands - the Mariana crow Corvus kubaryi, Guam Micronesian kingfisher Halcyon cinnamomina cinnamomina, Guam broadbill Myiagra freycineti, Guam bridled whiteeye Zosterops conspicillata conspcillata, Mariana fruit bat Pteropus mariannus, and little Mariana fruit bat Pteropus tokudae. The USFWS agreed to make new critical habitat decisions for these species no later than 1 June 2003. The USFWS listed all six species as endangered in 1984 and their continued survival remains in doubt due to predation by introduced brown tree snakes and continued fragmentation and destruction of their native habitat.

Source: 'Elepaio (2002), 62(4), 125.

Australia/ Antarctica/New Zealand

Southern Ocean warming up faster

A researcher at the Scripps Institution of Oceanography at the University of California, San Diego has uncovered

a significant warming trend in the Southern Ocean over the past 50 years. Comparisons revealed no significant temperature changes between the 1930s and 1950s and the most rapid warming in the 1950s and 1960s. Results suggest that the mid-depth Southern Ocean is responding and warming more rapidly than global ocean temperatures. The Southern Ocean plays a vital role in global climate conditions. The implications of warming include a potential depletion in the volume and stability of sea ice around Antarctica and a possible decline in the amount of carbon dioxide that can be stored in the oceans. Source: Marine Pollution Bulletin (2002),

Ice shelf collapses in Antarctica

44(4), 266.

On 19 March 2002 the US National Ice Center announced the completion of the breakup of the Larsen B ice shelf on the eastern edge of the Peninsula in Antarctica. Within 2 months 3,270 km² of ice shattered and broke away. The ice shelves in this region have been in retreat for many years and in 1995 Larsen A just to the north collapsed in a similar way. The Larsen B shelf will have no noticeable effect on sea level but others could have a drastic impact if they collapsed. The Ross Ice Shelf has enough water to raise global sea levels by almost 6 m. The question is whether these events are a result of climate change. While there is a long term climate change in Antarctica it is not clear whether it is a result of human activity or of natural cycles. It is however clear that warming is increasing in Antarctica, and this will have global impacts in the future.

Source: The Antarctica Project (2002), **11**(1), 3–4.

Coral bleaching on the increase

Corals are bleaching over an extensive area of Australia's Great Barrier Reef as a result of the record-breaking warm water conditions. Data from the Australian Institute of Marine Science, the Great Barrier Reef Marine Park Authority and the University of Queensland show that a vast area of the Coral Sea and Great Barrier Reef have temperatures much higher than normal due to hot, clear summer conditions. Bleaching is at this stage fairly mild but

there is a risk of significant mortality if conditions do not dramatically improve. *Source: Marine Pollution Bulletin* (2002), **44**(4), 266.

Tasmanian tiger cloning breakthrough

The last known Tasmanian Tiger, or Thylacine, died in captivity in 1936, but the Australian Museum has embarked on a project to clone this extinct species. In 1999 DNA was successfully extracted from a Tasmanian Tiger pup preserved in ethanol, and additional DNA was extracted from two other pups in 2001. In May 2002 the Evolutionary Biology Unit at the Australian Museum in Sydney successfully replicated individual Tasmanian Tiger genes using the Polymerase Chain Reaction. The next stage is to make large quantities of copies of all the genes of the Tasmanian Tiger so that these can be used to construct synthetic chromosomes.

Source: http://www.austmus.gov.au/thylacine/newsrelease.htm

Campaign to reduce albatross and petrel deaths

A campaign has been launched by Bird-Life International to reduce albatross and petrel deaths in fisheries. New Zealand is a key country for these species. Forty per cent of albatross species are native to the country, as are a large proportion of petrel species. It is thought that some albatross species could be extinct within 10 years, having already declined by 90% in 60 years. New Zealand's Department of Conservation has estimated that the ling fishery in New Zealand waters could be killing between 5,000 and 15,000 albatrosses and petrels annually. Total seabird deaths in New Zealand waters are likely to number 10,000-20,000 per year.

Source: Forest & Bird Conservation News (2002), **126**, 2.

Key forests on west coast of New Zealand are protected

On 1 April 2002 the goal of a 30-year campaign to protect temperate rainforests on the west coast of New Zealand was achieved with the gazetting and legal protection of the last of the 130,000 ha of forest previously controlled by the state-owned logging company. The New

Zealand Government's initiative included adding the North Okarito and Saltwater Forests to Westland/Tai Poutini National Park, increasing Reefton's Victoria Conservation Park by 18,000 ha, adding 7,400 ha to Paproa National Park, adding 900 ha to Kahurangi National Park, and creating a series of new ecological areas and other reserves.

Source: Forest & Bird Conservation News (2002), **126**, 3.

World's largest octopus found near New Zealand

The largest octopus ever seen has been caught at a depth of 900 m off the remote Chatham Islands near New Zealand. The animal was an adult male, 4 m long and thought to weigh 70–75 kg. It was identified as *Haliphron atlanticus*, a bright red jelly-like species that had not been previously recorded in the South Pacific. Juveniles of this species have been found in shallow northern waters, with adults believed to live at depths of 250 m. More than 40 species of octopuses are known from New Zealand waters.

Source: Marine Pollution Bulletin (2002), 44(5), 358.

Kakapo breeding success

The kakapo Strigops habroptilus is the world's rarest parrot. In February 2002 the New Zealand Department of Conservation announced that 18 females were incubating 52 eggs, more than half of them fertile, on Whenua Hou, a small island off the coast of South Island. In the subsequent 2 weeks seven chicks hatched, which was a major boost for a bird whose population was previously 62. Rats were eradicated from this island in 1999, making it one of the safest environments for the birds. The kakapos are thriving this year because rimu Dacrydium cupressinum trees on the island are bearing abundant fruit. The rimu is an important food source for young kakapos but there have only been three good seasons in the last decade. Source: International Zoo News (2002), 49(4), 231-232 (also at http:// www.zoonews.ws).

Successful translocation of tuatara

A new wild population of the tuatara *Sphenodon guntheri* has been successfully established on Titi Island, a 32-ha

rodent-free nature reserve located in the outer Pelorous Sound, Marlbourough Sounds, New Zealand. 18 wild-caught adults from North Brother Island and 50 captive-reared juveniles were translocated to Titi Island in 1995. Five years of monitoring indicated that at least 57% of the tuatara survived translocation,

and that reproduction has occurred on the new island. Because tuatara are longlived late-maturing reptiles with slow reproduction, establishment of a selfsustaining population will take decades of monitoring to confirm.

Source: Conservation Biology (2002), **16**(4), 887–894.

The Briefly section in this issue was written and compiled by Simon Mickleburgh, Martin Fisher and Sarah Parker, with additional contributions from Guillaume Chapron, John Fellowes, Michael Hoffman and Anthony Rylands. Contributions from authoritative published sources (including web sites) are always welcome. Please send contributions to Martin Fisher, Fauna & Flora International, Great Eastern House, Tenison Road, Cambridge, CB1 2TT, UK, or by e-mail to oryx@fauna-flora.org