

International

Large predatory fish are scarcer than previously thought

The state of the world's fisheries is much worse than previously thought, with large predatory fish such as shark, marlin, swordfish and tuna being very scarce. Many of the world's most important fisheries have already collapsed (see also *Oryx*, 37, 166–177). A 10-year project has revealed just how fast commercial fishing fleets can clear the sea of large fish. The study showed that populations of large species plummet as soon as big fishing boats arrive. In the first 10–15 years numbers fall by about 80% and then stabilize at about 10% of the original figure. The fish that remain are smaller. The scale of this impact has remained hidden because in many cases industrial fishing began before scientists could make accurate estimates of population numbers. There are concerns that fisheries managers may come to consider the stabilized population number as the norm when in fact it is but a fraction of its former level.

Source: *New Scientist* (2003), 178(2395), 4–5.

'Ocean friendly' labels may not protect fish stocks

Environmentalists have raised concerns that the 'ocean friendly' label on super-market fish, certified by the Marine Stewardship Council (MSC) and identifying the produce as from sustainable fisheries, may be used as a cover for fishing methods that kill seals and seabirds, damage the seabed and empty the seas of fish. The London-based MSC allows its label to be used on fish taken from seven stocks, c. 0.7% of the world's fish catch. In December 2002 the MSC certified New Zealand hoki. It is claimed that the hoki fishery kills an estimated 1,000 fur seals and 600 endangered albatrosses each year. Concerns have also been expressed over plans to certify Patagonian toothfish fisheries around South Georgia.

Source: *New Scientist* (2003), 178(2395), 5.

International Whaling Commission agrees major shift in policy

The International Whaling Commission (IWC) has agreed a fundamental shift in its remit, recognizing for the first time that conservation is part of its job. On 16 June 2003 at the 55th Annual Meeting in Berlin, the IWC voted 25 to 20 to set up a conservation committee that will, amongst other things, look at the effect of whaling on a broad range of cetacean species. Countries that support whaling, such as Japan, Norway and Iceland, have said that they will not fund or participate in the new committee. The vote was enthusiastically received by more than 40 conservation groups that supported it.

Source: *Nature* (2003), 423(6942), 789.

Dolphins threatened by focus on great whales

A report from IUCN has highlighted the concern that the general focus on the plight of the great whales has meant that some small dolphins have been quietly heading for extinction. Species such as the baiji (Yangtze River dolphin) may not survive another decade. A particular concern is the number of small cetaceans that are being caught as bycatch in fishing nets. While northern right whales and blue whales are Endangered there are signs that the ban on commercial hunting has allowed some populations of southern right whales, humpbacks, grey whales and blue whales to recover. In contrast the baiji and the vaquita, a porpoise that lives in the Gulf of Mexico, are Critically Endangered.

Source: *New Scientist* (2003), 178(2396), 11.

Chimpanzees belong with humans?

Biologists have controversially suggested that, on the basis of genetic studies, chimpanzees should be placed in the same genus as humans. This is not a new idea, but genetic analysis of chimps and humans has yielded varying results depending on how the genotypes are compared. A recent study published sequences of 97 genes from six species

including humans, chimps, gorillas, orangutans and Old World monkeys. The similarity in bases between humans and chimps ranged from 98.4 to 99.4%, much higher than the 95% reported in a study in 2002. However, some scientists argue that most of the DNA sequences in this new study do not code for proteins and are therefore not important for genetic function.

Source: *New Scientist* (2003), 178(2396), 15.

Debate over World Heritage listing is resolved

The List of World Heritage in Danger is an important document that lists sites considered to be "in danger" in terms of losing conservation values. Natural World Heritage sites are added to the list by the World Heritage Committee based on the IUCN/World Heritage Centre reports on the State of Conservation. In March 2003 the World Heritage Committee finally resolved a long-standing debate over a proposed change to the rules governing "in danger" listing. The change would have required State Party agreement before a site was put in the "in danger" list. Whilst the State Party is usually fully consulted before an "in danger" listing, the power to do so without State Party support is fundamental to the World Heritage Convention. The proposed change was defeated and the decision should be confirmed at a meeting in China in July 2003.

Source: *Arborevitae* (2003), 22, 3.

New space map shows loss of forests

NASA scientists have produced a map that shows how much of the earth's vegetation has disappeared in recent years due to wildfires, logging and crop failures. The map also shows how much carbon is being released by these activities. The NASA team reviewed data gathered since 1982 by satellites used by the National Oceanic and Atmospheric Administration, and from records of radiation reflected from the earth's surface calculated the extent of green leaf cover around the

world. They found that c. 142.5 million km² are covered by plants. Between 1982 and 1999 c. 3% of that had been disturbed by ecological events such as fire and storms. Over the same period the environment released 9 billion tonnes of carbon into the atmosphere, slightly more than the 7 billion tonnes emitted in 1990 alone by burning of fossil fuels.

Source: *New Scientist* (2003), 179(2404), 7.

Satellites will monitor World Heritage sites

The European Space Agency (ESA) has announced that it will use its remote sensing satellites to monitor the 730 World Heritage Sites. The list of sites is maintained by the United Nations Educational, Scientific and Cultural Organization (UNESCO) and includes many in developing countries that have not been extensively mapped. UNESCO has already begun a collaboration to protect some heritage sites in the remote mountain areas of Uganda, Rwanda and the Democratic Republic of Congo where hunting and farming are threatening mountain gorilla populations. Radar images from ESA's Envisat or ERS spacecraft will be used to alert authorities to changes in land use that could threaten the area.

Source: *Nature* (2003), 424(6944), 9.

Seahorse decision causes concern

Indonesia, Japan, Norway and South Korea have withdrawn from international trade rules for seahorses set by CITES, causing concern among those promoting the conservation of these threatened animals. All 32 species of seahorses are currently on Appendix II of CITES. At least 24 million dried seahorses are traded among 77 nations each year for traditional medicines and souvenirs, and hundreds of thousands more find their way into the aquarium trade. Indonesia is a major exporter of seahorses while Japan and South Korea are thought to be net importers. Norway plays no consequential role in the trade. All four countries have taken out "reservations", allowing them to opt out of CITES for the purposes of seahorse management. This decision will inevitably hamper international efforts to control the threats facing seahorses.

Source: <http://projectseahorse.org/new.html>

Europe

Europe's deepwater corals under threat

Cold-water coral *Lophelia pertusa* is widespread across the north-eastern Atlantic from the Faeroe Islands and Norway to the waters off Spain. It needs no light, can survive at water temperatures as low as 4°C and is typically found at depths of 200–500 m. It is thought that fishing vessels are destroying cold-water coral reefs, often before anyone has studied their ecological significance. Norway is the first country to protect its cold-water reefs and it is calling on other countries to follow suit. In June 2003 Norway announced plans to protect the thousand-year-old Tisler reef, while WWF is urging the UK Government to fulfil a promise made in 2001 to protect the Darwin Mounds off north-west Scotland.

Source: *New Scientist* (2003), 178(2400), 5.

Major changes in chemical testing in Europe are planned

The European Union is proposing a set of regulations on the safety testing of chemicals that could have a major impact on the chemical industry and on the welfare of animals used for testing. Since 1981 all new chemicals introduced into Europe have faced stringent tests but around 300,000 products that were on the market before 1981 now need to be tested. Environmentalists argue that the testing should go ahead because of the possible effects of such chemicals on the environment and believe that the regulations don't go far enough. Chemicals that accumulate in tissues and that may have 'gender-bending' effects are causing most concern. However, animal welfare groups argue that the new regulations will lead to an increase in the number of animal experiments.

Source: *New Scientist* (2003), 178(2399), 10.

Concern over decline in red kites in Europe

The breeding population of red kites *Milvus milvus* has declined dramatically in north-eastern France over the past decade and LPO (BirdLife in France) are concerned that the recording of fewer migrating birds suggests that there are significant declines in red kites throughout Europe. The main cause of the declines

is loss of habitat through agriculture. Germany, which holds more than 50% of the European population of red kites, has seen a decline of 20–25% since 1994 while Spain has seen a serious decline in both breeding and wintering populations. The only countries where declines have not been recorded are Sweden and Switzerland, where numbers are stable, and the UK, where numbers are increasing thanks to a reintroduction programme.

Source: *BirdLife in Europe* (2003), 8(2), 2.

Barents Sea threatened by oil developments

A new report from WWF highlights that the most environmentally vulnerable areas of the Barents Sea are in the same places as where new oil and gas developments are to take place. The Barents Sea lies between Spitsbergen (Svalbard), Norway and Russia and is Europe's last unspoiled marine environment. The oil industry is lobbying Norway to open the area to oil and gas developments and opposes plans for petroleum-free zones. Russia is also supporting plans for a privately-owned pipeline to Murmansk from Russia's oil fields. If this is built, Murmansk will become a major oil distribution terminal, further threatening the Barents Sea. The Norwegian government has commissioned environmental impact assessments for oil and gas developments in the Barents Sea and WWF is calling upon Russia to support Norway's plans to give the sea status as a particularly sensitive area that would allow more stringent regulations on shipping activities in the area.

Source: *Marine Pollution Bulletin* (2003), 46(6), 681–682.

Ancient logbooks used in study of climate change

The 500 year-old logbooks of dead Arctic explorers are helping to reveal the impact of climate change on the Arctic sea ice. The Norwegian Polar Institute has used these logbooks to produce a series of 6,000 historical sea-ice charts that will help in the understanding of climate variability over the past 500 years. It has been shown that sea ice extent has decreased in the Arctic Ocean over the past 30 years in line with global warming trends. The new charts will enable scientists to look at variations in sea ice as far back as the 16th Century.

The earliest observations were made by Sir Hugh Willoughby who set sail from London in 1553 to look for a north-east route to China. He died when his ship was trapped in sea ice near Murmansk. *Source: Marine Pollution Bulletin* (2003), 46(4), 381–382.

Exported British insects threaten New Zealand wildlife

The UK Government is being pressed to close a legal loophole that allows British businesses to threaten the ecology of other countries by exporting pests. Recently, a New Zealand collector was convicted of breaking the country's tough Biosecurity Act by importing butterflies and moths from Britain, although no UK law was broken by the purchaser or exporter. One imported species, the pale tussock moth *Calliteara pudibunda*, caused particular concern as it is known to damage temperate forests. New Zealand is already spending £35 million eradicating a close relative of the pale tussock moth. The UK's Department of Environment, Food and Rural Affairs argues that it is impossible to identify species that may be invasive in another country. *Source: BBC Wildlife* (2003), 21(6), 21.

Plans to reintroduce great bustards to the UK

In late 2003 it is planned to release 25 young great bustards at a secret location on Ministry of Defence-owned land in Wiltshire, southern England as part of a long-term reintroduction programme for a species that last bred in the UK in 1832. The birds will be raised from eggs collected on farmland in Saratov, Russia. Following quarantine, the birds will be released into a special enclosure and about 4 months later will be transferred to an open-top pen from which they can leave when they are ready. The scheme is being organized by the Great Bustard Group, the University of Stirling and the Zoological Society of London. The chances of success are thought to be high because the animals will be wild collected and not captive-bred. The ultimate aim is to establish a population of 100 over the next 4–10 years. *Source: BBC Wildlife* (2003), 21(6), 22.

UK airport plan threatens key wetlands

The UK's Royal Society for the Protection of Birds is fighting government plans to build an airport at Cliffe on the

north Kent marshes in south-eastern England. The development of this area would directly affect four designated Important Bird Areas. This is one of the most important wetlands in Europe and provides a key habitat for up to 200,000 wading birds, ducks and geese. The area has the highest levels of protection under national and international law but the UK Government is still considering building a major airport there. As well as the possible impact on threatened species and habitats, the numbers of birds at the Cliffe site would pose a serious risk to passenger safety because of the high risk of bird strikes. The UK Government's own experts at the Central Science Laboratory have concluded that this would be one of the most hazardous locations in the country in terms of bird-strike risk. *Source: BirdLife in Europe* (2003), 8(2), 5.

French act to protect Mediterranean

France has proposed stiff new punishments for polluters of the Mediterranean. Under the law, France will create an ecological protection zone extending up to 90 miles from its Mediterranean coast. The new measures are aimed at shippers deliberately dumping oil, rubbish and other pollutants into the Mediterranean and will seek to punish them even if they are outside French territorial waters. Captains of ships caught washing out oil tanks in the zone risk fines of up to \$600,000 while captains of French ships caught polluting the zone could face up to 4 years in jail. The regulations are expected to come into force in summer 2003. *Source: Marine Pollution Bulletin* (2003), 46(6), 681.

Tourist development threatens Italy's 'last natural beach'

LIPU (BirdLife in Italy) and the Ionian Coast Defence Committee are working to save Italy's 'last natural beach', 40 km of natural, sandy coastline in the Basilicata region that is threatened by a huge tourist development. The area is a key stop-over point for migrating birds such as cranes *Grus grus* and pallid harriers *Circus macrourus*, is one of the last otter *Lutra lutra* strongholds in Italy and is a key nesting area for sea turtles. A tourist development is proposed that includes 30 holiday resorts, four marinas, a road next to the sea, car parks and other

structures. LIPU has filed an official complaint with the European Commission as the proposals breach the Habitats Directive and is proposing an alternative plan involving the restoration of medieval villages just inland. *Source: BirdLife in Europe* (2003), 8(1), 5.

DNA tests prove that Iberian lynx occurs in Portugal

A team of scientist have discovered irrefutable proof that the Iberian lynx is found in Portugal. Scats found by scientists in eastern Alentejo were sent for DNA testing at the Doñana research station in Spain and were identified as being from lynx. The exact location of the discovery is being kept secret but it is close to the controversial Alqueva dam in eastern Portugal that has been criticized for its impact on threatened species. The find comes after the Portuguese national nature conservation institute could find no physical evidence of lynx and it was thus assumed that the species was extinct in Portugal. *Source: Cat News* (2003), 38, 15.

North Eurasia

Concern over Russia's ratification of the Kyoto Protocol

The Russian Federation is currently debating the ratification of the Kyoto Protocol and, if agreed, the international treaty will finally come into force. However, there are concerns that sceptics in Russia want to use the forthcoming World Climate Change Conference (WCCC) in Moscow this autumn to block ratification. Several scientists have considered boycotting the WCCC although it is felt this would offend the Russians and jeopardize climate negotiations both inside and outside Russia. *Source: Nature* (2003), 423(6942), 792.

Warning over imports of timber from Russia

A new report by WWF, *Illegal Logging in Northwestern Russia*, has highlighted that about 75% of Russian wood exported to Europe comes from north-west Russia where up to 35% of the timber is harvested illegally. The report encourages the Russian government to reform its forest policy and legislation but also stresses that European companies must take action

to halt illegal logging in Russian forests. It is important that suppliers can prove the legality of the traded wood, which will require more transparency and tracking systems.

Source: *Arborvitae* (2003), 22, 4.

Surveys confirm Amur/Far Eastern leopard on verge of extinction

Only a single population of Critically Endangered Far Eastern leopards *Panthera pardus orientalis* is known from the Chinese-Russian border in southwest Primorski Krai, Russia. A 4-month survey in the winter of 2002 using photo-trapping and track counts has indicated that there may be only 28–30 leopards left in the wild. Of particular concern was the lack of young animals recorded by either survey method. Recent genetic studies have indicated extremely low levels of genetic diversity and it is feared that lowered reproduction or survivorship of young may be related to inbreeding depression.

Source: *Cat News* (2003), 38, 2.

Aral Sea may disappear in 15 years

The Aral Sea in Central Asia is disappearing faster than was previously thought. Since the 1960s the sea has been drying up because of poor management of irrigation channels that take water from the rivers feeding it. As the sea dries up it causes environmental problems as vast salt plains form and the climate is transformed, with hotter summers and colder winters. A new survey has shown that the Aral Sea is drying up faster than was previously predicted. In 1965 the sea was at 57 m above sea level. By 2002 it was at 30.5 m, 3.5 m lower than had been predicted and it was 2.4 times more salty than the ocean. In the deeper section of the western part of the sea the bottom 20 m is saltier than the top, and this saltier water does not mix with the water above. As a result only the top 20 m of the sea heats up in summer and the hotter it becomes, the greater the rate of evaporation. The shallower this top layer is the more it heats up and the more it evaporates. This could eventually mean that the area will dry up completely within the next 15 years, decades before earlier estimates.

Source: *New Scientist* (2003), 179(2404), 9.

North Africa and Middle East

Study on bird trapping in Cyprus

In September and October 2002 a team from the UK-based Royal Society for the Protection of Birds visited south-eastern Cyprus to act as observers for the local law enforcement agencies and to document illegal bird trapping activities. The local enforcement agencies made several arrests and a general reduction in trapping was noted. However, an estimated half a million birds were killed in the area studied. The killing of small migrant birds for food has long been a controversial issue in Cyprus. Both the government and media have pointed out that Cyprus must reduce its bird trapping activities to meet existing and European bird protection legislation if it hopes to join the European Union.

Source: *World Birdwatch* (2003), 25(2), 4.

Assessment of environmental impact of Iraqi war is delayed

A team of UN scientists waiting to assess the environmental fallout from the war in Iraq is not being allowed to enter the country by the US authorities. The team is hoping to gauge the threat from unclean drinking water, uncollected toxic waste, bombed chemical and weapons factories, unexploded munitions and sewage-filled rivers. The United Nations Environment Programme (UNEP) considers the mapping of pollution hotspots to be vital before the country can be rebuilt. In the past UNEP has been quick to assess the environmental impacts of wars in the Balkans, Afghanistan and Israeli-occupied Palestinian territories. UNEP has already suggested that the main environmental threats will come from the military activity of the invading forces.

Source: *New Scientist* (2003), 178(2393), 7.

Calvin Klein perfume may help attract Asiatic cheetahs

Calvin Klein's perfume *Obsession for Men* may help in the conservation of the Critically Endangered Asiatic cheetah, which is now found only in Iran. The Mammal Department of the Bronx Zoo in New York has been studying how cheetahs behave in response to a variety of perfumes. Cheetahs were particularly attracted to *Obsession for Men* and would

spend up to 7 minutes at a time rolling and rubbing against objects sprayed with the perfume. Researchers now hope to use the perfume to attract wild Asiatic cheetahs, and by using a hair trap they hope to gain material for a DNA study.

Source: *Cat News* (2003), 38, 25.

Important progress in Afghani pelt trade

Efforts are underway to educate the peacekeeping forces and international aid workers in Afghanistan about the importance of refraining from the purchase of the pelts of threatened species and other body parts. The Snow Leopard Network (SLN) is at the forefront of these efforts. The SLN is a partnership of organizations working for the effective conservation of the snow leopard, its prey and natural habitat. The action follows reports of aid workers and peacekeepers purchasing pelts and body parts of threatened species. Most importantly, the commander of the International Security Assistance Force in Afghanistan responded to the concerns of conservationists by issuing an order banning the purchase of pelts and other body parts of species such as snow leopards, common leopards and Marco Polo sheep.

Source: *Snow Leopard News* (2003), Summer, 1–2.

Sub-Saharan Africa

Economy of Benin saved by weevils

Two species of beetles are credited with saving the economy of Benin \$260 million over 20 years. The weevils *Neochetina eichorniae* and *N. bruchi* have successfully controlled the spread of water hyacinth, a major aquatic pest in Africa. Water hyacinth has become a serious problem in 50 tropical countries since it was transported from Brazil in the 19th Century, creating dense mats of vegetation that remove oxygen, increase the acidity of the water and interfere with water flow, causing greater silt deposition. The weevils eat only water hyacinth and can reduce the coverage of the weed by up to 90%.

Source: *New Scientist* (2003), 178(2394), 10.

Plans for mangrove plantations are criticized

A plan to plant the world's desert coastlines with mangrove trees is being criticized by marine biologists who fear that it will be a disaster for coral reefs. An American cell biologist, Gordon Sato, wants to plant mangroves along hundreds of kilometres of coastline in Mexico and Arabia. The first 250,000 trees are already growing close to coral reefs on the shores of the Red Sea in Eritrea. To help the trees grow, fertilizer is being added at a rate of up to 1 tonne ha⁻¹. Scientists believe that the flush of nutrients from this fertilizer could harm nearby reefs and destroy fisheries on which local communities are dependent.

Source: *New Scientist* (2003), 178(2393), 11.

Lions are being killed in Nairobi National Park

The last remaining lions of Nairobi National Park in Kenya are being killed in a battle over land use. Between early May and late June 2003 at least 10 lions were killed by teams of Masai. Nairobi National Park is a tiny area (114 km²) only 10 km south of Nairobi. Traditionally, grazing animals have used the park in the dry season and then moved south to Kitengala Conservation Area and beyond. Most of the dispersal area is private land and until recently landowners have been tolerant of the competition for grazing and the loss of livestock to lions. A change in attitude may be related to the withdrawal of a government compensation scheme, the poor management of grazing and water facilities in the Park and the loss of tourists since the terrorist attacks of 11 September 2001. Until recently there were thought to be 30–40 lions in the park but there may now be fewer than 10.

Source: *BBC Wildlife* (2003), 21(8), 22–23.

Concerns over water hyacinth treatment in Lake Victoria

A controversial plan to shred and sink water hyacinth in the Lake Victoria basin is causing serious environmental concerns within the Nyanza gulf (see also p. 394). Four years ago, the weed was shredded and sunk on to the lake bed but marine and environmental experts have now found that the gulf has become shallow and dangerous for navigation. The Lake Victoria basin is facing increasing problems because of population pressure,

pollution, poor agricultural practices and increased sedimentation. The lake has seen a significant decrease in native fish species and a corresponding increase in exotic species.

Source: *Marine Pollution Bulletin* (2003), 46(6), 684.

Future looks brighter for Mt Kenya forests

A new study released on 10 April 2003 suggests that destructive activities in Mt Kenya's forests have declined markedly since 1999. The logging of indigenous trees has declined by more than 93% while the number of charcoal kilns in the forests declined from 547 in 1999 to 205 in 2002. The new study attributes the improved state of Mt Kenya's forests to a more effective and regular patrolling by Kenya Wildlife Service rangers.

Source: *Swara* (2003), 26(1), 6.

New theory about Seychelles giant tortoises

In 1998 it was reported that 10 specimens of the Seychelles giant tortoise had been found about 150 years after they were thought to have gone extinct. This initiated a frantic breeding programme, but a new genetic study has now suggested that the Seychelles tortoises may simply be members of another extant species. It was originally believed that there were six species in the genus *Dispochelys* in the Indian Ocean region and that all but one, *D. dussumieri* on Aldabra, had died out by the 1840s. A study in 1998 suggested that the Seychelles tortoises, previously assumed to be descendants of tortoises introduced from Aldabra as pets, actually belonged to two native species that were supposedly extinct, *D. arnoldi* and *D. hololissa*. A more recent study looking at 55 tortoises representing all three supposed species now suggests that they are all descended from the Aldabra giant tortoise and that the Seychelles species are extinct. The tortoises on the Seychelles have different shell shapes from the Aldabra animals but there is an argument over whether this is due to environmental factors or is because they are a different species. It is now planned to take DNA from animals on the Seychelles killed before the 1840s and compare it with that from living animals to finally solve the puzzle of the status of the Seychelles giant tortoise.

Source: *New Scientist* (2003), 178(2397), 19.

South and South-east Asia

Illegal wildlife trade flourishing in Asia

The first months of 2003 have been marked by the seizures in India and Nepal of large numbers of leopard and tiger skins and shahtoosh wool from the Tibetan antelope. The largest seizure was of 109 skins made on 3 April in Nepal. A dozen tiger skins have been seized in various places in India. In Melghat Tiger Reserve in Maharashtra State a tigress and four cubs were found dead, having been electrocuted, a method increasingly used by poachers to obtain skins and bones. In Delhi, wildlife officials seized 11 sacks containing 211 kg of shahtoosh in what was the biggest ever seizure of this wool. It is estimated that 211 kg of wool represents the death of 3,000 antelopes.

Source: *Cat News* (2003), 38, 40.

Pine needles vital for threatened flying squirrel

The woolly flying squirrel was thought to be extinct until it was rediscovered in 1994. At more than 1 m long, it is the world's largest gliding mammal and is only found in northern Pakistan. New research has shown that this species feeds almost exclusively on pine needles. The region's coniferous forests are disappearing rapidly and this could have serious implications for the flying squirrel. It is not known how many woolly flying squirrels remain but it is clear that they are limited to a very small region, living in alpine caves at up to 3,600 m. Local people used the squirrels' dung, known as *salajit*, in medicinal potions.

Source: *Journal of Mammalogy*, 84(2), 480–486.

National Action Plan for marine turtles in Vietnam

In November 2002 the First National Workshop for the Development of the National Action Plan for Marine Turtle Conservation in Viet Nam was held as a first step towards developing a National Action Plan for Marine Turtles. The Ministry of Fisheries, IUCN, WWF and TRAFFIC have coordinated a marine turtle conservation programme in Vietnam whose objectives are: 1) determine the

extent of illegal trade in marine turtle products, 2) record the abundance and threats to marine turtles, 3) prepare a national Action Plan that will guide future conservation efforts, and 4) awareness raising on marine turtle conservation through pilot community-based activities. *Source: Marine Turtle Newsletter* (2003), **100**, 55 (also at <http://www.seaturtle.org/mtn>).

Malaysia develops BioValley

The Malaysian government is quietly launching a major project to harness the country's abundant biodiversity to create a viable biotechnology industry. BioValley Malaysia is being set up amid great secrecy and in the next 3 years three research institutes will be built at a 80 ha site in Dengkil, 45 km south of Kuala Lumpur. The government hopes that the project will enable firms to develop drugs locally by bioprospecting in Malaysia. Critics doubt that Malaysian investors are ready to back long-term research ventures such as biotech companies. *Source: Nature* (2003), **424**(6945), 118.

East Asia

Increase in giant panda reserves

The Chinese government has nearly doubled the area of protected lands for giant pandas in the Qinling mountain range by creating five new reserves and five panda 'corridors'. This will increase the protected areas in Qinling from 184,000 to 334,000 ha. The new corridors will also allow fragmented populations of pandas to cross from one protected area to another. Qinling is home to c. 20% of the estimated 1,000 giant pandas living in the wild.

Source: Arborvitae (2003), **22**, 4.

Chinese alligators released into the wild

In April 2003 the World Conservation Society, the Anhui Forestry Bureau and East China Normal University released the first captive-reared Chinese alligators into a small lake in the Hong Xin community in Anhui Province. This was part of a programme that has been operative since 1997 to develop conservation strategies for the last wild alligators. The Chinese alligator is currently on the verge of disappearing from the few ponds in the

lower Yangtze River valley where it still survives. The released alligators have been fitted with radio transmitters so that scientists can follow their movements.

Source: Wildlife Conservation (2003), **August**, 10.

First ever photograph of wild Amur/Siberian tiger in China

In January 2003 an infrared camera trap recorded the first ever photograph of a wild Amur/Siberian tiger in northern China. The photograph was taken in Jilin Province's Hunchun Nature Reserve, which was established in 2001. The reserve is on the western side of the Russian-Chinese border and provides a corridor of habitat so that tigers can disperse from Russia and repopulate areas of China where they once lived. The Siberian tiger is found mainly in Russia's Far East where the most recent population estimate was about c. 350 adults. There are thought to be less than 20 Siberian tigers in China, mainly in the Lesser Hingan Mountains in the northernmost Helongjiang Province and the Changbai Mountains in Jilin Province.

Source: Cat News (2003), **38**, 10.

Awase tidal flats threatened by landfill scheme

The Awase tidal flats in Okinawa, Japan, support the highest number of migrant shorebirds on the island and are one of the 10 most important shorebird wintering sites in Japan. They are also important for threatened species of fish and shellfish. However, the flats are threatened by a landfill scheme where the reclaimed land will be used to build a new city. The Japanese Government has been at the forefront of wetland conservation efforts in Asia and recently joined with Australia in promoting international cooperation on wetland conservation along the Asia-Pacific shorebird flyway.

Source: World Birdwatch (2003), **25**(2), 3.

North America

Restriction on Atlantic gillnets to protect sea turtles

The US National Marine Fisheries Service has announced that gillnet fishing will be banned in federal waters off much of the Mid-Atlantic coast during most or all of the year to protect migrating sea

turtles (see also *Oryx*, **36**(4), 396–399). The closures will bar fishing with gillnets with a mesh size larger than 20.3 cm stretched mesh in the Mid-Atlantic Exclusive Economic Zone. The closures took effect on 2 January 2003. Federal waters south of the South Carolina/North Carolina border at the coast and south of the Oregon Inlet will now be closed at all times to large mesh gillnets.

Source: Marine Turtle Newsletter (2003), **100**, 53 (see also <http://www.seaturtle.org/mtn>).

Call for major overhaul of US fisheries policy

The Pew Oceans Commission, funded by the Pew Charitable Trusts and comprising 18 environmentalists, scientists and officials from government and the fisheries industry, has called for a major overhaul of US fisheries policy, which in future should be based explicitly on ecosystem management. The commission recommends the creation of an independent national oceans agency, the adoption of a national ocean-policy act, doubling of ocean-research spending over 5 years and the establishment of a network of national marine reserves or protected areas. It remains to be seen if the Pew Commission's findings will be endorsed by the government-sponsored US Commission on Ocean Policy. Both commissions were established because of a widespread feeling that US oceans policy was floundering.

Source: Nature (2003), **423**(6940), 577.

Bush administration is failing the parks system

A mid-term report card issued by the National Parks Conservation Association (NPCA) has given the Bush administration a 'D-' in response to its poor performance as steward of US national parks. Among the NPCA's criticisms are plans to privatize much of the National Park Service's workforce, roll back clean air regulations and default on President Bush's promise to fully fund the parks. The grading was based on an assessment of performance in five broad categories: protection of resources such as air quality, wildlife and historic places (given an 'F' grade); visitor use ('F'); funding ('C+'); park administration and management ('D'); and the growth of the National Park System ('F').

Source: National Parks (2003), **77**(7–8), 15.

GM salmon on hold in the US

The prospect of transgenic salmon being farmed commercially in the US is at least 18 months away, as an assessment by the Food and Drug Administration (FDA) will take at least this long to process. Concerns have also been raised that the FDA is not competent to undertake an assessment of the likely environmental impact and that the Environmental Protection Agency should be involved. Environmental groups are concerned that escaped GM fish could interact in a deleterious way with endangered wild stocks of Atlantic salmon. It is suggested that the GM fish could out-compete wild fish for food.

Source: *Marine Pollution Bulletin* (2003), 46(4), 383.

Protection of the grey wolf is to be downgraded in the US

In 1995 the US Fish and Wildlife Service (USFWS) began introducing grey wolves into the Yellowstone National Park and gave wolves that had migrated from Canada into the Great Lakes region of the US the same legal protection as Endangered species. There are now 4,000 grey wolves in the US and on 1 April 2003 the USFWS declared that the population was large enough to sustain itself and began the process of removing federal protection. Environmental groups argue that the decision is political and designed to avoid conflict with landowners and those opposed to the wolf's presence, and are even worried that the grey wolf might be 'de-listed' altogether. It is argued that large populations do not necessarily mean that the wolves' recovery is complete and a better test would be to see if the animals are fully reintegrated into their environment.

Source: *New Scientist* (2003), 178(2391), 9.

Emissions trading begins in Chicago

In January 2003 officials from the Chicago Climate Exchange (CCX) announced the launch of their greenhouse gas (GHG) trading market. The city of Chicago and leading US and international companies plan to achieve reductions in GHG emissions through trading. The 13 companies in the exchange have made a legally binding commitment to reduce their GHGs by 4% below the average of their 1998–2001 emissions, by 2006. There are no immediate international binding commitments on emissions following

the Bush administration's rejection of the Kyoto Protocol but some companies have decided that moving ahead on such schemes could be a sound business strategy.

Source: *WorldWatch* (2003), 16(3), 7.

Killer whale numbers down in Puget Sound

A popular and highly visible group of killer whales in Puget Sound, Washington has been officially designated a depleted stock by the US National Marine Fisheries Service. This designation under the Marine Mammal Protection Act will lead to a conservation plan to address the factors that may be leading to the population's decline. The population of killer whales in this region, which is known as the Eastern North Pacific residents, has fallen from c. 97 animals in 1996 to 80 in 2002.

Source: *Marine Pollution Bulletin* (2003), 46(7), 799–800.

Plans for Yosemite cause controversy

A plan to restore the natural beauty of the Yosemite Valley in California by reducing the number of campsites and parking spaces is causing controversy. The Yosemite Valley Plan would reduce the number of campsites to about 500 and day-use parking spaces to 550. Critics have argued that this will effectively lock people out of the park. The valley plan would cost about \$440 million over 10 years and return 176 acres along the Merced River to natural habitat and restore its floodplain. About 300 campsites were washed away by a flood in 1997 and have not been replaced because of the possibility of another flood.

Source: *National Parks* (2003), 77(7–8), 10–11.

Pipeline is proposed in the Grand Canyon

The world's largest oil company, Peabody Energy, has revealed plans for drilling 1,200 ft shafts into the Grand Canyon in order to tap water from the Colorado River. A \$125 million pumping station and pipeline would send water to a nearby mining operation. The scheme has been severely criticized by environmentalists who argue it will pollute the canyon and ruin its wilderness character. Peabody Energy needs a new water supply for its mining operations on the Navajo and Hopi Reservations in northern Arizona. If it does not find

a new source by 2005 it risks losing millions or even billions of dollars by shutting down operations. Although opposition from environmental groups has been fierce it has been the concerns of water authorities, namely the Central Arizona Project, which blocked the proposal, that has ensured the plan has been halted for the time being.

Source: *National Parks* (2003), 77(3–4).

California sea otter populations on the increase

A census of California sea otter populations in spring 2003 has recorded 2,505 animals compared to 2,139 in 2002. This is the highest total count and the highest count of adult and young adult sea otters since 1983. While the increase in numbers is welcome news this does not necessarily mean that the overall population is increasing. The US Fish and Wildlife Service's Southern Sea Otter Recovery Plan recommends that trend analyses be based on 3-year running averages. However, the 3-year running averages do indicate a gradual increase in population numbers of 0.9% since 1998.

Source: *Marine Pollution Bulletin* (2003), 46(7), 799.

Two thousand new species found in National Park

It has been estimated that 90% of the estimated 100,000 species in the Great Smoky Mountains National Park in Tennessee and North Carolina remain unknown. Since 1998 the All Taxa Biodiversity Inventory has been working to discover previously unknown taxa and up to March 2003 it had collected 334 species new to science and another 2,192 new to the park. Most of these have been insects, spiders, worms, fungi and slime moulds although there has been one mammal species new to the park, the evening bat *Nycticeius humeralis*. This inventory is expected to last between 10–15 years and will eventually provide a comprehensive checklist of species in the park.

Source: *National Parks* (2003), 77(5–6), 13.

Critical habitats designated for Gulf sturgeon

The US Fish and Wildlife Service and the National Marine Fisheries Service have designated critical habitat for the threatened Gulf sturgeon *Acipenser oxyrinchus desotoi* along portions of rivers, estuaries and marine coastline in

Alabama, Mississippi and Louisiana. In determining areas to designate as critical habitat scientists have looked at physical and biological habitat features that are essential for the conservation of the species. An economic analysis conducted of these areas concluded that the designation of critical habitat may result in \$3.31 to \$4.95 million per year in potential economic impact.

Source: *Marine Pollution Bulletin* (2003), 46(5), 533.

Wild birds to be used to restore damaged seagrass beds

Seagrass beds in the Florida Keys National Marine Sanctuary are being damaged by boat groundings. It is now planned to restore damaged beds by installing a series of bird stakes: vertical PVC pipes topped by wooden blocks. These will provide attractive roosting sites for cormorants and other seabirds whose droppings will provide fertilizer for the area below, helping to speed the growth of shoal grass *Halodule wrightii*, which is the first colonizer of barren areas. Shoal grass will prepare the way for other species such as turtle grass *Thalassia testudinum* and manatee grass *Syringodium filiforme*.

Source: *Marine Pollution Bulletin* (2003), 46(4), 384.

Plans to control overflight noise at the Hawaii volcanoes

Visitors to the Hawaii Volcanoes National Park are frequently disturbed by noise from the 30,000 air tours by small planes and helicopters that take place each year. This is one of the highest levels of overflights in the national parks system. In response, the National Park Service and the Federal Aviation Administration are creating legal guidelines to help protect the experience of park visitors. The guidelines are expected to specify the amount of air tours that can go over the park as well as where they can go and how high they can fly.

Source: *National Parks* (2003), 77(7–8), 8.

Ecologists battle to restore Colorado River

The Colorado River delta was once a vibrant ecosystem in the Mexican desert but with almost all of the river's water extracted for irrigation and water supply in the US, the river is sometimes just a small stream by the time it reaches the Gulf of California. Ecologists are trying

to force US authorities to let more water flow into Mexico from the Colorado's vast watershed and are requesting that the US should release about 37 million m³ of water per year into the river with an extra pulse every 4–5 years if normal floods don't occur naturally. The Colorado delta desperately needs fresh water and current salinity levels are nearly twice as high as normal. Economic and ecological stresses are threatening to eliminate the last vestiges of a lush riverbank system that existed 75 years ago before US dams harnessed most of the river's natural flow.

Source: *Nature* (2003), 423(6942), 793.

Central America and Caribbean

New assessment of Mesoamerican amphibians paints bleak picture

In November 2002, 25 herpetologists met in the La Salva Biological Station in Costa Rica to complete status assessments of the 771 species of amphibians known from Mesoamerica (Mexico through to Panama). This was part of the Global Amphibian Assessment sponsored by IUCN-SSC, the Center for Applied Conservation Science at Conservation International, NatureServe, the Declining Amphibian Populations Task Force and AmphibiaWeb. Of the 550 species for which sufficient information is available for an assessment, 52% fall into the IUCN Red List categories of threatened (Critically Endangered, Endangered and Vulnerable) or Extinct. Many of the 84 Critically Endangered species have disappeared and researchers can no longer locate populations of these species. Overall, endemic highland species with small distributions are most threatened.

Source: *Froglog* (2003), 57, 3–4.

Caribbean coral reefs close to extinction

The first analysis of all of the Caribbean's coral reefs suggest that only 10% of the reefs remain inhabited by the species of hard coral that created them, compared with 50% 25 years ago. This represents an unprecedented decline that exceeds the well publicized losses of tropical forests. The project analyzed 65 separate studies in the last 25 years on 263 sites

across the Caribbean and showed that 80% of the region's coral reefs had gone. The causes are a mixture of natural and human-induced factors. A hurricane in Jamaica in 1980 caused severe damage and this was followed by a disease that killed a common sea urchin. As urchins died, a toxic algae on which they fed proliferated and smothered the reefs. Destruction is also blamed on fishing, sewage pollution, damage from cruise ships and divers, topsoil washing into the sea following deforestation and increased sea temperatures caused by global warming and El Niño.

Source: *New Scientist* (2003), 179(2405), 9.

South America

Cerrado habitat threatened by presence of diamonds

The Canastra National Park in Brazil is one of the largest areas of cerrado habitat left in the country but it is now threatened because a mining company, Sul América Mineração, believes that the area could contain one of the world's largest diamond reserves. If its initial findings are correct, the company believes that the mine could earn £300 million in exports each year. The park covers 200,000 ha but only 71,000 has been properly incorporated. Farmers own the remaining land, including the area under dispute. Cerrado habitat is of international importance but has been hit by agricultural expansion in recent years.

Source: *BBC Wildlife* (2003), 21(8), 22–23.

New species of owl already nearly extinct

A new species of owl, the Pernambuco pygmy owl *Glaucidium mooreorum* found in the rainforests of north-eastern Brazil is threatened with extinction. The species was first recorded in 1980 but was mistaken for a darker-looking Amazonian species. It was only recently found to be a new species. It is found in only two locations and these are being increasingly fragmented by sugar-cane plantations. It has been seen only six times in 23 years and the remaining patches of forest are not big enough to support a viable population.

Source: *Brazilian Journal of Ornithology*, 10, 123–130.

Vital decision for two of Brazil's most threatened birds

The marsh antwren *Stymphalornis acutirostris* and Kaempfer's tody-tyrant *Hemitriccus kaempferi* are both Critically Endangered species that are not currently protected in any federal conservation unit in Brazil. Some of their largest remaining habitat exists in an area, APA de Guaratuba, that is proposed for inclusion within new boundaries for the 25,000 ha Saint Hilaire/Lange National Park. BirdLife Brazil is working with IBAMA, the Federal Environment Agency in Brazil, to ensure that these species are protected from threats from urban and tourist development.

Source: *World Birdwatch* (2003), 25(2), 2.

BirdLife buys block of Atlantic forest

BirdLife has purchased 251 ha of land in the Atlantic forest region of Brazil. The purchase was made jointly with a local non-governmental organization Instituto de Estudos Sócio-ambientais do Sul da Bahia (IESB) through grants from the Clothworkers Foundation and the Garfield Foundation. It is within the Serra das Lontras mountain complex, home to nine globally threatened bird species, including two only recently discovered, the pink-legged graveteiro *Acrobatornis fonsecai* and the Bahia tyrannulet *Phylloscartes beckeri*. The purchased land will be used to create a private nature reserve. Most of the land will be allowed to regenerate, although a small area will continue to be used for the harvesting of organically grown cacao.

Source: *World Birdwatch* (2003), 25(2), 5.

Brazilian endangered species now number 395

In May 2003 the Brazilian government released a new endangered species assessment. The new list contains 395 endangered species compared to 219 in the previous list published in 1989. According to the new list, 69 mammals, 160 birds, 20 reptiles, 16 amphibians and 130 invertebrates are endangered, threatened, at risk of extinction or already extinct. The list does not include aquatic species as it was felt that more studies on these species was required. The biggest concerns are marine invertebrates, as the government estimates that over 1 million people make their living from the commercial use of these species. Most of the endangered and extinct species are

found in the south-eastern regions of the country where economic development is highest.

Source: <http://ens-news.com/ens/may2003/2003-05-22-01.asp> (list available at <http://www.mma.gov.br/port/sbf/fauna/index.cfm>, in Portuguese only).

Seven new species found in Bolivia

An expedition by students from Oxford and Glasgow universities in the UK and the University Major San Simon, Bolivia, has discovered seven new species in a largely unexplored valley on the eastern slopes of the Andes. *Yungas 2001*, supported by the BP Conservation Programme, found two new frog species, two toads, two snakes and a lizard. They also recorded the cloud forest screech owl, previously known only from an area of Peru 1,000 miles to the north. The expedition found many species of insects not previously recorded and noted a high level of endemism. The forest where the discoveries were made has been designated a protected area by the Bolivian authorities. It is threatened by logging, burning and clearing for agriculture.

Source: <http://news.bbc.co.uk/1/hi/sci/tech/3016876.stm>

Pacific

Coral bleaching increasing in US waters

A recent report by WWF has indicated coral bleaching in seven research sites in the US territory of American Samoa, including the US National Park of American Samoa, Fagatele Bay National Marine Sanctuary and Maloata Bay community reserve. Up to 30% of coral has bleached at Maloata Bay with 10–20% at most other sites. It is thought that the bleaching has been caused by increased water temperatures; remote sensing has shown water temperatures increasing by 1.5°C above the normal annual high temperature for 6 weeks prior to the WWF survey.

Source: *Marine Pollution Bulletin* (2003), 46(5), 532.

Fiji establishes whale sanctuary

The Government of Fiji has declared the country's Exclusive Economic Zone

(EEZ) a whale sanctuary. The sanctuary within Fiji's EEZ will ensure free passage of whales through Fiji's waters as well as contributing to the growing number of South Pacific EEZ sanctuaries. Australia, the Cook Islands, French Polynesia, New Zealand, Niue, Papua New Guinea, Samoa, Tonga and Vanuatu have all either declared whale sanctuaries within their EEZs or enacted national legislation to protect whales in their waters. Whales visit the South Pacific Ocean to breed, calve and raise their young during the winter months of June–October.

Source: *Marine Pollution Bulletin* (2003), 46(5), 530–531.

Polynesian megapodes thriving on isolated island

The Polynesian megapode *Megapodius pritchardii* is a Critically Endangered species that survives on Niuafu'ou, Tonga's most northerly island. In 1993 there were thought to be only 188–235 pairs remaining and the population was in slow decline because of overhunting and egg harvesting by local people and predation by introduced rats, cats and dogs. A decision was therefore made to move 43 eggs to the uninhabited rat-free volcanic island of Fonualei. In March 2003 an expedition to the Fonualei estimated that the population on the island is now 300–500 birds. The scientists also observed good numbers of shy ground-dove *Gallicolumba stairii* a Vulnerable species with a patchy distribution across central Polynesia.

Source: *World Birdwatch* (2003), 25(2), 8.

Australia/ Antarctica/New Zealand

Rare coastal plants are replanted on an offshore island

Since 1999 a range of rare coastal plants in New Zealand have been reintroduced to Whale Island or Moutohora in the Bay of Plenty in an attempt to establish self-sustaining populations of species that would previously have occurred there. This is part of a wider programme to restore ecosystems on the island so that it resembles what was there before grazing and animal pests were introduced and the vegetation removed by fire. Approximately 80 plants were

established in 2003 to add to the several hundred planted in the three previous years. Plant species being reintroduced include pingao, hinarepe (sand tussock), tawapou, Cook's scurvy grass, New Zealand cress, sea spurge and spinach, mawhai (native cucumber) and two species of *Pimelea*.

Source: *Forest & Bird* (2003), 308, 7.

Database to help identify derelict nets

There are more than 90 types of discarded fishing nets that are continually being washed ashore on northern Australian beaches. These nets are a hazard to dolphins and turtles in the area. WWF-Australia has published a guide that will allow the easy identification of nets as a first step to keeping them out of the environment. The guide lists net mesh, colour and twine size, net use and likely country of origin. It will be distributed free to all members of the public including fisheries and indigenous communities who use the beaches and waters of the Northern Territory and Queensland.

Source: *Marine Turtle Newsletter* (2003), 100, 56 (see also <http://www.seaturtle.org/mtn>).

Discovery of an Australian spider raises concerns in New Zealand

In January 2003 an adult female huntsman spider was found in a residential

property at Buckland's Beach in Auckland. These large spiders are native to Australia and the discovery has raised concerns about their possible impact on native New Zealand wildlife. Huntsman spiders can grow to the size of a handspan and feed on a wide range of insects; they may even eat lizards. The discovery is puzzling as searches have revealed no other spiders and the area was not near a port or facility where shipping containers are opened. There are concerns that the spider may have come from another area of Auckland.

Source: *Forest & Bird Conservation News* (2003), 130, 3.

Greater protection for key New Zealand dune system

Pouto (North Kapiara Head) contains one of the largest unmodified dune systems remaining in New Zealand. It provides vital habitat for four threatened bird species, three threatened plant species and many freshwater fish species. It is also a popular site for off-road vehicle (ORV) recreation in the North Island. Following concerns over damage by ORVs, a range of stakeholders have developed a proposal for increased protection of the area including changing its status to a conservation park. This will allow for the development of appropriate controls on ORV access and use.

Source: *Forest & Bird Conservation News* (2003), 130, 4.

Campbell Island is declared rat free

The Sub-Antarctic Campbell Island, c. 600 km south-east of Stewart Island, has officially been declared rat free. This follows a \$2.6 million rat eradication programme, the largest ever undertaken. Two years ago the New Zealand Department of Conservation assembled a team of 20 staff, workers and contractors who used helicopters to spread c. 120 tonnes of bait on the 11,331 ha island. At the time there were estimated to be 200,000 Norway rats on the island. A team of conservation officers returned to the island in May 2003 and could find no trace of rats. Rats had been present on Campbell Island for 200 years but their removal means that the Department of Conservation can now reintroduce the rare Campbell Island teal, a flightless relative of the endangered brown teal.

Source: http://www.birdlife.net/news/news/2003/05/campbell_island_teal.html

The *Briefly* section in this issue was written and compiled by Simon Mickleburgh and Martin Fisher, with an additional contribution from Jenny Daltry. 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