

International**Satellite tags give fresh angle on tuna quota**

The migration patterns of giant Atlantic bluefin tuna *Thunnus thynnus* have been unravelled through satellite tagging. The results suggest that policies for managing this overfished species require an urgent rethink. Bluefin tuna are the most valuable fish in the ocean and in Japan single fish can fetch up to USD 100,000 but numbers have fallen by 80% since 1970. Bluefin spawn in the Gulf of Mexico and the Mediterranean but fishing quotas are lower in the more heavily fished Gulf. The tagging study shows that the two populations are separate but merge when foraging in the open ocean, and thus fish from the more fragile Gulf population are being caught as part of the larger eastern quota.

Source: *Nature* (2005), 434, 1056–1057 & 1121–1127.

Turning up the heat on hotspots

Biodiversity hotspots have been defined by one or more metrics, in particular number of species, number of endemic species, and number of rare or threatened species. Using a newly compiled database for the breeding distribution of all of the world's birds, a lack of congruence has been found between hotspots defined using these different metrics. This calls into question the use of the hotspots principle in setting priorities for conservation. Only 2.5% of hotspots are common to all three aspects of diversity, with over 80% of hotspots being idiosyncratic. The results suggest that, even within a single taxonomic class, different mechanisms are responsible for the origin and maintenance of different aspects of diversity. Consequently, the different types of hotspots also vary greatly in their utility as conservation tools.

Source: *Nature* (2005), 436, 919–920 & 1016–1019.

Global forest canopy plan

The Global Canopy Programme at Oxford University, UK, has announced plans to create a global network of

rainforest research stations. The programme would recruit local workers and give them the equipment and skills needed to study the canopies of their forests. Results would be compiled to give a global picture of the state of forest canopies. The study would look at both biodiversity and changes in how much carbon dioxide is taken up by forests. Ten stations already exist, and the project aims to set up five new stations in Brazil, Ghana, Madagascar, Malaysia and India. The plan is backed by the United Nations.

Source: *Nature* (2005), 436, 452.

Top predators and biodiversity

The charisma of top vertebrate predators is often used as a lever to obtain financial support for conservation but this strategy has been criticized. Habitat data on five raptor species that differ widely in their diet and habitat associations has shown that sites occupied by these predators are consistently associated with high biodiversity. The biodiversity of such sites is greater than that of sites selected at random or sites occupied by species lower down the trophic pyramid. The results suggest that this tight association between apex predators and biodiversity may justify the strategic use of top predator species as conservation tools.

Source: *Nature* (2005), 436, 192.

Ballast water management project enters new phase

The Global Ballast Management Programme, aimed at assisting developing countries implement measures to minimize the adverse impacts of aquatic invasive species transferred by ships in ballast water, has begun a new phase. The main objective is to assist particularly vulnerable countries to enact legal and policy reforms to meet the objectives of the International Convention for the control and Management of Ship's Ballast Water and Sediments. The issue of aquatic invasive species, including the transfer of harmful organisms in ships' ballast water and sediments, is seen as one of the greatest threats to global marine biodiversity and ecosystems.

Source: *Marine Pollution Bulletin* (2005), 50(6), 613.

Let the big fish go to save the species

The trophy fish that anglers dream of landing are crucial for saving fish populations, and fishery managers may need to rethink the common policy of chasing

the big fish and letting smaller fish go. A review of the effects of fishing on populations has shown that the biggest fish are the most valuable for maintaining the population. Female fecundity often increases dramatically with size, and larvae from older and larger fish are bigger, grow more than three times as fast and can survive without food for twice as long as larvae from younger females. Also, in some species, young learn the route to spawning areas by following older individuals.

Source: *New Scientist* (2005), 186(2505), 11.

Whaling ban stays in place

The annual meeting of the International Whaling Commission in Ulsan, South Korea, closed on 25 June with no real change in the status quo. Japan, however, stood by its plans to increase its so-called scientific catches. The meeting had opened to fears among the anti-whaling bloc, led by New Zealand, Australia and the UK, that pro-whaling nations could finally gain a majority among the 66 member states and overturn the 19-year ban on commercial whaling. This did not transpire, but Japan said it intended to double its annual so-called scientific minke whale quota to 935, and also announced plans to take 50 humpback and 50 fin whales per year.

Source: *New Scientist* (2005), 187(2506), 6.

Sea life in peril as oceans turn acid

The oceans are gradually becoming more acidic as they soak up the excess carbon dioxide released into the atmosphere. The change could be catastrophic for marine ecosystems and for economies that rely on reef tourism and fishing, and there is no way to reverse it. The seas, which are naturally alkaline with an average pH of 8.2, act as a buffer that can normally soak up large quantities of CO₂ with little change in levels of acidity. Levels of CO₂ are now rising so fast, however, that the oceans are becoming more acidic. Little is known about the effects this will have but oxygen becomes more difficult to extract from water as pH falls and this could affect animals with high oxygen demands, such as squid. The greatest effect is likely to be on organisms with calcium carbonate shells, including lobsters, crabs, shellfish, certain plankton species and coral polyps. It will become more difficult for animals to make their shells and such structures could even start to dissolve.

Source: *New Scientist* (2005), 187(2507), 15.

New World Heritage sites

At the July meeting of the World Heritage Committee eight new sites were inscribed on the World Heritage list. These included two of Norway's fjords, Geirangerfjord and Nærøyfjord, Wadi al Hitan in Egypt, marine ecosystems in the Gulf of California, Gulf of Chiriquí in Panama, and off the Japanese island of Hokkaido, the Valley of Flowers National Park in India, and a mosaic of tropical forests in Thailand. The Committee also considered the delisting of Garamba National park in the Democratic Republic of Congo if it fails to protect the last remaining northern white rhinos. Only 10 individuals of this subspecies are believed to be left in the wild.

Source: *New Scientist* (2005), 187(2509), 14.

Sustainable wild collection of plants

Medicinal and aromatic plants are important resources but unsustainable wild collection threatens the survival of many of these species. An *International Standard for Sustainable Wild Collection of Medicinal and Aromatic Plants* is being developed by the German Federal Agency for Nature conservation, IUCN and WWF/TRAFFIC. An estimated 40,000–50,000 plant species are used in traditional and modern medicine around the world, with the great majority provided by collection from the wild. The Standard will bridge the gap between already existing guidelines and management plans developed for specific local conditions. Stakeholders involved will receive an easy to use list of criteria, indicators and verifiers that will enable them to check the sustainability of wild collected plant material.

Source: <http://www.floraweb.de/proxy/floraweb/map-pro/>

Don't duck offshore wind farm checks

A review by the Centre for Evidence-Based Conservation (<http://www.cebc.bham.ac.uk>) suggests that windfarms should not be built near populations of birds of conservation importance, and much more research needs to be done on the impact of offshore windfarms on vulnerable groups such as ducks and waders. Current wind farm plans in the UK, however, target the estuaries and shallows these birds need. The review also found that birds do not seem to get used to windfarms. The longer windfarms are in operation, the worse the decline of certain bird species appears to become. But most Environmental Impact

Assessments monitor birds for no more than a year before and a year after windfarms are built. The reviewers recommend policy-makers consider moving turbines further out to sea.

Source: http://www.birdlife.org/news/news/2005/05/offshore_wind.html

Europe

UK must tackle threats to its marine life

Fishing and climate change are having an adverse effect on marine life according to a recent integrated assessment of UK seas from the UK Department for the Environment, Food and Rural Affairs. In the east of England higher sea temperatures and more storms are being recorded, and as a result cold water plankton is declining and warm water plankton is increasing. This has an adverse effect on the recovery of cod stocks. It was found that existing monitoring programmes are inadequate to assess the status of some elements of the UK marine ecosystem, and there is a need to increase and manage knowledge of the marine environment.

Source: *Marine Pollution Bulletin* (2005), 50(4), 365.

Northern European seas awash with chemicals

The seas and estuaries around northern Europe are becoming a stew of toxic chemicals, and native fauna are widely contaminated by these chemicals, according to a recent report by WWF. Flame retardants and other chemicals are entering the North Sea and finding their way into fish, birds, crustaceans, porpoises and seals. Some of these chemicals are virtually indestructible and are therefore persistent in the environment, and some are carcinogenic or neurotoxic and their metabolites can affect hormone regulation.

Source: *Marine Pollution Bulletin* (2005), 50(5), 491.

Fish stocks move north

A recent study of British fish stocks has found that 21 species have shifted their distributions and 18 species have moved up to hundreds of kilometres northward over the past 25 years, a rate nearly four times that of land-based birds, butterflies and alpine herbs. The North Sea has

warmed by 1°C over the past 25 years and populations of fish such as cod have responded by moving northwards. Cod's centre of population has shifted 117 km towards the Arctic while haddock's southern boundary has moved 105 km north. The study raises concerns that some already over-fished stocks are under further threat from climate change, and this could lead to calls for tighter fishing restrictions.

Source: *Marine Pollution Bulletin* (2005), 50(7), 701.

Mediterranean fish at risk of exotic viruses

Mediterranean fish are exposed to exotic viruses because of huge quantities of imported feed-fish used in tuna farming, according to a report by WWF. During their 6-month captivity tuna are fed on large quantities of feed-fish, most of which consists of imported frozen, untreated fish from West Africa, the North Atlantic and North and South America. This could lead to the introduction of new viruses that could affect the Mediterranean ecosystem. In the 1990s in Australia massive imports of fish from other regions were the origin of viral epidemics that affected 500 km of coastline and killed 75% of the Australian sardine population. WWF has called for a ban on importing such feed-fish.

Source: *Marine Pollution Bulletin* (2005), 50(6), 615.

Whales might fly

Grey whales *Eschrichtius robustus* have long been extinct in the north Atlantic where the population was finished off by hunters, although other factors could have precipitated the decline. A proposal has been made to move grey whales from the coast of California to the coast of England, by flying them over in a cargo plane. It is not clear, however, whether or not the waters of the North Atlantic could now support grey whales or if the waters are suitable for grey whales from the Pacific. A 3-year feasibility study has been proposed.

Source: *New Scientist* (2005), 187(2509), 15.

Rare Spanish lynx cub dies in fight

One of three lynx cubs born in captivity in Spain in March has died after a fight with one of its siblings. Female cub Brezina died and her brother Brezo was left injured and is being treated by staff at the Doñana National Park in southern Spain. The Iberian lynx cubs were born as part of a special breeding programme. Lynx numbers have declined from

100,000 at the beginning of the 20th Century to around just 100–120 in the wild today. Dam-building, road deaths, hunting and a decline in wild rabbits have led to the dramatic decrease in the lynx.

Source: [Http://news.bbc.co.uk/1/hi/world/europe/4539603.stm](http://news.bbc.co.uk/1/hi/world/europe/4539603.stm)

New reserve for houbara

SEO/BirdLife (BirdLife in Spain) have purchased a reserve to protect the globally threatened houbara bustard *Chlamydotis undulata* on Fuerteventura in the Canary Islands. The reserve consists of 209 ha of well-preserved steppe habitat. Sixteen houbara were counted in the winter 2004/2005 census. The population of the endemic Canary Islands race of houbara, *fuerteventurae*, was placed at 527 in the mid 1990s, with 18 on La Graciosa, 268 on Lanzarote and 241 on Fuerteventura. Numbers are thought to have declined subsequently, although there is evidence they are now on the rise again, particularly on Lanzarote.

Source: [Http://www.birdlife.org/news/news/2005/06/houbara.html](http://www.birdlife.org/news/news/2005/06/houbara.html)

Rare stone-curlew back from the brink

Numbers of breeding stone-curlew in England (they are not found anywhere else in the UK) have risen to more than 300 pairs, hitting a national conservation target 5 years ahead of schedule. The species had suffered one of the most spectacular declines of any UK breeding bird since the second world war. The help of more than 150 farmers and landowners, including the Ministry of Defence, has been crucial in reversing the stone-curlew's demise, while stone-curlews elsewhere in Europe decline. There are two main populations, on and around Salisbury Plain and in the Brecklands. Stone-curlews used to number more than 1,000 breeding pairs in England before habitats were lost to arable farming and forestry after the second world war. It is one of the species most vulnerable to disturbance and its eggs and chicks are so well camouflaged that they are almost impossible to spot.

Source: [Http://www.rspb.org.uk/action/rarystonecurlew.asp](http://www.rspb.org.uk/action/rarystonecurlew.asp)

Threat to birds of prey from persecution continues

Birds of prey in Scotland continue to face a serious threat from persecution, while attempts to prosecute those responsible

are often hampered by lack of resources for wildlife law enforcement and failures of the court system, a report has concluded. RSPB Scotland's new report into the persecution of birds of prey during 2004 highlights the fact that crime against birds of prey is undermining conservation efforts and Scotland's international obligations to provide proper protection for these bird species. The report shows that although some species, such as the buzzard, have made a significant comeback after a century of absence from large parts of Scotland, other bird of prey species continue to face serious threats from wildlife criminals. The Scottish Agricultural Science Agency confirmed 35 incidents of birds being illegally poisoned in Scotland in 2004. Buzzards were the commonest victims, with a total of 40 found dead. Three red kites, three peregrine falcons and a goshawk also died from poisoning during the year. There were also 16 incidents of birds of prey being directly persecuted.

Source: [Http://www.rspb.org.uk/scotland/action/persecutioncontinues.asp](http://www.rspb.org.uk/scotland/action/persecutioncontinues.asp)

Lifeline for ailing woodland birds

Mysterious declines of woodland birds are prompting conservationists to issue urgent advice on how to improve management of English woods and forests. Numbers of more than 20 bird species associated with woodlands have plummeted in the last 10 years and it is suspected that changes in woodland management may be amongst the causes. The willow tit, down 67%, the wood warbler 52%, the lesser spotted woodpecker 75%, and the 44% fall in spotted flycatcher numbers are amongst the worst declines, despite an increase in the amount of native woodland since 1990. The declines also show that birds with differing ecologies have been affected, highlighting the difficulty of identifying the causes. A reduction in insect food, altered nesting dates due to climate change, and changes to migration and over-wintering sites in Africa are amongst suggested reasons for the declines. The management of the woodlands themselves may also be an issue, and in the short-term improving their management and condition will help.

Source: [Http://www.rspb.org.uk/action/lifeline.asp](http://www.rspb.org.uk/action/lifeline.asp)

Bittern recovery suffers setback

The recovery of the bittern, one of Britain's rarest birds, has suffered a

setback say researchers who have just completed a UK-wide survey of the birds this summer. Related to the more familiar grey heron, the number of bitterns was extremely low in Britain in 1997 when a similar survey found only 11 males. Although this year's count revealed a minimum of 46 male bitterns, compared with last year's count of 55 males this is a significant drop. The bittern is dependent upon large tracts of wet reed-bed to find sufficient food, principally fish and amphibians. In the 1950s the bittern was more common, but the drainage of wetlands and the general deterioration of reed-beds led to the decline. The bittern has a distinctive booming call, with the males audible for up to 5 km. Monitoring these calls enables researchers to count these otherwise secretive birds.

Source: [Http://www.rspb.org.uk/action/bitternsetback.asp](http://www.rspb.org.uk/action/bitternsetback.asp)

North Eurasia

Proposed Russian oil pipeline threatens Amur leopard

A proposed oil pipeline in the Russian Far East could cause the extinction of the Amur leopard *Panthera pardus orientalis*, which has been reduced to fewer than 40 in the wild by over-hunting and loss of habitat. The pipeline, designed to make Russian oil available to Japan, Korea and others in the Pacific area, would run east from near Lake Baikal and down the coastal area of the Russian Far East between China and Amur Bay, opposite Vladivostok. The southernmost section, near the proposed terminal site of Perovoznaya, is the last refuge of the Amur leopard and contains a small isolated population of Amur tigers *Panthera tigris altaica*. Conservationists have proposed alternative pipeline terminal sites.

Source: *Cat News* (2005), 42, 33.

Climate warning as Siberia melts

The world's largest frozen peat bog is melting. An area of a million square kilometres across the permafrost of western Siberia is turning into a mass of shallow lakes as the ground melts. This sudden melting could unleash billions of tonnes of methane, a potent greenhouse gas. The melting has happened in the last 3–4 years. Siberia's peat bogs formed

about 11,000 years ago at the end of the last ice age. Since then they have been generating methane, most of which has been trapped within the permafrost.

Source: *New Scientist* (2005), 187(2512), 12.

North Africa and Middle East

Majority of Cypriots disapprove of songbird slaughter

Almost nine out of ten Cypriots disapprove of the illegal capture of songbirds, including robins, which are trapped each autumn and spring to be served up as expensive delicacies in local restaurants. This market research, funded by the RSPB, follows a programme by the Society to clamp down on illegal trappers. Field work, run by the RSPB and BirdLife Cyprus, has helped spare the lives of an estimated 20 million songbirds since autumn 2002 by encouraging enforcement authorities, including the UK forces responsible for the island's two large UK Sovereign Base Areas (at Akrotiri and Dhekelia), to clamp down on trappers. Trapping has been illegal on Cyprus for over three decades but it is believed that hundreds of thousands of birds are still slaughtered every year, driving a trade providing tavernas with the delicacy ambelopoulia.

Source: <http://www.rspb.org.uk/international/cypriotsdisapprove.asp>

Sub-Saharan Africa

Lion attacks on humans in Tanzania

An analysis of the patterns of lion attacks over the past 15 years on humans in Tanzania, which has the largest population of lions in Africa, has found that they have killed more than 563 people since 1990 and injured at least 308. The largest proportion of attacks occur during the harvest season of March–May. Attacks are most common in districts with the lowest abundance of natural prey. Attacks have increased dramatically since 1990, probably because of the increased human population and an associated loss of lion prey outside protected areas. As bush pigs are probably the maintenance diet of lions in agricultural areas controlling their

numbers may be the best strategy to decrease the attraction of lions to populated areas.

Source: *Nature* (2005), 436, 927.

Systematic recording of human-elephant conflict

A standardized data collection system, recommended by the African Elephant Specialist Group, to record and assess human-elephant conflict has been used in subsistence agricultural areas to the east of the Selous Game Reserve, Tanzania. Nine enumerators were recruited, trained and supervised to collect primary data on elephant damage incidents in 38 rural villages. Losses were suffered over a small total area of cultivation that covered only 1% of elephant habitat. In the first year of recording there were 1,239 incidents, of which 973 were crop raids. Sixteen categories of crops were damaged. Elephants killed two people and people killed 25 elephants. The study has highlighted the usefulness and cost-effectiveness of simple, inexpensive recording schemes operated principally by people within affected communities and producing rapid results relevant to local wildlife management and community-based conservation.

Source: *Pachyderm* (2005), 38, January–June, 29–38.

Conservation collaboration is a winner for Gola

The Conservation Society of Sierra Leone (BirdLife in Sierra Leone), the RSPB and BirdLife's Africa Division have joined forces with local people to help secure the future of one of the most important areas of rainforest remaining in West Africa. 75,000 hectares of the Gola rainforest in Sierra Leone will be managed by BirdLife in conjunction with seven local chiefdoms and the government. The Gola Forest Conservation Concession programme was launched by Sierra Leone's President Alhaji Dr Ahmad Tejan Kabbah on 4 June. Gola is classified by BirdLife as an Important Bird Area. This collaboration will help protect the 274 bird species recorded there, of which 14 are of global conservation concern. Much other wildlife will also benefit including pygmy hippos, forest elephants and the zebra duiker. Gola will now be protected from logging, and more than 40 local people are being appointed to patrol the reserve and run education programmes.

Source: <http://www.birdlife.org/news/news/2005/06/gola.html>

A new chimpanzee?

Measurements of 96 chimpanzee skulls indicate that the chimpanzee subspecies *Pan troglodytes schweinfurthii* of East Africa may in fact be two subspecies, bringing the total number of chimpanzee subspecies to five. The data suggests that there is a north-western group, *P. t. schweinfurthii* and a south-eastern group, *P. t. marungensis*. More work is needed to confirm the finding, in particular because *P. t. marungensis* is well protected but *P. t. schweinfurthii* is being hunted for bushmeat and is poorly protected.

Source: *New Scientist* (2005), 187(2510), 13.

Managing a logging boom in Tanzania

Since 2000 Tanzania has witnessed a rapid increase in export demand for hardwood logs, with one of the largest and growing export markets being China. The greatest increases in timber harvest pressure have been experienced since 2003, in the miombo woodlands and coastal forests of southern Tanzania. Because of concerns over the levels of exports, uncontrolled harvesting, signs of forest degradation and lost government revenue, the Government has taken a strong stance against illegal, unregulated and wasteful practices. TRAFFIC is working with the Government to monitor trade, and a national harvest ban of hardwoods from natural forests introduced in July 2004 has twice been extended to allow the completion of resource assessments in priority forested areas.

Source: *TRAFFIC Dispatches* (2005), 24, 9.

Army gadget tracks elephant rumbles

A device used to track enemy troop movements during the Vietnam war may give conservationists a better understanding of elephant behaviour. Forest elephants, thought to be a different species from savannah elephants, have been difficult to count because dense tree cover hides them from aerial surveys. A small seismic detector, or geophone, has now been used to track the rumble of elephant footfalls. A geophone was buried near a waterhole in Etosha National Park in Namibia and used to record animals as they passed. Analysis of the recording showed that elephant footsteps could be distinguished from those of other large mammals by a stronger low-frequency component. The number of animals could be estimated from the total energy generated by their footfalls.

Source: *New Scientist* (2005), 186(2505), 23.

Gorilla deaths show tourists should keep their distance

Respiratory disease has become the second biggest killer of gorillas after poaching. About 700 mountain gorillas live in two separate populations, one in Uganda and the other in a region that straddles Rwanda, The Democratic Republic of the Congo and Uganda. An investigation of deaths dating back to 1968 found that 40 were due to trauma, of which poaching is almost always the cause in adults and 24 to the effect of respiratory diseases, including influenza A and parainfluenza viruses. To cut the risk of people passing these disease on, tourists who trek to see the gorilla already have to stay at least 7 m away, and keep their visits to no more than one hour. The populations are closely monitored but their overall numbers are small.

Source: *New Scientist* (2005), 187(2507), 17.

Mauritius highway threatens flagship site

Work has begun on a road that could devastate part of the forest heartland of the Mauritius Kestrel *Falco punctatus*, one of the world's flagship conservation success stories. The south-eastern highway will pass through the Mauritius east coast mountains Important Bird Area, cutting a swathe through some of the last remaining good quality forest in this part of Mauritius. This kestrel was once the world's rarest bird but from near extinction in the 1970s its population has grown to 800–1000 individuals, thanks to a captive breeding and reintroduction programme. The south-eastern forest is home to half the world population, centred around the Ferney Valley, where the first reintroductions took place. Ferney Valley is in the path of both proposed routes for the new highway. The road is funded by the African Development Bank. The Mauritian Wildlife Foundation has been lobbying both the government and the Bank to consider alternative routes, or at very least to ensure that harm to the biodiversity of the area is minimized.

Source: <http://www.birdlife.org/news/news/2005/05/mauritius.html>

Africa bargain key site conservation

The cost of conservation work in all of Africa's protected wildlife sites has been found to be a fraction of the amount spent by governments and consumers in other areas. Research by BirdLife

International's African network and the African Protected Areas Initiative shows that just USD 300 million annually would cover the minimum costs of managing Africa's 1,200 national parks and reserves, compared to USD 51 billion on EU farm subsidies and USD 450 million on UK arms subsidies. Worldwide, shoppers spend USD 26 billion on dog and cat food and, in Europe, USD 11 billion on ice cream. Africa was chosen for the BirdLife study because it has substantial development needs but also a wide range of wildlife. The continent was also selected because biological resources there provide food, medicine and many sources of income.

Source: <http://www.birdlife.org/news/news/2005/06/cbd.html>

South and South-east Asia

Tsunami damage enhanced by coral theft

Illegal removal of coral along Sri Lanka's coastline increased the amount of destruction wrought on the island by the tsunami of December 2004. The tsunami reached significantly farther inland through gaps caused by illegal removal of coral. The coral is mined to provide souvenirs for tourists or to be ground up for use in house paint. Coral harvesters sometimes blow the reefs up with dynamite in order to collect fish at the same time.

Source: *Nature* (2005), 436, 1071.

Storm protection function of mangroves in India

A study of the ecosystem services provided to three villages by the Bhitarkanika mangrove ecosystem in India was examined by looking at the effects of cyclones. The economic loss incurred per household as a result of cyclone damage was greatest in the village that was not sheltered by mangroves but had an embankment, followed by the village that was neither in the shadow of mangroves or the embankment, and least in the village that was protected by mangrove forests.

Source: *Environmental Conservation* (2005), 32(1), 85–92.

Threats to the greater one-horned rhino in India

Pabitora Wildlife Sanctuary in Assam, north-eastern India, has the highest

density of the Indian or greater one-horned rhinoceros *Rhinoceros unicornis* anywhere in its range. The area, dominated by moist savanna grasslands, was designated a wildlife sanctuary in 1987. With c. 80 rhinos Pabitora is an important habitat for this Endangered species. However, the area is facing serious threats such as encroachment, road construction, overgrazing, poaching, high floods and increasingly heavy tourism.

Source: *Pachyderm* (2005), 38, January–June, 82–88.

Snow melt causes large ocean plant blooms

A decline in winter and spring snow cover over South-west Asia and the Himalayas is creating conditions for more widespread blooms of ocean plants in the Arabian Sea. The decrease in snow cover has led to greater differences in both temperature and pressure systems between the Indian subcontinent and the Arabian Sea, generating monsoon winds that mix ocean water in the western Arabian Sea. This leads to better growing conditions for phytoplankton, which have increased by more than 350% in the past 7 years. Increases in phytoplankton can lead to oxygen depletion in the water column and eventually to a decline in fish populations.

Source: *Marine Pollution Bulletin* (2005), 50(6), 615.

Tigers vanish from Indian reserves

Tigers have completely vanished from Sariska Tiger Reserve, the closest to new Delhi, since mid 2004. Tigers are also missing in Ranthambhore reserve, and 30 have disappeared in the last 3 years from the Panna Tiger Reserve. The Prime Minister called an emergency meeting of the National Board for Wild Life and set up a Task Force to propose action to tackle the situation. He also decided to establish the long delayed National Wild Life Crime Prevention and Control Bureau and ordered the Central Bureau for Investigation to investigate the disappearances. The Ministry of Environment and forests announced that an all India Tiger Census would take place in November, with cooperation from independent and international experts, including from IUCN. The report of the Task Force, delivered in August, concluded that humans are the main danger to tigers, and recommended that villages be moved away from tiger habitat.

Source: *Cat News* (2005), 42, 4; *New Scientist* (2005), 187(2512), 5.

Dalai Lama calls on Tibetan exiles to stop illegal trading

The Dalai Lama, in exile in India, has for the second time called on Tibetans to remember their dedication to Buddhist non-violence and to end illegal wildlife trafficking between Nepal, Tibet, India and China. He launched the Tibetan conservation Awareness Campaign at a meeting of Tibetans in Delhi. On the same day two Tibetans and a Nepali were arrested in Delhi loading 45 leopard skins and 124 otter skins on a bus headed for Kathmandu. The Dalai Lama is working with the UK charity Care for the Wild International and the Wildlife Trust of India to promote an understanding of the damage illegal trading can cause.

Source: *Cat News* (2005), 42, 5.

Manas Tiger Reserve recovers after 10 years of chaos

Manas Tiger Reserve in NE India, which is also a Biosphere Reserve and World Heritage site, is recovering after nearly two decades of chaos caused by insurgency of the Bodo people. They claim the area as their traditional land, which had been taken from them by the British Raj and became part of the state of Assam. In 2003 the Bodo leaders signed an agreement with the Indian authorities to set up a Bodoland Territorial Council. The Bodos have formed an ecotourist committee, including a notorious poacher Budheshwar Bora who is said to have killed 80 tuskers, two tigers and countless deer. Nearly 150 other poachers have surrendered their guns and taken up forest conservation and tourism promotion. Recently it was reported that a rhino had been sighted and tracks were found.

Source: *Cat News* (2005), 42, 32.

New tiger reserve created in Central Sumatra

Indonesia's first dedicated tiger conservation reserve and holding centre for problem tigers has been established at Sungai Senpis in Riau Province of Sumatra. More than 20 confirmed attacks on humans and livestock have occurred in the past 2 years, resulting in the death of six people. Eight tigers were captured and six were transferred to a zoo in Bogor, Java. The need for a wild sanctuary where problem tigers could be relocated was identified, and the Mayor of Dumai suspended logging concessions in a 60,000 ha region near Dumai. The Senepis Tiger Conservation Area was formally declared in August 2004. Since then two wild tigers involved in conflict

with humans have been captured and released into the Area.

Source: *Cat News* (2005), 42, 35.

Illegal trade in orang-utans and gibbons continues in Indonesia

Orang-utans and gibbons are still traded and kept as pets in Java and Bali despite having been legally protected in Indonesia since 1931. Information collected from 35 wildlife markets in 22 cities across two islands found 559 orang-utans and gibbons, many on sale or being illegally traded. Both species are listed in Appendix I of CITES, prohibiting any international trade. Under Indonesian law orang-utans and gibbons are classified as protected, which forbids capturing, killing, possessing and trading these species. However, people who hunt, keep and trade in these species are rarely punished. Fewer than 10% of people that had specimens confiscated were actually prosecuted.

Source: *TRAFFIC Dispatches* (2005), 24, 1.

Siamese crocodile surveys in Lao PDR

Lao PDR has emerged as a globally important region for conservation of the siamese crocodile *Crocodylus siamensis*. The species is Critically Endangered and now very rare or locally extinct in South-east Asian countries where it historically occurred. A detailed survey for this crocodile was carried out in 2005. A small breeding population was found in a small swamp in Savannakhet Province, and crocodiles were found at four out of 14 other sites where they had historically occurred. Current threats to remnant crocodile populations include loss of nesting habitat as swamps are drained for agriculture, invasion of weeds, and burning of wetland vegetation and fringing forest.

Source: *Crocodile Specialist Group Newsletter* (2005), 24(2), 10–11.

New leatherback conservation project in Papua, Indonesia

A new conservation and management project has been launched for leatherback turtles nesting on Wermon beach, Papua, Indonesia. The beach is controlled by Wau village, 5 km from the beach, whose people are members of the hunting Abun tribe. Some of the villagers were collecting eggs for food or for sale to provide small sums of money to the village church. The people of Wau have now entered into a partnership with Everlasting Nature of Asia, the Indonesia

Sea Turtle Research Center, and Sorong Regional Office of Nature Conservation. The village has voluntarily halted egg collection and four villagers are employed to monitor the beach.

Source: *Marine turtle Newsletter* (2005), 109, 8.

The rediscovery of Gurney's pitta in Myanmar

Gurney's pitta *Pitta gurneyi* was discovered in Burma (now Myanmar) in 1875 and later described from Siam (now Thailand) in 1914. However, prior to a new survey, the only known population of the species, believed to be 11 pairs, was in Khao Pra-Bank Khram Wildlife Sanctuary in Trang Province, Thailand. Now in a new survey at five sites within the species' historical range in Myanmar, Gurney's pittas were heard and/or observed at four sites, with 10–12 pairs recorded at one site. Birds were encountered in logged primary and secondary forest below 100 m, sometimes less than 10 m from the forest edge. The known global population is at now at least 100% greater than the published estimate.

Source: *Bird Conservation International* (2005), 15(1), 3–26.

East Asia

Massive tiger bone seizure in Taiwan

A massive seizure of Tiger bone in Taiwan has clearly shown that there is little evidence of a major reduction in poaching of Tigers in the wild and signals the urgent need for strong enforcement action by both Tiger range States and potential consumer countries. In the largest ever single seizure of Tiger bone in Taiwan, and one of the largest ever in Asia since 2000, Kaohsiung Customs authorities confiscated, on 4 July, over 140 kg of Tiger bones, including 24 skulls, in a shipment from Jakarta, Indonesia. The contraband was hidden in a container of deer antlers being exported to Taiwan for use in traditional medicines. CITES prohibits the international trade in parts and derivatives from Tigers and the species is totally protected in Indonesia. The seizure indicates that illegal trade of protected species from South-east Asia to Taiwan and other East Asian destinations continues on a large scale.

Source: [Http://www.traffic.org/news/press-releases/Tiger_poaching.html](http://www.traffic.org/news/press-releases/Tiger_poaching.html)

North America

Farm sea lice plague wild salmon

The transfer of parasitic sea lice from salmon farms to wild salmon populations is much more extensive than had previously been thought, a study in British Columbia, Canada, has found. Sea lice are produced in the farms far more than in the wild, and these lice cause infection levels in wild juvenile salmon near the farm that are much higher than normal. Normally young salmon are not exposed to sea lice because the adults that carry them are out at sea when the juvenile salmon migrate seaward. When infection rates are high enough, the parasites feed on the fish at rates greater than the fish can feed itself, literally eating the fish alive. Young salmon are much more vulnerable due to their small size. The researchers are calling for fish farms to be positioned away from wild salmon habitats.

Source: *Marine Pollution Bulletin* (2005), 50(5), 491.

No ballast on board does not mean no organisms on board

While carrying goods and raw materials to the Great Lakes, international ships, even though fully loaded with cargo and not carrying pumpable ballast water, still carry aquatic species that can be released into the Lakes, according to a recent report. About 90% of ships entering the Great Lakes have no ballast on board and are not covered by ballast water exchange regulations. However, once they unload their cargo they take on Great Lakes water for stability. If they then unload cargo at another Great Lakes port, they must discharge ballast water, which now is a mix of Great Lakes water and residual foreign water and organisms. The discharge of this mixed ballast water can lead to the potential introduction of non-indigenous species to the Great Lakes.

Source: *Marine Pollution Bulletin* (2005), 50(7), 702.

US paddlefish sinking under caviar pressure

Over-harvesting and illegal trade have driven Eurasian beluga sturgeon to near extinction, leaving a void for what connoisseurs consider the tastiest caviar. With this collapse female paddlefish eggs are becoming a popular substitute

as a source for caviar, both in legal and illegal markets. Because demand is high, poachers have been overfishing paddlefish and passing off the roe as beluga. The range of paddlefish has shrunk and populations have declined throughout the Mississippi river basin. Legal sales of caviar are worth USD 90 million per year, but illegal trade can be 10 times as much. The USA currently takes 80% of the world's legally traded beluga. A proposed US ban on the imports was rejected in 2004, but the sturgeon was listed as threatened under the US Endangered Species Act.

Source: *Marine Pollution Bulletin* (2005), 50(6), 616.

Wolves win right to roam

A federal court ruling has paved the way for wolves to return to the north-eastern USA. On 19 August the court blocked the Bush administration's attempt to stop the wolf being reintroduced there. The grey wolf still roams Alaska and Canada but once inhabited most other regions of North America. In 2003 the successful return of grey wolves to central and western states prompted the Department of Interior to declare there was no need to reintroduce them to the north-east as well, but this has been overturned by the court ruling. The wolves will control the abundant populations of moose, beavers and deer that are eating the vegetation, and will also attract tourists.

Source: *New Scientist* (2005), 187(2514), 4.

Ivory-billed woodpecker may not have been rediscovered

Controversy continues over whether the sighting and videotaping of an ivory-billed woodpecker, not seen in the USA since 1944 and believed extinct, may have been a case of mistaken identity. The ivory-billed woodpecker disappeared when its dense forest habitat was chopped down. Scrutiny of the video by some ornithologists has suggested that the bird could be a pileated woodpecker rather than an ivory-billed woodpecker. Following an earlier announcement of the rediscovery USD 10 million had been re-routed from other conservation measures to pay for efforts to save the bird's vanishing habitat. However, examination of new sound recordings and comparison with recordings made in 1935 suggest that the recent sighting may have been an ivory-billed woodpecker after

all. Field work to locate the species is continuing in Arkansas.

Source: *Nature* (2005), 436, 447 & 437, 188–190.

New Ramsar site in Hawai'i

The Kawaiinui and Hamakua Marsh complex on O'ahu's windward coast has been designated a new Wetland of International Importance under the Ramsar Convention. Sacred to native Hawaiians, Kawaiinui Marsh is the largest remaining wetland in Hawai'i, as well as the largest ancient Hawaiian freshwater fishpond. The wetland provides a primary habitat for four of Hawai'i's endemic and endangered waterbirds, the Hawaiian coot, moorhen, stilt and duck. Hamakua Marsh is a smaller wetland connected to Kawaiinui Marsh. It also provides significant habitat for several waterbirds species and is a Hawai'i State Wildlife Sanctuary.

Source: *'Elepaio* (2005), 65(6), 41–42.

Trawlers banned from huge area in Alaska

A ban on commercial fishing nets that destroy the sea floor is to be made over half a million square miles near the Aleutian Islands in an attempt to protect deep water corals and sponges. It is being done in an attempt to conserve the organisms that provide food for the Alaskan fishing grounds. Until now fishing bans are only in areas that have been set aside for the protection of specific birds or mammals. Although the ban area is enormous it only accounts for 5% of the Alaskan fish caught and the financial impact is not expected to be great.

Source: *Marine Pollution Bulletin* (2005), 50(4), 366.

Panamanian ship to pay for coral damage

A settlement of more than half a million dollars has been made in a case where a Panamanian freighter was cited for coral damage in a Florida Keys National Marine Sanctuary. The Panamanian registered MSC Diego anchored in a no-anchor zone of the Sanctuary's Tortugas Ecological Reserve and damaged a 1,175 m² area of coral.

Source: *Marine Pollution Bulletin* (2005), 50(4), 367.

Dolphin strandings have possible link with Navy sonar

Eighty rough-toothed dolphins beached themselves in the Florida Keys in March

at a time when a nuclear-powered submarine was using active sonar to navigate as it trained off the Florida Keys. Twenty of the dolphins made it out to sea within a day but at least 28 subsequently died. Navy and wildlife experts are investigating whether the beaching was linked to the sonar exercises. Mounting evidence indicates that mid- and low-frequency range active sonar can cause whales and dolphins to beach, surface too quickly or behave in other unusual ways.

Source: *Marine Pollution Bulletin* (2005), 50(5), 492–3.

Marine life at risk from seismic mapping

The use of seismic profiling to search for energy deposits under the ocean floor of America's continental shelf poses a serious risk to cetaceans and other marine life. The mapping involves firing sounds, often as loud as 230–240 decibels, at the ocean floor. These sounds are of a similar strength to those of navy sonars, which are thought to be connected to beaked whale strandings. Evidence shows that the bowhead whale avoids areas that are being seismically mapped in the Arctic, and mapping is thought to be responsible for damage to the ears of some fish species.

Source: *New Scientist* (2005), 187(2513), 14.

Central America and Caribbean

Sharks key factor in maintaining coral reefs

A model has been developed of a Caribbean ecosystem and details of its predator-prey interactions. The model food web covers 1,000 km² to a depth of 100 m and includes c. 250 species of marine organisms, including a network of more than 3,000 links between the species. The model has shown that overfishing of sharks triggers a domino effect of changes in abundance that carries down to several fish species and contributes to the overall degradation of the reef ecosystem. This is because there are fewer sharks to feed on carnivorous fish such as grouper, which then increase and prey more extensively on herbivorous parrot fish. A possible effect of this removal of herbivores results in a shift of

reefs from coral to algae dominated as algae growth is unchecked.

Source: *Marine Pollution Bulletin* (2005), 50(6), 614–615.

South America

New hope for great green macaw

The Ecuadorian Minister of the Environment has signed a decree putting into effect a conservation strategy for the great green macaw *Ara ambigua*. The Endangered great green macaw numbers fewer than 2,500 individuals in Central and South America, with just 60–90 individuals of the western Ecuadorian *guayaquilensis* race known, in Esmeraldas and Guayas Provinces. In January 2005 a working group was formed consisting of representatives of the Ecuadorian Ministry of the Environment, Municipality of Guayaquil, Fundación Pro-Bosque and Fundación Rescate Jambelí. Initially the group will focus on a field census and monitoring programme and protect any nests that are located. Future actions will concentrate on habitat protection and restoration through the creation of protected areas and conservation agreements with relevant private land owners.

Source: [Http://www.birdlife.org/news/news/2005/07/great_green_macaw.html](http://www.birdlife.org/news/news/2005/07/great_green_macaw.html)

First curassow sighting for 36 years

Earlier this year a team from Asociación Armonía (BirdLife in Bolivia) saw one and heard three more southern helmeted curassows *Crax unicornis koepckeae* in the Sira mountains of central Peru, the first time the distinctive endemic Peruvian race of this Endangered species has been seen since 1969. An environmental awareness project has since informed local people about their unique bird. Local people reported hunting the curassow in the past, but there is now local enthusiasm to protect the bird now that its global significance has been appreciated. The team hopes to develop a long-term conservation project in the Sira mountains, to continue their awareness work, educate local people about sustainable use of natural resources, and contract a team of park guards.

Source: [Http://www.birdlife.org/news/news/2005/08/curassow.html](http://www.birdlife.org/news/news/2005/08/curassow.html)

Pacific

Joint effort nets illegal fishing in Micronesia

A three-nation marine surveillance operation has netted five foreign vessels fishing illegally in the Micronesian area. Australian-funded patrol boats from Palau, Federated States of Micronesia and the Marshall Islands apprehended vessels from Japan, China and the Philippines that were allegedly violating the 200-mile Exclusive Economic Zones of the three nations. The waters of the Federated States of Micronesia are one of the main tuna fishing grounds in the Pacific.

Source: *Marine Pollution Bulletin* (2005), 50(7), 702.

Australia/Antarctica/New Zealand

Arctic is the chemical sink of the globe

The Arctic and its wildlife are increasingly contaminated with chemicals and pollutants from global sources, according to a recent WWF report. Air, river and ocean currents, drifting sea ice and migrating wildlife species carry industrial and agricultural chemicals from distant sites to the polar environment. Recent studies of polar bears in the Norwegian and Canadian Arctic indicate that exposure to older chemicals, such as polychlorinated biphenyls and organochlorine pesticides, is already at levels where effects are seen in their hormone, immune, and reproductive systems. Arctic contamination also has serious implications for Arctic indigenous peoples who rely on a traditional marine diet.

Source: *Marine Pollution Bulletin* (2005), 50(4), 366.

Shore plovers to head south

One of New Zealand's rarest waders, the threatened shore plover *Thinornis novaeseelandiae*, is set to be reintroduced on a new offshore island location off the South Island early in 2006. The Department of Conservation and its partners in the Shore Plover Recovery Programme will transfer 10–30 captive-bred birds to the new site each year for approximately 5 years. This follows closely the success of the previous transfer programme to an island off the East Coast of the North

Island that is free of introduced predators such as cats and stoats. The current wild population of the shore plover is c. 200 birds. The recovery programme has a 10-year goal of maintaining or establishing shore plovers at five or more locations with a combined population over 250 birds. If achieved this will mean increased insurance for the species against extinction and down-listing from Endangered on the IUCN Red List to the lower threat category of Vulnerable.

Source: [Http://www.birdlife.org/news/news/2005/08/shore_plover.html](http://www.birdlife.org/news/news/2005/08/shore_plover.html)

New Zealand's great whites tagged for first time

Great white sharks in New Zealand waters have been fitted with satellite tags for the first time. The tags collect detailed information about the waters that the sharks move through, and the tags detach after a few months, surface, and transmit their data via satellite. Great white sharks are otherwise difficult to study because of their naturally low abundance, large size and mobility. Researchers will obtain key information on the ecology of great whites and ascertain threats to the survival of this long-lived, slowly reproducing species. Great whites, along with many other shark species, are now thought to be threatened by a combination of game fishing and commercial harvest of fins for shark fin soup.

Source: *Marine Pollution Bulletin* (2005), 50(6), 614.

Easter hope for kakapo

After a lapse of 3 years kakapo have successfully bred again on predator-free Codfish Island. Three chicks hatched just before Easter, followed by two more shortly after, bringing the population of this Critically Endangered flightless parrot to 88. The kakapo population could soon be at its highest level in 25 years. The best kakapo breeding years coincide with abundant mast years when there is plenty of rimu fruit. The 2004–2005 breeding season was a modest rimu year, but supplementary feeding has been carried out by the Kakapo Recovery Team.

Source: *Forest & Bird* (2005), 316, 5.

Stitchbird makes mainland comeback

In the first step in a new 5-year recovery plan 30 stitchbirds (hihi) have been transferred from Tiritiri Matangi Island to the mainland. Shortly afterwards the birds were seen in the vicinity of feeding

stations in the Karori Wildlife Sanctuary. This release follows earlier successful releases of North Island saddleback (tieke), North Island robin (toutouwai) and North Island kaka. Hihi were once found throughout the North Island but declined because of loss of forested areas and the introduction of predators and avian diseases. Recent genetic analysis has revealed hihi may belong to a new family of birds, yet to be named, found only in New Zealand.

Source: *Forest & Bird* (2005), 316, 6.

Disease hits world's rarest penguin

New Zealand's rare yellow-eyed penguins (hoiho) have been hit by a new disease that killed an estimated 60% of chicks in the worst affected areas of South Island. Several hundred chicks died, including 200 found in nests on the Otago coast. With a global population of under 5,000 individuals, this Endangered species is considered the world's rarest penguin. The main threats to the species are introduced predators such as cats and stoats, habitat loss and degradation, and occasional population crashes due to disease or food shortages. The present disease was caused by *Corynebacterium amycolatum*, previously unknown in yellow-eyed penguins.

Source: *Forest & Bird* (2005), 316, 12.

Dolphin discovery

The Australian snubfin *Orcaella heinshohni* has been recognized as a different species to the Asian Irrawaddy dolphin *Orcaella brevirostris*. The new Latin name honours George Heinshohn, who studied the dolphins intensively in the 1960s and 1970s. A combination of anatomical and genetic analysis has shown that the two populations are clearly different species. The snubfin dolphins live in shallow coastal waters and are said to be shy of boats; it is not clear how many there are. Recognition of the dolphin as a separate species places new obligations on Australia and the international community to conserve it.

Source: *New Scientist* (2005), 187(2507), 6.

Supersize mice decimate island's seabirds

Invasive, introduced house mice, three times the size of those in Europe, are devastating seabird populations on the remote Gough Island in the South Atlantic. Gough Island is the most southerly of the Tristan da Cunha group (a UK Overseas Territory). There are 22 bird species nesting on the island of which 20 are seabirds. Among the affected species

are the endangered Tristan Albatross *Diomedea dabbenena*, which has around 2,000 annual breeding pairs restricted to Gough Island and St Helena. The island also hosts 99% (about 1.8 million pairs) of the world's Atlantic Petrels *Pterodroma incerta*. About 60% of all chicks (700,000) die before fledging, probably because of mice predation. The mice may also be eating the eggs and chicks of the rare, ground-nesting Gough Bunting *Rowettia goughensis*, a small finch found nowhere else in the world.

Source: [Http://www.birdlife.org/news/news/2005/07/gough_island.html](http://www.birdlife.org/news/news/2005/07/gough_island.html)

Stamps celebrate seabird return

A series of stamps has been produced to acknowledge the work of the Ascension Seabird Restoration Project which, by June 2005, had encouraged 348 pairs of five species of seabird to return and nest on mainland Ascension Island. This remote island in the middle of the Atlantic Ocean is rich in unique flora and fauna. At the time of its colonization by Europeans in 1815 it was thought to host 20 million individual seabirds but nesting birds were subsequently devastated by feral cats introduced onto the island in the early 19th Century to control introduced rats and mice. Among the island's avifauna is the Ascension Frigatebird *Fregata aquila*, a globally threatened species that breeds nowhere else. It is believed that the species prefers to nest within colonies, therefore it will be a few more years until numbers of other nesting seabirds are at high enough levels to encourage its return to the Ascension Island mainland from its current inaccessible, offshore sanctuary. The Ascension Seabird Restoration Project has been removing feral cats from Ascension Island since 2001. No feral cats have been seen since February 2004, encouraging the return of the seabirds.

Source: [Http://www.birdlife.org/news/news/2005/07/ascension.html](http://www.birdlife.org/news/news/2005/07/ascension.html)

The Briefly section in this issue was written and compiled by Martin Fisher. 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