Briefly

International

Hope for coral reefs

Many coral species are sensitive to rises in ocean temperature, and coral bleaching events have increased in frequency in recent years. Now researchers have shown that some corals may be able to acclimatize to higher temperatures. Experiments involving the hard coral *Acropora millepora* have shown that adult corals are able to acquire increased thermal tolerance as a result of changing the symbiont type in their tissues to a more thermally resistant type, *Symbiodinium* type D. The data show that the change in symbiont type resulted from a shuffling of types already present within the coral's tissues, meaning that the D type did not have to be taken up by the coral from the external environment.

Source: Proceedings of the Royal Society B: Biological Sciences (2006), **273**(1599), 2305–2312.

Ultrasound and algae prove potent force for dealing with contaminated sediment

The use of ultrasound in conjunction with a genetically modified algae provides a wildlife-friendly technique for dealing with contaminated sediments. Ultrasonic vibrations shake mercury loose from sediment, and an algae, modified to increase its natural ability to absorb heavy metals, absorbs the metal from the water. The combined system of ultrasound and algae can remove 30% of mercury from sediment within the first few minutes of treatment. A major advantage of this method over other clean-up techniques is that it is selective; the modified algae absorbs five times the normal amount of a particular group of toxic metals, including mercury, cadmium, copper and zinc.

Source: Marine Pollution Bulletin (2006), **52**, 477–478.

Tactics first used by conservationists now practised by whalers...

One of the accusations levelled at Japan in its dealings with the International Whaling Commission (IWC) concerns the buying of votes by promising to give foreign aid to small island nations in return for their support within the commission. It seems, however, that these tactics are similar to those instigated by Peter Scott, then head of WWF, to obtain the original moratorium on whaling. Evidence shows that many of the countries that voted in favour of the moratorium in 1982 had been offered help with providing suitable delegates and expenses. Scott's biographer writes that China's decision to join the IWC and vote for the moratorium was influenced by a WWF promise to provide USD 1 million towards a panda reserve.

Source: New Scientist (2006), **190**(2556), 14.

... and pay off at the IWC meeting

Japan won an unprecedented victory at the IWC meeting in June, with a majority vote that enabled the passing of a resolution noting 'concern that the IWC has failed to meet its obligations'. Japan is of the opinion that the global moratorium on whaling is no longer necessary and that it continues 'irrespective of stock conditions'. However, a three-quarters majority is required for the moratorium to be overturned, which looks some way off given that support for the resolution was 33–32 votes.

Source: Nature (2006), **441**(7096), 921.

Call for international biodiversity panel

A group of eminent scientists has called for the setting up of an international panel to tackle the accelerating loss of biodiversity. They argue that one of the problems of dealing with the biodiversity crisis is that international agreements concerned with biodiversity do not have the means to mobilize the expertise of a large scientific community to inform governments, with the result that the scientific community does not feel involved in the political process. The authors suggest that the panel should be run along the same lines as the Intergovernmental Panel on Climate Change to bring together the scientists involved in biodiversity research to provide, on a regular basis, validated and independent scientific information to governments, policy-makers, NGOs and the wider public.

Source: Nature (2006), **442**(7100), 245–246.

Deserts feel the heat

Climate change is expected to have a highly variable effect from region to region, but a report from the United Nations Environment Programme suggests that deserts may be among those ecosystems most affected. Climatic pulses are more important than average conditions in desert ecosystems, and because of this even moderate changes in precipitation and temperature can have a severe impact. Contrary to appearance, the 3.7 million km^2 of the world's deserts provide a habitat for many species, which will be adversely affected should the report's projected scenario of an increase in desert temperature by 7°C and a decrease in rainfall of 20% prove correct. However, deserts could also have a role to play in mitigating future environmental change: it has been suggested that an 800*800 km area of the Sahara could capture enough solar energy to provide the electricity needs of the entire world.

Source: BBC News (2006), http://news.bbc.co.uk/1/hi/sci/tech/5041988.stm & *Global Deserts Outlook* (2006), available at http://www.unep.org/geo/gdoutlook/index.asp

Increased biodiversity leads to greater stability in grassland ecosystems

A long-term experiment that directly controlled the number of perennial plant species in prairie grassland plots has shed light on the link between biodiversity and ecosystem stability. Experimental plots with greater numbers of species showed higher temporal stability of ecosystem annual aboveground plant production, and stability also tended to increase as the plots matured. Ecosystem stability was also found to be dependent on root mass. These findings suggest that the supply of some foods, biofuels and ecosystem services could be enhanced through the use of biodiversity.

Source: Nature (2006), **441**(7093), 629–632.

Seagrass beds shrinking

Seagrass beds, which are among the most productive plant communities in the world, are declining throughout their range and, to make matters worse, the reasons behind the declines vary according to where the beds occur. At a state park in Malaysia, for example, increased water-bourne sediment from onshore logging cut down the amount of light available to seagrass beds, whereas at a site in Arctic Canada, seagrass beds were declining because they were in the plume of a fresh water pipe from a Hydro-Quebec plant that had drastically reduced the salinity of the water. The global monitoring programme

SeagrassNet believes that climate change appears to be having only a localized effect on seagrass decline, and that the biggest issue is human pollution of the water.
Source: Marine Pollution Bulletin (2006), **52**, 476.

Albatross Task Force members appointed

Two people have started working with long-line fishermen in South Africa as part of BirdLife's Albatross Task Force. One of them, Meidad Goren, has been working onboard tuna long-liners, carrying out bycatch observations and trialling streamer lines that scare albatrosses away from the baited line. The other Task Force member, Maria Honig, hosted a bycatch workshop for 75 hake long-line fishermen, and has also been training observers.
Source: BirdLife News (2006), http://www.birdlife.org/news/news/2006/06/atf.html. The diaries of the Albatross Task Force members can be read at http://www.savethealbatross.net/field_diary.asp

Marine life to be tracked across oceans

A global project, the Ocean Tracking Network, is to follow the movements of numerous marine species to build up a clearer picture of life beneath the ocean waves. The Network should provide insights into how climate change is affecting marine ecosystems, as well as aiding fisheries management, and is the first project that aims to track individuals on a global scale. Individuals will be tagged with electronic transmitters, which will then be picked up by underwater sensors. Salmon, for example, can have a tag as small as an almond fitted in their abdomen, which sends out a signal received by sensors lying on the ocean floor. Other species being considered for inclusion in the project include penguins, polar bears and whales.
Source: New Scientist (2006), **191**(2558), 29.

DNA barcodes reveal many more new species than expected

An investigation in the western Pacific Ocean that used DNA barcoding to determine mantis shrimp species has found 50–150% more unknown species than expected. The barcoding examined a short length of mitochondrial DNA, enabling known species to be identified and yielding an estimate of the number of unknown species based on the variations in the DNA strand. While it was easy capturing the floating larvae of mantis shrimps in open water, the newly discovered shrimps are proving hard to classify, as the DNA tests need to be backed up with traditional taxonomic classifications, and there is a lack of funding to enable this work to be carried out.
Source: New Scientist (2006), **190**(2553), 20.

Algae causes coral death by indirect methods

Coral death is generally associated with an increase in the abundance of fleshy algae in affected areas but until now it was unclear whether algae caused the death of the coral or merely settled on dead coral. New research reveals that algae enhance microbial activity through the release of dissolved compounds that fuel bacterial growth on coral. Overfishing exacerbates the problem by removing grazers that would otherwise control algae populations. It is feared that as human pressure on reefs increases a positive feedback loop may be initiated, where increased algae numbers lead to more bacterial activity and thus greater mortality of corals, which in turn leads to more algal growth.
Source: Ecology Letters (2006), **9**, 835–845.

Deep-sea fish stocks being decimated

A report by WWF has revealed that fish stocks in international waters are being overfished to the point of extinction, with illegal fishing and bottom-trawling largely to blame. The orange roughy is one of the species under threat, and the bottom-trawling method used to catch this species is also responsible for destroying benthic habitats such as coral reefs by dragging heavy rollers across the sea floor. The report also criticized the regional fishing management organizations that oversee fishing regulations in international waters for poor decision-making and being unable to control the activities of countries that ignore regulations.
Source: BBC News (2006), http://news.bbc.co.uk/1/hi/sci/tech/4996268.stm

Pan-european migrants are disappearing

Long-distance migratory birds that were once common in Britain, such as the spotted flycatcher and European turtle-dove, have greatly declined over recent years, and scientists are worried that this is an indication of environmental damage on a widespread scale. There are four theories for the migrants' dwindling numbers: climate change causing insects to breed earlier, so that the migrants miss the food glut needed to raise their chicks, drought and agricultural intensification in the Sahel, the area that provides the first feeding opportunity for migrants crossing the Sahara, desertification, which is making the Sahara larger and therefore more difficult to cross, and the use of pesticides to control locusts in Africa. On a more positive note, work done by the RSPB and the Ghana Wildlife Society to reduce trapping of the migratory roseate tern has seen the population stabilize after a 90% decline in the UK between 1969 and 1992.
Source: BirdLife News (2006), http://www.birdlife.org/news/news/2006/05/migrants.html

Call for moratorium on long-line fishing to save leatherback turtles

The Sea Turtle Restoration Project has been backed by researchers from nearly 100 countries and over 280 NGOs in its call to instigate a moratorium on high seas industrial long-line fishing to protect leatherback turtles. The leatherback turtle was once the world's most abundant sea turtle but it is now estimated that it may become extinct in the Pacific within 5 years. The Sea Turtle Restoration Project's plan of action, presented to the United Nations in June, includes use of permanent and temporary closures of important areas of the oceans to long-line fishing and the creation of marine protected areas in the high seas to provide a safe area for sea turtles and other species threatened by destructive fishing techniques.
Source: Sea Turtle Restoration Project press release (16 June 2006).

Europe

White-tailed eagles breed in the Netherlands

For the first time in living memory white-tailed eagles *Hailaeetus albicilla* have bred in the Netherlands, successfully rearing one chick. The birds, whose wingspan may measure 2.5 m when adult, bred at the Oostvaardersplassen where every care was taken not to disturb them in the hope that they will return to use the same nest next year.

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What makes the success even more unusual is that the female of the pair is only 3 years old and therefore an inexperienced breeder. Wardens noticed that the male was extremely attentive during the rearing of the chick, and attribute the chick's survival to his behaviour.
Source: Staatsbosbeheer News (2006), http://www.staatsbosbeheer.nl/actueel/nieuws/details.asp?NWS_ID=761 [in Dutch]

Seahorses found at Stansted

Customs officials at Stansted airport in the UK found over 100 dwarf seahorses *Hippocampus zosterae* in a parcel sent from Florida to the UK. As this species is listed under CITES Appendix II, which prohibits trade without a licence, the shipment was confiscated and the seahorses were taken to Colchester Zoo. The conditions under which the seahorses had been transported were poor, with the result that 10 died, but the condition of the remaining individuals is improving.
Source: Colchester Zoo press release (2006).

Dormice living on motorway verges

For a small mammal that spends three-quarters of its year asleep a busy roadside verge might not be the obvious spot to inhabit. However, researchers working for England's Highways Agency found dormice living in 15 out of 40 roadside sites visited in central southern England, and have earmarked a further 200 sites for investigation. Dormice, protected under the Wildlife and Countryside Act, live in overgrown hedgerows and deciduous woodland, feeding on nuts, flowers, fruits and insects. The roadside sites identified by the Highways Agency contained the diversity of habitat and food required by dormice, suggesting that the land alongside motorways and trunk roads may provide ideal areas for dormice to thrive in.
Source: UK Highways Agency press release (18 May 2006).

Sustainability safeguards needed in revision of Biofuels Directive

BirdLife International, the European Environmental Bureau, and Transport and Environment have called on the European Commission to ensure that sustainability safeguards are in place as part of the revisions to the Biofuels Directive. Without such safeguards, greenhouse gas savings will be minimal, biodiversity will suffer and the public may reject biofuels on the grounds that they are not a credible alternative to fossil fuels. There is already evidence that the little bustard in France and the red kite in Germany have been put in danger as a result of the unmanaged conversion of land for biofuels, while the biofuels that Europe imports from abroad increase the damage being wrought to tropical rainforests to grow biofuels.
Source: BirdLife News (2006), http://www.birdlife.org/news/news/2006/06/biofuels.html

Fears over existence of bypass snail

Desmoulin's whorl snail *Vertigo moulinsiana* is no stranger to controversy; it was the subject of a legal case during the building of a major bypass road around Newbury in southern England because the planned route for the road went through its marshy habitat. Now, following a survey of the translocation site where the snails were moved to in 1996, the NGO Buglife has said that the habitat has not been managed properly with the result that the snails have become extinct in the area. The government's agency for conservation, English Nature, has warned that it is premature to state that the snail has become extinct in the area, because the species is known to go through boom and bust periods, and may reappear in greater numbers in the near future.
Source: BBC News (2006), http://news.bbc.co.uk/1/hi/sci/tech/5217558.stm

Baltic cleaning up its act

Eleven pollution hotspots have been removed from the list of the Baltic Sea's worst sources of pollution, following improvements in the processes and pollution abatement technologies at the sites. The delisted hotspots include the capital of Estonia, Tallinn, several other municipalities in Estonia and Lithuania, wastewater treatment sites in St Petersburg and some industrial sites such as fertilizer and cardboard factories. One hundred and sixty three hotspots were designated in 1992 by an international group of scientists, engineers, bankers and environmental managers, according to economic considerations as well as the seriousness of their impact on the environment and human health. A total of 81 hotspots and sub-hotspots remain on the list today.
Source: Environment News Service (2006), http://www.ens-newswire.com/ens/jun2006/2006-06-22-04.asp

British butterfly species in decline

Habitat loss has had a serious effect on the number of British butterfly species, according to a report by the charity Butterfly Conservation, with one particular county of England, Hertfordshire, having lost as many as 17 species of butterfly in the last century. Overall, only 56 butterfly species remain in Britain. Butterfly habitat has disappeared as a result of urban spread, lack of woodland management, and intensive farming practices. The loss of species is most pronounced in counties in the east of England, where the flat topography means there are fewer hills that could have provided a refuge for butterflies from the plough. The loss of butterflies is particularly worrying, as their presence in an area is an indication of ecosystem health.
Source: BBC News (2006), http://news.bbc.co.uk/1/hi/sci/tech/5205358.stm

Two million ha of cork oak forests could disappear within 10 years

A report by WWF has found that three-quarters of the western Mediterranean's cork oak forests could disappear within 10 years if the current decline in the cork stoppers market continues. The process of producing the 15 billion cork stoppers sold to the wine industry every year is entirely sustainable, provides a vital source of income for over 100,000 people and results in a biodegradable and reusable product. In addition, cork oak forests provide a habitat for threatened species such as the Iberian lynx and the cinereous vulture. However, the move towards the use of screw top and synthetic stoppers is leading to the demise of the industry, with the result that large areas of cork oak forests will be at a heightened risk of desertification and forest fires.
Source: Cork Screwed? Environmental and Economic Impacts of the Cork Stoppers Market (2006), available at http://assets.panda.org/downloads/cork_rev12_print.pdf

Fishes' fortunes hang in the balance

A demand from Estonia, Poland and some Mediterranean countries to lift a ban imposed in 2002 on subsidies for more powerful engines in fishing boats has resulted in deadlock following a late night bargaining session in Luxembourg. The subsidies would be used to install new engines in boats under 12 m long, which make up 80% of Europe's fishing fleet, but have been

opposed by the UK and Germany amid fears from conservation organizations that lifting the ban would increase the catching capacity of the boats. EU fisheries ministers will now decide in October how to spend their EUR 4 billion fishing subsidies budget.
Source: New Scientist (2006), **190**(2553), 6.

North Eurasia

Oil spill threat in Sakhalin Island

A new report urges the European Bank for Reconstruction and Development to demand effective protection measures or to decline funding for Shell's Sakhalin project. The sea ice around Shell's Sakhalin operation can last for longer than 6 months, during which time the company would be unable to respond to any spills, while traditional methods of dealing with oil spills are rendered obsolete in this area because of the prevailing weather conditions. Unrecovered oil would pollute the surrounding marine area, which includes the feeding grounds of the last known population of grey whales. The report also points out that there are no existing models for predicting oil movement beneath sea ice and that, without this information, the environmental impact assessment is incomplete.
Source: WWF News (2006), http://www.panda.org/about_wwf/where_we_work/europe/where/russia/sakhalin/

North Africa and Middle East

Afghanistan launches biodiversity conservation initiative

A joint project of the Afghan and USA governments and the Wildlife Conservation Society will work to set up Afghanistan's first official system of protected areas. The Afghan landscape is dominated by the Hindu Kush and the Pamir, which contain some of the greatest mountains in the world, home to species such as the Marco Polo sheep and Persian and snow leopards. The biodiversity project, which is funded by the United States Agency for International Development, is seeking to bring together the governments of Afghanistan, Pakistan, Tajikistan and China to develop a transboundary park in the Pamir.
Source: Environment News Service (2006), http://www.ens-newswire.com/ens/jun2006/2006-06-29-02.asp

New ecosystem found in Israel

A subterranean cave 100 m beneath a limestone quarry in central Israel has been found to contain a unique ecosystem that may have been cut off from the outside world for 5 million years. Eight previously unknown arthropods, including four types of crustacean, a springtail and a scorpion were collected from the Ayalon cave, which is 2.5 km long, pitch black and contains a lake. The specimens found so far, all of which lack eyes, are undergoing DNA analysis to determine when they diverged from their marine and freshwater relatives. Researchers suspect that the base of the ecosystem's food chain is formed by bacteria known as chemoautotrophs that oxidize sulphur for energy.
Source: New Scientist (2006), **190**(2555), 6.

Turkey launches fund for biodiversity conservation

Doga Dernegi, the BirdLife partner in Turkey, has formed an alliance with the United Nations Development Programme and the Turkish Ministry of Environment and Forestry to establish the Turkish Zero Extinction Fund, a national fund aimed at halting biodiversity decline. The fund will work in the 305 Key Biodiversity Areas identified by Doga Dernegi, and projects that will benefit from the fund include the conservation of Vulnerable great bustards, demoiselle cranes, orchids and the Sultansazlığı wetlands. The television network CNN Turk is one of the main sponsors of the fund, and will promote the 10 highest priority projects through a series of programmes on television.
Source: BirdLife News (2006), http://www.birdlife.org/news/news/2006/06/turkey.html

Basra reed-warbler found in Israel

The Vulnerable Basra reed-warbler *Acrocephalus griseldis*, which normally breeds only in the Mesopotamian marshes of Iraq and probably in south-west Iran, has been found in Israel. Two males, one female and a juvenile were trapped and ringed in Hula Valley and are the first individuals to be found breeding in Israel. The finding boosts hopes for a recovery of the species, which has suffered an 80% decrease in its breeding population, largely as a consequence of the draining of the Mesopotamian marshes.
Source: BirdLife News (2006), http://www.birdlife.org/news/news/2006/07/basra.html

Bald ibis tagged

Three northern bald ibis *Geronticus eremita* have been tagged to track their movements as they migrate south from their breeding sites near Palmyra in Syria. The Critically Endangered northern bald ibis was only rediscovered in the Middle East 4 years ago (see *Oryx*, 38, 106–108), and the global population is currently 13 individuals in Syria and 100 breeding pairs in Morocco. Researchers are hoping that by locating the over-wintering areas of the ibis they may discover why so few birds return to their breeding sites. The ibis used to be widespread across the Middle East, northern Africa and the Alps and was revered by the Egyptian Pharaohs but the population declined because of habitat loss, disturbance and persecution.
Source: BirdLife News (2006), http://www.birdlife.org/news/news/2006/07/bald_ibis.html

Camel bone increasing in popularity as ivory substitute in Egypt

Since the CITES ban on ivory came into force in 1990 the ivory trade in Egypt has been in decline. There is also heartening evidence that camel bone is increasing in popularity as an ivory substitute. By 2005 some souvenir shops in Cairo's Khan al Khalili market that had been selling ivory in 1998 had switched entirely to camel bone. Egypt is the largest consumer of camels in the world so there is a ready supply of cheap camel bone. As the price for ivory items rises, and with increased awareness-raising of the source of the remaining ivory items, it is hoped that the ivory trade in Egypt can eventually be phased out altogether.
Source: Swara (2006), **29**, 22.

Sub-Saharan Africa

Logging halted in Gola rainforest

The Government of Sierra Leone, in conjunction with the RSPB and the Conservation Society of Sierra Leone (CSSL), is implementing a groundbreaking project to protect one of Sierra Leone's most biodiverse areas, Gola

forest. The 75,000 ha forest, designated as an Important Bird Area, contains over 270 bird species, including 14 that are globally threatened. Under the new project the forest will be protected from logging and will be patrolled by local people from seven chiefdoms who will also be involved in managing the reserve. The CSSL and RSPB are financing development projects in the area that will bring benefits to up to 100,000 local people, and a fund will be established to cover the costs of protecting the area over the long-term and to support community development programmes.
Source: World Birdwatch (2006), **28**, 4.

Successful prosecutions of landowners guilty of clearing virgin land illegally

Hopes are high that a number of successful prosecutions by South Africa's Department of Water Affairs and Forestry will deter future illegal land clearance. Two of the prosecutions related to the removal of camel thorn without a licence, which is illegal under the provisions of the National Forest Act. One landowner who had also transgressed other Acts while clearing land for agricultural purposes was fined ZAR 15,000. A further case saw the successful prosecution of two farmers who had illegally cleared 12 ha of protected flora to plant a vineyard in the Western Cape; each was fined ZAR 4,000 and they were ordered to rehabilitate the damaged land.
Source: Veld & Flora (2006), **92**, 66–67.

Madagascar gains three new species of mouse lemur

Phylogenetic analysis that investigated *c.* 4,500 base pairs in mitochondrial DNA has revealed that the previously monotypic mouse lemur species of eastern Madagascar, *Microcebus rufus*, should be split into four species; *M. rufus*, *M. jollyae*, *M. mittermeieri* and *M. simmonsi*. The three new species are all named after researchers who have supported conservation programmes in Madagascar. Additionally, another new *Microcebus* species is proposed in western Madagascar. The general distribution of *Microcebus* lemurs in Madagascar is along an east/west divide, and is influenced by the presence of rivers and altitudinal differences that act as barriers to movement of species.
Source: International Journal of Primatology (2006), **27**, 347–389.

Protected area officially gazetted in the Democratic Republic of Congo

The DRC's Ministry of Environment and Conservation of Nature, Waters and Forests has announced the gazettement of the Faunal Reserve of Lomako-Yokokala, 15 years after a process was initiated to create a protected area for the world's most famous bonobo populations. The new 3,625 km² reserve will also be important in protecting other threatened species, such as the endemic Congo peacock, the giant pangolin and *c.* 10 species of primates. The African Wildlife Foundation, which was instrumental in supporting the Ministry during the gazetting process, will remain involved in the future of the reserve by supporting the implementation of a participatory management plan that includes the development of scientific tourism as a source of local income.
Source: African Wildlife Foundation (2006), http://www.awf.org/news/101908

Invasive snail found in Lake Victoria

A researcher has warned of an additional ecological problem for the beleaguered Lake Victoria, already colonized by the voracious Nile perch and the cosmopolitan water hyacinth. Charles Lange first found a specimen of the invasive South American snail *Physa acuta* in the lake in 2004 but was initially unable to identify it. It has since been confirmed as being present in some numbers in Lake Victoria, having being introduced to the African mainland as long ago as the 1980s. Reports from South Africa, where the snail is present in abundance, suggest that the species may significantly reduce food availability for endemic African freshwater snails, as well as for nymphs of mayflies and other insects.
Source: Swara (2006), **29**, 11.

South and South-east Asia

Giant catfish benefits from regal celebrations

Recent celebrations marking King Bhumibol Adulyadej's record-breaking 60th year as monarch of Thailand included a declaration by fishermen from the north of the country that they would stop catching the world's largest freshwater fish, the Mekong giant catfish *Pangasius gigas*, and hand their nets over to the government in return for USD 500 per net. The population of the catfish, which can grow up to 3 m in length and weigh 300 kg, has fallen by 80% in the past 13 years, and the species is categorized as Critically Endangered. Estimates suggest that the population will not recover for at least 30 years, given the slow reproduction rate of the fish.
Source: New Scientist (2006), **190**(2556), 6.

Ban on production and sale of diclofenac boosts hopes for vultures

Three vulture species whose populations have crashed by 97% in the last 15 years should have their fortunes reversed by the Indian government's ban on the sale and production of diclofenac, which causes kidney failure in vultures when they eat carcasses of animals treated with the drug. Pharmaceutical firms are being told to promote meloxicam, a safe alternative for vultures, instead of diclofenac. Two breeding centres set up in India have had some success this year, with two pairs of vultures attempting to breed. The recovery will be a slow process, however, as vultures do not breed until they are 5 years old, and they only produce one egg per year.
Source: BirdLife News (2006), http://www.birdlife.org/news/news/2006/05/vulture_update.html
See also pp. 388–399.

Overfishing in Philippines threatens whale sharks

A study by WWF has found that 32.5% of commercially important fish species in the Philippines are being overfished. Not only does this threaten the livelihood of the fishermen in the region but it may also affect the whale shark population that inhabits these waters. WWF is working with local fishing communities to draw up a fisheries management plan to address issues that may have an effect on the whale shark population, such as illegal fishing. Swimming with whale sharks is becoming a lucrative industry in the Philippines; in 2005 over 7,000 tourists travelled to Donsol to visit the fishes, bringing *c.* PHP 35 million to the economy.
Source: WWF News (March 2006), http://www.panda.org/about_wwf/where_we_work/asia_pacific/where/philippines/news/index.cfm?uNewsID=62160

Survey finds Nepalese National Park nearly devoid of tigers and rhinos

Two years of armed conflict have prevented surveys taking place in Nepal's

Royal Bardia National Park but a ceasefire between Maoist insurgents and government troops has allowed Park staff and staff from IUCN and WWF to survey the Park. They found that poaching had been rife in the Park during those years, with tigers down to three individuals from an estimate of 13 in 2001, and found evidence of only three rhinos, despite more than 70 animals having been translocated to the Park since 1986. The loss of animals has been blamed on poachers who took advantage of the absence of anti-poaching patrols during the insurgency. Fortunately, the habitat escaped largely unscathed, so it is hoped that species will be able to recover provided adequate protection measures are put in place.
Source: Environment News Service (2006), http://www.ens-newswire.com/ens/jun2006/2006-06-01-02.asp

Tiger data missing

The tiger census launched by the Indian government has been criticized because the results of the first phase of the census have not been sent to the Wildlife Institute of India. In fact, the results appear not to have been made public at all, despite initial indications suggesting that tiger numbers have decreased significantly. Researchers are questioning how subsequent phases, which include camera-trapping, can be carried out when the findings of the first phase are not known.
Source: Cat News (2006), **44**, 7.

Baby boom for Javan rhinos

Researchers have found signs that suggest that four baby Javan rhinos have been born this year in Indonesia's Ujung Kulon National Park, a significant step forward for the conservation of this Critically Endangered species, which is estimated to have a population of *c.* 60 individuals. In addition to finding footprints of mothers and offspring, a research team came across a rhino and her female calf in the rainforest. In the past the Javan rhino has faced many threats to its existence, including poaching and volcanic eruptions, but today the main threats are competition for food and habitat encroachment by an invasive palm species.
Source: WWF News (2006), http://www.panda.org/news_facts/newsroom/index.cfm?uNewsID=79280

Rice production threatens Bengal florican in Cambodia

The Endangered Bengal florican *Houbaropsis bengalensis* may become extinct in Cambodia in 5 years because its grassland habitat is being converted to dry-season rice production, a move endorsed by the Cambodian government. The seasonally-flooded grasslands that occur around the world's largest floodplain lake, Ton Le Sap, harbour most of the global population of the florican. Whereas the land around the lake used to be communally owned, land-grabbing is in full swing across the area, pushing the remaining birds into progressively smaller areas of grassland. The World Conservation Society and BirdLife International are working together to promote the establishment of Integrated Farming and Biodiversity Areas to protect the florican's remaining habitat.
Source: World Birdwatch (2006), **28**, 8.

Himalayas may lose 50% of their forests by 2100

The Himalayas, whose watersheds are said to harbour more diverse ecosystems than those of the Amazon, are being deforested so rapidly that less than one-third of the dense forest in the western Himalaya will remain by the end of the century. Large-scale conservation projects are urgently needed to prevent a decline in the area's biodiversity. However, conservation efforts may be hampered by official statistics that suggest that Himalayan forest cover will increase by more than 40% by 2100, which has led to the approval of schemes that will cause further disturbance to the ecosystem, such as the building of hydroelectric dams. It is thought that this erroneous calculation stems from poor sampling and a lack of resources and expertise within government institutes.
Source: New Scientist (2006), **190**(2552), 20–21.

Borneo yields another new species

A new species of snake belonging to the genus *Enhydris* has been found in Borneo, giving further justification to the island's reputation as one of the most biologically diverse regions on Earth. A researcher found the 50 cm long poisonous Kapuas mud snake in the wetlands around the Kapuas river in Kerihun National Park, an area in Kalimantan. It is thought that the snake, like other members of the genus, has a very restricted range, and may even occur only in the area of the Kapuas river drainage system. The snake has one very unusual characteristic, which is its ability to change colour spontaneously, something that has only been seen rarely in snakes but is common in some other reptiles such as chameleons.
Source: WWF News (2006), http://www.panda.org/news_facts/newsroom/news/index.cfm?uNewsID=73220

East Asia

Air pollution desiccates China's skies

Aerosol particles from chimneys and car exhausts are changing the behaviour of the atmosphere in China and preventing the formation of raindrops, with the result that between 1961 and 2000 rainfall decreased by up to 0.4% per year over eastern central China. Particles affect the atmosphere in two ways: firstly, extra particles prevent the formation of heavy droplets that are needed for rain by increasing the number of tiny droplets that repel each other. Secondly, sunlight is absorbed by sooty particles in the atmosphere, raising the temperature of the upper atmosphere and reducing the amount of mixing with the lower atmosphere, thus decreasing the chance of clouds forming.
Source: New Scientist (2006), **190**(2556), 22.

Panda found in new area of China

A group of tourists got an unrivalled view of a panda when they found an injured female near a river in a forest valley, 4 km outside the Houzhenzi Panda Corridor Zone in north-central Shaanxi province. The panda, which had fallen off a mountainside, was rescued and taken to a wild animal rescue centre, where it was found that she had suffered no serious injuries. The discovery is significant because it shows that pandas are able to move into new areas outside the corridor zone, which was previously thought to be the limit of their range in this area.
Source: WWF News (2006), http://www.panda.org/news_facts/newsroom/news/index.cfm?uNewsID=74700

Yangtze river being poisoned

Chinese state media have reported that China's biggest river is being poisoned by pollution. The Yangtze, which supports one in every 15 people on the planet, was previously thought to be immune to pollution, because the 900 billion t of water that flow through into the estuary every year were assumed to

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be sufficient to flush out toxins. It has now been predicted that 70% of Yangtze water will be unusable within 5 years, mainly because of the 25 billion t of waste water dumped in the river every year, 80% of which is untreated. To add to the pollution problems, the Yangtze also has the Three Gorges dam along its course, as well as an ambitious plan to divert water from the Yangtze to the arid north of China using a network of canals.
Source: The Guardian Newspaper (2006), http://environment.guardian.co.uk/waste/story/0,,1846270,00.html

North America

New shark species found in South Carolina

Researchers have come across a new species of hammerhead shark, discovered while examining DNA of scalloped hammerhead sharks. While the new shark looks just like the scalloped hammerhead, a common Atlantic shark that can grow up to 3 m long, its DNA is sufficiently different to warrant its classification as a new species. Unlike the scalloped hammerhead, the new shark appears to have a very limited distribution and may only breed in certain bays off the coast of South Carolina.
Source: National Geographic News (2006), http://news.nationalgeographic.com/news/2006/06/060612-sharks.html

Rockfish succumb to wasting disease

Chesapeake Bay is the epicentre of an outbreak of a fatal wasting disease caused by the bacterium *Mycobacteria* that affects nearly three-quarters of rockfish in the bay. Humans who handle infected rockfish develop a skin infection that, if left untreated, can lead to joint problems. Despite the wasting disease having been discovered nearly a decade ago, it is still not known how or why it first appeared, nor whether the disease will spread to other species. Rockfish were once nearly fished to extinction and were only saved by the introduction of fishing restrictions. It is speculated that, as numbers rose, the fish remained in a body of water too polluted to support previous population levels, making the fish vulnerable to infection.
Source: Marine Pollution Bulletin (2006), **52**, 478.

Giant carp leaps closer to Great Lakes

The Asian carp, which can grow to 45 kg, is only a few kilometres from invading the Great Lakes following its escape from fish farms less than 10 years ago. The carp is known for its prodigious appetite, eating up to 40% of its body weight in plankton every day, and for its energetic leaping out of the water. The invasion could spark major ecological changes in the lakes: there would be less phytoplankton available for small species such as perch, which would in turn lead to a decrease in carnivorous game fish, and a decrease in microorganisms would enable light to penetrate further, thus encouraging the growth of toxic algae species.
Source: Marine Pollution Bulletin (2006), **52**, 360–361.

Non-native fishes thrive in USA's streams

A study by the United States Geological Survey that examined over 650,000 km of streams in 12 western states of the USA has found that one in every four fishes in those streams was non-native. Non-native fish species were most common in interior states, with streams in Colorado containing more non-native than native species. In *c.* 11% of streams across the states all fishes were non-native species, although *c.* 50% of streams, mostly in forested areas, were occupied solely by native fish species. A surprising finding of this study is that less disturbed streams generally contained more non-native fish than native fish, although non-native species were also common in disturbed streams.
Source: Marine Pollution Bulletin (2006), **52**, 603–604.

Mussel beds too hot for comfort

Over the past 40 years biodiversity in the mussel beds along California's coast has dropped by *c.* 60% according to researchers from California State University. Mussel beds rank among the world's most diverse microhabitats, and can harbour up to 300 invertebrate species at any given location. The decrease in mussel bed biodiversity has coincided with a regional shift in climate, which has lead to higher surface water temperatures. The result of these higher temperatures has been an increase in stratification of the water and this, according to the researchers, has lead to a decrease in ocean biodiversity.
Source: New Scientist (2006), **190**(2553), 21.

Central America and Caribbean

Pear Tree Bottom saved – for the moment

A High Court Judge in Jamaica has ruled that the National Environment and Planning Agency (NEPA) and the Natural Resources Conservation Authority acted unfairly in granting an environmental permit to a hotel company to build a 1,918 bedroom hotel in Jamaica's species-rich Pear Tree Bottom area of Runaway Bay, and ordered NEPA to reconsider the application. The judge found that NEPA had failed to consider all of the relevant environmental information, including a crucial marine ecology report that was missing from the Environmental Impact Assessment. The Respondents were granted a 21-day stay on the revocation of the permit to prepare an appeal if they so wished.
Source: BirdLife News (2006), http://www.birdlife.org/news/news/2006/06/runaway_bay.html

Sustainable lobster fishing

Fishermen in Nicaragua have tested and approved sustainable lobster traps, which should prevent over-harvesting of spiny lobsters on the Mesoamerican Reef in Central America. The modified traps allow smaller lobsters to escape but they do not decrease the catch of legally-sized lobsters, which can fetch high market prices and are therefore the most important source of income for many coastal communities. Trials have shown that the modified traps should prevent the illegal catch of thousands of immature lobsters.
Source: WWF News (2006), http://www.panda.org/news_facts/newsroom/news/index.cfm?uNewsID=70840

South America

Goldminers halt rainforest research project

The murders of two guards by goldminers prompted the temporary evacuation of scientists from a research station in Nouragues nature reserve in French Guyana. Staff at the station, run by the French research agency CNRS, were close to completing a major project, the Canopy Operation Permanent Access System, which consists of a helium balloon and basket that provide access

to the rainforest's canopy along a system of cables. The project was previously delayed in 2004 by the ransacking of the research station, also by goldminers. Illegal goldmining is a growing problem in the reserve, and causes serious ecological damage through suctioning of the river bed in search for gold nuggets, felling trees and polluting water bodies with mud and mercury.
Source: Nature (2006), **441**(7093), 555.

New orchid bee species discovered

A new bee species found in Brazil has been named after a Critically Endangered macaw with which it shares its habitat and appearance. Both the bee *Euglossa anodorhynchi* and the glaucous macaw *Anodorhynchus glaucus* are dark blue with yellowish head markings and come from the same area in southern Brazil. The bee may turn out to be a memento mori for the macaw, however, as many fear that the bird is already extinct in the wild.
Source: World Birdwatch (2006), **28**, 3.

Road through the Amazon given the go-ahead

Brazil's President Luiz Inacio Lula da Silva has approved a plan to pave a 1,569 km section of road through the Amazon rainforest to link Cuiaba to the Amazon river port of Santarem, much to the concern of environmentalists. The road, currently a dirt track prone to washing away during seasonal rains, will help to cut transport costs for grain exports and will bring Brazil's main centre-west soybean belt closer to foreign export markets in Europe and Asia. Although the government has said it will ensure that strict environmental controls are in place to protect the rainforest, environmentalists are afraid that paving the road will open the rainforest to squatters, ranchers, loggers and soy farmers.
Source: Environmental News Network (2006), http://www.enn.com/today.html?id=10614

Pacific

Marine protected area established in the Pacific Islands

At 184,700 km^2 the newly established Phoenix Islands Protected Area is the largest marine protected area in the Pacific Islands. It contains a near pristine coral archipelago and is the first marine protected area to contain deep sea habitat, including underwater mountains. The protected area's establishment means that fishing in the area has been restricted, with the result that the Kiribati government will lose revenue normally generated through the issuing of foreign commercial fishing licences. However, the government will be reimbursed as part of a memorandum of understanding signed by the Republic of Kiribati, the New England Aquarium and Conservation International, under which the management and enforcement of the Phoenix Islands Protected Area will be financed though an endowment system.
Source: Marine Pollution Bulletin (2006), **52**, 475–476.

Rats to be eradicated from two islands in Fiji

Two rat eradication programmes are underway by BirdLife Fiji and the University of the South Pacific on the islands of Vatuira and Viwa, respectively. Three species of rat have found their way to these remote Pacific islands: Pacific rats arrived with the first Fijians thousands of years ago, and brown rats and black rats arrived more recently with European travellers. The rats' presence has led to many extinctions of the local fauna, as well as economic and health problems. These rat eradication programmes are well supported by the people of the islands, which is particularly important for the eradication programme on Viwa Island as this is a large, populated island with the added complication of harbouring a threatened ground frog.
Source: BirdLife News (2006), http://www.birdlife.org/news/news/2006/05/fiji.html

Australia/Antarctica/New Zealand

Fledging successes on Chatham Islands

Chatham petrels *Pterodroma axillaries* have successfully fledged a chick on Pitt Island for the first time in over 100 years. This Critically Endangered species was previously confined to Rangatira Island, a small island off Pitt Island, but a 4-year programme to establish a second breeding colony was set up in 2002. Two hundred petrel chicks were transferred to a predator-free enclosure on Pitt Island, and this year a pair returned and successfully reared a chick. Elsewhere on the island group a record 11 Chatham Islands taiko *Pterodroma magentae* fledged thanks to effective predator control in their breeding area on Chatham Island. This brings the world population of this Critically Endangered species to between 120–150 individuals.
Source: BirdLife News (2006), http://www.birdlife.org/news/news/2006/07/chatham.html

Wetas involved in seed dispersal

More than a century after Charles Darwin hypothesized that insects might be involved in seed dispersal, research in New Zealand has shown that wetas, giant, flightless grasshoppers that are endemic to New Zealand, occupy the seed-dispersing role normally performed by small mammals. The researchers suspect that, while the wetas' seed-dispersing abilities are more localized than those of birds, they are probably involved in seed dispersal from shrubs with diverging branches, which birds would find harder to reach.
Source: Forest & Bird (2006), **320**, 13.

Clap your hands if you believe in fairy terns

Unlike Tinkerbell, New Zealand's Critically Endangered fairy terns may not escape extinction through the power of belief alone. News that the New Zealand population of fairy terns may be genetically distinct from fairy terns in New Caledonia and Australia and therefore the world's most threatened tern species has been followed by the revelation that the 36 remaining individuals are threatened by a proposed development of up to 2,000 houses in their sand dune habitat at Mangawhai Heads, north of Auckland. While the developers say measures will be taken to keep pets away from the terns, the small size of the population means that one dog or cat could do enough harm to cause the fairy terns' extinction.
Source: Environmental News Service (2006), http://www.ens-newswire.com/ens/apr2006/2006-04-28-04.asp

Beck's petrel returns after 77-year absence

Beck's petrel *Pseudobulweria becki*, unrecorded since 1929, has been photographed in the Coral Sea, off the coast of Australia. Richard Baxter, a birding tour guide, was able to compare the individual with Tahiti petrels, with

which it can be confused, but the Beck's petrel was significantly smaller than the Tahiti petrels and it had a pale chin, unlike the Tahiti petrels. Despite not having been seen for so many years, Beck's petrel had not been classified as Extinct, because conservationists are keen to avoid the so-called 'Romeo error' where a species is declared extinct prematurely.
Source: BirdLife News (2006), http://www.birdlife.org/news/news/2006/06/becks_petrel.html

Non-native species invading Antarctica

Rising temperatures, which make it easier for invading species to survive, and an increase in tourism, which may provide invaders with a route into the area, are making Antarctica vulnerable to invasion by non-native species. While over 200 non-native species have been introduced to islands around the Antarctic, in some cases leading to the destruction of whole seabird colonies and local vegetation, the Antarctic itself has escaped so far. Delegates at the Antarctic Treaty Consultative Meeting, held at the end of June 2006, agreed that the issue of non-native species should be given the highest priority.
Source: New Scientist (2006), **191**(2558), 16.

Campbell Island teal ducklings spotted

The flightless Campbell Island teal *Anas nesiotis* was reintroduced to Campbell Island in 2004, with a further release of captive-bred birds in September 2005. There was disappointment that the ducks did not breed in their first year on the island, as had occurred on other islands where the ducks were released but 2006 has proved more successful. Members of an albatross research team spotted a brood of ducklings swimming with their parents by the Wharf at Beeman Base in January. A local teal monitoring team, aided by a dog called Percy, subsequently found a small duckling with a female teal, three juveniles and three nests with eggs.
Source: BirdLife News (2006), http://www.birdlife.org/news/news/2006/06/campbell.html

City of weeds

Auckland's 400 native plant species are far outnumbered by the weeds (220 species) and exotic plants (10,000 species) that occur in the city, making it the weediest city in the world. Every year an average of four exotic plant species become naturalized in the city, by escaping from cultivation and reproducing in the wild. Native plants are at risk of displacement by weeds and escaped exotics, and native animals may also be affected through a reduction in their food supply.
Source: Forest & Bird (2006), **320**, 6.

The *Briefly* section in this issue was written and compiled by Elizabeth Allen and Martin Fisher, with additional contributions from Matt Walpole and Anthony Rylands. Contributions from authoritative published sources (including web sites) are always welcome. Please send contributions by e-mail to oryx@fauna-flora.org, or to Martin Fisher, Fauna & Flora International, Great Eastern House, Tenison Road, Cambridge, CB1 2TT, UK.