

International

Red List Index to become indicator for UN's Millennium Development Goals

The Red List Index, which is based on the proportion of species in each category of the IUCN Red List, will be used as the basis for a new Millennium Development Goal (MDG) indicator from 2008. The Proportion of Species Threatened with Extinction will be used alongside other MDG indicators, such as rates of infant mortality and proportion of population with an income of <USD 1 per day, to assess progress in achieving the eight MDGs as the target date of 2015 approaches. The eight MDGs, which have been agreed by all the world's governments, range from ensuring environmental stability to halving extreme poverty. *Source: BirdLife International News (2007), http://www.birdlife.org/news/news/2007/05/birds_become_development_indicator.html*

Climate change can be managed if swift action is taken now

A report by the Intergovernmental Panel on Climate Change (IPCC) has suggested that the growth in greenhouse gas emissions can be cut at a reasonable cost, and that major climate impacts may be avoided provided global emissions start to decline within 1-2 decades. Researchers believe that stabilization of atmospheric CO₂ concentrations at between 445-480 ppm is needed to keep future temperature rise in the order of 2.0-2.8°C. Current levels of atmospheric CO₂ are c. 425 ppm, meaning that significant cuts in emissions need to occur within a few years. Increasing the use of renewable energy, improving energy efficiency and reducing deforestation will be key aspects of reducing emissions, according to the IPCC, although the Panel's chair warned that economic incentives will be necessary to encourage technological transformation in current practices. *Source: BBC News (2007), <http://news.bbc.co.uk/1/hi/sci/tech/6620909.stm>*

Asian crime syndicates implicated in illegal ivory trade

A report by TRAFFIC that examined c. 12,400 ivory seizure cases from 82

countries has implicated Asian-run crime syndicates based in Africa in the increase of the illegal ivory trade. Three African countries, the Democratic Republic of Congo, Cameroon and Nigeria, are thought to be major routes for ivory trafficking, much of it destined for international markets, particularly in Asia. China has a high demand for ivory, which either enters the country directly or through ports such as Hong Kong, Macao and Taiwan. Japan and Thailand are also important final destinations, and the Philippines acts as a transit country. These seven countries and territories account for 62% of the 49 largest ivory hauls ever recorded on the Elephant Trade Information System. *Source: TRAFFIC (2007), <http://www.traffic.org/RenderPage.action?CategoryId=1858>*

Japan's 'provocative act' rejected at annual IWC meeting

Anti-whaling groups voted against an offer from Japan at the IWC's annual meeting that could have resulted in Japan reducing the scale of its whale hunting in the Arctic. Japan was seeking approval for its request to instigate limited commercial hunting by four coastal communities, in return for which the country would have considered aborting its plans to include humpback whales in its Antarctic catch. Japan's whale-hunting activities in the Antarctic come under the remit of scientific research, and currently allow minke and fin whales to be caught. Now, however, Japan is keen to add 50 humpbacks to this quota. This move has caused particular outrage among Australia and New Zealand, as humpback whales are particularly important assets in their whale-watching industries. *Source: BBC News (2007), <http://news.bbc.co.uk/1/hi/sci/tech/6699201.stm>*

Three million kg of rubbish fished out of the world's waterways

Volunteers in 68 countries picked up 7.7 million pieces of rubbish during an annual beach clean-up day in 2006, according to The Ocean Conservancy. The most common form of rubbish was cigarettes and cigarette butts, which made up c. 1.9 million of the total amount of rubbish collected. Food wrappers and containers were the second most common form of rubbish collected from the 55,000 km of coastlines, waterways and ocean, river and lake bottoms cleaned by the 350,000 volunteers who took part. Discarded fishing gear is also a sizeable problem in the world's

waterways. Along with plastic debris it is responsible for the deaths of >1 million sea birds and >100,000 marine mammals annually.

Source: Marine Turtle Newsletter (2007), 117, 17.

Model designed to prioritize islands for vertebrate eradication

Small islands have lost more species to extinction than continents over the last 400 years, and one of the major causes of this high rate has been invasive alien vertebrates. Modern techniques have made the eradication of vertebrates from islands more feasible, with the result that many islands are candidates for eradication of alien vertebrates. A group of researchers have now drawn up a model, using threatened bird species, to determine which islands yield the greatest conservation benefit per unit of expenditure on vertebrate eradication. The results of the model show that, while greater conservation benefit would be achieved through eradication of vertebrates from larger islands, benefit per unit cost of expenditure was higher on smaller islands.

Source: Animal Conservation (2007), 10, 380-390.

Threat to farm animal diversity

A report to the Commission on Genetic Resources for Food and Agriculture has revealed that the spread of large-scale industrial livestock production is threatening the genetic diversity of the world's farm animals. Many traditional breeds of animal are particularly well-adapted to the conditions where they have been bred but the ever-increasing demand to feed the world's growing population means that farmers are turning to high output animals, often of European descent, bred to supply uniform products. The report estimates that one livestock breed per month has become extinct over the past 7 years, with the narrowing of genetic diversity almost complete in Europe and North America, and warns that livestock in developing countries may follow unless action is taken.

Source: FAO Newsroom (2007), <http://www.fao.org/newsroom/en/news/2007/1000598/index.html>

Seeds hitch free rides on motorways

Experiments carried out inside motorway tunnels in Germany have revealed that seeds travel long distances by hitching lifts on cars. Annual seed rain in three tunnels in Berlin was between 635-1,579 seeds per metre, with half of the

204 species whose seeds occurred in the tunnel non-native species and 19% highly invasive. Tunnels were chosen to exclude dispersal by non-traffic means, and the researchers also sampled the vegetation around the tunnel entrance to exclude the possibility that dispersal was local. The findings were consistent in that the composition of seeds in tunnels resembled the regional flora of Berlin rather than the local flora, implying that traffic routinely disperses seeds over long distances.

Source: *Conservation Biology* (2007), 21, 986–996.

Offsetting sea bird deaths alternative to closing fisheries

In cases where bycatch of sea birds persists despite attempts to halt sea bird death the last resort is normally to close the fishery. Recent research from Australia, however, suggests there may be another way: offsetting dead sea birds. Using a model, researchers looked at what would happen if fishermen paid a levy for catching flesh-footed shearwaters, which occur on Lord Howe Island where they are threatened by fishing and rats. Another simulation of the model examined the effects on the shearwater population if fishing were banned within 750 km of the island. In both cases, the population increased by 60% in 20 years but banning fishing cost >USD 3 million in lost revenue whereas rat eradication cost USD 500,000.

Source: *New Scientist* (2007), 195(2614), 6.

Humans utilizing a quarter of the earth's resources

Humans are using 24% of the earth's production capacity, according to a new study based on data from the UN Food and Agriculture Organization. Humans use c. 15.6 trillion kg of carbon annually, half of which is used up by growing crops. The study's authors warn that while the situation may be stabilized by making food production more efficient, expanding biofuel production could lead to disaster. To replace fossil fuels completely with biofuels some models suggest a four or fivefold increase in biofuel production is needed, which would mean clearing the world's rainforests. Not only would this affect the species that occur there, but it would also result in a drier climate, as rainforests help seed rainfall.

Source: *New Scientist* (2007), 195(2611), 15.

Deadly waiting game

The decision to ban trade in a species may result, ironically, in more individuals

being killed in the run-up to the legal enactment of the decision. Researchers examined trading records held by CITES for 46 species where records existed for trade before and after the enactment of a trade ban. They found a worrying surge in the number of individuals traded in the year before the ban became legal. In the case of Kleinmann's tortoisés, for example, about half the population was killed in the year before trade in this species was banned. The amount of time between the proposal of a ban and its legal enactment is currently between 240–420 days, a time period that should be cut, or subject to stringent trading quotas in the species concerned, say the researchers.

Source: *New Scientist* (2007), 194(2606), 7.

RoboSwift soars off the page

A propeller-driven robotic aircraft that uses techniques gleaned from studies of swifts in flight is currently undergoing construction and is due to be unveiled in March 2008. The robot's designers observed swifts flying in wind tunnels and used high-speed footage to calculate how far the birds sweep back their wings at different airspeeds, as well as how they sweep one wing further back than the other when turning sharply. RoboSwift, which has a 50 cm wing span and weighs only 80 g, is equipped with individually hinged 'feathers' on the outer wing, and each wing can be controlled independently. It is hoped that by flying RoboSwift among real swifts, researchers will learn even more about the wing dynamics of these agile birds.

Source: *New Scientist* (2007), 195(2611), 26.

Male-biased sex ratios bad news for estimates of threatened bird populations

Researchers estimating the population size of threatened bird species frequently use the number of males as an estimate of the number of breeding pairs because males are often more conspicuous and therefore easier to spot. Now a new study has revealed that this may lead to overestimates of population size because in many bird species there are more males than females. An explanation for this is that females do not live as long as males, so as generations get older they are increasingly dominated by male birds. More worryingly still, the study found that the rarer the species, the more male-biased its sex ratio becomes. This may be because one of the major threats faced by birds comes

from introduced predators, which often kill incubating females.

Source: *BirdLife International News* (2007), http://www.birdlife.org/news/news/2007/08/sex_ratios.html

Leave forests alone to slow global warming

Paying countries not to destroy their tropical rainforests is a faster and cheaper way of preventing CO₂ emissions than the technology being developed to trap CO₂ produced by burning fossil fuels, according to a study by the Global Canopy Programme. Every 24 hours deforestation produces as much CO₂ as would be produced by aircraft carrying 8 million people between London and New York. Deforestation accounts for 18% of all carbon emissions but because existing forests are excluded from current carbon credit trading schemes, farmers can get more money by cutting down virgin forest to plant new trees than if they protected the existing trees.

Source: *New Scientist* (2007), 194(2604), 4.

Nocturnal arboreal mammals not keen on flashes

A camera-trapping study of the nocturnal kinkajou in the forests of Costa Rica has suggested that this method of study may be more invasive than has previously been thought. The kinkajous in the study showed progressive avoidance behaviour, with none of the animals captured on film traversing beyond the spot in the tree where they were photographed. The eyes of the kinkajou, which are more sensitive to light than human eyes, may render the animals temporarily blinded by the camera's flash. Given these findings, infra-red beams may be more suitable for use with light-sensitive species.

Source: *Small Carnivore Conservation* (2007), 36, 38–41.

Biodegradable plastic may ease at-sea storage space conundrum

A new type of plastic that can degrade in seawater in just 20 days looks set to solve a major headache for ocean-going ships. Currently ships have to store all the plastic they use until they reach port, but researchers have developed plastics made of modified polyurethane that can be altered in structure to suit a wide range of uses. Whereas conventional plastics take years to break down and can produce toxic by-products during this process, the degradation of these new plastics results in natural by-products such as water, lactic acid, CO₂ and L-lysine, all of which occur in nature.

What is more, the new plastics are denser than seawater, so tend to sink to the ocean floor rather than float.

Source: *Marine Pollution Bulletin* (2007), 54, 505.

New classification developed for marine conservation planning

To create geographically representative systems of protected areas it is necessary to have biogeographical classifications. In the past, however, most mapping of biodiversity patterns has been limited to terrestrial ecosystems. Now a team of researchers has produced a new global system for coastal and shelf areas, called the Marine Ecoregions of the World (MEOW), consisting of a nested system of 12 realms, 62 provinces and 232 ecoregions. MEOW was developed using existing data and with three main principles in mind: the classification should have a strong biogeographical basis, offer practical utility, and be characterized by parsimony. The researchers believe that MEOW will enable gap analyses and assessments of representativeness in a global framework, in addition to providing sufficient detail to be of use in marine conservation.

Source: *BioScience* (2007), 57, 573-583.

CITES rejects proposed restrictions on shark trade but sawfish trade banned

At the recent CITES meeting in The Hague, delegates voted against an attempt by the European Union to restrict trade in two threatened sharks. Bodies such as the CITES secretariat and the IUCN supported the proposal, which called for trade in the spiny dogfish and the porbeagle to be limited, but the Food and Agriculture Organization felt that neither of the species met the criteria that warrant listing on CITES Appendix II, suggesting that improving fisheries management was a better option. Meanwhile, a proposal to ban trade in sawfish, another type of shark whose snouts, or rostra, can sell for >USD 1,000 each, was passed with little opposition, causing frustration among some delegates who perceived CITES as only supporting shark species when they reach the brink of extinction.

Source: *BBC News* (2007), <http://news.bbc.co.uk/1/hi/sci/tech/6735047.stm> & <http://news.bbc.co.uk/1/hi/sci/tech/6740609.stm>

Bear detection kit launched

The World Society for the Protection of Animals has developed a test kit, similar in appearance to a home pregnancy

testing kit, which enables the detection of bear products in medicines and other products. It is hoped that the kit, which works by detecting the presence of a common protein, will help customs officials and wildlife trade officers to identify illegal products. Initial tests of the kit have been positive, with a range of bear products, including teeth, blood, dried galls and fur, having been detected. It is thought that >12,000 bears are kept in farms in China, Vietnam and South Korea, where their bile is extracted daily for use in products ranging from shampoo to traditional medicine, despite synthetic alternatives having been available for decades.

Source: *BBC News* (2007), <http://news.bbc.co.uk/1/hi/sci/tech/6742671.stm>

Slow loris trade banned but bigger picture still unclear

The Cambodian government's proposal to ban trade in slow loris was approved at the CITES meeting, but conservationists are concerned the emotive appeal of this primate may be hampering rational analysis of the problem. Slow loris are popular as pets, retailing for USD 1,500-4,500 but a large number die in transit and many more are injured, with vendors known to remove animals' teeth to sell them as babies. Lorises are also used in traditional remedies, with some people believing that domestic trade, despite being illegal, could be having a more serious effect on populations than international trade. Other researchers are concerned that the lack of knowledge about this species, which has recently been split into five species, all of which are categorized as Endangered or Vulnerable, may mean that habitat loss is a greater threat than trade.

Source: *BBC News* (2007), <http://news.bbc.co.uk/1/hi/sci/tech/6731631.stm>

Protection for corals used in jewellery

Corals belonging to the genus *Corallium* have been placed on CITES Appendix II, meaning that trade permits will only be issued in cases where the health of wild coral populations will not be affected. Demand for red coral is intense, with red coral necklaces selling for up to USD 20,000 in the USA, and over-harvesting of *Corallium* in the Mediterranean and western Pacific is causing population declines. Resistance to the decision came from Italian coral harvesters and, because EU countries vote as a block at CITES conferences, this caused some friction within the EU contingent. However, a compromise that includes delaying

implementation of the decision for 18 months and granting individuals an allowance to carry up to seven pieces of finished jewellery mollified these concerns.

Source: *BBC News* (2007), <http://news.bbc.co.uk/1/hi/sci/tech/6750433.stm>

Proposal for legal trade in tiger parts rejected

A 14-year ban on trade in tiger parts will remain in place in China, after a move to allow trade in parts from captive tigers was quashed at the CITES conference. China has nearly 5,000 tigers in privately-run tiger farms, which have admitted stockpiling tiger carcasses in the hope that the ban on trade would be lifted. Investors in these establishments have been putting pressure on the government to lift the ban so they can sell tiger products such as tiger bone wine. As well as rejecting the proposal to rear tigers for trade in their parts, three countries that have tiger populations, India, Nepal and Bhutan, were joined by the USA in calling for China to phase out tiger farms.

Source: *WWF Newsroom* (2007), http://www.panda.org/news_facts/newsroom/news/index.cfm?uNewsID=106740

Europe

Europe's farmland birds in sharp decline

Europe-wide breeding bird surveys carried out over the past 25 years have revealed a 44% average decline among common farmland birds, a decline that is being blamed on EU-wide agricultural intensification. The research, carried out by the Pan-European Common Bird Monitoring Scheme, found that the most rapidly declining species across Europe are the grey partridge, corn bunting and turtle dove, all of which have declined by >50% since 1980. The organizations involved in the study are calling for a reform of the Common Agricultural Policy because the European Union subsidies and programmes instigated through this Policy have driven agricultural intensification in member states.

Source: *RSPB press release* (6 June 2007).

Fear of cats may suppress urban bird populations

A new study has shown that the relationship between cats and urban birds is more complex than initially thought. Whereas previous studies have examined

the direct effects of cat predation on bird mortality, the study used a model to reveal that sub-lethal effects of cats on birds, such as affecting where and how birds forage, may also have a pronounced effect on urban bird populations. In areas where cat density is high, such as in the UK, and even when predation mortality is low, a small reduction in fecundity as a result of sub-lethal effects can result in decreases in bird abundances of up to 95%.

Source: *Animal Conservation* (2007), 10, 320-325.

Rise in use of plastic in Danish kittiwake nests

A repeat of a study first carried out in 1992 has found an increase of 17.9% in the number of kittiwake nests containing plastic garbage such as synthetic string and net fragments. The first study found that 39.3% of kittiwake nests on the Bulbjerg cliff at the Jammerbugt in north-west Denmark contained various types of plastic debris, whereas a new survey of the same colony found that the number of nests containing plastic debris had risen to 57.2%. The quantities of debris found in these nests seem to reflect the amount of debris available on the beach and in the area surrounding this colony. This is in spite of the North Sea having been designated a MARPOL-Special Area for garbage in 1991.

Source: *Marine Pollution Bulletin* (2007), 54, 595-597.

Number of species at risk in UK doubles in 13 years

A report by the UK Biodiversity Action Plan has revealed that 1,149 species of plant, mammal, bird and insect, as well as 67 types of habitat, are at risk from climate change and human activity. This is a large increase on the numbers included in the last report in 1994, which recorded 577 species and 49 habitats as threatened. The Department for the Environment, Food and Rural Affairs stated that the increase is mainly due to the collection of more accurate information on the status of British species and habitats following 2 years of research by 500 wildlife experts and large numbers of volunteers. Conservationists blame the high level of threat to species and habitats on a range of factors including farming techniques and inappropriate planning.

Source: *BBC News* (2007), <http://news.bbc.co.uk/1/hi/uk/6729535.stm>

Otter populations show strong recovery

Otters in England and Wales are continuing to make a strong comeback, with the Environment Agency (EA) suggesting that declining levels of certain chemicals have played an important part in their recovery. While many factors have been implicated in the decline of the otter, an 11-year study by the EA has shown a correlation between the use of organochlorines such as the insecticide dieldrin and the decline in otter populations. Dieldrin and other organochlorines were widely used in agriculture after the Second World War, and were particularly damaging to otters because they washed into watercourses and contaminated the otters' fish prey, and eventually had an adverse effect on the reproductive abilities of the otters. Dieldrin and other organochlorides were withdrawn from use from 1962 onwards, and banned in 1989.

Source: *BBC News* (2007), <http://news.bbc.co.uk/1/hi/sci/tech/6742033.stm>

Unique Scottish tree species found

A tree that is a cross between rowan and whitebeam has been found growing on the Isle of Arran, off the Scottish coast. Researchers discovered 2 specimens of the Catacol whitebeam *Sorbus pseudomeincichii* after analysis of the genetics of whitebeams by Scottish Natural Heritage revealed a more diverse population than originally thought. The researchers believe that the Catacol whitebeam from Arran may slowly be evolving into a new type of tree that will probably be similar to a rowan in appearance. Seeds and cuttings have been taken from the newly discovered species.

Source: *BBC News* (2007), http://news.bbc.co.uk/1/hi/scotland/glasgow_and_west/6754975.stm

Via Baltica construction halted for time-being

According to reports in the Polish media, the European Court of Justice (ECJ) has received notification from the Polish government that construction on the controversial Augustow bypass will not start until the ECJ's final judgement on the case, expected in 2 years' time. The bypass was due to pass through the Rospuda Valley, a designated Natura 2000 site this is home to the lesser-spotted eagle, white-tailed eagle and western capercaillie. The decision follows an application by the European Commission to the ECJ for temporary suspension of the construction works.

Source: *BirdLife International News* (2007), <http://www.birdlife.org/news/news/2007/09/ViaBalticaroadhalted.html>

North Africa and Middle East

Cyprus attracts opprobrium for its decision to allow turtle dove shooting

The conservation community reacted with shock to the Cypriot government's decision to allow spring hunting of European turtle doves as they fly over the island en route to their breeding grounds in mainland Europe. The decision contravened the EU Birds Directive under which the shooting of birds on migration towards breeding grounds is banned to ensure that birds are able to reproduce and thus replenish their numbers. The issue is particularly serious given the declining numbers of the turtle dove throughout Europe. BirdLife International informed the European Commission about the decision, and asked for an immediate and firm reaction.

Source: *BirdLife International News* (2007), http://www.birdlife.org/news/news/2007/05/cyprus_spring_hunting_announced.html

Oryx sanctuary removed from UNESCO list...

The Arabian Oryx Sanctuary in Oman has become the first site to be deleted from UNESCO's World Heritage List since the Convention governing the Protection of the World Cultural and Natural Heritage came into force in 1972. The World Heritage Committee removed the site following a decision by Oman to reduce the size of the protected area by 90%, a move viewed by the committee as destroying the site's value. The site, which was inscribed in 1994, had a population of 450 Arabian oryx in 1996 but this number has dwindled to 65, with only 4 breeding pairs, as a result of poaching and habitat degradation.

Source: *UNESCO News Service* (2007), http://portal.unesco.org/en/ev.php-URL_ID=38721&URL_DO=DO_TOPIC&URL_SECTION=201.html

... while workshop draws up strategies for oryx conservation and reintroduction

A group of participants from the 25 member countries of the Coordinating Committee for the Conservation of Arabian Oryx, which include the United

Arab Emirates, Oman, Saudi Arabia, Bahrain, Qatar, Syria, Yemen and Jordan, took part in a workshop organized by the Committee in conjunction with the Environment Agency, Abu Dhabi. The aim of the workshop was to draft a Regional Strategy to Conserve Arabian Oryx, with the delegates discussing their views and experiences regarding the best ways to conserve Arabian oryx through captive breeding and/or re-introduction programmes.

Source: *UAE Interact* (2007), http://uaeinteract.com/docs/Oryx_conservation_workshop_concluded/26600.htm and *Environment Agency - Abu Dhabi News Center* (2007), <http://www.ead.ae/en/?T=4&ID=3229>

Basra reed warbler found breeding in Israel

Researchers have recorded the first breeding site of the Basra reed warbler outside Iraq, in Israel's Hula Valley. Four individuals were found in this area last year, and 2007 saw the return of all three adults ringed last year to the same site. Irrefutable evidence that this species is breeding in the Hula Valley was recorded, with the discovery of two family groups with at least one fledgling. The Basra reed warbler has undergone serious declines in its breeding sites in Iraq's Mesopotamian marshes, which were heavily drained during the time of Saddam Hussein. The marshes are now being re-flooded but the Basra reed warbler remains categorized as Endangered on the IUCN Red List.

Source: *BirdLife International News* (2007), http://www.birdlife.org/news/news/2007/08/basra_israel.html

Sub-Saharan Africa

Six new species found in remote Congolese forest

A forest in the east of the Democratic Republic of Congo that has been inaccessible since 1960 because of political instability in the region has yielded six new species following a visit by researchers from the Wildlife Conservation Society. The 3-month expedition discovered two shrews, a bat, a rodent and two frog species, one of which may be an entirely new genus. The expedition, which encompassed the Misotshi-Kabogo Forest and the Marunga Massif, found that c. 1,000 km² of forest was still intact, in spite of the years of unrest in the area. The biological richness of the

forest, which has been separated from the main Congo Forest block for at least 10,000 years, is sufficient to warrant protected area status, according to the researchers.

Source: *Swara* (2007), 30(2), 9.

Africa's Benguela Current claims 34,000 sea birds annually through long-lining

Long-line fishing in the Benguela Current Large Marine Ecosystem, which stretches north from the west coast of South Africa to the Namibian and Angolan coasts, is estimated to kill as many as 34,000 sea birds, 4,200 sea turtles and >7 million sharks, rays and skates annually. A new report, which has for the first time assessed the impact of long-line fishing on vulnerable species foraging in this rich marine ecosystem, has also provided recommendations for reducing these deaths, such as the use of *tori*, or bird-scaring lines, to keep birds away from the baited hooks, as well as providing specific recommendations for the three countries that border the Current.

Source: *BirdLife International News* (2007), http://www.birdlife.org/news/news/2007/05/seabirds_south_africa.html

Herdsmen clash with predators in Ugandan National Park

Lions, leopards and hyenas in Uganda's Queen Elizabeth National Park are at risk of extirpation following the temporary resettlement of Basongora herdsmen around the fringes of the Park. The herdsmen were settled in the area in March 2006 after their eviction from the Virunga National Park in neighbouring DRC. In addition to felling Park trees for firewood and building materials, herdsmen have been poisoning the predators in the Park, with an estimated 80% of the Park's hyenas having been killed in this way. The Ugandan government is having trouble finding a suitable area for the permanent resettlement of the Basongora, and efforts to evict c. 1,000 herdsmen and their cattle in May 2007 had to be shelved when violence broke out.

Source: *Swara* (2007), 30(2), 8-9.

Proposed soda plant threatens lesser flamingos at Lake Natron

Seventy-five percent of the world's lesser flamingos, as well as other wildlife, are at risk from a soda ash extraction and processing plant planned for the shores of Lake Natron, Tanzania. The plant would be able to pump 560 m³ of brine per hour from the lake, and would require the building of roads and housing for

the plant's workers. In addition, the plant would consume c. 106,000 l of water h⁻¹ in an area where water is already scarce, jeopardizing the livelihoods of the local Maasai. The development at Lake Natron, a Ramsar site and the only major breeding site of the lesser flamingo, has been proposed by a joint venture of Tata Chemicals Limited and Tanzania's National Development Corporation.

Source: *Swara* (2007), 30(2), 48-51.

Seven wildlife rangers killed in Kenya, DRC and Chad in 1 week

Seven rangers patrolling the Tana River District in Kenya were attacked by a group of armed men, suspected to be poachers, resulting in a gun fight that left three rangers and four of the attackers dead. The area where the fight took place is the site of three national parks, and poaching is common. In the eastern Congo, a wildlife officer was killed and three others injured when Mai Mai rebels attacked patrol posts in the Virunga National Park, while three rangers were shot dead in the Zakouma National Park in Chad, which is well-known for the levels of elephant poaching that occur there.

Source: *BBC News* (2007), <http://news.bbc.co.uk/1/hi/world/africa/6672619.stm>; *WildlifeDirect press release* (2007), <http://www.wildlifedirect.org/press.php>; *IFAW press release* (2007), <http://www.ifaw.org/ifaw/general/default.aspx?oid=213607>

Wildlife cornucopia witnessed in Sudan

An aerial survey of southern Sudan has revealed huge numbers of migrating wildlife, rivalling the famous mass migrations of the Serengeti. More than 1.3 million white-eared kob, tiang and mongalla gazelle were observed by researchers from the Wildlife Conservation Society who spent 150 hours traversing 93,000 km² of Boma National Park, Jonglei region and Southern National Park. In addition to the migrating species, an estimated 8,000 elephants were also observed, mainly in Africa's largest freshwater wetland, the Sudd. The aerial surveys were based on the last surveys WCS carried out in the region, in 1982, 1 year before the civil war started, and it was feared that the decades of war would have depleted wildlife populations. WCS is calling for the creation of a Sudano-Sahel Initiative to encourage natural resource management in the region.

Source: WCS (2007), http://www.wcs.org/353624/wcs_southern Sudan

Alcohol production poses additional threat to Waki River

Uganda's Waki River and its catchment area are being degraded as logging depletes the ecosystem and agricultural run-off adds nutrients. In addition, recent increases in the distillation of molasses to make *waragi*, locally-brewed gin, is further jeopardizing the health of the river, with waste from the distillation process being dumped in the river. *Waragi* is a popular product, sold as far as eastern DRC, and distillers can earn USD 9 a day from selling 15 jerry cans, more than can be earned from traditional farming activities. However, effluent from *waragi* production is killing fish and other species in the Waki River and demand for fuelwood is driving deforestation.

Source: WWF Newsroom (2007), http://www.panda.org/news_facts/newsroom/index.cfm?uNewsID=107040

South and South-east Asia

India's tiger population smaller than suspected

A major new survey of the number of tigers in the wild in India has revealed an alarming decline, and cast doubt on previous population estimates. The 2-year census, carried out by the Wildlife Institute of India, found that tiger numbers in some areas have fallen by as much as two thirds since the last census in 2002, when the population was estimated to be 3,500. The decline in numbers was most severe in the state of Madhya Pradesh, where the population has fallen from 710 in 2002 to 255 in the 2007 census. Poaching and urbanization are chiefly held responsible for the decline, with the Indian government criticized for failing to deal with poaching and the illegal trade in tiger skins (see also this issue pp. 415-416).

Source: BBC News (2007), http://news.bbc.co.uk/1/hi/world/south_asia/6686457.stm

Fishermen harvest 7 million snakes from Tonlé Sap every year

About 20 years ago fishermen in Cambodia began to hunt water snakes that occupy Tonlé Sap lake after the fish stocks they had relied on began to dwindle. The reptiles are sold to local crocodile farms and demand for snake meat is now so high that the annual toll of snakes is estimated at 7 million per year. The crocodile trade has flourished

in recent years, with crocodiles hatched in Cambodia being exported to Thailand and Vietnam where they are raised for their skins. Although it seems likely that the harvest is unsustainable, it provides a lifeline to the communities around the lake and so conservationists have suggested suspending snake collection during the breeding season in November and December, rather than a blanket ban. Source: *New Scientist* (2007), 195(2611), 4.

Earthquake causes mass death of corals

The earthquake in Aceh in March 2005 caused one of the greatest mass coral deaths ever recorded, with some coral species suffering 100% loss in certain areas. In one case an entire island, Simeulue, was raised by 1.2 m, exposing most of the reefs that surrounded the 300 km coastline of the island. Even though the corals have been exposed for 2 years, they are well preserved, allowing researchers to identify each affected species. The study is the first to examine the effects of earthquake uplift on coral reefs, and it is hoped that it will bring useful insights into the process of coral recovery. There are already signs of recovery, with many of the worst affected species beginning to re-colonize shallow water reefs.

Source: *Marine Pollution Bulletin* (2007), 54, 637.

First confirmed wreathed hornbill nest found in Malaysia

A survey of the Temengor section of the Belum-Temengor Forest Complex resulted in the discovery of the first confirmed nest of the wreathed hornbill in Malaysia. The finding further underlines the importance of the Belum-Temengor Forest Complex for hornbills, as this is the only site where all 10 species of hornbill occurring in Malaysia are found together, making it a hotspot of hornbill diversity. While the Royal Belum State Park was gazetted by the Perak State Government in May 2007, the Temengor Forest Reserve remains unprotected, classified as a Permanent Forest Estate under Malaysian law, meaning that logging is still carried out. The State Government has declared that logging will cease in 2008, however.

Source: *BirdLife International News* (2007), http://www.birdlife.org/news/news/2007/07/malaysia_wreathed_hornbill.html

Five year old nation declares first National Park

The country of Timor-Leste, which became an independent nation in 2002, has

declared >123,000 ha of land as its first National Park. Nino Konis Santana National Park, named in honour of a national hero and former Commander of the armed wing of the resistance movement, links three of the island's 16 Important Bird Areas, and also includes >55,600 ha of the Coral Triangle, a marine area with the greatest diversity of coral and reef fish in the world. The terrestrial areas of the Park are home to 25 bird species found only on Timor and neighbouring islands, including the endangered endemic green-pigeon, threatened through the loss of its monsoon-forest habitat on Timor island.

Source: *BirdLife International News* (2007), http://www.birdlife.org/news/news/2007/08/timor-leste_np.html

East Asia

Birds face starvation in South Korea

Britain's Royal Society for the Protection of Birds claims that tens of thousands of migratory birds are under threat of starvation following a huge and controversial wetland reclamation project in South Korea. Birds migrating from their overwintering grounds in Asia to their breeding areas in the Arctic use the tidal flats of the Saemangeum wetlands on the west coast as a vital stopover. However, a project to reclaim the land for agriculture resulted in the 33 km sea wall being closed in 2006, with the result that where the wetlands once were, only parched earth remains. According to the RSPB a few thousand hectares of the wetland could still be restored, however, if two sluice gates in the sea wall are opened to allow water to flow back into the wetlands.

Source: BBC News (2007), <http://news.bbc.co.uk/1/hi/world/asia-pacific/6649233.stm>

Record sewage levels swamp China's coast

The amount of sewage flowing into the coastal waters of China's Guangdong Province has increased by 60% since 2002, leading to a deterioration of the ecosystems in some parts of this southern coastline. It is estimated that 1.26 million t of chemicals, including lead, copper and cadmium, are contained within the sewage, which amounted to nearly 8.3 billion t in 2005, much of it untreated. The problem is not unique to this area of China's coastline; about 25%

of China's coastal areas are moderately or heavily polluted, and government investment in the protection of the marine environment is <10% of the funds that go towards the treatment of river pollution.

Source: *Marine Pollution Bulletin* (2007), 54, 1078.

Hope for Okinawa dugong

Japan's Ministry of the Environment has categorized the Okinawa dugong as Critically Endangered on the Japanese Red List amid fears that as few as 50 individuals remain. The Okinawa dugongs are the most northern population of dugongs and, in common with other dugong populations, are at risk of entanglement in fishing gear, habitat loss and siltation of their feeding areas. The Okinawa dugong also faces another serious threat in the form of plans by the US military to build airbase runways in one of the richest areas of sea grass in Okinawa. A lawsuit brought against the US Department of Defence by the Center for Biological Diversity is ongoing, and there is hope that the official recognition of the dugong's imperilled state will add further support for this legal battle.

Source: *National Geographic News* (2007), <http://news.nationalgeographic.com/news/2007/08/070823-dugongs.html>

Siberian tigers get a boost

Siberian tigers, of which only 400 exist in the wild, have been prolific in captivity, with 84 cubs born between March and June in the Hengdaohezi Feline Breeding Centre in Harbin, China. The breeding centre was set up in 1986 with eight tigers, and now houses 750. According to the Xinhua news agency, the breeding centre aims to release 620 tigers into the wild (but see this issue, pp. 414-415). The Siberian tiger, the largest feline in the world and one of the world's 10 most threatened animals, mostly occurs in the Russian Far East.

Source: *BBC News* (2007), <http://news.bbc.co.uk/1/hi/sci/tech/6761957.stm>

Fears for fairy pitta

The future of the Vulnerable fairy pitta, threatened by habitat loss in its breeding range across China and Japan, is further jeopardized by a proposed dam development in Taiwan's Yunlin County. The dam would flood 422 ha of forests within the Huben-Hushan IBA, which are home to the largest known breeding population of the fairy pitta, as well as other important species such as the Taiwan partridge and Swinhoe's pheasant. This is not the first time that the

Huben-Hushan IBA, designated as an IBA on account of the fairy pitta and five species only found on Taiwan Island, has been threatened with development; a number of NGOs fought successfully against a proposal to extract gravel from the area in 2000.

Source: *BirdLife International News* (2007), http://www.birdlife.org/news/news/2007/06/hushan_dam_fairy_pitta.html

North America

Boston's shipping lanes reconfigured for whales

Following an analysis of whale density and collision risks, Boston's shipping lanes have been rotated slightly to the north-east and narrowed, to reduce the chance of collision between boats and whales. The new route adds 3.75 nautical miles onto the journey of each ship into and out of the harbour, which equates to an additional 10-22 minutes per trip. The lane reconfiguration has moved larger vessels away from the areas of the harbour used by smaller fishing boats, and has also reduced the likelihood of large boats colliding with whales or with other boats trying to avoid whales. The move should be of particular benefit to North Atlantic right whales as they are particularly susceptible to collisions with boats.

Source: *Marine Pollution Bulletin* (2007), 54, 1077.

Invasive plant fertilizing ecosystem

Kudzu *Pueraria montana* is a serious pest in southern American states. One of the fastest growing plants in the world, the vine has now been found to be releasing large amounts of nitrogen compounds into the soil, water and atmosphere. The roots of the plant contain bacteria that convert atmospheric nitrogen into ammonia, which kudzu uses to make chlorophyll. A study has found that soil and leaf litter in areas where kudzu had invaded contained nearly twice as much nitrogen as areas populated with native tree species. Not only does this pose a threat during rainy conditions, when the excess nutrients may wash into waterways, but the extra nitrogen in the soil may make it easier for other invasive plants to acquire a foothold, and also lead to higher emissions of the greenhouse gas nitrous oxide.

Source: *New Scientist* (2007), 195(2616), 13.

Models developed to keep track of toxic algal blooms

Algal blooms have long been common in the waters around California, although they are becoming more toxic, as evidenced in 2007 by the most toxic bloom ever witnessed, which killed hundreds of marine mammals and birds. A researcher at the University of California has now developed a model that combines satellite images with information on ocean dynamics in an attempt to track and predict algal blooms. Blooms become toxic when a photosynthetic diatom produce a neurotoxin called domoic acid, which accumulates through the food chain and can result in seizures and death in marine mammals, birds and humans. It is hoped that the model will help health officials and animal rescuers to prepare for the aftermath of a toxic bloom.

Source: *New Scientist* (2007), 194(2608), 18-19.

Tequila results in more than just a hangover

Intensive cultivation of the main ingredient of tequila *Agave tequilana* is having a serious effect on other agave species by affecting their genetic diversity. In addition, the cultivation of *A. tequilana* is resulting in a decrease of the area of land available for traditional crops and is also leading to soil erosion. In the past, agaves were grown alongside staple crops such as maize and squash but intensive cultivation of *Agave tequilana* in monocultures means that farmers have had to turn to herbicides to maintain the crop.

Source: *New Scientist* (2007), 194(2608), 22.

Corvids suffer as West Nile virus sweeps through north-eastern USA

West Nile virus, which is predominantly spread by birds, arrived in the USA in 1999 and has resulted in 179 human deaths since this time, as well as major declines in crow and blue jay populations in the north-eastern states. In some areas the population of these species have halved since the onset of the infection, which infects birds when they are bitten by mosquitoes that carry the virus. Declines have also been observed in populations of titmice, wrens, chickadees, American robins and bluebirds, and researchers fear that this may lead to other species, such as birds of prey, to suffer.

Source: *New Scientist* (2007), 194(2604), 4.

Wind turbines and bats don't mix

Previous concerns about wind farms have focused on their potential to affect birds but research in the USA has now revealed that bats appear to be the main victims of turbines. Two species appear to be particularly affected, with >60% of bat carcasses retrieved from wind farms being either hoary or eastern red bats. Because bats are long-lived, and females usually only produce one or two offspring per breeding season, wind turbines may have a negative effect on bat populations. It is not clear why bats are unable to avoid turbines; it may be that high-frequency noise interferes with the bats' echolocation systems.

Source: *New Scientist* (2007), 194(2603), 4.

Exposure to oestrogen disastrous for wild fish

Experiments on wild fish populations in a lake in Ontario have found that exposure to continuous, low-level doses of the oestrogen used in birth-control pills resulted in male minnows growing smaller testes, having delayed sperm development and producing egg proteins within a year of first exposure. In some cases, males were found to be intersex, meaning that they had both male and female gonadal tissues. Two years after researchers stopped adding oestrogen to the lake, the minnow population was found to have suffered a 2,000-fold decrease. Whereas minnows were initially expected to be more resilient to pollutants in the water, their short 4-year lifespan may have made them more susceptible.

Source: *New Scientist* (2007), 194(2605), 15.

Lowest water level in Great Lakes since 1926

Fears are growing that low water levels in the Great Lakes are attributable to global warming. Although the area has been suffering from a multi-year drought, the surface waters of one of the Lakes, Superior, has warmed by 2.5°C since 1979, a much higher rate of warming than surrounding average air temperatures over the same period. This warming is linked to less winter ice cover, leading to the solar energy normally reflected by the ice being absorbed by the lake's waters instead. Less ice also means more water is able to evaporate from the lake during the winter, exacerbating the rate of shrinkage of the lake. The low water level is already affecting

the shipping industry, as well as the naturally-occurring rice beds growing in the lake's wetlands that are utilized by Native Americans.

Source: *New Scientist* (2007), 194(2606), 8-9.

Large declines of USA's common birds

The National Audubon Society has published a report revealing that the populations of 20 common US bird species have fallen by at least half since 1967. Some species have declined by over 70% during this 40-year period, including the eastern meadow lark (71%), northern pintail (78%) and northern bobwhite (82%). The report cites the loss of habitats such as grasslands, forests and wetlands as a contributing factor in much of the documented decline. For some species climate change is also a serious issue; the list of declining birds includes the snow bunting, down by 64% because of the loss of its delicate tundra habitat, and the greater scaup, which has decreased in numbers by 75% because of melting permafrost and the invasion of species from more southerly regions.

Source: *BirdLife International News* (2007), http://www.birdlife.org/news/news/2007/06/us_common_bird_declines.html

Central America and Caribbean

Sought: developers interested in snapping up Grenada's National Parks

An amendment to the Grenada National Parks and Protected Areas Act has been passed by the Grenadian government granting the Governor General the right to sell national park land and other protected areas to private developers, thus enabling the sale of Grenada's Mount Hartman National Park, which is home to about half of the world population of the Critically Endangered Grenada dove. Although the government claims that no final decision has been made on the proposed Four Seasons Resort in the National Park, and that the developer has been given time to produce a full Environmental Impact Assessment, evidence from the area suggests otherwise, with about half of Hog Island, a key part of the proposed development, having been cleared in preparation for building work.

Source: *BirdLife International News* (2007), http://www.birdlife.org/news/news/2007/05/grenada_crown_jewels.html

South America

Seminal book on Tumbesian region now available online

Biodiversity and Conservation in Tumbesian Ecuador and Peru, first published in 1995, is now available online. It highlights the ecology of this biologically rich region, which stretches from northern coastal Ecuador to just north of Lima in Peru. The region is one of the world's most important Endemic Bird Areas, and is home to 24 globally Threatened bird species, eight Near Threatened species as well as 61 endemic species, many of which are at risk as deforestation increases in the area. The book has been made available through DarwinNet (<http://www.darwinnet.org>), BirdLife's web-based information portal that aims to improve knowledge in the region.

Source: *BirdLife International News* (2007), http://www.birdlife.org/news/news/2007/05/tumbesian_online_launch.html

Brazil's Environment Minister receives accolade

The Minister of the Environment in Brazil, Marina Silva, is one of seven individuals awarded the UN's Champion of the Earth 2007 environmental award. The award is in recognition of Marina Silva's work to protect the Amazonian rainforest, where deforestation rates have fallen by 50% in the last 3 years, as well as for her efforts among local communities of Brazil. The Champions of the Earth awards have been in existence since 2004, with the aim of recognizing those people who have made a significant contribution to the protection and sustainable management of the environment and natural resources. The other winners of the 2007 awards are Al Gore, Cherif Rahmani of Algeria, Elisea 'Bebet' Gillera Gozun of the Philippines, Viveka Bohn of Sweden, Prince Hassan Bin Halal of Jordan, and Jacques Rogge and the International Olympic Committee.

Source: *United Nations Environment Programme* (2007), <http://www.unep.org/Documents.Multilingual/Default.asp?DocumentID=504&ArticleID=5567&l=en>

New puffleg hummingbird found in Columbia

A mountainous region in south-west Columbia has yielded a new species of

puffleg hummingbird, the gorgeted puffleg *Eriocnemis isabellae*, so-called because of the white tufts above its legs and a bicoloured, iridescent throat patch sported by males. Researchers from the Hummingbird Conservancy suspected that the montane cloud forest of the Serrania del Pinche could harbour unknown vertebrates after a new plant species was discovered in the area in the 1990s, and this hunch proved to be correct. The isolated nature of the Serrania del Pinche means that there may also be other species to be discovered but the future of the area is not secure as the region is unprotected, and an estimated 500 ha of the forest is being lost each year, mainly through conversion to agricultural land.

Source: *BirdLife International News* (2007), http://www.birdlife.org/news/news/2007/05/colombia_new_hummingbird_discovery.html

Anti-mining demonstrations by Peruvian farmers block roads

Action by farmers in the northern Peruvian state of Piura blocked major routes to mining concessions in protest against a recent increase in pressure by mining companies prospecting for gold, silver, copper and molybdenum. The protesters are calling for the immediate suspension of mining in Piura's cloud forests and Andean alpine plateaus, as well as the declaration of a no-mining zone in the Piuran Cordillera, home to the Endangered mountain tapir. This increase in anti-mining protests comes at a time when Monterrico Metals of London is about to complete the environmental and social impact assessment for its controversial Rio Blanco copper and molybdenum mining project, which the company hopes to open in 2011. Conservationists fear that the Rio Blanco mine will lead to other companies following suit, with serious consequences for the area's delicate ecosystems.

Source: *Environmental News Service* (2007), <http://www.ens-newswire.com/ens/may2007/2007-05-07-04.asp>

Indigenous hunters not such a threat to wildlife

A study in Peru's Manu National Park has found little or no evidence that indigenous hunters cause a decline in hunted species, even though the numbers of the local Matsigenka tribe in the Park have doubled over the last 2 decades. The study found that, although hunters do kill many animals close to

their settlements, these animals are replaced by animals from non-hunted areas, with the result that the Park's overall populations remain at a stable level. In addition, the presence of indigenous hunters can deter loggers or other incomers to the forest, thus aiding the protection of the area from destruction.

Source: *New Scientist* (2007), 195(2618), 5.

Booming salmon farming industry puts pressure on Chile's lakes

A WWF survey has revealed worrying trends in Chile's salmon farming industry. The lakes used for salmon farming are in the Valdivian Ecoregion area of southern Chile, and are biogeographically unique. However, over the last 25 years the area has seen a sharp increase in the use of the waterways for smolt production, with 1.6 billion smolt produced in lakes in 2005 alone. Smolt production has become one of the major sources of nutrient input into the ecosystem, and also poses a threat through risk of disease transmission, input of antibiotics, and escapees. On a positive note, there is currently a move towards the use of recirculation systems that reduce many of the risks associated with the early stages of smolt production as well as having technological and economic advantages over traditional methods.

Source: *Salmon Farming in the Lakes of Southern Chile - Valdivian Ecoregion: History, Tendencies and Environmental Impacts* (2007), <http://www.worldwildlife.org/news/pubs/2007salmoniculturajunio.pdf>

Study area in Amazon at risk of fragmentation

The 1,000 km² Biological Dynamics of Forest Fragments Project, which has been used since 1979 to examine the impact of logging and settlement on rainforest, is now at risk from the very impacts it had been used to study. The Project is situated close to the town of Manaus, which has been expanding rapidly since it was declared a free-trade zone in the 1970s. Settlers are now moving to land around the Project, and a research camp was raided in 2006. Part of the Project's area has also been damaged by a fire lit by the new settlers.

Source: *New Scientist* (2007), 195(2614), 7.

'Hero for the Planet' scientist given 16-year jail term in Brazil

A Dutch scientist has been convicted of holding an internet auction for the right to name two new monkey species he had discovered, with the intention of

using the proceeds to help protect their habitats. The court ruled that because Marc van Roosmalen was working at Brazil's National Institute for Amazon Research, the naming rights belonged to the government. He was also convicted keeping wild animals at his home without permission. Van Roosmalen was given a 16-year jail sentence but the scientist, voted by Time Magazine as one of its 'Heroes for the Planet', is currently on bail pending an appeal. Van Roosmalen blames powerful logging interests in the state of Amazonas for orchestrating his conviction, and claims that Brazilian officials are trying to stifle scientific research in the country. Source: *Guardian Unlimited* (2007), <http://www.guardian.co.uk/worldlatest/story/0,,6841749,00.html>

Pacific

Iguana smuggler is charged

A Californian man has been charged with smuggling three Endangered iguanas into the USA using his false leg. Jereme James is thought to have adapted his prosthetic limb specially to smuggle the reptiles from Fiji. The United States Fish and Wildlife Service received a tip-off that Mr James was in possession of a number of iguanas at his house, and searches of the property found four individuals, as well as indications that the reptiles were being bred there. The Fiji banded iguana, prized for its bright green skin, is on CITES Appendix I, which prohibits trade in the species. If found guilty Mr James could face up to 5 years in prison.

Source: *BBC News* (2007), <http://news.bbc.co.uk/1/hi/world/americas/7007942.stm>

Australia/Antarctica/New Zealand

Stoat wrecks havoc within brown teal population

Disaster struck the captive pateke (or brown teal *Anas chlorotis*) population at the Brown Teal Conservation Trust facility in Carterton at the beginning of 2007, when a pair of stoats killed 12 juvenile and three adult brown teal, including a 14-year old pair. Only one breeding pair and one adult male from another pair survived. The stoats were caught within 12 hours and a system of perimeter trapping was implemented. Remnant brown teal populations in predator controlled areas have been supplemented

by the release of captive bred brown teal under the direction of the New Zealand Department of Conservation's Pateke Recovery Group.

Source: *Brown Teal Conservation Trust (BTCT) News* (May 2007), Issue 9.

White-capped albatrosses no longer shy

New Zealand has gained a new endemic species of albatross, bringing the world total of these species to 22, after DNA analysis revealed two distinct species of shy-type albatross. Visually similar, the white-capped albatross *Thalassarche steadi* breeds on subantarctic islands in New Zealand, while the shy albatross *T. cauta* breeds on islands off Tasmania. The two species appear to have different feeding ranges too, with the shy albatross mainly occurring in Australian waters and the white-capped albatross ranging across the Indian and Pacific Oceans. The white-capped albatross is exposed to trawl and long-line fisheries throughout its range and it is one of the most frequently caught species in commercial fisheries off the South African and New Zealand coasts.

Source: *Forest and Bird* (2007), 325, 6.

Icebergs harbour marine life

Free-drifting icebergs in the Weddell Sea have been found to be hotspots for marine life, with sea bird colonies above and a web of phytoplankton, krill and fish below. Research has shown that the

icebergs contain trapped terrestrial material, which is released far out at sea as the icebergs melt. This creates a halo effect of up to 3.2 km around the iceberg, with concentrations of phytoplankton, krill and sea birds significantly higher around the icebergs. The icebergs may also act as a route for CO₂ drawdown and sequestration of particulate carbon as it sinks into the deep sea. These icebergs are considered to be one of the visible impacts of climate change, which is causing Antarctic ice shelves to shrink and fall apart.

Source: *Marine Pollution Bulletin* (2007), 54, 1078.

Australian government provides AUD 4 million for coastal environment

A special round of the Australian Government Envirofund will provide AUD 4 million in grants to communities to protect coastal environments. The grants, of up to AUD 50,000, will be given to community groups who apply for funding for a project to protect foreshores, beaches, estuaries and marine environments along Australia's coastline. Examples of the sorts of project that will receive support are construction of coastal walkways to protect vulnerable fauna and flora, and restoration of sand dunes by planting native grasses. The Envirofund, which started in 2002, has so far given >AUD 110 million to nearly 7,000 local environment projects throughout Australia.

Source: *Marine Pollution Bulletin* (2007), 54, 824.

Fairy terns breed in Kaipara Harbour

New Zealand's rarest breeding bird has bred successfully in Kaipara Harbour for the first time for 5 years. The New Zealand fairy tern nests on shell and sand banks just above high-tide, where the nests are vulnerable to disturbance and introduced predators. The new chick was hatched from an egg that had been incubated at Auckland Zoo and returned to its parents for hatching. The birds are fussy about where they nest, and so it is not possible to transfer the population, which numbers 35-40 individuals, to predator-free islands. It is also not possible to rear the species in captivity, as the young need to be taught how to fish by their parents.

Source: *Forest and Bird* (2007), 324, 6.

All internet addresses were up to date at time of writing. The *Briefly* section in this issue was written and compiled by Elizabeth Allen and Martin Fisher, with additional contributions from Anthony Rylands, Phil Seddon, Thalia Liokatis, David Mallon and Mark Spalding. 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, 4th Floor, Jupiter House, Station Road, Cambridge, CB1 2JD.