

# Briefly

## INTERNATIONAL

### Bankers learn from ecosystems

Two years before the emergence of the current financial unrest, an initiative to 'stimulate fresh thinking on systematic risk' held a conference that brought together researchers to explore parallels between systemic risk in the financial arena and other fields including ecology. A conference report has now been published, which emphasizes how widespread the potential for catastrophic changes is in the overall state of a system, be it the global climate, fisheries or banking systems. Furthermore, the report draws on examples that may inform the design of complex systems. One such example comes from studying ecosystems, which are, in effect, robust networks that have survived millions of years of change while maintaining remarkable constancy. Identifying the structural attributes shared by different ecosystems may provide clues as to the characteristics of complex systems correlated with robustness.

Source: *Nature* (2008), 451(7181), 893–895.

### Encyclopaedia of Life takes first breath

The Encyclopaedia of Life (EOL; <http://www.eol.org>), conceived in an essay by E.O. Wilson, is now accessible online, with 1 million pages available for viewing by the public. The EOL aims to become a 'one-stop-shop' for information on each one of the Earth's 1.8 million species, with the advantage of the system being that information can be easily updated and is accessible to millions of people. There are also plans to make the site available in languages other than English. Only 30,000 of the 1 million pages currently on the site contain more than a bare minimum of information about particular species but there are 24 exemplar pages, which give a tantalizing glimpse into how the project will look once completed in 2017.

Source: *EOL press release* (2008), [http://www.eol.org/files/pdfs/EOL\\_Press\\_Release-Feb-27-2008.pdf](http://www.eol.org/files/pdfs/EOL_Press_Release-Feb-27-2008.pdf)

### Staples Inc. halts relationship with APP

One of the world's biggest office-supplies companies, Staples Inc., has decided to stop using Asia Pulp & Paper Co. Ltd. (APP) as a result of concerns about the company's poor environmental record. Staples Inc.,

which used to source >9% of its paper from APP, is one of a number of companies and conservation NGOs that believe APP is destroying pristine rainforest and also contributing to climate change through its polluting pulp mills. APP is attempting to portray itself as environmentally friendly but a recent report by WWF found that the company and affiliates are creating a new logging road through a forested peat swamp in Sumatra, home to two indigenous tribes, elephants, tigers and orangutans. (See also this issue, pp. 329–339).

Source: *WWF* (2008), <http://www.worldwildlife.org/forests/updates/staples.cfm?enews=news0208t>

### 'Doomsday' seed bank opens

A vault that tunnels 130 m into a mountain on the remote island of Svalbard has been opened, with Norway's prime minister and the Nobel Prize winner Wangari Maathai placing the first consignment of seeds in the bank. The vault has been built in a stable, remote and cold area of the world to protect it from natural and human disasters, and to keep the seeds at the ideal temperature for long-term storage. When full, the vault will contain >4.5 million samples of food crops from >100 countries, amounting to *c.* 2 billion seeds in total. The seed vault is intended as an insurance policy, with the idea that any seeds lost through natural disaster, for example, could be re-established using seeds from the collection at Svalbard.

Source: *BBC News* (2008), <http://news.bbc.co.uk/1/hi/sci/tech/7264758.stm>

### Farmers undervalued as stewards

A report by the International Assessment of Agricultural Science and Technology for Development has concluded that the way the world grows its food will need to change radically to provide for the poor and hungry in the face of a growing population and climate change. Although there have been significant improvements in food production, benefits have not been spread equally through the world. Furthermore, food is taken for granted in many countries, with farmers and farm workers inadequately rewarded for their work as stewards for almost one third of the Earth's land. The report recommends that institutional, legal and environmental frameworks are put in place that combine productivity with conservation of valuable natural

resources such as water, soil, forests and biodiversity.

Source: *IAASTD press release* (2008), [www.agassessment.org/docs/Global\\_Press\\_Release\\_final.doc](http://www.agassessment.org/docs/Global_Press_Release_final.doc)

### Invasive insects aided by increased CO<sub>2</sub> levels

Experiments on soya bean plants have revealed that higher CO<sub>2</sub> levels make the plants more susceptible to the invasive Japanese beetle and other crop pests by down-regulating the expression of genes involved in defence signalling. The down-regulation of these genes in turn reduces production of other chemicals that work specifically to deter beetles from eating the plants. The finding is evidence of a further manifestation of anthropogenic global change, in the form of rapid establishment of pest species, and casts doubt on predictions that soya bean productivity will rise under elevated CO<sub>2</sub> levels.

Source: *Proceedings of the National Academy of Sciences* (2008), 105, 5129–5133.

### Criticism of forest emissions undeserved?

Previous research has suggested that volatile organic compounds, emitted by vegetation, deplete hydroxyl radicals (OH, the primary cleansing agent in the atmosphere) in pristine conditions. However, research carried out on the atmosphere above pristine Amazonian rainforest has revealed unexpectedly high levels of OH. Although the chemical processes involved are complex, and not yet understood in detail, researchers believe that some form of OH recycling is at work in these pristine conditions. This finding is viewed as evidence that interactions between the biosphere and atmosphere above tropical rainforest work to achieve a subtle balance.

Source: *Nature* (2008), 452(7188), 737–740.

### Shell ceases to sponsor photography competition

Following 2 years of campaigning by environmentalists Shell is no longer the sponsor of the prestigious Wildlife Photographer of the Year. The oil company's sponsorship had been heavily criticized, with protests that the company's involvement in the competition was hypocritical. The director of the Natural History Museum in London, where the yearly exhibition of winning photographs is displayed, received nearly

5,000 letters and phone calls from supporters of Friends of the Earth in protest at Shell's involvement, in which he was urged not to renew the sponsorship deal.

Source: *Friends of the Earth* (2008), [http://www.foe.co.uk/campaigns/corporates/success\\_stories/shell\\_wildlife\\_photographer.html](http://www.foe.co.uk/campaigns/corporates/success_stories/shell_wildlife_photographer.html)

### Sunscreen side effects

Four chemicals commonly used in sunscreen, paraben, cinnamate, benzophenone, and a camphor derivative, may be causing coral bleaching as they are washed off swimmers' bodies. It is estimated that 4,000–6,000 t of sunscreen are washed off worldwide every year, and researchers have found that these four compounds can trigger dormant viruses inside corals' symbiotic algae, zooxanthellae, to start to replicate, until the algae explode, spreading viruses throughout the surrounding water. Without the photosynthesizing zooxanthellae, the corals turn white and die. While there is some scepticism that the quantities of sunscreen in the water are sufficient to trigger this reaction, the study's authors urge swimmers to use sunscreens with physical filters and use eco-friendly chemical sunscreens while further studies are carried out.

Source: *National Geographic News* (2008), <http://news.nationalgeographic.com/news/2008/01/080129-sunscreen-coral.html>

### Marine food chain threatened by plastic waste

The dangers of waste plastic in the oceans have received attention in recent years but now researchers are concerned that small plastic particles may be acting as magnets for toxic substances. Microscopic plastic shards concentrate pollutants such as DDT, which may then be released from the particle when ingested by an organism. Examinations of shorelines have revealed that microscopic pollution is far worse than had been thought; in a typical sample of the sandy matter retrieved from the high tide mark up to 25% of the total weight can consist of plastic particles. Furthermore, this plastic takes a long time to degrade, meaning it will remain on the beaches for many years to come.

Source: *BBC News* (2008), <http://news.bbc.co.uk/1/hi/sci/tech/7316441.stm>

### Albatross Task Force soars in numbers

The Albatross Task Force, currently functioning in Brazil, Chile and South Africa, is going to extend its remit to Argentina, Uruguay and Namibia. Recent evidence

from these countries shows that many seabirds are dying within their waters, with an estimated 30,000 seabirds killed in Namibian long-line fisheries alone. BirdLife International and the RSPB are committing > GBP 2 million to increase the output of the initiative, which consists of a team of international experts advising fishermen about albatross-friendly fishing techniques. Evidence from the work of the Brazilian Task Force indicates that the number of albatrosses dying on long-lines is halved when vessels use streamer lines. Source: *BirdLife International News* (2008), [http://www.birdlife.org/news/news/2008/03/Albatross\\_Task\\_Force\\_Doubles.html](http://www.birdlife.org/news/news/2008/03/Albatross_Task_Force_Doubles.html)

### Sea levels could rise by 1.5 m

A computer model linking temperature to sea levels over the past 2,000 years suggests that the Intergovernmental Panel on Climate Change's current estimates of a sea level rise of 28–43 cm by 2100 are too conservative. A research group from the Proudman Oceanographic Laboratory near Liverpool, UK, estimate that sea level will rise by 0.8–1.5 m by the end of this century because of the rapid melting of ice sheets, the dynamics of which are only now becoming clear. A separate study in 2007 came to a similar conclusion, estimating a sea level rise of 0.5–1.4 m by 2100. Considering that, for example, 80–90% of Bangladesh is within c. 1 m of sea level, even a rise of 1 m would have catastrophic effects on such low-lying countries and their ecosystems.

Source: *BBC News* (2008), <http://news.bbc.co.uk/1/hi/sci/tech/7349236.stm>

### Human health will be affected by the vanishing of species

A new book has highlighted a serious side effect of the decline in biodiversity, in that species are vanishing before researchers have been able to examine them for any health benefits to humans. The book, *Sustaining Life*, provides further justification of the vital importance of conservation. One example of a species that disappeared before it could be studied is the southern gastric brooding frog, from Australia, whose females reared their young in their stomachs. Preliminary studies suggested that the young produced substances that prevented them being digested, which could have been useful in the treatment of stomach ulcers. However, this species has not been seen since 1981, robbing researchers of the chance to investigate the species further.

Source: *BBC News* (2008), <http://news.bbc.co.uk/1/hi/sci/tech/7361539.stm>

### More biodiverse ecosystems capture more carbon

An experiment conducted in South America has shown that more productive ecosystems capture more carbon. An area of Patagonia was divided into 90 plots, and researchers proceeded to remove native species from each plot while measuring the plot's productivity. As the plots' biodiversity decreased, so did their levels of productivity. This is an important finding for the fight against climate change, as the more productive an area is, the more carbon it is able to capture and store. The researchers believe that 'niche complementarity' may explain the relationship between diversity and productivity. A healthy, intact environment where each species has evolved its own niche enables different species to interact positively and make full use of all the resources of a particular area.

Source: *mongabay.com* (29 April 2008), [http://news.mongabay.com/2008/0429-hance\\_biodiv.html](http://news.mongabay.com/2008/0429-hance_biodiv.html)

## EUROPE

### Maltese NGO attacked...

Conservationists have strongly condemned the arson attack on BirdLife International's Maltese partner, in which three cars belonging to BirdLife Malta volunteers were destroyed. Malta has recently been taken to the European Court of Justice over the issue of spring hunting, which is responsible for the deaths of thousands of birds, many of them migrants, every year. BirdLife International has called on the Maltese government to identify and bring to justice the people responsible for this act, and also to declare an end to spring hunting.

Source: *BirdLife International News* (2008), [http://www.birdlife.org/news/news/2008/02/Malta\\_incident.html](http://www.birdlife.org/news/news/2008/02/Malta_incident.html)

### ... and European Court bans spring hunting in Malta

Interim measures have been issued by the European Court that prohibit the opening of the 2008 spring hunting season for European turtle dove and common quail in Malta. The European Commission took the Maltese Government to court in January 2008 because Malta had allowed hunting and trapping of these two species to occur every year since its accession to the EU in 2004. The order not to open the spring hunting season is an indication that the Court feels there is an urgent need to prevent irreversible damage being done to these species, as the final decision on the

case is pending and not expected before 2009. Hunting of turtle doves and quail during their breeding and migratory seasons is prohibited in EU member states under the EU Birds Directive.

Source: *BirdLife International News* (2008), [http://www.birdlife.org/news/news/2008/04/malta\\_interim\\_measures.html](http://www.birdlife.org/news/news/2008/04/malta_interim_measures.html)

### Maps of potential wind farm–bird conflict areas published

The RSPB has published maps of sensitive but unprotected land in northern England to illustrate to developers areas that are best avoided for wind farm proposals. The issue of wind farms is a tricky one, with environmentalists torn between supporting the use of renewable energy, and the threats posed to various species by turbines. Threats to birds are thought to include collision with turbines, disturbance or displacement, barriers to movement, and change or loss of habitat. It is hoped that the new maps will be of use in easing the conflict that can arise from wind farm proposals.

Source: *BirdLife International News* (2008), [http://www.birdlife.org/news/news/2008/02/rspb\\_windfarms.html](http://www.birdlife.org/news/news/2008/02/rspb_windfarms.html)

### Turtle gets help from dentist

A loggerhead turtle washed up on the British coast has had his recovery aided by a dentist, after staff at the aquarium who rescued the turtle asked the dental surgery for help. The loggerhead, nicknamed James Bond because of his 007 stranding number, was found stranded on a beach, tangled in a pile of seaweed and covered in oil. Since his rescue he has been making a good recovery but aquarium staff were unsure how to deal with the black lesions on his shell, caused when the animal bashed against coastal rocks. The surgery donated a protective paste to cover the injuries as they heal, and there are now plans to release the turtle back into the wild in the next few months.

Source: *The Times* (2 April 2008), <http://www.timesonline.co.uk/tol/news/environment/article3662514.ece>

### 'Ratty' gets full protection . . .

The water vole, Britain's most threatened mammal, has now been granted full legal protection, making it illegal to kill, injure or take a water vole from the wild. In cases where water voles have been persecuted deliberately, the police will have the power to prosecute. Since Kenneth Graham wrote *The Wind in the Willows* in 1908, which featured a water vole as one of the main characters, the population has crashed, and

it is estimated that only one water vole exists today for every 20 that were alive then. The decline was mainly brought about by the loss of their wetland habitat, as well as the rise in the mammal that has become the vole's main predator, the American mink.

Source: *WWT News* (2008), [http://www.wwt.org.uk/article/3/1198/legal\\_protection\\_may\\_herald\\_better\\_future\\_for\\_endangered\\_voles.html](http://www.wwt.org.uk/article/3/1198/legal_protection_may_herald_better_future_for_endangered_voles.html)

### . . . while Mr Toad gets his own beer

A beer brewed to celebrate the centenary of the publication of *The Wind in the Willows* is helping modern-day toads by funding the closure of a road used by hundreds of the amphibians to reach their breeding grounds. The road in Nottinghamshire has been closed every year for 10 years but 2007 was the last year that the local water company provided the money for creating diversions. Happily for the toads, Castle Rock Brewery collaborated with the Nottingham Wildlife Trust to fund the 3-week closure using the proceeds from the sale of Mr Toad beer. The beer is part of the company's Natural Selection range, which is brewed in support of the local Wildlife Trust's work.

Source: *Nottingham Evening Post* (3 April 2008), <http://www.thisisnottingham.co.uk/displayNode.jsp?nodeId=134487&command=displayContent&sourceNode=134482&contentPK=20306778&folderPk=78489&pNodeId=134461>

### Bitterns not out of trouble yet

The conservation of the bittern in Britain is generally heralded as a success, with 50 booming males recorded in 2007, an impressive total given that the population had fallen to 11 booming males by 1997. However, the population is heavily dependent on the breeding populations along the south-east coast of England, part of the island most vulnerable to flooding by seawater as sea levels rise. Conservationists are urging action now, and hope that by creating reedbeds inland from the vulnerable coast the future of this species will be assured for years to come.

Source: *RSPB press release* (2008), <http://www.rspb.org.uk/news/details.asp?id=tcn:9-184552>

### Destructive aphid thrives in warmer temperatures

Data collected over 41 years has found that increased temperatures during 1966–2000 have resulted in the flight period of the green spruce aphid starting a month earlier. The aphid causes partial defoliation and

reduced growth of spruce trees, an important species in the UK timber industry. Researchers are concerned by the findings, because the temperature increase over the study period was only 1.46°C. This would indicate that higher temperatures, as forecast in some climate change scenarios, may wreak even more havoc on ecosystems.

Source: *Quaternary International* (2008), 173–174, 153–160.

### Hungary's birds benefit from new agreement

An agreement signed by the Hungarian Ornithological and Nature Conservation Society (MME), the Ministry of Environment and Water (MEW) and all relevant electricity companies aims to reverse the high number of birds killed by electrocution by Hungary's power lines. Surveys have indicated that as many as 30,000 birds are killed annually in this way, with raptors and corvids particularly vulnerable. Another problem is birds, especially large migratory species such as cranes, colliding with wires. MME and MEW are preparing a map indicating where the most dangerous power lines for birds are, and indicating priority categories for each site. The electricity companies involved have promised a bird-friendly transformation of all dangerous power lines by 2020; 50,000 of the country's pylons have already been insulated since 1991.

Source: *BirdLife International News* (2008), [http://www.birdlife.org/news/news/2008/03/Hungary\\_powerlines.html](http://www.birdlife.org/news/news/2008/03/Hungary_powerlines.html)

### Not such great news from Lake Constance's cormorants

Freiburg's local authority is to destroy Lake Constance's only colony of great cormorants, accusing them of damaging the lake's fish stocks and thus its economy. Local NGO Nature and Biodiversity Conservation (NABU) is protesting strongly about the decision, which it claims contravenes European bird legislation, as the area in which the cormorants breed is a Special Protected Area as well as a National Nature Reserve. The authorities intend to use searchlights to drive the adult birds from their nest, leaving eggs to go cold and chicks to freeze to death. NABU fears that other birds in the area, such as western marsh harrier, will also be disturbed during the procedure. The great cormorants became locally extinct in the 1970s, and eventually re-established thanks to strict protection laws.

Source: *BirdLife International News* (2008), [http://www.birdlife.org/news/news/2008/04/cormorant\\_nabu.html](http://www.birdlife.org/news/news/2008/04/cormorant_nabu.html)

### MEPs urged to use influence to help save tigers

The first ever Tiger Day has taken place at the European Parliament to raise awareness of the plight of the world's biggest cat. European Members of Parliament were encouraged to use their influence to persuade countries with wild tiger populations to clamp down on poaching and illegal trade in tiger parts. Conservationists are concerned that China is considering lifting the 15-year ban on trade in farmed tiger parts. The Chinese government is currently being petitioned by a few Chinese businessmen with interests in industrialized tiger farming. Current estimates suggest there are 2,000 adult breeding tigers left in the wild but conservationists are confident that this number could rise to 10,000 in a decade if given sufficient support and resources.

Source: *BBC News* (2008), <http://news.bbc.co.uk/1/hi/sci/tech/7348449.stm>

### Vulnerable goose is shot in Greece

A lesser white-fronted goose has been shot and killed in a protected area in Greece, a country where this Vulnerable species is protected by national legislation. The bird, a male called Mánnu that had been colour-marked by researchers, belonged to the Fennoscandian population of the species, which breed in northern Norway and overwinter in the protected areas of the Evros Delta and Lake Kerini. The loss of one adult male represents c. 5% of all breeding males from the Fennoscandian population, and thus has a serious impact on the future of this population of lesser white-fronted geese. NGOs are urging Greece to implement immediate measures to prevent poaching. (See also this issue, pp. 408–414).

Source: *BirdLife International News* (2008), <http://www.birdlife.org/news/news/2008/04/LwfGooseshot.html>

### New campaign to protect UK's birds of prey

The RSPB has launched a new campaign to halt the persecution of the UK's raptors, with information from the north of England suggesting that persecution of these species is rife. Birds of prey are targeted by unscrupulous gamekeepers and shooting estates, with the result that golden eagles have not yet been able to colonize northern England from Scotland, and only 15 hen harrier pairs have nested in England despite evidence that there is suitable habitat for at least 200 pairs. One of England's most visited tourist spots, the Peak District, has only had three successful nesting attempts by hen har-

riers in the last 140 years. The RSPB is laying down the gauntlet to landowners and managers, asking for their help to boost the number of nesting hen harriers to 40 by 2010.

Source: *RSPB press release* (2008), <http://www.rspb.org.uk/news/details.asp?id=tcm:9-187858>

### Fishermen to help in skate and ray count

Fishermen have been enlisted to help draw up an accurate picture of the state of England's skate and ray populations. All of England's 16 species of skate and ray are normally entered in fishermen's log books as 'skates and rays', and by the fishing industry as 'skate'. Now, thanks to an identification guide prepared by The Sea Fish Industry Authority, aided by the Shark Trust, fishermen will be able to identify the skates and rays to species. This information will then be used to examine the health and sustainability of skate and ray populations, as well as changes in catch composition over time.

Source: *Fishing Focus* (Spring 2008), p. 6 (<http://www.defra.gov.uk/marine/pdf/fisheries/fishfocus10.pdf>).

### Rogue grey may have hitched a ride

The first official report of a grey squirrel in the Scottish Highlands has alarmed environmentalists, as this area is traditionally considered to be a stronghold for the beleaguered red squirrel. Theories abound as to how grey squirrel got to the highlands, where the species has never previously been recorded, but some people believe the individual may have hitched a lift on the back of a lorry, as a major road is located close to where the squirrel was spotted. Grey squirrels pose a threat to the native red species, competing for food and spreading squirrel pox, a disease that is fatal to red squirrels.

Source: *BBC News* (2008), [http://news.bbc.co.uk/1/hi/scotland/highlands\\_and\\_islands/7364769.stm](http://news.bbc.co.uk/1/hi/scotland/highlands_and_islands/7364769.stm)

### Seahorses found in Thames

Surveys of the Thames have revealed the presence of short-snouted seahorses in the estuary on a number of occasions. The information was initially kept secret but the seahorse has now received full protection under an amendment to the Wildlife and Countryside Act 1981. The presence of the seahorse is an indication of the improvement of the Thames' water quality but the seahorses remain vulnerable to disturbance of their habitat. As well as the animals themselves, the habitats of the seahorse are protected under the Wildlife

and Countryside Act. Little is known about the short-snouted seahorse, particularly in the UK, and researchers are unsure about the level of threat facing the species. Source: *ZSL News* (2008), <http://www.zsl.org/field-conservation/news/secret-seahorses-in-the-thames-revealed,445,NS.html>

## NORTH EURASIA

### Luxury vodka funds conservation projects

The Snow Leopard Vodka company has announced the first projects to benefit from its decision to give a percentage of its annual profits to snow leopard conservation charities. Fifteen per cent of the profits from the company's first year of trading will go to two projects run by the Snow Leopard Conservation Trust: one in Kyrgyzstan, where the company's money will pay for children living in mountainous areas of rural Kyrgyzstan to attend an eco-camp to learn more about the mountain ecosystem, and the other in Mongolia, where the money will fund the recruitment and training of a village in an economic enhancement enterprise, which enables herders to sell their handicrafts at an increased price.

Source: *Snow Leopard Vodka press release* (17 January 2008).

## NORTH AFRICA AND MIDDLE EAST

### Falcon killers receive derisory penalty

Conservationists have protested at the decision by a court in Cyprus to fine two poachers a mere EUR 1,250 each. The men were involved in the shooting of 52 red-footed falcons last year, in the worst case of raptor killing recorded in Cyprus. The maximum penalty the men faced was a fine of EUR 17,000 and 3 years in prison. Shortly after their arrest in October 2007 the men admitted to police that they had shot the birds but changed their plea to not guilty before the trial. Following plea-bargaining before their sentence, however, the men finally admitted to shooting four of the falcons, which they claimed they had mistaken for European turtle doves. BirdLife Cyprus are concerned that the poaching and trapping situation in Cyprus is getting worse, and have called for urgent intervention from the EU.

Source: *BirdLife International News* (2008), <http://www.birdlife.org/news/news/2008/02/redfootedfalcon.html>

### Addax and oryx travel in style

A project that aims to restore desert antelope to the Sahara has gathered steam with the arrival in Tunisia of 13 addax and nine scimitar-horned oryx from captive breeding programmes in the USA and Europe. The project has involved nearly 50 organizations and taken nearly 4 years to reach this stage. Once arrived in Tunisia the animals, which had experienced journey times ranging between 48 hours to 10 days, were placed onto trucks and driven to Dghoumes National Park (the oryx) and Djebel National Park (addax). Following a period of acclimatization and quarantine, the animals will help to found populations in these two Parks.

Source: *Sandscript* (2008), pp. 1–2 ([http://www.saharaconservation.org/pictures/uploaded/files/Sandscript\\_3\\_English\\_medium.pdf](http://www.saharaconservation.org/pictures/uploaded/files/Sandscript_3_English_medium.pdf)).

### Mass release of houbara bustards in North Africa

More than 5,000 captive-bred houbara bustards have been released in Morocco as part of a project by the United Arab Emirates to increase the number of these Vulnerable birds in the wild. The birds were bred at the Emirates Centre for Wildlife Propagation in Missour, Morocco, which intends to breed 5,000 birds a year for release into the wild, and has already succeeded in the creation of a self-sustaining captive population. A proportion of the birds released in Morocco were fitted with satellite transmitters, which will enable researchers to track their movements. The ultimate aim of the project is to recreate a sustainable houbara bustard population in the wild, in an attempt to reverse the current decline brought about by destruction of over-wintering and breeding habitats, over-hunting, and the illegal wildlife trade.

Source: *Gulf News* (2008), <http://www.gulfnews.com/Nation/Environment/10202367.html>

## SUB-SAHARAN AFRICA

### Gorilla birth witnessed

Staff of the Dzanga-Sangha Primate Habituation Programme have for the first time observed the birth of a western lowland gorilla in the wild. Mowane, meaning Gift of God in Bantu, was born in a tree nest, and staff witnessed her mother, Malui, bite through the umbilical cord. Mowane was born into the Makumba group of Critically Endangered western lowland gorillas, which lives in the Central African Republic's Dzanga-Ndoki National Park. This

group is one of four gorilla groups undergoing habitation to human contact for tourism and research. It is hoped that having habituated gorilla groups in the Dzanga-Sangha region will generate revenue through tourism for local communities and increase the economic importance of parks in this area.

Source: *WWF* (2008), <http://www.worldwildlife.org/wildplaces/congo/updates/babyGorilla.cfm?enews=news0208>

### Elephants to be culled in South Africa

A decision has been taken by the South African government to cull elephants for the first time for 13 years. In this time, the elephant population has grown by 10,000 individuals, and now numbers 18,000. Culling will be used as a method of last resort, carried out under strict conditions, and other methods of elephant population control, such as translocation, contraception and the use of enclosures will also be used. As anticipated, the government's announcement was condemned by animal rights campaigners but a government spokesman pointed out that there was a need to consider the interests of people living in close proximity to elephants, who lose their crops and, on occasion, their lives, to elephants.

Source: *BBC News* (2008), <http://news.bbc.co.uk/1/hi/world/africa/7262951.stm>

### Lapwings find society in Sudan

Two Critically Endangered sociable lapwings have been tracked to their wintering grounds in central Sudan, a distance of 8,000 km from their Kazakh breeding grounds. The birds left Kazakhstan at the beginning of August, arriving in Turkey in October, where they joined a flock of over 3,000 lapwings, the largest gathering of the species recorded for over a century. After c. 2 weeks they flew on to Sudan, where there are plans for conservationists from the Sudanese Wildlife Society to locate the birds, count them and study the sites they are using for over-wintering. It is hoped that this study will enable the identification of sites in need of protection to safeguard the future of the species.

Source: *BirdLife International News* (2008), [http://www.birdlife.org/news/news/2008/02/sociable\\_lapwing\\_sudan.html](http://www.birdlife.org/news/news/2008/02/sociable_lapwing_sudan.html)

### New lemur species identified by molecular analysis

Analysis of the DNA of lemurs from Masoala National Park has provided researchers with much information about the taxonomic relationships between nocturnal

lemurs from this part of Madagascar. As well as distinguishing all currently described species from the genera *Avahi* and *Lepilemur*, the study identified two new species, a woolly lemur and a sportive lemur. Moore's woolly lemur *Avahi mooreorum* has been named after the Moore family, who provide major support to conservation through the Betty and Gordon Moore Family Foundation and other channels, while Scott's sportive lemur *Lepilemur scottorum* has been named after the Suzanne and Walter Scott Jr Family Foundation.

Source: *Special Publications of the Museum of Texas Tech University*, No. 53 (2008).

### Aerial survey carried out in Niger

A partnership between the Sahara Conservation Fund and the French NGO Aviation Sans Frontières has enabled an aerial survey of 23,000 km<sup>2</sup> of desert and mountain habitats in the Termit and Tin Toumma regions of Niger. The survey, the first of its kind for the region, examined wildlife, vegetation and domestic livestock in the area. The primary objective of the survey was to investigate land-use issues to inform the future Termit reserve's management plan. However, the survey spotted over 70 addax in several groups, supporting previous findings that suggest a population size in the area of c. 200 individuals.

Source: *Sandscript* (2008), p. 3 ([http://www.saharaconservation.org/pictures/uploaded/files/Sandscript\\_3\\_English\\_medium.pdf](http://www.saharaconservation.org/pictures/uploaded/files/Sandscript_3_English_medium.pdf)).

### Birding tourism proves a hit

Tourism is a lynch pin for the South African economy, outperforming all other sectors. Now conservationists are capitalising on this success, with the establishment of Birding Routes. Two such routes generate USD 6.4 million annually for local people, and BirdLife South Africa has announced that it is developing an additional six Birding Routes in the Western Cape and Cape Town areas. Birding Routes provide visitors with suggested itineraries, trained local guides and birder-friendly accommodation in areas with high avian diversity. Over 140 local guides have been trained so far under the scheme, with a further benefit to the community being the setting up of local offices for the Birding Routes to facilitate the administrative aspects of the tours, thus ensuring that the project doesn't fail through want of resources for marketing, management and fundraising.

Source: *BirdLife International News* (2008), [http://www.birdlife.org/news/news/2008/04/SA\\_Birding\\_Routes.html](http://www.birdlife.org/news/news/2008/04/SA_Birding_Routes.html)

### Survey reveals more white-necked picathartes breeding colonies

A survey undertaken as part of a project that brought together an NGO, a government department, the University of Sierra Leone and local communities has discovered two breeding colonies of the Vulnerable white-necked picathartes in the Western Area Peninsula Forest. This is a significant finding for the species, bringing the number of known breeding colonies in Sierra Leone to 18. The survey's results suggest that the population of white-necked picathartes in Sierra Leone, estimated at 1,400, is apparently stable or declining very slowly. Other activities carried out under the project's auspices include the establishment of a network of trained wardens in the villages around the Western Area Peninsula Forest, raising awareness of the species, and a database containing details of the 18 picathartes' breeding sites.

Source: *BirdLife International News* (2008), [http://www.birdlife.org/news/news/2008/04/Picathartes\\_survey.html](http://www.birdlife.org/news/news/2008/04/Picathartes_survey.html)

## SOUTH AND SOUTH-EAST ASIA

### Indian bureaucracy clips entomologists' wings

A joint Indian-American project to study the insect fauna of the Western Ghats mountains is in jeopardy because India's National Biodiversity Authority (NBA) has refused to grant permission for the export of specimens for identification, despite assurances that the insects would be returned and incorporated into national collections. Twenty-four taxonomists from around the world had already agreed to work on the project, which intends to collect 200,000 specimens from different ecosystems at various altitudes. The NBA stipulates that samples such as these must remain in India, and encourages researchers to send photographs in their stead. One of the project's participants points out that his recent discovery of three new flea beetle species in India would have been impossible without the loan of specimens from five international collections, and that the NBA's ruling could isolate Indian biodiversity researchers.

Source: *Nature* (2008), 452(7183), 7.

### Substantial populations of red-shanked douc langurs found

Surveys undertaken in the Son Tra Nature Reserve, in Vietnam, have confirmed the presence of multiple groups of Endangered

red-shanked douc langurs. Moreover, some of the groups are large, with group sizes of 6–24 individuals. The finding is particularly significant because previous surveys of the area only found a few douc langur groups, leading some to speculate that the species was vanishing from the Reserve. The problems facing the langur doucs, and other species in the Reserve, are numerous, however, with illegal hunting and trapping rife in the area and unregulated tourism on the increase.

Source: *Primate Conservation* (2008), 23 (<http://www.primatesg.org/PDF/PC23.nemaus.pdf>).

### Gharia's last supper may have been poisoned fish

Specialists who performed post-mortems on some of the 110 Critically Endangered gharial crocodiles washed up dead along the Chambal River earlier this year, believe fish carrying poisonous chemicals may be to blame. Lesions on the reptiles' kidneys would have prevented proper functioning of these organs, eventually causing the reptiles to die of gout. The identity of the substance that caused the lesions is still not known but researchers expect that it is an industrial chemical released into the nearby Yamuna River, where it is ingested by the tilapia, a fish species introduced into the rivers as a food source. This species, now so numerous that gharia's feed on it almost exclusively, stores ingested chemicals in its tissues, which are then passed on to its predators.

Source: *National Geographic News* (2008), <http://news.nationalgeographic.com/news/2008/03/080312-gharia.html>

### Animals traded as status symbols in Sarawak

The black market in wildlife is flourishing in certain areas of Sarawak, according to an environmental NGO, the Borneo Resources Institute. Trappers are paid by middlemen to catch species alive, which are then sold on to wealthy city dwellers. The most sought after animals are threatened species of bears, monkeys, birds and reptiles, which are displayed in small cages in the buyers' homes. This information has come to light after reports that a sun bear died after being kept in a small cage on a private farm for 6 months. The farm is alleged to belong to an influential property developer who wildlife authorities are unable to interrogate.

Source: *The Star Online* (13 April 2008), <http://thestar.com.my/news/story.asp?file=/2008/4/13/nation/20915516&sec=nation>

### No suspects for tribal chieftain's death

Investigations into the death of a Malaysian tribal chieftain in October 2007 have not found any suspects but at the same time police have not ruled out murder as a possible cause. Seventy-year old Kelesau Naan disappeared in October and his skeletal remains were found near a river in December. Naan had been spearheading the campaign by his Penan tribal community against the timber trade, accused by the Penans of destroying their ancestral lands and taking their rights over the forests. Local villages believe that timber companies are planning to resume logging around Long Kerong, the village led by Naan. Despite the lack of suspects, some community members suspect that Naan was killed by people involved in logging.

Source: *The International Herald Tribune* (11 February 2008), <http://www.iht.com/articles/ap/2008/02/11/asia/AS-GEN-Malaysia-Tribal-Death.php>

### Vultures declining faster than the dodo

A study of vulture populations in India has predicted that the birds will be extinct in 10 years unless drastic action is taken to halt the use of diclofenac. Oriental white-backed vultures have declined by 99.9% since 1992, and their population continues to fall by 40% every year. Manufacture of veterinary diclofenac was banned in India in 2006 but is still widely available. The researchers believe that oriental white-backed vultures have crashed to 11,000 from tens of millions in the 1980s, although the study's authors believe this may be an overestimate of the number remaining because many of the sites studied were in or near protected areas where diclofenac use may be lower. (See also *Oryx*, 40, 388–399)

Source: *ZSL News* (2008), <http://www.zsl.org/science/news/extinct-in-ten-years-vultures-decline-quicker-than-the-dodo,450,NS.html>

### Lack of mangroves increased risk for Burma

The death toll from the devastating cyclone in Burma in May 2008 could have been lower had mangrove forests not been destroyed to allow coastal development to take place in the Irrawaddy Delta. More deaths were caused by the storm surge that followed the 190 km h<sup>-1</sup> winds of Cyclone Nargis, leading to comparisons with the tsunami in 2004, in which > 200,000 people died. Researchers examined the death toll of two villages in Sri Lanka, one of which was flanked by dense scrub and mangrove forests, and suffered two fatalities,

whereas a nearby village that had cleared its vegetation lost up to 6,000 individuals. Global research shows that mangrove clearance has slowed since the 1980s but still continues on a large scale, mainly to free up land for aquaculture, and also for settlements. (See also *Oryx*, 40, 123-124)  
 Source: *BBC News* (2008), <http://news.bbc.co.uk/1/hi/sci/tech/7385315.stm>

## EAST ASIA

### Albatrosses flee volcano (with a little help from their friends)

Ten Vulnerable short-toed albatross chicks have been moved 350 km by helicopter from their breeding site on an active volcano to a safer location. Circa 80–85% of the world population breeds on an erodible slope near an active volcano on the island of Torishima, and an eruption would pose a serious risk to the species' survival. The island where the chicks have been transferred to, Mukojima, is not volcanic and had been a breeding site for the species until the 1920s. The chicks will be fed by hand until they fledge, and researchers hope that by moving chicks before they have undergone geographic imprinting of their breeding island, they will return to Mukojima to breed when they achieve sexual maturity, thereby establishing another breeding colony.  
 Source: *BirdLife International News* (2008), [http://www.birdlife.org/news/news/2008/03/start\\_translocation.html](http://www.birdlife.org/news/news/2008/03/start_translocation.html)

## NORTH AMERICA

### Snake maps drawn up for USA

The US Geological Society has released maps showing where in the USA the climate is similar to that in places where invasive Burmese pythons occur naturally. The purpose of these maps is to assist in the management and of control of non-native giant constrictor snakes, currently established and breeding in the Everglades National Park in Florida. The establishment of these species has a detrimental effect on some of the other species in the habitat, with pythons known to eat threatened species such as Key Largo wood rats. The maps indicate that the species' range will increase considerably over time, and researchers are intending to collect enough data to prevent establishment of the snakes elsewhere in the USA.  
 Source: *USGS press release* (2008), <http://www.usgs.gov/newsroom/article.asp?ID=1875>

### Translocated tortoises suffer high mortality rate

Desert tortoises that have been moved from land adjacent to the National Training Center at Fort Irwin, California, are suffering a high rate of mortality, with 23 tortoises having been killed by coyotes since 800 individuals were moved in late March 2008. The tortoises, each of which was fitted with a radio transmitter, were moved because the National Training Center is expanding in size to train soldiers being sent to Iraq and Afghanistan. Researchers believe there are two coyotes in the area that are preying on the tortoises, and that the problem has been exacerbated because the tortoises have no burrows in which to hide and are moving around more than normal as they try to return to their home territory. In addition, a prolonged drought has affected the coyotes' normal prey species, the rabbit. Desert tortoises are categorized as threatened at the federal level.  
 Source: *Herpdigest* (2008), 8(23).

### A road runs through it

The US Secretary of Homeland Security has used an act that allow him to set aside laws preventing the construction of barriers at US borders to waive 35 separate environmental laws. The border in question is the Mexican-US border, where the administration intends to complete fence segments totalling 750 km to prevent illegal entry into the country by immigrants. The fence will pass through many important wildlife habitats, in Texas, New Mexico, Arizona and California. In one location, in Texas, the fence runs parallel to the Rio Grande, along flood levees 100–1,500 m from the banks, creating what has been termed a 'no-man's-land' between river and fence. Critics are calling for a Supreme Court review of the decision.  
 Source: *New Scientist* (2008), 198(2651), 6.

### Fears for murrelet

The decision by the US Government to auction leases to drill for oil and gas off the Alaskan coast has been criticized by conservationists. The coastal and marine habitats around the Chukchi Sea are home to a number of threatened species, including one-tenth of the world's polar bears, the Vulnerable Steller's eider and the only population of bowhead whales not yet considered threatened. There are fears that the Critically Endangered Kittlitz's murrelet, which occurs at two major sea bird colonies on the east coast of the Sea, will be at particular risk from petroleum contamination, with up to 15% of the population in

Prince William sound having died following the *Exxon Valdez* oil spill.  
 Source: *BirdLife International News* (2008), <http://www.birdlife.org/news/news/2008/02/chukchi.html>

### Insect-eating birds in decline

Studies carried out in Canada have revealed a worrying decline in the number of erstwhile common insect-eating birds. In the previous 2 decades populations of birds such as the chimney swift and common nightjar have decreased by >70%. The reasons for the declines are not yet understood, with potential causes including habitat change, lack of nest sites, pesticide use and climate change. There are also concerns that the decrease in the birds may be an indicator of decreases in their prey, which would have serious consequences for ecosystems as the species these birds feed on are often important pollinators. To add more mystery, the research showed that birds that forage at heights of < 3 m do not appear to be declining so rapidly.  
 Source: *BirdLife International News* (2008), [http://www.birdlife.org/news/news/2008/03/Canada\\_insectivore\\_decline.html](http://www.birdlife.org/news/news/2008/03/Canada_insectivore_decline.html)

### Illegal wildlife trade second only to trade in drugs and guns, report warns

A Congressional Research Service report has revealed that the lucrative illegal trade in wildlife, which generates USD 10–20 billion annually, poses myriad threats to the USA and the rest of the world. Many of the same groups and individuals who deal in arms and drugs are involved in the wildlife trade, with the proceeds of the illegal trade increasingly going to organized crime and terrorist groups. In addition to being a major consumer of wildlife products, the USA is also a supplier, exporting, for example, juvenile leopard sharks from California and live eels from the east of the country. The report outlines a number of ways that Congress may play a role in combating illegal trafficking, including strengthening border controls and proposing sanctions on countries with weak wildlife laws.

Source: *The Atlanta Journal-Constitution* (2008), <http://www.ajc.com/search/content/news/stories/2008/03/06/poach0306.html> & *Herpdigest* (2008), 8(16).

### Hatching crocodiles filmed for first time

Four Critically Endangered Orinoco crocodiles have been filmed hatching in an incubator at Dallas World Aquarium, the first time that a hatching event has been

captured on film. Orinoco crocodiles have been hunted to near extinction for their black-spotted hide, and the pair in Dallas is the only breeding pair on North America. The baby crocodiles are being reared away from their parents because they are at risk of predation by the piranhas that share the adults' enclosure. Incubation of the eggs also has the advantage of allowing sex ratio manipulation, with the recent hatchlings all incubated at a temperature that ensured they hatched as females. The Aquarium plans to return some of the 57 female crocodiles previously hatched at the establishment to the Orinoco River in Venezuela later in 2008.

Source: *KVUE News* (2008), <http://www.kvue.com/news/state/stories/032608kvuecrocodiles-eh.47fe37.html>

### Red knots (and crabs) get a lifeline from New Jersey Senate

The New Jersey Senate has given its approval to a measure that will ban the harvest of horseshoe crabs to enable one of their prey species, the *rufa* subspecies of red knot to recover its numbers. Red knot feed almost exclusively on horseshoe crab eggs during their migratory stopover at Delaware Bay, as they move between their breeding grounds in the Canadian Arctic and overwintering grounds at the tip of South America. Since the 1990s over-harvesting of horseshoe crabs has caused the population to decline rapidly, making it harder for red knot to find and consume enough eggs to enable their successful onward migration. The result has been a decrease in *rufa* red knot numbers from 100,000 in the 1980s to <15,000 today.

Source: *American Bird Conservancy News* (2008), <http://www.abcbirds.org/newsandreports/releases/080318.html>

### Abandoned mines to become havens for birds

A coalition of organizations is working together on a project to reforest parts of the Appalachian landscape following the cessation of mining in the area. It is hoped that the resultant forests will provide habitat for some of the USA's most threatened forest bird species, such as the cerulean warbler. Before the seedlings can be planted the soil needs to be 'ripped' with a soil ripper because it would otherwise be too compacted to allow the seedlings to take root. The restoration of the area is complicated by the fact that during the 30 years since the mines were shut many non-native grasses and shrubs have moved in, providing habitat for other protected species, but the project will be coordinated so as not to affect these species adversely.

Source: *American Bird Conservancy News* (2008), <http://www.abcbirds.org/newsandreports/releases/080409.html>

### Canadian polar bears at risk but not threatened

The Canadian population of polar bears, long a source of concern for conservationists, has now been officially recognized as at risk from climate change. A panel of researchers has advised the Canadian government that the polar bear population is not undergoing a sufficient decline to warrant its listing in the most serious category of concern, endangered, and have instead recommended it be categorized as a species of special concern. Canada's environment minister is obliged to accept the panel's findings and address the threats to the species' survival. However, a management plan for the polar bears will not be required until 2014, by which time some researchers fear the Arctic's summer sea ice that makes up the bears' habitat will have melted completely.

Source: *BBC News* (2008), <http://news.bbc.co.uk/1/hi/world/americas/7368484.stm>

### Loggerheads decline in Florida

Florida's beaches are home to 90% of the USA's loggerhead turtle nests but evidence shows that the number of nests has fallen by 50% since 1998. The beaches are also used by nesting green turtles and leatherbacks but it is only the loggerheads that are in decline. Sea turtles are at risk from a number of threats, including beach development, oil spills and boat collisions but researchers believe that fishing practices are largely to blame in this instance. Unlike green turtles and leatherbacks, loggerheads eat food such as jellyfish and shrimps that bring them into greater contact with fishing boats. A few years ago a rule was introduced stipulating that shrimp fisheries should use nets fitted with turtle excluder devices but because loggerheads can take up to 30 years to reach sexual maturity the effects of this ruling will not be felt for several years.

Source: *The Tampa Chronicle* (2008), <http://www2.tbo.com/content/2008/apr/19/me-loggerhead-nests-drop-by-4600-in-state/#>

### Amphibians and reptiles suffer heavy roadside mortality

A 17-month study of Indiana's roads has found that out of 10,515 road mortality events, 95% were amphibians or reptiles, with the other 5% being mammals (3%) and birds (2%). The researchers identified 69 species among the road kills, including 25

mammal, 26 bird, 10 reptiles and 9 amphibian species, although most of the amphibian carcasses could only be identified to genus. The most commonly encountered species was the bullfrog, with 1,671 bullfrog carcasses identified. The number of road kills varied according to the habitat that the road bisected, as well as the weather conditions. The study's authors point out that roads may be a significant factor in amphibian decline but that mitigating against road kill is difficult because different species require different mitigation techniques. (See also *Oryx*, 38, 220–223).

Source: *Herpetological Conservation and Biology* (2008), 3, 77–87 ([http://www.herpconbio.org/Volume\\_3/Issue\\_1/Glista\\_etal\\_2008.pdf](http://www.herpconbio.org/Volume_3/Issue_1/Glista_etal_2008.pdf)).

## CENTRAL AMERICA AND CARIBBEAN

### Cahows return to Nonsuch Island...

Three Endangered Bermuda petrels, or cahows, have returned to Nonsuch Island after they were translocated there as chicks in 2005. The species was considered extinct for nearly 300 years, until 18 pairs were found on islets near Castle Harbour, Bermuda in 1951. A translocation project was started after the islets, which contained the entire known breeding population, were flooded and partially destroyed by Hurricane Fabian in 2003. Nonsuch Island Nature Reserve, which covers an area of 6.5 ha, has nesting habitat complete with artificial burrows that is high enough to withstand hurricane damage. Researchers are optimistic that the return of the fledglings will result in breeding on the island in the near future.

Source: *BirdLife International News* (2008), [http://www.birdlife.org/news/news/2008/03/Bermuda\\_Petrel.html](http://www.birdlife.org/news/news/2008/03/Bermuda_Petrel.html)

### ... while the adjacent IBA's status is increased

Cooper's Island, Bermuda's only Important Bird Area and one of the country's most important sites for neotropical migrants, is going to become a National Nature Reserve. The entire world population of cahows nests within 1 km of the island, which is also home to a large colony of white-tailed tropic birds. Some infrastructure on the island, such as a marine communications antenna, is at odds with its status as a Nature Reserve but the Bermuda Department of Conservation is in discussions to minimize the effects of these activities on the wildlife. The newly designated Cooper's Island National Nature Reserve



will undergo a restoration programme, during which non-native vegetation will be removed, and native and endemic plant cover restored. There are also plans to reintroduce the Critically Endangered Bermuda skink to the island in the future.

Source: *BirdLife International News* (2008), [http://www.birdlife.org/news/news/2008/03/Coopers\\_island.html](http://www.birdlife.org/news/news/2008/03/Coopers_island.html)

## SOUTH AMERICA

### Amazonian river corridors too narrow

A study in Brazil's Mato Grosso State, an area affected by high rates of deforestation, has found that the corridors of remnant riparian vegetation left along rivers following deforestation are too narrow to provide effective protection for birds and mammals. The legal minimum width of these buffers is 60 m but research by academics from the University of East Anglia uncovered evidence showing that the wider and better-preserved the corridors, the greater the number of species living in them. The study, which recommends a minimum width of 400 m for the corridors, was published at the same time as the Brazilian Congress debated the existing legislation on river corridors, including proposals to decrease the minimum width of the corridors.

Source: *UEA press release* (2008), <http://www1.uea.ac.uk/print/home/services/units/mac/comm/media/press/2008/feb/Amazon+corridors+far+too+narrow%2C+warn+scientists>. (*Conservation Biology*, 22, 439–449).

### Fuertes' parrot gets protected area

A Columbian NGO, Fundación ProAves, has created a private protected area that is home to the Critically Endangered Fuertes' parrot. The reserve is a joint project of the American Bird Conservancy, ProAves, and IUCN NL/SPN and covers c. 6 km<sup>2</sup> of the parrot's cloud forest habitat. Fuertes' parrot, only rediscovered in 2002 after not having been reported since 1911, is thought to have a population of 160 individuals, and is threatened by the deforestation of its habitat. As well as securing this area, a mobile education and outreach programme has been initiated to bring messages about forest conservation to communities across the central Andes. The Parrot Bus, active since 2005 with the support of the Disney Wildlife Conservation Fund, has brought information, workshops and demonstrations to over 70,000 adults and children.

Source: *American Bird Conservancy press release* (2008), <http://www.abcbirds.org/newsandreports/releases/080305.html>

### Utility value of rainforests to be priced for first time

A deal between the Iwokrama International Centre for Rainforest Conservation and Development and Canopy Capital, a company established in 2007 to channel money to the rainforest canopy, is paving the way for financial markets to price the utility value of rainforests. Specifically, the deal enables the use of risk capital to protect the rainforest's ecosystem services within the Iwokrama Reserve in Guyana. The forests that make up the c. 3,710 km<sup>2</sup> Reserve, which lies in the Guiana Shield, generate rainfall that waters the agricultural areas throughout Latin America and the southern Caribbean. Canopy Capital will continue to provide previously secured funds for the management of Iwokrama Reserve, which is managed according to the principles of conservation through sustainable best practice.

Source: *Canopy Capital press release* (2008), [http://www.canopycapital.co.uk/resources/2008-03-27\\_press\\_release\\_Iwokrama\\_Canopy\\_Deal.pdf](http://www.canopycapital.co.uk/resources/2008-03-27_press_release_Iwokrama_Canopy_Deal.pdf)

### Tighter control on access to Amazon considered

Concerns about the activities of foreign visitors and workers in Amazonia have prompted the creation of a bill due to be sent to Brazil's Congress that requires these groups to have a permit to be in the area. The bill puts forward a recommendation that anyone in the region without a permit would be fined up to GBP 30,000. The Brazilian government is becoming increasingly concerned about the risks of biopiracy in the Amazon region but scientists are worried that the proposed measures could have a serious negative effect on research. Under the measures overseas organizations would need to acquire authorization from both the justice and defence ministries to be in the area.

Source: *BBC News* (2008), <http://news.bbc.co.uk/1/hi/world/americas/7368449.stm>

### Brazil's Environment Minister resigns

Marina Silva, Brazil's Environment Minister since 2002, has resigned, citing difficulties she has faced 'for some time' in implementing the government's environmental agenda. Conservationists greeted the news with dismay, claiming Silva's departure is a major setback for Brazil's rainforest, and that she had suffered unbearable pressure as a result of the meas-

ures she took against deforestation in the Amazon. Silva had unsuccessfully opposed several projects in the Amazon, including the building of two big hydroelectric dams and a major new road, as well as a new nuclear power plant. Silva was also said to be unhappy at the appointment of another minister to coordinate the government's new strategy for the Amazon. Her departure adds weight to the perception that President Lula is more concerned with economic development than conservation. Source: *BBC News* (2008), <http://news.bbc.co.uk/1/hi/world/americas/7399715.stm>

## PACIFIC

### Partnership succeeds in rat eradication on Fiji

The island of Vatuira, which lies 15 km off the coast of Fiji's largest island Viti Levu, has been cleared of Pacific rats *Rattus exulans* following an partnership between BirdLife International and the Nagilogilo Clan who live on the island. The rats were eradicated using poison baits laid during July 2006, and evidence suggests that the rats found most of the baits on the first night. Following 18 months of monitoring, the island has now been declared rat free. The success of the project is evidenced by the presence of ground-nesting birds such as bridled tern and black-naped tern, which have been observed rearing their chicks on the island since the eradication.

Source: *BirdLife International News* (2008), [http://www.birdlife.org/news/news/2008/02/Vatuira\\_Fiji\\_rat\\_free\\_island.html](http://www.birdlife.org/news/news/2008/02/Vatuira_Fiji_rat_free_island.html)

### It's official: Beck's is back

A bird that had not been seen for 79 years has now been officially welcomed back after an expedition to the Bismark Archipelago, north-east of Papua New Guinea, found > 30 individuals, including some juveniles. First described in the 1920s, Beck's petrel had not been seen until 2003, when an ornithologist, Hadoram Shirihai, caught a glimpse of a bird he thought could be a Beck's petrel. This sighting inspired him to make the return trip that eventually rediscovered the birds. Little is known about the species, and there are concerns that the population size may be small but, until its breeding sites are known, ornithologists cannot be sure of the threats facing the species.

Source: *BirdLife International News* (2008), [http://www.birdlife.org/news/news/2008/03/beckspetrel\\_rediscovery\\_ns.html](http://www.birdlife.org/news/news/2008/03/beckspetrel_rediscovery_ns.html)

## AUSTRALIA/ANTARCTICA/ NEW ZEALAND

### AI to boost kakapo breeding success ...

New Zealand's Department of Conservation intends to trial the use of artificial insemination of kakapos during the summer breeding season on Codfish Island/Whenua Hou. Dominant male kakapos mate with more females than less dominant individuals, meaning that the representation of genes in the kakapo gene pool is skewed towards particular males. The use of artificial insemination will therefore increase genetic diversity within the Critically Endangered species and, additionally, there is some evidence that females that mate more than once have a higher fertility rate. Richard Henry, a kakapo discovered in Fiordland, has been chosen as the sperm donor, with plans to use two of his male offspring at a later date.

Source: *Forest & Bird* (2008), 327, 3.

### ... but a fruit-rich diet may be the answer

Researchers in New Zealand have formulated a hypothesis that may explain the correlation between the 3–5 year kakapo breeding cycles and mast seeding/fruitletting of their food plants, in particular, podocarps such as rimu. It is speculated that in a mast year the birds will eat more of the unripened rimu fruits, which contain chemicals that pre-sensitize certain egg yolk protein genes expressed in female kakapo livers to oestrogens produced by the bird's ovaries. Only in those years that the bird eats enough rimu fruits for the genes in the liver to be sufficiently pre-sensitized will the ovarian follicles develop to ovulation.

Source: *Wildlife Research* (2008), 35, 1–7.

### Edge effect penetrates deep into forest

Researchers examining beetle abundance in fragments of New Zealand forest have

found that the edge effect goes far deeper into forest fragments than was previously realized. Most studies of edge effect's influence on faunal communities have focused on scales of only 20–250 m. However, in the new study, the abundances of 20% of common beetle species were affected by edges at scales >250 m, with one in eight beetle species affected by edge effects as far as 1 km inside the forest. This is bad news for species that occur in forest interiors, with spatially explicit models indicating that km-scale edge effects can lead to an 80% reduction in the population of interior forest species, even when the fragments concerned are large.

Source: *Proceedings of the National Academy of Sciences* (2008), 105, 5426–5429.

### New measures implemented for albatrosses

New Zealand's Fisheries Minister has announced new measures to tackle the numbers of seabirds killed on long-lines in the country's fisheries. The announcement comes after a single fishing boat working in the Chatham Rise area killed 36 albatrosses, included 12 Critically Endangered Chatham albatross. The measures include weighting the lines so that they sink out of sight faster, and setting lines at night when they cannot be seen by birds. The measures have been welcomed by conservationists, who estimate that at least 5,000 seabirds are killed in New Zealand fisheries every year.

Source: *BirdLife International News* (2008), [http://www.birdlife.org/news/news/2008/02/albatross\\_newzealand.html](http://www.birdlife.org/news/news/2008/02/albatross_newzealand.html)

### Maud Island frogs breed on New Zealand mainland

The Year of the Frog has been celebrated in style in New Zealand, where the Vulnerable Maud Island frog has bred on the mainland for the first time for hundreds of years. Sixty frogs were transferred from their last known breeding site on Maud Island to a mouse-proof enclosure in Wellington's Karori sanctuary in 2006, with 30 being

transferred outside the enclosure later that year to enable researchers to compare the captive and wild populations. It was during a comparison of the two populations in February 2008 that the 13 finger-nail sized froglets were found clinging to adult males in the enclosure. The froglets were removed from the enclosure and reared to maturity before being released back into the enclosure as adults.

Source: *New Zealand Herald* (29 February 2008), [http://www.nzherald.co.nz/category/story.cfm?c\\_id=82&objectid=10495224](http://www.nzherald.co.nz/category/story.cfm?c_id=82&objectid=10495224)

### Lonely times for magenta petrels

Molecular examination of the Critically Endangered magenta petrel, or Chatham Island taiko, has brought the disturbing news that 95% of non-breeding birds are male. Researchers are concerned that this indicates that male petrels are too spread out for their calls to attract the attention of passing females. Magenta petrels have suffered an 80% decline in numbers over the last 45 years, mainly as a result of the destruction of their habitat by introduced species, and estimates now put the entire breeding population at 8–15 pairs. Efforts to increase the population include the translocation of chicks to a secure, predator-free habitat, the Sweetwater Secure Breeding Site, from which eight petrels fledged successfully in 2007.

Source: *BirdLife International News* (2008), [http://www.birdlife.org/news/news/2008/04/Magenta\\_petrel.html](http://www.birdlife.org/news/news/2008/04/Magenta_petrel.html)

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. Contributions from authoritative published sources (including web sites) are always welcome. Please send contributions by e-mail to [oryx@fauna-flora.org](mailto:oryx@fauna-flora.org), or to Martin Fisher, Fauna & Flora International, 4th Floor, Jupiter House, Station Road, Cambridge, CB1 2JD, UK.