### **Briefly**

### **International**

# Marine protected areas reduce poverty

The first empirical study to examine the relationship between biodiversity conservation initiatives and poverty reduction has found that marine protected areas can reduce poverty (cf. this issue, pp. 19-25 and 26-35) The study, which consulted c. 1,100 local people living near four marine protected areas, found that the protected areas had contributed to poverty reduction in the following ways: improved fish catches resulting from fishes spilling over from no-fishing zones; new jobs, particularly in tourism; better local governance; health benefits both from increased protein intake from fish and more income enabling the installation of infrastructure such as public toilets; and benefits to women, from increased income from fishing and opportunities for higher income through tourism.

Source: Nature's Investment Bank: How Marine Protected Areas Contribute to Poverty Reduction (2007), http://www.nature.org/initiatives/protectedareas/files/mpa\_report.pdf

### Whales' faeces tell a gourmet tale

According to the Japanese government one of the reasons for the existence of their so-called scientific whaling programme is to investigate the diet of whales. A team of researchers has now, however, developed a non-invasive way of determining whale diet, by extracting mitochondrial DNA from prey remains in whale faeces. The research has already revealed some surprises, such as DNA remains of bony fish, including gulper eel, in the faeces of Blainville's beaked whale, previously thought to feed primarily on squid.

Source: New Scientist (2007), 196(2632), 6.

#### A fishy business...

Researchers have found that even a small dose of the surfactant 4-nonylphenol is sufficient to force fishes into pariahdom. Chemical cues are important for many species, aiding individuals in social recognition of conspecifics, and the shoaling behaviour of many freshwater fishes is believed to be linked to these cues.

Exposure to a 1-hour  $0.5~\mu gl^{-1}$  dose of 4-nonylphenol, sometimes found in soaps and shampoos, was enough to change the response of banded killifish towards their exposed conspecific, and a dose of  $1-2~\mu gl^{-1}$  caused killifish to move away from the dosed individual. The importance of shoaling for finding food and avoiding predation means that individuals excluded from a shoal probably face a higher risk of predation.

*Source: Proceedings of the Royal Society B* (2007), **275**(1630), 101-105.

### IPCC's synthesis report shows its metal

The UN's Intergovernmental Panel on Climate Change has responded to criticism that its report on the physical science of climate change published in February did not go far enough by producing a synthesis report that, for the first time, warns of 'abrupt and irreversible' climate change. The synthesis report, intended as a summary of the findings of three studies published earlier in 2007, actually goes further than these reports, following discussion that the IPCC's focus on findings with a ≥90% certainty had led to the exclusion of less certain scenarios that nevertheless required attention. The chairman of the IPCC explained that it had become apparent during 2007 that the uncertainty surrounding the melting of the Greenland and Antarctic ice sheets meant that the upper boundaries of sea level rise estimates should be removed.

Source: New Scientist (2007), 196(2631), 13.

### ...and sun bear makes six

The inclusion of the sun bear on the 2007 IUCN Red List of Threatened Species brings the number of bear species in this role call of threat to six, or 75% of the world's bear species. The sun bear, categorized as Vulnerable, joins the giant panda (Endangered), Asiatic black bear (Vulnerable), sloth bear (Vulnerable), Andean bear (Vulnerable), and the polar bear (Vulnerable) on the updated Red List. The sun bear, previously categorized as Data Deficient, is a native of South-east Asia, Sumatra and Borneo and is threatened by habitat destruction and commercial poaching. Only one bear species, the American black bear, is considered to be secure across its range, and with an estimated population of 900,000 there are twice as many American black bears than all the other bear species combined.

Source: IUCN News Release (2007), http://www.iucn.org/en/news/archive/2007/11/12\_pr\_bear.htm

### Mauritius parakeet shows the way for threatened birds

While the conservation status of most species on the 2007 IUCN Red List of Threatened Species has deteriorated, some species have moved away from the brink of extinction. One such species, the Mauritius parakeet, is being heralded as an example of what can be achieved through conservation action. The parakeet, downlisted from Critically Endangered to Endangered in the new Red List, suffers from a myriad of threats, including nest predation by introduced predators, decline of its native food source and habitat loss. Artificial nest cavities have been developed that are suitable for the parakeet, with the result that the birds now nest more often in artificial than in traditional cavities. Source: BirdLife International News (2007), http://www.birdlife.org/news/news/ 2007/09/iucn\_red\_list\_2007.html

## Green Customs Initiative receives award

Organizations belonging to the Green Customs Initiative, including the Secretariat of the Convention on Biological Diversity, the United Nations Environment Programme and CITES, have received a 20th Anniversary Ozone Protection Award in the Partners Award category, in recognition of the Initiative's role in the development and implementation of the Montreal Protocol on Substances that Deplete the Ozone Layer. The Green Customs Initiative was set up in 2001 to strengthen the capacities of customs to detect and act upon illegal trade in environmentally sensitive commodities that are covered by various international agreements. Commodities include ozone-depleting substances, as well as toxic chemicals, hazardous waste, threatened species and living modified organisms. The Global Environment Facility was also recognized in the same category for its role in supporting projects in countries with economies in transition, thereby enabling their compliance with the Montreal Protocol.

Source: 2007 Ozone Award Book (2007), http://ozone.unep.org/20th\_Anniversary/and CBD press release (2007), http://www.cbd.int/doc/press/2007/pr-2007-09-21-ozone-en.pdf

## Destruction of the natural world harming humanity

A report by the UN Environment Programme paints a gloomy view of the state of the environment, with farmland degradation, pollution, deforestation and overfishing just some of the problems

being encountered. The Global Environment Outlook report suggests that the continued destruction of the natural world risks undermining advances made by human society in recent years, and may even destabilize international peace and security. While the Global Environment Outlook does contain some good news stories, such as a slowing in the rate of deforestation in the Amazon, overall the environmental indicators reveal a downward trend that, according to the report's authors, governments are not doing enough to halt.

Source: BBC News (2007), http://news.bbc.co.uk/1/hi/sci/tech/7050788.stm

### Green, the colour every city wants to be seen in

Covering buildings with leafy roofs and walls could result in cooler cities, enabling residents to turn down the airconditioning and thus save energy. Researchers used computer models to compare the effects of adding green buildings to nine different cities, and found that the air around green buildings would be cooler than that of their unclad neighbours. What is more, the effects would be greater in cities with hot climates; spaces between green buildings in Riyadh, Saudi Arabia, would be 11°C cooler in some cases. In cities such as London and Montreal the peak temperature drop would be 4°C. Green cladding works in two ways; firstly, less heat is absorbed by green buildings and, secondly, water evaporating from plants during transpiration cools the air. Source: New Scientist (2007), 196(2624), 6.

### Salmon manipulated to

produce trout

A team of researchers in Japan have inserted germ cells belonging to male rainbow trout into embryos of masu, or cherry, salmon, with the result that when the salmon reached maturity, they produced pure trout sperm. The researchers repeated this process using female trout germ cells, producing salmon containing trout eggs. When these eggs were fertilized using trout sperm from the male salmon, 90% of the resultant eggs hatched into healthy trout. While this procedure may be limited to related species (trout and salmon both belong to the Salmonidae family), it could still be useful to conservationists. The Japanese team is now working with American researchers to repeat the experiments using the germ cells of sockeye salmon, which are threatened in parts of their range.

Source: New Scientist (2007), 195(2622), 20.

## Ming the clam is the longest-lived animal ever discovered

An ocean quahog clam dredged up off the coast of Iceland has been pronounced the world's longest-lived animal discovered to date, with researchers estimating that it reached between 405-410 years old. The shell of Ming the clam, named after the Chinese dynasty in power when it started its life, was key to determining its age, as the researchers were able to count the shell's growth rings. These growth rings also indicate how the mollusc's growth rate, linked to environmental parameters such as climate, sea-water temperature and food supply, varied from year to year.

Source: BBC News (2007), http://news.bbc.co.uk/1/hi/sci/tech/7066389.stm

#### On the trail of migratory fish

Researchers have developed a tagging system that will enable them to track fish larvae as they migrate across open seas. Transgenerational Isotope Labelling (TRAIL) involves adding a chemical tag in the form of a stable isotope of barium into the tissues of an adult female fish just before she spawns. The tag is passed onto the resulting larvae, becoming a chemical signature in their ear bones. This signature can be traced by researchers even when the larvae are in large coral reefs or the open sea. TRAIL has been used successfully in clownfish and butterfly fish, and will now be tried in an investigation into how far fish larvae hatched in marine protected areas travel beyond the boundaries of their natal protected areas.

Source: Woods Hole Oceanographic Institution News Release (2007), http://www.whoi.edu/page.do?pid=7545&tid=282&cid=30346&ct=162

# Temperature rises could trigger mass extinction

Researchers examining the connection between climate and biodiversity in the fossil record have unearthed an alarming link between the two, with cool periods having high biodiversity and warm periods low biodiversity. The researchers found that four out of five of the mass extinctions suffered by the planet have been associated with greenhouse phases, which are characterized by warm, wet conditions. These include the worst mass extinction on record, 251 million years ago, when 95% of all species were lost. Most worryingly, the temperatures predicted for the coming centuries are within the range of temperatures when these mass extinctions occurred.

Source: BBC News (2007), http://news.bbc.co.uk/1/hi/sci/tech/7058627.stm

#### **Primates in peril**

The biannual list of the 25 most threatened primates has been published for 2006-2008, and contains a number of different primates, ranging from great apes (the Sumatran organ-utan and the Cross River gorilla) to gibbons (from China and India). Eighteen countries host the world's most threatened primates, with particular concentrations in Madagascar (four species) Vietnam (four), and Indonesia (three). Four of the species on the list are recently described and, given that 71 primate species have been described for the first time since 1990, it is anticipated that this number may grow in the future. The authors of the report warn that almost one third of the world's primates are at risk of extinction, with the destruction of their habitats and their use in food and medicine particularly serious.

Source: Primate Conservation (2007), 22, 1-40 [available at http://www.primatesg.org/PDF/PC22.Top25.06-08.pdf], and BBC News (2007), http://news.bbc.co.uk/1/hi/world/asia-pacific/7063139.stm

#### **Deforestation linked to floods**

There has been much debate surrounding the idea that forests offer protection against flooding. Now the first globalscale empirical investigation of the relationship between forests and flood risk has revealed that forests are correlated with flood risk and the severity of floods in developing countries. Data from 56 countries collected during 1990-2000 showed a negative correlation between flood frequency and the amount of remaining natural forest, and there was a positive correlation with natural forest area loss. Among the countries investigated, a model showed that the average prediction of flood frequency range is 4-28% for a hypothetical 10% decrease in the natural forest area, with total flood duration increasing by 4-8%. The findings highlight the importance of largescale forest protection.

Source: Global Change Biology (2007), 13, 2379-2395.

#### **Europe**

### Set-aside falls by the wayside...

The European Commission has come under criticism for its proposal to reduce the rate of set-aside in 2008 to 0%. The decision has been made amid fears of the low availability of cereals, which could lead to increasing food prices,

and the Commission has promised to carry out a full assessment of set-aside in the 2008 Common Agricultural Policy 'Health Check'. In the mean time, however, conservationists are concerned about the effect of this decision on the many bird species, such as yellowhammer and corn bunting, which use set-aside for feeding and nesting. There is particular concern about species such as the little bustard that depend on set-aside for their survival.

Source: BirdLife International News (2007), http://www.birdlife.org/news/news/ 2007/09/set-aside.html

### ... while England's farmland bird decline continues

A UK government wildlife indictor, the Wild Bird Populations indicator, has shown that the number of wild farmland birds breeding in England has reached an all time low. Populations of farmland birds have fallen by c. 60% since 1970, with species such as the skylark, which is dependent on farmland for breeding and feeding, suffering the greatest decline. The farmland bird index measures the populations of 19 species, and showed a 50% decline in numbers over 1977-1999 but then stabilized at this level. In recent years, however, numbers appear to be falling again. Changes to agricultural processes, such as the loss of field margins and hedges, are thought to be to blame for the decline in farmland

Source: BBC News (2007), http://news.bbc.co.uk/1/hi/sci/tech/7050910.stm

### Iceland's commercial whale hunting halted

The NGO Greenpeace has released a report stating that Iceland will not be issuing any more commercial whale hunting quotas until the market for whale products improves and they are granted permission to export whale products to Japan. Despite announcing a return to commercial whaling in 2006, only 14 whales have been killed by Icelandic whalers out of a permitted quota of 39. The International Whaling Commission has also reviewed Iceland's scientific whaling programme, and decided not to support it on the grounds that advances in non-invasive research techniques have nullified the need to kill whales in the name of science (see also Whales' faeces tell a gourmet tale, p. 3).

Source: Marine Pollution Bulletin (2007), **54**, 1565.

### Invasive crayfish good for bitterns

A study carried out in reed-dominated wetlands in the Camargue has found that

the spread of the invasive red swamp crayfish may be good news for bitterns, a species of high priority concern in Europe. The study examined the impact of food abundance on male bittern density, and found that only red swamp crayfish abundance was related to bittern density. Taking into account the impact of water level, the relative abundance of crayfish explained 56% of inter-annual differences in bittern density. The researchers hypothesize that crayfish are a good food source for bitterns, being rich in calcium, and their tolerance for a range of hydrological conditions means they are available throughout the breeding season.

Source: Journal of Zoology (2007), **273**, 98-105.

### **Bullfrogs leap across Europe**

Research has shown that North American bullfrogs, which carry the chytrid fungus responsible for decimating local amphibian populations the world over, are spreading across Europe with the aid of human introductions. Despite the existence of an EU ban on the release of bullfrogs since 1997, research shows that these amphibians are still being released, with bullfrogs having been brought into the continent on at least two occasions since 1997. The bullfrogs were initially introduced into Europe as pets, research animals, and to supply the food industry with frogs' legs, and now occur in five European countries, compared to three a decade ago.

Source: New Scientist (2007), 195(2623), 4.

## Stronghold for mining bee discovered

Surveys on a group of remote Scottish islands have discovered a significant number of colonies of the northern colletes, a solitary mining bee. More than 10 colonies of this rare insect were found on sandy dunes on the Uists, making these islands the most important UK habitat for the bee. Although northern colletes are solitary they nest in aggregations, where the females dig tunnels into soft soil in which they then lay their eggs. The nest burrows, which can be up to 26 cm long, are lined with secretions from the females' mouths, and are provisioned with nectar and pollen to support the larvae during the winter months. Although not restricted to the UK, this is the only area in the Atlantic biogeographical zone where they occur, making the UK's populations of international importance.

Source: RSPB press release (2007), http://www.rspb.org.uk/media/releases/details.asp?id=tcm:9-176264

## River Thames is tempting for dolphins and seals

A project to document the occurrence of marine mammals in London's major river has revealed that there were more than 100 sightings of dolphins, seals and porpoises in the Thames between July 2005 and June 2006. The sightings include at least one sighting of a dolphin between Westminster Bridge and Tower Bridge. The data are being collected to enable researchers to gain a clearer understanding of the use of the river by cetaceans and pinnipeds, and to determine the threats to these mammals. For example, the study shows that the water upriver of Tower Bridge is not particularly safe for marine mammals, with the discovery of dead harbour porpoises with injuries consistent with propeller or boat collision damage shortly after live sightings of the same species were recorded.

Source: ZSL News (2007), http://www.zsl.org/zsl-london-zoo/news/londons-tourists-include-dolphins-and-seals,388, NS.html

### UK's waters attract European rarity

Ten percent of the world population of Europe's most threatened seabird visited the UK's inshore waters during summer and autumn 2007. Rising sea surface temperatures in the north-east Atlantic have resulted in a northwards shift of the prey of the Critically Endangered Balearic shearwater, with the consequence that these birds are now frequent visitors to the UK's inshore waters. Since 2003 some shearwaters have even spent the entire winter off the Cornish coast and the Isles of Scilly. Changes in fish distribution and abundance have increased the distance that the shearwaters have to migrate in search of food by 20%, or >640 km, since a few years ago. Source: RSPB press release (2007), http:// www.rspb.org.uk/news/details.asp?id= tcm:9-176212

### More lynx discovered in Spain

A new population of Iberian lynx has been discovered in previously unsurveyed estates in the Castilla-La Mancha region of Spain. While the exact details have not been made known, the population is thought to contain both adults and cubs. Until this recent discovery, the Critically Endangered Iberian lynx was thought to be restricted to two isolated breeding populations in southern Spain, and to number only *c*. 110 adults. The lynx faces many threats in Spain, such as a lack of prey, collision with vehicles on the roads and the destruction of their

habitat. Conservationists hope that this latest discovery will galvanize conservation action to protect the lynx, with WWF calling for all lynx habitat to be protected under the EU's Natura 2000 programme.

Source: WWF News (2007), http://www.panda.org/news\_facts/newsroom/news/index.cfm?uNewsID=115860

### Greece guilty of infringing EU Birds Directive

The European Court of Justice has found Greece guilty of not implementing a sufficient number and area of Special Protection Areas (SPAs) for birds, thus contravening the EU Birds Directive. Greece has 196 Important Bird Areas but only 40% of these have been designated as SPAs. Under the ruling by the Court of Justice Greece has been ordered to convert the remaining 60% to SPAs, and has also been ordered to do more to protect 12 species including lammergever and longlegged buzzard. All EU countries are committed to implementing the EU's nature legislation and working towards the target of halting biodiversity loss by 2010 but the court's ruling shows that there is still a way to go.

Source: BirdLife International News (2007), http://www.birdlife.org/news/news/ 2007/10/Greek\_IBASPA.html

### Mediterranean proves fatal for sharks and rays

Forget the menace posed to bathers by sharks; the first complete IUCN Red List assessment of Mediterranean sharks and rays has revealed that this area is one of the most dangerous places in the world for these fishes. Forty-two percent of the species that occur here are threatened with extinction, mainly as a result of overfishing. Bottom-dwelling species, such as the Critically Endangered endemic Maltese skate are particularly at risk, because of intense fishing that occurs on the seabed. In recent years there has been some legislation to combat threats to these species, including a deepwater fishing ban and bans on driftnets and shark finning but the report's authors have called for better enforcement to give populations a chance to recover.

Source: IUCN news release (2007), http://www.iucn.org/en/news/archive/2007/11/16\_pr\_sharks.htm

## One in three European fishes faces extinction

A 7-year IUCN assessment has found that more than one third of Europe's freshwater fish species is at risk of extinction, meaning that the group is more at risk than Europe's birds or mammals. Fish conservation is hampered by the fact that these species are not deemed to be charismatic, and they therefore run the risk of disappearing with only a minimum of fuss. One species of particular concern is the Critically Endangered European eel, with the numbers of eels reaching rivers from their Atlantic breeding grounds having fallen by 95-99% since 1980. Environmental changes wrought by humans in the last 100 years, such as dam construction and water extraction, is the main reason for the decline in fish populations.

Source: National Geographic News (2007), http://news.nationalgeographic.com/news/2007/11/071102-fish-europe.html

#### **North Eurasia**

# Black Sea slick threatens ecosystem

Storms that struck the Strait of Kerch during November were responsible for the sinking of at least 10 ships in this channel, which links the Black Sea with the Sea of Azoz to the north. One of the damaged ships was the oil tanker Volganeft-139, which released 2,400 tonnes of heavy fuel oil, while the sinking of two other freighters led to the release of 6,500 tonnes of sulphur. Researchers are concerned that the unique conditions in the Black Sea, which is not oxygenated at depths below c. 150 m, mean that the heaviest oil may sink and contaminate the environment for many years to come. Additionally, there are fears that the sulphur may also have negative impacts on this environment, as a spill of sulphur in these conditions is without precedent. Source: New Scientist (2007), 196(2630), 6.

### Whales picking up bad vibrations

Recent construction at Shell's Sakhalin II project site has resulted in constant, lowfrequency noise, the vibrations of which could be felt on the shore 12 km away, and researchers are concerned that this sound is causing western grey whales to abandon their feeding grounds. The area around the project site is adjacent to the only known feeding ground for this Critically Endangered species, which numbers <100 individuals. The problem is particularly serious as the whales use their auditory systems in orientation, and there are fears that the low-frequency sound emitted by boats as they work on a new oil platform may interfere with this.

Source: Marine Pollution Bulletin (2007), **54**, 1311.

## Spoon-billed sandpiper in sharp decline

Surveys of the Endangered spoon-billed sandpiper at its breeding grounds in the Russian province of Chukotka have revealed that only 200-300 pairs of this species now remain. The spoon-billed sandpiper has suffered serious population declines over the last decade, with a 70% drop in numbers at some breeding sites in the last couple of years. The reasons behind this decline are complex, involving the loss of breeding sites, coastal reclamation along its migratory route to South and South-east Asian coasts, and disturbance by dogs and people during the breeding season. Plans are being developed to protect the birds' nesting areas, and in the longer term action is needed to safeguard migratory stopovers. Unless effective action is taken now there is a risk that the sandpiper will carry the secrets of its spoon-shaped bill to its grave.

Source: BirdLife International News (2007), http://www.birdlife.org/news/news/2007/10/spoon\_billed\_sandpiper.html

## Clarification on World Bank funding for Aral Sea

The World Bank has published a press release refuting reports in the media (Oryx, 41, 279-280) that it has provided a USD 126 million loan to the Kazakhstan government for the continuing restoration of the Northern Aral Sea. A grant from the World Bank was originally used to build the Kok-Aral dam as part of the Syr Darya Control and Northern Aral Sea project. Preparation for a follow-up project, funded by a USD 800,000 Japanese grant and administered by the World Bank, started at the beginning of 2007, and will take c. 1 year. Furthermore, it is anticipated that the second phase of the project will be ready for discussion by the World Bank Board of Executive Directors in mid 2008.

Source: World Bank press release (2007), http://siteresources.worldbank.org/INTKAZAKHSTAN/News%20and%20Events/21295609/Aral\_Sea\_April12\_07.pdf

# North Africa and Middle East

#### Sociable lapwing congregate in Turkey

A satellite-tagged social lapwing has led researchers to discover the largest flock of these Critically Endangered birds for 100 years. The lapwing was tagged on its breeding grounds in Kazakhstan and was subsequently followed as it migrated past the Caspian Sea, through the Caucasus and south into Turkey, a distance of >3,200 km. Once the bird arrived in Turkey, researchers were able to find it, along with 1,800 of its sociable conspecifics. The following day a flock of 3,200 sociable lapwing was seen at the site. The discovery of such a large flock is particularly remarkable considering that the total population of these birds was thought at one point to number as few as 400 individuals.

Source: BirdLife International News (2007), http://www.birdlife.org/news/news/ 2007/10/lapwing\_superflock.html

### Red-footed falcon massacre condemned

There has been widespread outrage among conservationists throughout Europe following the discovery of the illegal shooting of 52 red-footed falcons in Cyprus. Forty-six of the Near Threatened birds were already dead upon discovery in the poaching black spot of Phasouri, on the Akrotiri peninsula of Limassol. The policing of this area is complicated by the presence of the Akrotiri British Sovereign Base Area (SBA), necessitating joint anti-poaching patrols by the SBA Police and the Cyprus Game Fund. A joint SBA-Game Fund antipoaching team has been established but has not yet been seen in action. BirdLife Cyprus have called for an immediate ban on shooting on the entire peninsula, to protect the falcons as well as other birds such as bee-eaters and yellow wagtails that are also targeted illegally by hunters. Source: BirdLife International News (2007), http://www.birdlife.org/news/news/ 2007/10/cyprus\_falcon\_massacre.html

#### **Sub-Saharan Africa**

#### A sting in the tail for elephants

The problem of crop-raiding elephants is a serious one for African farmers, and efforts to deter the elephants have included using flashlights and loud noises, burning rubber, and building barriers (see also this issue, pp. 76-82 and 83-91). Researchers have now hit upon a simple and effective solution; the sound of buzzing bees. In experiments where bee sounds were played back through speakers hidden in a portable fake tree trunk, it was found that the elephants put an average of 64 m between them and the sound, compared to

an average of 20 m when deterred with white noise. The equipment used in the experiments is expensive, but the researchers suggest that the use of real bee hives may also be effective, while providing additional benefits to the farmers in the form of honey.

Source: New Scientist (2007), 196(2625), 5.

### Bonobos benefit in the Democratic Republic of Congo

A reserve larger than the US state of Massachusetts is to be created in the Democratic Republic of Congo, bringing the amount of land set aside for conservation in the DRC to just over 10%. The Sankuru Reserve has been gazetted with the specific intention of safe-guarding the future of the bonobo, one of the two species of chimpanzee, often targeted for bushmeat. The entire world population of bonobos, estimated at 10,000, is found in the DRC, and civil war has hampered efforts aimed at their conservation. The new reserve is 30,500 km2 and has been established with assistance from the USA's Bonobo Conservation Initiative.

Source: Nature (2007), 450(7169), 470.

### Seychelles white-eye moves to new islands

The future of the Endangered Seychelles white-eve is now more secure thanks to a series of transfers of individuals from their stronghold on Conception to Cousine and North islands. These releases were part of the Sevchelles White-eve Recovery Programme and their aim is to create new populations on islands that contain suitable, predator-free habitat for the birds. The white-eve were transferred to Cousine and North island by helicopter in Helibird boxes, specially designed to be able to transport the birds in a sound-proof and ventilated box. Once on the new islands the birds were kept for observation in a release cage for 1 day before being released. Post-release observations show that the birds have dispersed widely and some males have been displaying territorial behaviour. Source: Birdwatch (2007), 64, 2-5.

### African countries join forces for ape protection

African countries where great apes occur are legally obliged to act in a coordinated manner to combat threats to these animals following the signing of a new agreement. The legally binding agreement, signed at a meeting hosted by the French government and the UN's Convention on Migratory Species, specifies how the governments

need to collaborate on and undertake action for their great apes. It is hoped that the agreement, hailed as a major conservation achievement, will promote collaboration and political will to protect important ape habitat, and halt threats such as poaching and Ebola outbreaks. The countries involved in the talks were Angola, Cameroon, Central African Republic, Democratic Republic of Congo, Equatorial Guinea, Gabon, Nigeria, Republic of Congo and Uganda, with Rwanda unable to attend.

Source: WWF Newsroom (2007), http://www.panda.org/news\_facts/newsroom/news/index.cfm?uNewsID=116062

#### Mabira forest's future more secure

The Ugandan government has stated that it has abandoned its plan to give away one third of Mabira Forest for sugar cane planting. Mabira Forest Reserve is an Important Bird Area containing >12% of plant and 30% of bird species found in Uganda. It is thought that the government's decision was based in part on an economic valuation of the Reserve by NatureUganda, which found that the value of the forest, if conserved, would exceed the anticipated value from growing sugarcane. Additionally, there is land elsewhere in Uganda suitable for sugarcane plantations where there may be additional benefits to local communities and economies. Source: BirdLife International News (2007), http://www.birdlife.org/news/news/ 2007/10/mabira.html

### **Diclofenac reaches Africa**

The anti-inflammatory drug diclofenac, which has wrecked havoc among the vulture populations of Asia, has been discovered for sale in a veterinary practice in Tanzania. Diclofenac causes gout and renal failure in vultures belonging to the genus Gyps, raising fears for the future of the Africa members of this genus, which include the Vulnerable Cape vulture. Gyps vultures are wideranging and the presence of a single diclofenac-contaminated carcass within their range could wipe out whole populations. There are also concerns that the toxic effects of diclofenac may not be limited to Gyps vultures but may affect other raptors. Urgent action by governments and veterinary associations to ban the veterinary use of the drug is required to safeguard the existence of Gyps vultures in Africa.

Source: BirdLife International News (2007), http://www.birdlife.org/news/news/ 2007/10/africa\_diclofenac.html

### Primate hunting ban in Equatorial Guinea

Conservationists in Equatorial Guinea are celebrating new legislation prohibiting the hunting, sale, consumption and possession of monkeys and primates. Any person violating this ban faces fines of XAF 100,000-500,000 (USD 225-1,125), as well as the confiscation of their gun and hunting licence. The legislation, signed by President Obiang on 27 October 2007, is the result of fears about the consumption of monkey meat and of the epidemics and pathogens carried by monkeys and primates, in addition to concerns about the extinction of species as a result of excessive hunting.

Source: Bioko Biodiversity Protection Program (2007), http://bioko.org/conservation/hunting.asp

### Flamingos earn reprieve for the moment

Plans to build a soda ash extraction plant on the shores of Lake Natron, the breeding site for one million lesser flamingos, have been rejected. The developers, Lake Natron Resources, owned by Tata Chemicals and the Tanzanian Government, have been asked to provide a new improved environmental statement, as well as to consider other sites for soda ash extraction. Groups at the meeting to advise the Tanzanian Environment Minister on whether to allow the development to go ahead, included conservation organizations, representatives from national parks, and the EU. There was general agreement among those present that the development should be rejected because of the damage that it would do to the flamingos and other species, as well as to the lake itself.

Source: BirdLife International News (2007), http://www.birdlife.org/news/news/ 2007/11/Lake\_Natron\_reprieve.html

### Swallow flocks to be monitored from airport control tower

Following an international outcry at the announcement of the expansion of South Africa's La Mercy Airport, a number of mitigation actions have been developed to protect the five million barn swallows that roost in the adjacent Mount Moreland reedbed. Consultants employed to examine the swallows' flocking and roosting behaviour reported that constant monitoring of the birds during take-off and landing would be required. This finding has led to the development of a number of measures by the Airports Company of South Africa to protect the swallows following the expansion. One such measure involves the installation of

radar technology in the airport control tower, enabling staff to instruct planes to alter their landing procedure when large flocks of swallows form over the reedbed in the late evening.

Source: BirdLife International News (2007), http://www.birdlife.org/news/news/2007/11/swallows\_runway.html

## Eastern and southern Africa to benefit from cable project

A number of international organizations including the World Bank, the African Development Bank and the German KfW Entwicklungsbank, have concluded the contracts for the co-financing of the Eastern Africa Submarine Cable System project. This million dollar scheme us funding the construction of a submarine fibreglass cable stretching some 10,000 km along Africa's east coast, from Sudan to South Africa, providing 21 African states with high-quality internet connection and enabling 250 million African citizens to access the internet. Currently, internet access in eastern and southern Africa costs c. USD 200-300 per month, and is mostly supplied by satellite link. This new project, due to be completed in time for the football world cup in 2010, will reduce this cost significantly, as well as enabling many new users to access the

Source: KfW Entwicklungsbank press release (30 October 2007).

#### **South and South-east Asia**

## Oryx editorial board member receives accolade

Congratulations are in order for Dr K. Ullas Karanth, director of WCS-India, who has been awarded the prestigious J. Paul Getty Award for Conservation Leadership by WWF-US. The award was established in memory of the philanthropist of the same name to recognize those who have made an outstanding contribution to conservation. The USD 200,000 cash prize that comes with the accolade will be used to create graduate fellowships named in honour of Dr Karanth and J. Paul Getty. These fellowships will support graduates studying in conservation-related fields at an institute of higher learning chosen by the winner of the award. Dr Karanth has chosen to support students studying for master's, doctoral and post-doctoral degrees at the National Centre for Biological Sciences in Bangalore.

Source: WWF (2007), http://www.worldwildlife.org/about/gettyaward/

#### High mortality rate among lions in Gir National Park

The discovery of five electrocuted lions in Gir National Park in October 2007 brought the total of lions that died in 2007 to 32. The latest deaths are reported to be the result of electrocution by a crop protection fence, erected by a farmer in an area adjoining the National Park. Other causes of death include poaching (eight lions), falling into open wells (five) and collision with a vehicle (one). An additional 12 lions were found dead with no obvious cause of death attributable, and one other lion was electrocuted prior to the latest incident. (See also *Oryx*, 41, 93-96) *Source: Wildlife Protection Society of India* 

# New reserves created for the mysterious saola...

press release (19 October 2007).

The future of one of the world's rarest animals has been made more secure following the designation of two new reserves in the Annamite mountains of Vietnam. The saola was only discovered 15 years ago, and only 11 individuals have ever been recorded alive. So elusive is this mammal that researchers are not yet sure whether it is a goat, antelope or cow species. The new reserves, which form a continuous protected landscape from the Vietnamese coast to Xe Sap National Biodiversity Conservation Area in Lao PDR, are part of a saola conservation plan approved by the provincial People's Committees in Thua Thien Hue and Quang Nam provinces. Research by WWF has revealed that hunting is the main threat to the saola, with numbers falling rapidly since the introduction of wire snare-traps in the mid 1990s.

Source: WWF Update (2007), http://www.worldwildlife.org/wildplaces/flm/updates/saola.cfm?enews=enews1007

#### ... and for sarus cranes

The Cambodian government has approved a proposal to protect nearly 9,000 ha of seasonally inundated grassland for the South-east Asian subspecies of the Vulnerable sarus crane, which is the fastest declining of the three subspecies. The Boeung Prek Lapouv Sarus Crane Conservation Area is located in Takeo province, south-eastern Cambodia, and is home to up to 300 of the cranes, equivalent to 40% of the subspecies' population. Conservationists have applauded the government's decision to gazette the area, which is located in one of Cambodia's most densely populated and poorest regions, where land is much sought after for rice cultivation.

Source: BirdLife International News (2007), http://www.birdlife.org/news/news/2007/11/cambodia\_sarus\_cranes.html

### **East Asia**

#### Tern's population plummets

A survey of the Critically Endangered Chinese crested tern has revealed that the global population has fallen to an alltime low of 50 individuals, a 50% decline since the last study in 2004. Researchers believe that without urgent action the species will disappear within 5 years. The Chinese crested tern was discovered in 1861 and sightings of it have been infrequent since then, leading to suggestions that it might have gone extinct until the discovery of a breeding colony on an island off the coast of Fujian province in 2000. The greatest threat currently facing this species is the collection of its eggs to supply the trade in seabird eggs, the price of which has more than doubled since 2005.

Source: BirdLife International News (2007), http://www.birdlife.org/news/news/ 2007/09/chinese\_crested\_tern.html

### Sighting of river dolphin brings glimmer of hope

The news of the 'functional extinction' of the baiji, or Yangtze River dolphin, earlier this year after a survey of the Yangtze failed to locate any individuals was greeted with widespread dismay. However, all may not be lost following the alleged sighting of a baiji by a business man from Tongling City, who filmed a 'big white animal' on his digital camera. The footage was later confirmed as a baiji by Professor Wang Ding, a leading researcher on the species. Although this sighting has prompted hope that perhaps the species could be rescued from the brink of extinction, in practice the outlook for the species remains bleak, given the miniscule population size and the polluted state of the heavily-utilized Yangtze River.

Source: WWF Newsroom (2007), http://www.worldwildlife.org/news/displayPR.cfm?prID=427

### Three gorges dam could cause environmental catastrophe

Engineers working on China's three gorges dam are warning that the dam could have serious environmental impacts unless urgent action is taken to counter emerging problems such as soil erosion, landslides, and water pollution. The dam, due to be completed at the end

of 2008, has already caused major upheaval with one million people having been relocated, and has cost at least USD 25 billion. This admission about the negative impacts of the dam comes at a time when China's government is increasingly worried that environmental damage is leading to political unrest, with reports earlier this year that fears about pollution had led to an increase in protests and riots throughout the country.

Source: BBC News (2007), http://news.bbc.co.uk/1/hi/world/asia-pacific/7013953.stm

#### **North America**

### The politics of publishing

The oil company that provided funding for an astrophysicist and other researchers to investigate the impact of climate change on polar bears in western Hudson Bay is having its motives scrutinized by the US House Committee on Science and Technology. The researchers published their conclusions that polar bears are not threatened by climate change in Ecological Complexity, as a Viewpoint article, which are not subject to peerreview. ExxonMobil is likely to be directly affected should the polar bear be listed under the Endangered Species Act, and the Committee feel that the public has the right to know why the oil company is funding an astrophysicist to write on issues outside his area of expertise. Source: New Scientist (2007), 196(2627), 4.

## Third regional emissions agreement signed in USA

The governors of Illinois, Iowa, Kansas, Michigan, Minnesota and Wisconsin, and the premier of Manitoba, Canada, have signed a regional agreement to cap greenhouse gas emissions, in lieu of the existence of a federal emissions reducprogramme. The Midwestern Greenhouse Gas Reduction Accord is the third such agreement of recent years, and commits the seven states to establish an emissions credit rating system by 2010, with likely targets for cuts in emissions of 60-80%. The World Resources Institute estimates that if this group of states was a country, it would be the seventh largest emitter of greenhouse gases in the world.

Source: New Scientist (2007), 196(2631), 4.

### Junk hampers condors' comeback...

A paper has revealed that the re-establishment of the Critically Endangered Californian condor is being severely affected by the amount of rubbish ingested by the birds. Twelve out of 13 breeding attempts failed between 2001 and 2005. Two condor chicks have died directly from junk ingestion, and this cause is implicated in the deaths of a number of other chicks. This issue needs to be addressed urgently, as the human footprint of the area in southern California where the condors breed is growing. The authors suggest the creation of additional condor feeding restaurants at unaffected areas.

Source: BirdLife International News (2007), http://www.birdlife.org/news/news/ 2007/09/junk\_ingestion.html

## ... but ban on lead ammunition should help

The governor of California Arnold Schwarzenegger has ignored objections by his own Department of Fish and Game and has signed a bill that will make it illegal to use lead ammunition when hunting big game in the range of the Californian condor. The ingestion of lead bullets played a major part in the decline of the condor, which fell to a low of six individuals in the wild in 1987. These individuals were taken into captivity as part of a breeding and reintroduction programme that has enabled the wild population to rise to 70 individuals. Conservationists are hailing the newly signed Ridley-Tree Condor Preservation Act as an example of a creative solution to an environmental issue.

Source: BirdLife International News (2007), http://www.birdlife.org/news/news/2007/10/lead\_ban\_california\_condor.html

## Fish swim freely following dam's removal

A dam in the Lehigh River Watershed has been removed, enabling migratory fish such as American shad and herring to reach 29 km of their historic range for the first time since the dam's construction. The 3 m high Heilman dam, originally built to provide water for steam-powered locomotives, was deemed a public safety hazard not worth maintaining. The banks of the restored river channel will be planted with native grasses, shrubs and tree seedlings, and 1.2 ha will be made into a riverside park for local communities. The removal of the dam opens up a route of over 400 km for migratory fish, from the Atlantic Ocean to the headwaters of Mahoning Creek in Carbon and Schuylkill counties. Source: National Oceanic and Atmospheric Administration News Release (2007), http://www.publicaffairs.noaa.gov/ releases2007/aug07/noaa07-r129.html

## Polar bear seen diving for its supper

For the first time in 200 years researchers have witnessed a polar bear fishing for its supper by diving into the water and swimming after prey. The adolescent polar bear was seen swimming in an estuary full of migrating charr in Iqaluit, Canada, catching c. one fish every hour. There is much concern about the effects of dwindling sea ice on polar bears, which normally hunt seals on the ice, and therefore the possibility that the bears are learning to exploit new sources of food is welcome news. However, it is unclear whether polar bears will be able to obtain the same amount of energy from fish as they can from seals.

Source: New Scientist (2007), 195(2623), 16.

### **Endangered Species Act decisions** overturned

Seven decisions made by an employee of the US Fish and Wildlife Service who worked on the Endangered Species Act have been overturned, after it transpired that she had pressurized agency scientists, and had sought advice on decisions from a friend in the online game World of Warcraft. Species affected include Preble's meadow jumping mouse, the white-tailed prairie dog, the arroyo toad, and 12 species of Hawaiian picture-wing fly. The latter are having the size of their 'critical habitats' increased from the 0.4 ha per species originally designated for them. Revision of some of the other decisions is dependent on the acquisition of funding, however.

Source: Nature (2007), 450, 775.

### 'Amazon of the North' protected

The Canadian government has been praised by conservationists following the temporary withdrawal of >10 million ha of the North-West Territories from future industrial development. The government's decision brings to 1% the total amount of Canada's land mass under protection, which is one of the largest designations of its kind in the northern hemisphere. The recently protected areas include the Ramparts River and Wetlands complex, expected to become the next Canadian national wildlife area and the East Arm of the Great Slave Lake, due to become a national park. Among the species set to benefit from the decision are lesser snow geese and Bewick's swan, both of which use the East Arm of

the Great Slave Lake during their northwards migration.

Source: BirdLife International News (2007), http://www.birdlife.org/news/news/2007/11/canada\_amazon.html

#### Kirtland's warbler moves north

A pair of Kirtland's warblers have bred in Canada for the first time for 60 years, providing further evidence for the continuing expansion of this species. The population reached a low of <200 singing males in the 1970s following extensive habitat loss in their northern breeding sites. The population has since recovered, with an estimated 1,500 singing males recorded in Michigan in 2006. In recent years Michigan has been the only place where Kirtland warblers have bred in the USA but in addition to the Canadian pair, other pairs were found in Wisconsin in 2007. The nest and two inviable eggs from the Canadian pair, which bred on a Canadian Forces Base in Ontario, have been donated to the Royal Ontario Museum.

Source: BirdLife International News (2007), http://www.birdlife.org/news/news/2007/11/kirtlands\_nest\_discovery.html

## Roads keep newborn moose safe(ish) from harm

The presence of people in protected areas has been shown to affect the relationship between predators and their prey, following a 10-year study of moose and brown bears in Yellowstone National Park. Female moose were found to choose birth sites near to paved roads, apparently because bears avoid going within 500 m of roads, thus minimizing bear predation of neonatal calves. Other examples of animals using humans as shields from predation include axis deer in Nepal, which stay close to ranger stations to avoid being attacked by big cats. The study raises the question of how typical of a 'natural' ecosystem national parks can claim to be, given that anthropogenic effects may be influencing behaviour in indirect ways.

Source: Royal Society press release (2007), http://royalsociety.org/news.asp?year=&id=7189

# Central America and Caribbean

### Captive breeding population of 'swampers' increases by nine

The population of the Critically Endangered Utila iguana has received a boost

following the hatching of nine babies at London Zoo. The iguanas, known as swampers because they live in mangrove swamps on Utila island in the Caribbean, are the focus of a conservation breeding programme launched to protect the species from extinction. The Utila iguana, endemic to its namesake island, is unique in that it is the only species of spiny-tailed iguana that lives in mangrove swamps. The iguanas are threatened by conversion of their habitat into tourist and residential complexes, with the beaches where the females lay their eggs at particular risk.

Source: ZSL News (2007), http://www.zsl.org/zsl-london-zoo/news/hope-hatches-for-a-rare-species-critically-endangered-lizard-on-the-brink-of-extinction,395,NS.html

## Costa Rican debt cut in return for forest protection

The US and Costa Rican governments have reached a settlement whereby the US and conservation groups will cut USD 26 million from Costa Rican debt in return for the country spending the same amount on forest protection over the next 16 years. The settlement has been drawn up under the auspices of the US Tropical Forest Conservation Act, which has seen similar deals made in Guatemala, Belize and Peru in recent vears. The Costa Rican environment minister announced that the money would be spent on enlarging protected areas, supporting local communities in conservation efforts, and encouraging tourism. One of the areas due to be targeted under the plan is the Talamanca Highlands, which contain Costa Rica's largest area of pristine rainforest.

Source: BBC News (2007), http://news.bbc.co.uk/1/hi/world/americas/7050664.stm

### Supreme Court recognizes traditional land rights of Mayan people

The Supreme Court of Belize has upheld a claim brought by indigenous groups that Maya customary land rights are protected by the constitution in the same way as other property rights in Belize, thus setting a precedent for all indigenous communities. The ruling means that the government of Belize must consult with villagers before being able to issue land titles, concessions, licenses or permits, on the grounds that the land is recognized as belonging to the communities. For the people living in Conejo, who have long been arguing that proposed oil exploration in Sarstoon

Temash National Park threatens the area's biodiversity, the Court's decision means that they are now recognized as legitimate stakeholders in this debate. *Source: EcoLogic E-News* (30 October 2007), http://www.emailbrain.com/rwcode/content.asp?SID=1&SiteID=5076&Email=%3cGM0.0%3eEmail%3c/GM%3e&Section=108101

### **South America**

### Million-dollar package announced for science and technology in Brazil

The president of Brazil has announced a surprise package of USD 28 billion for science and technology over the next 3 years in a bid to improve academic research and combat the lack of technological innovation in the industrial sector. The majority of Brazilian researchers work in the public sector, which has resulted in a 9% increase in scientific publications year on year since 2000. However, there is still a lack of qualified researchers in the private sector, particularly in key areas including biofuels, climate change and Amazon-related studies. An increase in funding for postgraduate qualifications aims to redress this, as do new measures to reduce bureaucracy and legislation.

# International project launched to save Brazil's Atlantic forest

Source: Nature (2007), 450(7170), 591.

Brazil's Boa Nova Important Bird Area is located at the meeting place of the lush Atlantic Forest biome and the caatinga (semi-arid vegetation) biome, and the resultant rich biodiversity includes 359 bird species, 10 of which are threatened. This area in the south-west of Bahia state is now set to benefit from a new project, Forest Conservation Project in Atlantic Tropical Forest, part of an international collaboration led by Bird-Life's Asia Division, implemented on the ground by SAVE Brasil and funded by Ricoh Co. Ltd. The 3-year project will develop a number of forest conservation management plans with local communities in an attempt to secure the future of the forest, a part of which has already been destroyed, mainly through land clearance, overgrazing and collection of firewood.

Source: BirdLife International News (2007), http://www.birdlife.org/news/news/ 2007/09/ricoh\_atlantic\_forest.html

## Enough to put a smile on anyone's beak

Good news for the future of the Endangered recurve-billed bushbird; a number of sightings of this species, also known as the smiling bird because of the way its beak curves upwards, indicate that it may not be as threatened as has previously been thought. Until a four-man team came across the species in Venezuela in 2004, the bushbird has not been seen for 40 years, leading to fears that it had become extinct. Subsequent surveys have also discovered the bird in Colombia, while recent work in Venezuela has revealed that the bird can occur in secondary habitat. The habitat, and thus the future existence, of the smiling bird is still not secure, however, as deforestation and flooding resulting from hydroelectric dam-building threaten at least part of its range.

Source: BirdLife International News (2007), http://www.birdlife.org/news/news/ 2007/09/Rercuve-billed\_Bushbird\_ rediscovery.html

### Peruvians vote against mine in referendum

A referendum organized in three cities in Peru's Piura state to determine the opinion of local communities regarding the planned construction of an open pit mine by Rio Blanco returned a resounding 95% vote against the mine's construction. The referendum was apparently dogged by attempts to declare it illegal and when this failed, organizations in favour of the mine are alleged to have tried to sway the outcome through bribery and by inebriating voters. The mayors of the Rural Municipalities of Piura were even threatened by government organizations for supporting the referendum. Despite these attempts to derail the referendum, communities voted overwhelmingly to protect the natural and cultural landscapes that are threatened by the mining plans.

Source: Environmental News Service (2007), http://www.ens-newswire.com/ens/oct2007/2007-10-10-01.asp

### **Pacific**

# Time for rats to say goodbye to Ringgold Isles

A new project is set to rid some of Fiji's most important seabird islands of their unwelcome invasive residents. The mostly uninhabited Ringgold Isles, which form an outlier group to Vanua

Levu, are home to many seabirds, as well as sea turtles and native lizards. However, seven of eight islands surveyed had rats present, and one had a feral domestic cat. Rats and cats pose a serious threat to the seabirds, as they eat eggs and chicks. Rats also hinder the regeneration of coastal forest, as they eat the seeds of native trees. The programme to rid the islands of these invasive predators will be finalized early in 2008, and will also focus on preventing future recolonization of the Ringgold isles by these mammals.

Source: BirdLife International News (2007), http://www.birdlife.org/news/news/ 2007/10/ringgolds\_survey\_fiji.html

### Australia/Antarctica/ New Zealand

#### **Australia ratifies Kyoto protocol**

The decision by the incoming Australian prime minister and head of the Australian Labor Party, Kevin Rudd, to ratify the Kyoto protocol on climate change leaves the USA and Kazakhstan as the only two nations with significant emissions not to have ratified the treaty. Rudd made the announcement within days of his party winning the general election, thus paving the way for Australia to partake in the forthcoming negotiations at the United Nations Conference on Climate Change in December. Source: New Scientist (2007), 196(2632), 7.

### Something in the water?

The bar-tailed godwit E7, which achieved fame with the longest non-stop flight has broken its own record on the return journey to New Zealand from its breeding ground in Alaska. E7 flew non-stop across the Pacific for more than 8 days, covering 11,600 km in the process. The godwit, which is being tracked as part of the Pacific Shorebird Migration Project, completed the round-trip between its overwintering grounds and breeding grounds during a 7-month period, covering >29,000 km, and stopping in many countries en route. At the current rate, E7 is expected to cover 300,000 miles during its lifetime.

Source: BirdLife International News (2007), http://www.birdlife.org/news/news/ 2007/09/godwit\_records.html

### Chilling news for krill

The USA's National Environment Trust has issued a warning about the dangers of over-fishing of krill in the Antarctic, and has urged the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) to bring the management and observation of the krill fishery in line with that of other Southern Ocean fisheries. Human demand for krill is increasing as aquaculture, particularly salmon farming, burgeons and these small crustaceans are also caught for human consumption and nutraceuticals. This is bad news for the predators that rely on krill as their primary food source in the Southern Ocean. CCAMLR member states are keen to increase their krill quotas during the coming season, intending to exceed the current catch limit of 620,000 t by as much as 144,000 t. Source: National Environment Trust News Release (2007), http://www.net.org/ proactive/newsroom/release.vtml?id=

## Long legs get cane toads into trouble

Researchers who discovered the alarming news that cane toads in the frontline of the Australian invasion have evolved longer legs have now uncovered evidence that longer legs are not necessarily better for the toads. Dissection of toads from the invasion front in the Northern Territory revealed that 10% of them had severe spinal arthritis, with some of the vertebrae fused by bony growths. The most severely affected joints were at the back of the spine, implying that mechanical stress may be involved. Toads with smaller legs did not have these problems. The bony growths were infected with a normally harmless soil bacterium, indicating that the hitherto infallible

toads may be under stress, which may in turn make them easier to control. Source: New Scientist (2007), 196(2626), 23.

#### Fur seals infected with human E. coli strain

Fur seal pups living nearby a Chilean research station on Livingston Island have been found to be infected with a virulent strain of the bacterium *E. coli*, which causes diarrhoea in humans and livestock. It is the first time that a virulent human infection has been found in Antarctic wildlife, and the first time that *E. coli* has ever been recorded in seals. There is particular concern about the potential spread of pathogens, as many Antarctic wildlife species breed in colonies, which could result in disease spreading rapidly among individuals. *Source: New Scientist* (2007), **195**(2619), 6.

### Hihi hatching success

A group of Vulnerable hihi, or stichbirds, have successfully hatched chicks in Cascade Kauri Park, less than a year after their translocation to this area made them the first hihi on the New Zealand mainland for >100 years. The 59 mostly juvenile birds were transferred after an intensive programme to control introduced species such as possum, rats and stoats. Should the newly hatched hihi fledge successfully, and eventually raise their own young, this will indicate that the birds are able to survive in areas with a low predator density, thus paving the way for their reintroduction to other, similar, mainland areas in the future.

Source: BirdLife International News (2007), http://www.birdlife.org/news/news/ 2007/11/hihi\_hatch.html

#### Pulp mill gets the go-ahead

Despite vociferous protests, the controversial pulp mill due to be built in Tasmania's Tamar Valley has been approved by the Australian government. The government has set 17 conditions relating to the protection of threatened species in the area, including the Tasmanian wedge-tailed eagle and the Tasmanian devil. An additional 16 conditions relating to effluent have also been imposed, and the mill could be closed at any time should the effluent fail water quality tests. Conservationists are outraged by the news, claiming that the mill will not only pollute the marine environment, but that the 4 million t of wood due to be pulped annually will decimate Tasmania's forests and the 500,000 t of fuel wood burned annually will release millions of tonnes of CO<sub>2</sub>.

Source: Environmental News Service (2007), http://www.ens-newswire.com/ens/oct2007/2007-10-04-02.asp

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@faunaflora.org, or to Martin Fisher, Fauna & Flora International, 4th Floor, Jupiter House, Station Road, Cambridge, CB1 2JD, UK.