Briefly

International

Temperate zones produce more species than tropical zones

An examination of pairs of sister species (species that evolved from a common ancestor) has found that sister species occurring near the equator split on average 3.5 million years ago, while those occurring in temperate regions split *c*. 1.7 million years ago. At extremely high latitudes, above the Artic Circle, all sister species pairs examined split from their common ancestor <1 million years ago. The idea that tropical hotspots of biodiversity are also hotbeds of evolution stems from fewer species having gone extinct from tropical areas compared to temperate areas. Dramatic climate changes in temperate ecosystems over a long period of time may be behind the rapid rate of speciation in these areas.
Source: New Scientist (2007), **193**(2596), 21.

Climates themselves under threat from climate change

The first assessment of the effects of climate change on the world's climates shows that over half the current climates will disappear during the next 100 years. Cold climates will be worst off, with temperature rises causing glaciers to disappear from mountains such as Kilimanjaro. New climates, characterized by higher temperatures and more rain, will appear, particularly in tropical areas such as the Amazon and Indonesian rainforests. The effects of these changes in climate will be particularly serious for species with nowhere to migrate to, or those at risk of being outcompeted by invasive species. The data used for the assessment were both best- and worst-case scenarios, and the difference was great, offering a glimmer of hope that if CO_2 levels are reduced some of the world's climates may yet be reprieved.
Source: New Scientist (2007), **193**(2597), 7.

Heavy metals affect fish senses

Throughout the world heavy metals such as copper and zinc are entering natural water courses, mainly via storm water runoff picking up metals from industry, mines and built-up areas. It was thought that these concentrations were too low to affect aquatic organisms but a new study has shown that salmon lose their sense of smell, vital for avoiding predators, if there are even very low levels of copper in the water. Salmon are not the only species affected; in the presence of heavy metals leeches in Lake Ontario were unable to smell their food, while fathead minnows could not recognize their own eggs, and ate them instead of protecting them.
Source: New Scientist (2007), **194**(2598), 12.

Better environment makes for more optimistic starlings

Recent experiments have given researchers an insight into how animals adapt their behaviour in different environmental conditions. Starlings were trained to associate a nice-tasting worm with a dish with a white lid, while unpalatable quinine-flavoured worms were associated with dishes with dark grey lids. The birds were then kept in two groups, one set in enriched cages with branches and water baths, while the other set were housed in smaller, bare, cages. When the starlings were given dishes with lids of various intermediate shades of grey, only birds kept in enriched cages were likely to bother opening dishes where the lid colour was ambiguous as to whether there was a tasty worm inside, indicating that these birds were more 'optimistic' than those kept in standard cages.
Source: New Scientist (2007), **194**(2601), 15.

Migratory fish stocks at risk

The publication of the Food and Agriculture Organization's latest report into the global state of fisheries has found that the proportion of marine fish stocks rated as overexploited or depleted has remained stable for the last 15 years. However, there is growing concern about certain migratory fish populations, with <50% of the stocks of highly migratory oceanic sharks and 66% of straddling stocks (those that regularly cross national maritime boundaries) either overexploited or depleted. The report also notes that monitoring of fish captures in waters outside national jurisdictions is poor.
Source: FAO press release (2007), http://www.fao.org/newsroom/en/news/2007/1000505/index.html

Skiing not so fun for animals

Wildlife in areas around ski slopes appears to suffer from the presence of skiers and boarders, with concentrations of the stress hormone corticosterone and its metabolites 17% higher in the faeces of grouse that live in these areas. Researchers fear that the birds are forced from their snow burrows where they hide from predators and the cold, losing heat and energy in the process. These findings support previous studies that suggest that the numbers of animals have declined by up to 50% in some areas near ski resorts.
Source: New Scientist (2007), **193**(2594), 6-7.

Climate change report accused of being watered down

Researchers who have seen drafts of the International Panel on Climate Change's report published in February claim that it was changed in subtle but significant ways after governments became involved in its production. An independent analyst of climate change, David Wasdell, who acted as a reviewer for the report compared the final report with a preliminary report prepared by researchers in April 2006. One the differences between the draft report and the final version is that the former contained many references to the possibility that climate change may be speeded up as a result of positive feedbacks in the climate system but most of these references were absent from the final report. Likewise, discussion of recent observations of collapsing ice sheets and accelerating rises in sea levels were also toned down in the published report.
Source: New Scientist (2007), **193**(2594), 10.

Seasonal variation recorded in amphibian chytridiomycosis

Many studies have reported mass die off among amphibians as a result of infection by the chytrid fungus *Batrachochytrium dendrobatidis*. Now new research has examined for the first time the relationship between seasonal fluctuation and chytridiomycosis in a wild frog population. The results show that disease prevalence peaked at 58.3% in the early spring, but fell to 0% in late summer and early autumn. These findings, which tally with observations made in laboratories in which the fungus grows best and is most pathogenic to frogs at low temperatures, have far ranging implications both for conservationists involved in captive breeding of amphibians and for researchers performing studies on chytridiomycosis infection in wild amphibian populations.
Source: Journal of Zoology (2007), **271**, 352-359.

Nations boycott special IWC meeting

A 3-day conference called by Japan has been boycotted by nearly half the countries

https://doi.org/10.1017/S0030605307004132 Published online by Cambridge University Press

that make up the membership of the International Whaling Commission (IWC), including the USA, New Zealand, Australia and the UK. Japan is trying to get a moratorium on commercial whaling lifted, and to persuade the IWC to focus more on the management of whale populations. A spokesperson from the UK's Department for Environment, Food and Rural Affairs said that the only place for these sorts of discussions was at IWC meetings, and that there were concerns that this meeting might further polarize and distract IWC members from the conservation work carried out by the IWC.
Source: BBC News (2007), http://news.bbc.co.uk/1/hi/sci/tech/6355593.stm

Catalogue of Life reaches 1 million species...

A project that aims to create the world's first comprehensive catalogue of all living organisms has just celebrated the addition of its 1 millionth species. The data are extracted from *c.* 50 databases and experts are consulted to validate which species should be recognized before the data are integrated into the database. The project aims to cover all 1.75 million known species by 2011, and is a vital component in developing the world's biodiversity knowledge systems of the future.
Source: University of Reading press release (21 March 2007). See also http://www.catalogueoflife.org/

...and Millennium Seed Bank banks 1 billionth seed

The Millennium Seed Bank, based at the UK's Royal Botanic Gardens in Kew, collected its billionth seed, a species of African bamboo that only sets seed every 7 years. The Millennium Seed Bank is one of the most ambitious conservation projects in the world, aiming to collect and bank seeds from 25% of the world's plants by 2020. The Seed Bank currently holds the largest wild seed collection in the world, and has over 100 partner organizations in 50 countries, such as the Institut d'Economie Rurale in Mali, which collected the bamboo. An important aspect of the Seed Bank is that it duplicates collections in partner seed banks, thus ensuring against loss of species in their natural habitats.
Source: Millennium Seed Bank press release (2007), http://www.kew.org/msbp/news/billionth-seed.html

New standard for trade in medicinal plants launched

A new industry standard that covers trade and sustainable management of wild medicinal and aromatic plants has been launched following consultation with botanists and the herbal products industry. The International Standard for Sustainable Wild Collection of Medicinal and Aromatic Plants provides guidelines for suitable management of wild plant populations to ensure that plants used in medicine or cosmetics are not overexploited. Over 400,000 t of medicinal and aromatic plants are traded every year, with nearly all of the 70,000 species used (*c.* 80%) being harvested from the wild. Many of these plants are at risk of overexploitation, in some cases to such an extent that extinction is a possibility.
Source: TRAFFIC press release (16 February 2007).

Migratory birds victims of flu, not vectors

A review of the literature on bird influenza has revealed that it is largely the poultry trade that is responsible for the spread of bird flu, rather than wild birds. Wild birds act as reservoirs of gene fragments of low pathogenic avian flu, which can be transmitted to domestic birds. However, it is the way in which the domestic birds are subsequently reared that determines how the virus will evolve. High density rearing of domestic fowl, as seen in Asia, is the ideal condition for the evolution of a virulent, infectious strain of the disease, which is then further spread by trade. Furthermore, it is suggested that wild birds catch avian influenza from domestic birds, in some cases causing them to die and thus perpetuating the myth that they are to blame for outbreaks in nearby areas.
Source: BirdLife International News (2007), http://www.birdlife.org/news/news/2007/03/avian_flu_report.html

Bar-tailed godwit with stamina

The Pacific Shorebird Migration Project, which involves biologists from a number of different organizations and countries has tracked a bar-tailed godwit that set a new record for the longest non-stop flight. The bird travelled from North Island, New Zealand to Yalu Jiang, at the north of the Yellow Sea in China. The godwit flew 10,200 km during its journey, which lasted only 9 days. While researchers were aware of the godwits' prodigious flying skills on their southward journey from Alaska to Australia and New Zealand, a journey aided by favourable winds, this is the first time that the migration has been tracked in reverse. The information gleaned from these studies will be used to garner support for protection of the stopovers used by birds as well as their breeding and wintering grounds.
Source: BirdLife International News (2007), http://www.birdlife.org/news/news/2007/04/bar-tailed_godwit_journey.html

Groupers in decline

A workshop in Hong Kong looking at the extinction threat posed to one of the world's most valuable groups of commercial fishes, the groupers, recommended that an additional 12 species should join the eight species already on the IUCN Red List. The workshop called for better fisheries management, more effective protected areas and more sustainable eating habits among consumers to combat the insatiable demand for grouper, which sells for up to USD 50 per kg. Groupers are frequently the oldest fish species on coral reefs, with some species living for over 50 years. Many groupers do not breed until later life and therefore they may be caught before they have had a chance to reproduce.
Source: Environment News Service (2007), http://www.ens-newswire.com/ens/mar2007/2007-03-22-03.asp

Europe

Fisheries ministers breaking own laws

The European Union's fisheries ministers are cutting cod quotas by less than their own recommendations made in a 2004 cod recovery plan. The plan required catch quotas to be cut by ≥15% should cod stocks fall below a certain threshold. In the North Sea the minimum acceptable stock level is 70,000 t. Latest research shows that there are <50,000 t of cod left in the North Sea, yet the most recent North Sea cod quotas were cut by only 14%. According to WWF, who are taking the EU's fisheries ministers to the European Court over this matter, the whole recovery plan is not working as it also calls for cod stocks to be allowed to increase by 30% a year, which is not happening.
Source: New Scientist (2007), **193**(2596), 7.

Euro fund announced for Europe's threatened species and habitats

Negotiations at the European Parliament have resulted in a breakthrough agreement for a EUR 738.8 million scheme that aims to protect the most vulnerable

https://doi.org/10.1017/S0030605307004132 Published online by Cambridge University Press

habitats and species in Europe. The LIFE+ Nature and Biodiversity fund will co-finance projects to protect habitats and species that are top priorities for conservation at a European level. This includes 70 habitats, 50 species and subspecies of animal and 205 plants, as well as 51 species and subspecies of birds recognized by the EU Ornis Committee as priority targets for funding. One particular target for some of the money from the fund will be to extend protected areas into European seas, to ensure the protection of vulnerable marine wildlife such as cold water coral reefs.
Source: RSPB press release (28 March 2007).

UK's marine features fully mapped for first time

A 2-year project involving 10 statutory bodies and conservation groups has culminated in the publication of new maps of the UK's seas. The UKSeaMap shows the locations of 44 large-scale marine landscapes within the UK's seas, as well as the major habitats that make up these landscapes. The project was undertaken in two phases, one of which examined seabed features, such as depth and light attenuation, while the other phase looked at water column features such as salinity. All the data collected have been processed into GIS format, and are available for download. It is hoped that the UKSeaMap will be useful both in protection of the marine environment and in marine planning, particularly in strategic planning for industry.
Source: RSPB press release (8 February 2007). See also http://www.jncc.gov.uk/UKSeaMap

Double hulled tankers now law in European waters

European officials have signed a new law that prohibits the use of single hulled tankers to carry heavy oil into European ports. The law is a reaction to oil spills from single hulled tankers *Erika* in 1999 and *Prestige* in 2002. Both tankers were carrying heavy fuel oil when they broke up, and researchers have estimated that the effects from the *Prestige* spill alone will have adverse effects on marine life until at least 2012. The new regulation means that tankers carrying heavy oil will only be allowed to fly the flag of a European Union member state if it is double hulled, and only double hulled tankers will be allowed to enter European member states' harbours or anchor in their territorial waters.
Source: Environment News Service (2007), http://www.ens-newswire.com/ens/apr2007/2007-04-28-02.asp

Warmer seas spell trouble for porpoises

An investigation that examined the stomach contents of stranded harbour porpoises in the North Sea found that they contained fewer sand eels and other food compared to a similar study carried out during 1992–2001. Another study found that 33% of harbour porpoises starved to death in the springs of 2002 and 2003, compared with only 5% in the late 1990s. Sand eels, the staple food source of harbour porpoises, are moving further north as the temperature of the seas around Britain rise. If the porpoises are unable to acquire enough energy from their food, they are forced to use their blubber, but this leaves them vulnerable to hypothermia.
Source: Marine Pollution Bulletin (2007), **54**, 249.

Via Baltica given the go-ahead by the Polish government

The Polish government has given permission for the first stages of the building of part of the Warsaw to Helsinki transnational highway, the Via Baltica. The highway will run through internationally important wetlands in the Rospuda Valley, protected under both Polish and European law, which are home to lynx, wolf and the most important populations of the Vulnerable greater spotted eagle and aquatic warbler in the European Union. The government's decision was made despite intense opposition at both a national and international scale. The Polish President, the European Parliament and the European Commission have all expressed their disapproval of the plans. The European Commission sent a letter of warning to the Polish authority as soon as construction started, and declared that it was accelerating its infringement procedure.
Source: RSPB press release (22 February 2007).

Coral spawning offers hope to conservationists

One of Britain's most spectacular corals, the pink sea fan, has spawned in captivity for the first time, giving hope to those involved in its conservation. The coral grows on rocky reefs in south-west Britain and can form colonies up to 80cm high and 100 cm across. However, it is threatened by water pollution and bottom trawling, and is listed as a priority species in the UK Biodiversity Action Plan. The spawning, which took place in London Zoo, is of particular significance because the Zoological Society of London is trying to grow coral polyps in captivity with the eventual aim of restocking specific reefs with juvenile colonies.
Source: ZSL press release (2007), http://www.zsl.org/info/media/press-releases/null,1859,PR.html

Protests as hunting season opens in Malta

Bird conservation groups throughout Europe have united in protest against the Maltese government for allowing the spring hunting season to take place despite legal and political action by the European Commission. Since joining the EU in 2004 Malta is alleged to have breached EU law on four occasions through its persistence in allowing spring hunting of turtle dove and quail. Spring hunting is prohibited by under the European Birds Directive to protect birds as they complete their migration from Africa to their breeding grounds in Europe. In addition to quail and turtle doves, threatened species are also killed illegally. Legal action was started against Malta by the European Commission in 2006, and a court case is expected to start in 2007.
Source: BirdLife International News (2007), http://www.birdlife.org/news/news/2007/04/malta_hunting_start.html

Shipping lanes to skirt dolphin habitat

The International Maritime Organization has announced that the shipping lanes off the southern coast of Spain are to be diverted away from bottlenose dolphin feeding grounds. Vessels using the shipping lanes in the Alboran Sea will have to travel 32 km further south, to reduce acoustic and water pollution in the area and to mitigate the impact of any accidental oil spills in the area. The species rich Alboran Sea marks the meeting of the Atlantic Ocean and the Mediterranean Sea and acts as a migratory corridor for many marine species, but also provides a thoroughfare for almost 30% of the world's maritime traffic.
Source: Earthwatch press release (23 April 2007).

North Eurasia

World Bank gives loan to help Aral Sea

The World Bank has provided the Kazakhstan government with a USD 126 million loan to implement the second phase of a project that aims to reverse one of the most serious

https://doi.org/10.1017/S0030605307004132 Published online by Cambridge University Press

ecological disasters in history, the shrinking of the Aral Sea. The World Bank has already given a loan of USD 68 million, which enabled the Kazakhs to build a dam that split the sea into two parts. The northern part, in Kazakhstan, is already filling up, with a reported 40% of the sea having returned, although the water level of the southern, Uzbek, part of the sea is still falling. Now the Kazakhstan government intends to use the new World Bank loan to build a second dam to bring water back to the deserted port of Heralsk.
Source: BBC News (2007), http://news.bbc.co.uk/1/hi/world/asia-pacific/6538073.stm

New nature reserve declared in Kazakhstan

Wild ungulates, including the Critically Endangered saiga antelope, have a safer place in which to roam following the creation of the 763,549 ha Irgiz-Turgay nature reserve in north-western Kazakhstan. The reserve is part of the Altyn Dala Conservation Initiative, a coalition of international NGOs in cooperation with Kazakh authorities that aims to create a 6 million ha system of protected areas to safeguard the future of Kazakhstan's steppes and semi-deserts. The Irgiz-Turgay area has a history of overgrazing, agriculture and fishing activities that will be banned from part of the reserve, and limited in the rest of the area.
Source: WWF News (2007), http://www.panda.org/news_facts/newsroom/news/index.cfm?uNewsID=97582

Sub-Saharan Africa

Water hyacinth forces Lake Victoria's fishermen into dangerous waters

A new encroachment of water hyacinth into Lake Victoria has forced the Lake's fishermen further out into the waters to try and compensate for a decrease in catch size brought about by the invasive weed. This has made the fishermen more vulnerable to criminal gangs who board fishing boats in the guise of fisheries officials looking for illegal fishing gear. The heavily armed gangs submit the fishermen to extortion, torture and robbery, as well as demanding protection fees. As a result, the management of Lake Victoria is moving away from fishery and environmental issues, with criminal control becoming the most urgent requirement. The three countries bordering the lake are being called upon to work together to tackle the problems.
Source: Marine Pollution Bulletin (2007), **54**, 373.

Survey stumbles upon Grauer's swamp warbler nest

A team of researchers carrying out a routine survey in the Albertine Rift Valley have taken pictures of a nest belonging to Grauer's swamp warbler, a first for Rwanda, after finding the nest by chance. The Endangered swamp warbler is endemic to the area, and its current habitat is threatened by the ongoing loss of the Rift Valley's mountain forests as these are converted to agricultural land. Grauer's swamp warblers have been recorded throughout the Rift Valley in Burundi, Democratic Republic of Congo, Uganda and Rwanda, but little is known about their breeding and nesting behaviour, and therefore the photographing and subsequent monitoring of the nest in Rwanda is of particular interest to conservationists.
Source: BirdLife International News (2007), http://www.birdlife.org/news/news/2007/04/grauers_nest_discovery.html

Laid-back bonobos better at cooperating than chimps

Bonobos' easy-going lifestyle means that they are better at cooperating than their more aggressive cousins the chimpanzees, according to recent research. Pairs of each species were given tasks that required cooperation to retrieve a food reward. In cases where the food was easily shared both species learned how to do this quickly, but in cases where the food was in a single bowl, and thus easier to monopolize, chimps were less keen to work together. Bonobos on the other hand used play or sex to diffuse any social tensions that arose during the task. The results of this experiment suggest that cooperation among humans stemmed more from social adeptness than high-powered reasoning.
Source: New Scientist (2007), **194**(2598), 17.

Uluguru bush-shrike found in new area

Conservationists are celebrating the discovery of a pair of Uluguru bush-shrikes in Uluguru South Forest Reserve, which many people had thought to be above the species' normal altitudinal limit. The bulk of this Critically Endangered bird's population occurs in the Uluguru North Forest Reserve and an adjacent area, which are separated from Uluguru South Forest Reserve by the Bunduki Gap, thought to be an obstacle to the canopy-reliant bush-strike. However, researchers discovered a pair of bush-shrikes in Uluguru South using a playback of the shrike's song. The discovery was made at a site with a similar forest structure to that of Uluguru North, and in a part of Uluguru South that is closest to Uluguru North Reserve.
Source: BirdLife International News (2007), http://www.birdlife.org/news/news/2007/03/uluguru_bush-shrike.html

Senegal revealed as aquatic warbler's winter home...

The aquatic warbler, Europe's most threatened migratory songbird, has finally been tracked to its wintering grounds. Researchers from BirdLife International and the UK's Royal Society for the Protection of Birds examined the patterns of isotopes in feathers from aquatic warblers caught in Europe, as these feathers had grown while the birds were at their African wintering grounds. Isotope patterns from the feathers were compared with isotope maps of West Africa, which revealed that it was likely the birds spent their winters just south of the Sahara. Computer modelling of potential climatic conditions combined with analysis of the African records for the species suggested that areas near the Senegal river were the likely wintering areas of the warbler, and this turned out to be the case when an expedition team explored the area.
Source: BirdLife International News (2007), http://www.birdlife.org/news/news/2007/02/aquatic_warbler_senegal.html

... and is also home to raptor 'super-roost'

One of the largest bird of prey roosts ever found has been discovered in Senegal, after a conservationist saw large groups of falcons flying overhead and decided to follow them on foot. After walking for 10 km his efforts were rewarded by the discovery of a communal roost containing >28,600 lesser kestrel and 16,000 African swallow-tail kite. While the existence of large communal roosts outside the breeding season has been known for years, a roost of this size is exceptional. Lesser kestrel is listed as Vulnerable on the Red List, as it has undergone rapid declines in Europe since 1950. The finding of this roost emphasizes the importance of protecting the over-wintering grounds of threatened species as well as their breeding sites.
Source: BirdLife International News (2007), http://www.birdlife.org/news/news/2007/04/raptor_super_roost.html

https://doi.org/10.1017/S0030605307004132 Published online by Cambridge University Press

Mountain gorilla numbers on the increase

Following years of intense conservation efforts East Africa's mountain gorillas are making a comeback, albeit slowly. A study found that the mountain gorilla population in Bwindi Impenetrable National Park is now 340 individuals, an increase of 12% during the past decade. Although this is an increase of only *c*. 1% per year, it is an indication that the population is healthy and well protected. The gorillas in Bwindi Impenetrable National Park constitute almost half the world's remaining mountain gorillas, and efforts to protect the species need to continue, as evidenced by the killing of two silverback gorillas in the Democratic Republic of Congo's Virunga National Park earlier in 2007.
Source: WWF News (2007), http://www.panda.org/news_facts/newsroom/news/index.cfm?uNewsID=99520

Foundation established to protect the Congo

Three countries in the Congo basin, Cameroon, the Central Africa Republic and the Republic of Congo, have joined together to form an environmental trust fund to ensure long-term finding for conservation within the 28,000 km^2 Sangha Tri-National forest complex. The fund has already mobilized more than EUR 11 million, which has been spent on managing the three parks and their buffer zones that make up part of the forest complex; Lobeke, in Cameroon, Dzanga-Ndoki in Central Africa Republic and Nouabale-Ndoki in Congo. The forest complex is home to important populations of forest elephants, chimpanzees, bongos and mountain gorillas. The Sangha Tri-National forest complex is one of the first transboundary protected areas to be created under the auspices of the Yaounde Summits held in 1999 and 2005.
Source: WWF News (2007), http://www.panda.org/news_facts/newsroom/news/index.cfm?uNewsID=96740

South and South-east Asia

Rubbish island attracts wildlife and tourists

As a wealthy city state with 4.4 million inhabitants, Singapore's waste disposal strategy needed some creative thinking by urban planners. Since 1999 Singapore has been recycling as much as possible, while the rest is incinerated. The resultant ash is shipped out to a specially created island, called Pulau Semakau, a 20 minute boat ride from the main island. The ash is dumped into one of 11 interconnected bays, which are lined with thick plastic to prevent contamination of neighbouring waters. Once a bay is filled to 2 m above sea level it is then covered in earth and seeded with grass. The island has a rich biodiversity and is proving to be something of a tourist attraction, as testified by the >6,000 people who visited in 2006.
Source: New Scientist (2007), **194**(2599), 39-41.

Boost for vultures

Cambodian conservationists made an important discovery while surveying for birds near the Mekong river in Stung Treng Province. They found five nests of the Critically Endangered slender-billed vulture, the first nesting site for the species to be found in South-east Asia. The nests were found in the Seasan Important Bird Area, which is home to other threatened species, including two further vulture species that were located at the same time as the slender-billed vultures. Fortunately it appears that use of the anti-inflammatory drug diclofenac, responsible for decimating vulture populations on the Asian subcontinent, is non-existent in Cambodia. Although vultures face other threats in Cambodia, such as persecution and dwindling food sources, the Cambodia Vulture Conservation Programme is working to raise awareness of vultures and protect their feeding and breeding sites.
Source: Birdlife International News (2007), http://www.birdlife.org/news/news/2007/02/slender-billed_vulture_cambodia.html

Captive bred rhino travels to Sumatra...

The only Sumatran rhinoceros to be bred in captivity for over 100 years has been flown from Cincinnati Zoo to a national park in Sumatra, to join two females already resident in the area. Sumatran rhinos are the smallest, hairiest and most threatened of all the rhino species, with only *c*. 300 individuals remaining in isolated areas in Malaysia and Indonesia. Andalas, named after the original name for Sumatra, was transferred from Cincinnati to Los Angles Zoo, from where he was flown across the Pacific to Jakarta. Finally, he was transported by road to the Sumatran Rhino Sanctuary in Way Kambas National Park.
Source: BBC News (2007), http://news.bbc.co.uk/1/hi/world/asia-pacific/6375951.stm

...while Borneo rhino poses for cameras

Conservationists in Borneo have secured the first ever video documenting the behaviour of a Borneo rhino, of which there are only estimated to be between 25-50 on the island. The rhinos on Borneo are thought to be a subspecies of the Sumatran rhino, and spend most of their time in the thick undergrowth, making them hard to spot. Video footage may help researchers to calculate the exact numbers of rhinos on the island of Borneo as it can be useful in the identification of individuals.
Source: WWF News (2007), http://www.panda.org/news_facts/newsroom/news/index.cfm?uNewsID=99560

Ground-cuckoo holds forth

Researchers trying to monitor the Critically Endangered Sumatran ground-cuckoo in the dense tropical forests of its Indonesian habitat now have another means of tracking the bird, courtesy of the Wildlife Conservation Society; a recording of its call. The call was obtained from an injured bird, brought to conservationists by hunters, which is currently recovering prior to its release back into the wild. It is anticipated that the call will enable conservationists to locate other individuals belonging to this elusive species. The ground-cuckoo is endemic to Sumatra, and has suffered large-scale habitat loss, mainly as a result of encroachment by agricultural land. (See also *Oryx*, 41, 13-18).
Source: BirdLife International News (2007), http://www.birdlife.org/news/news/2007/03/sumatra_ground_cuckoo.html

Tenth Asian IBA book published

Malaysia has become the 10th country in Asia to produce a book containing details of the Important Bird Areas (IBAs) within its borders. The *Directory of Important Bird Areas in Malaysia* contains information about the 55 IBAs in the country, many of which are unprotected and at risk of destruction. A particular worry for Malaysian IBAs is commercial logging, and it is hoped that the directory will provide guidelines to direct efforts towards protecting these sites. One such site is the largest IBA in Malaysia, Belum-Temengor, parts of which lack official protection, despite having important populations of Vulnerable plain-pouched hornbill and many other bird, mammal and plant species.
Source: BirdLife International News (2007), http://www.birdlife.org/news/news/2007/03/malaysia_ibas.html

https://doi.org/10.1017/S0030605307004132 Published online by Cambridge University Press

Vulture restaurants slow vulture decline

Supplementary feeding of vultures has been shown to decrease the rate of death from diclofenac poisoning, but is not sufficient to halt population decline. In areas where the use of diclofenac is rife it is impossible to limit vulture feeding to uncontaminated carcasses. A study of a white-rumped vulture colony in India found that when carcases were provided, the mean daily mortality was 0.072 birds per day, compared with 0.387 birds per day when no carcases were provided. This study shows that without a change in practice by livestock keepers and veterinarians extinction of colonies is inevitable. Supplementary feeding may, however, be useful in staving off the extinction of colonies until diclofenac is removed from veterinary use.
Source: BirdLife International News (2007), http://www.birdlife.org/news/news/2007/03/vulture_restaurants_diclofenac.html

Hope for Sumatran rainforest

A major change in Indonesia's forestry law has enabled the protection of a large tract of Sumatra's lowland rainforest. The change in law means that so-called production forest can be earmarked for conservation and restoration. The announcement came just in time for the coalition of NGOs that have been working to create the Harapan Rainforest Initiative, as the new law will enable them to establish Indonesia's first forest ecosystem restoration concession, and thus prevent the area from being clear-felled to make way for timber or oil palm plantations. The Initiative will oversee the conservation and regeneration of a 101,000 ha block of dry lowland rainforest that contains many threatened species, including 20 Critically Endangered Sumatran tigers.
Source: BirdLife International News (2007), http://www.birdlife.org/news/news/2007/04/harapan_rainforest_launch.html

Humphead wrasse head back home

Over 1,000 Endangered humphead wrasse are being returned to their home in Tubbataha Reef Natural Park in the Philippines after a poacher tried to smuggle them out of this national marine protected area, along with 200 other fish. Since their rescue the fish have been looked after by WWF and the Tubbataha Park Management Office. The poachers are likely to face a prison sentence and high fines. Humphead wrasse are sought after fish, especially in East Asia where their lips are considered a delicacy. Poaching of fish in the Philippines is a major problem, with over 90% of fish stocks in the region overexploited.
Source: WWF press release (2007), http://www.worldwildlife.org/news/displayPR.cfm?prID=362&enews=enews0407c

Crown-of-thorns starfish infests Philippine's coral reefs

Large areas of coral reef in the Philippines are being destroyed by the voracious crown-of-thorns starfish, a toxic species that is capable of consuming 6 m^2 of living reef every year. The coral reefs of the Philippines previously covered an area of 25,000 km^2 but a recent study found that only *c.* 1% of this original area remains in a pristine state. The problem of the predatory starfish, outbreaks of which generally occur when water temperatures and nutrient levels increase, is exacerbated by overfishing, which removes the starfish's natural predators such as humphead wrasse. To combat the current invasion beach-goers are being enlisted to help remove the starfish from the reefs.
Source: WWF News (2007), http://www.panda.org/news_facts/newsroom/news/index.cfm?uNewsID=98780

Turtle poachers caught

Conservation organizations have congratulated Malaysian authorities after a number of Chinese boats containing hundreds of green and hawksbill turtles were seized off Borneo's north coast earlier this year. All species of marine turtle found in the waters of Sabah Province are protected under Malaysian law, and the poachers arrested during these raids face fines of up to MYR 50,000 (USD 14,000) and/or 5 years in prison. This is not the first time that Chinese fishermen have been apprehended in this area for poaching turtles, and authorities from the Association of South-east Asian Nations have launched a wildlife enforcement network to decrease the amount of illegal wildlife trade.
Source: WWF News (2007), http://www.panda.org/news_facts/newsroom/news/index.cfm?uNewsID=98140

Borneo's clouded leopard declared a new species

Genetic analysis has revealed that the differences between clouded leopards found on Borneo and Sumatra and those occurring on the mainland are enough to warrant the consideration of the island taxon as a separate species. The difference between the Borneo clouded leopard (newly named as *Neofelis diardi*) and mainland leopards *Neofelis nebulosa* are comparable to the differences between lions and tigers, with research suggesting that the species diverged *c.* 1.4 million years ago. Borneo's clouded leopard population is estimated to be 5,000-11,000, and the total number in Sumatra is 3,000-7,000. The Borneo clouded leopard is sensitive to human disturbance, and the destruction of their heavily forested habitat is the main threat to their existence.
Source: Environment News Service (2007), http://www.ens-newswire.com/ens/mar2007/2007-03-15-02.asp

East Asia

Ibis brings Prime Ministers together

The Prime Ministers of China and Japan have held a meeting to discuss the conservation of the Endangered crested ibis *Nipponia nippon*. The ibis was thought to be on the brink of extinction in the 1980s, with the last five remaining birds in Japan taken into captivity in 1981, the same year that a wild population was discovered in central China. The Chinese ibis population has now risen to *c.* 500 individuals, thanks in part to efforts to protect nesting and feeding areas. Both China and Japan have successfully bred the species in captivity, and China has donated a number of ibis to the Japanese captive population to strengthen the genetic stock. Efforts are now underway to reintroduce captive-bred ibis into the wild.
Source: BirdLife International News (2007), http://www.birdlife.org/news/news/2007/02/crested_ibis.html

Eurasia's largest raptors have migrations to match

Researchers have long suspected that some cinereous vultures migrate from Mongolia to Korea and China, but the first evidence that this occurs has now been obtained. A vulture tagged as a youngster in Mongolia's Ikh Nart Nature Reserve was seen near Pusan in South Korea, *c.* 1,930 km south, while other tagged vultures have been observed elsewhere in South Korea and China. The cinereous vulture population is estimated to be 4,000-6,000 but their numbers are declining throughout Europe and Asia as a result of poisoning and habitat loss.
Source: Earthwatch press release (2007), http://www.earthwatch.org/site/apps/nl/content2.asp?c=crLQK3PHLsF&b=453237&ct=3623801

https://doi.org/10.1017/S0030605307004132 Published online by Cambridge University Press

North America

Sturgeon population recovering in Hudson River

Research carried out at Cornell University has produced evidence of the recovery of a threatened fish species, the first time this has happened in North American history. What is more, the shortnose sturgeon's recovery has taken place in the Hudson River, which flows through one of the world's largest population centres, New York City. The study found that the sturgeon's population increased by >400% since the 1970s, although it is still endangered in other rivers in North America. This result is a boost for the beleaguered US Endangered Species Act, which, since its inception in 1966, has only been able to claim a population recovery in 16 of the hundreds of species listed, with the result that both researchers and legislators are calling for changes to the Act.
Source: Marine Pollution Bulletin (2007), **54**, 251-252.

The bee-vanishing mystery

Commercial beekeepers in 22 states across the USA have been baffled by the disappearance of honeybees, with colonies thousands strong vanishing in a matter of days. The cause of the phenomenon, known as colony collapse disorder, is unknown, and the mystery is heightened because no dead or dying bees can be located near afflicted hives. Some researchers believe that pathogens or pesticides may be involved in the disappearance, while others have suggested that the high density of bee colonies in some areas may have caused competitive stress. This mystery has highlighted the lack of standardized data about honeybees, and has thrown a spotlight on an industry responsible for the pollination of crops worth USD 14 billion annually, but that only receives USD 8 million for research out of an annual US Agriculture budget of USD 93 billion.
Source: New Scientist (2007), **193**(2596), 10-11.

Butterfly database goes online

A database containing 35 years of data about butterflies in northern California has been made available to the public for the first time. Arthur Shapiro has been monitoring a transect that ranges from sea level to the tree-line in the Sierra Nevada (*c.* 3,000 m) since 1972 and by the end of 2006 had made 83,000 individual records of 159 species and subspecies. Butterflies are frequently used as indicators of changing climate, and Shapiro's data will be useful in examinations of the relationship between climate and butterfly seasonality and distribution. As well as the butterfly data the website also contains geographical and climatological data for the area. There are plans to develop exercises to allow teachers to use the database to illustrate concepts in population biology, statistics and field biology.
Source: UC Davis press release (27 February 2007). See also http://butterfly.ucdavis.edu/

Nuthatch eavesdroppers

Red-breasted nuthatches in North America have developed ways of telling apart different alarm calls made by black-capped chickadees, calls that seem identical to the human ear. Experiments showed that nuthatches were able to distinguish between chickadee alarm calls warning of the presence of pygmy owls, which may also attack small birds like nuthatches, and larger great horned owls, which tend to leave nuthatches alone. During playback experiments nuthatches became much more agitated on hearing the chickadee response to pygmy owl presence, even mobbing the loudspeaker as if it were a predator. These findings are a testament to the complexities of nature that humans are not privy to.
Source: New Scientist (2007), **193**(2596), 21.

Poachers' conviction generates million-dollar partnership fund

The conviction of people found guilty of poaching undersized California leopard sharks from San Francisco Bay has resulted in the creation of a USD 1.5 million fund that will help to restore the sharks' habitat. USD 500,000 has been contributed to the fund by the Holy Spirit Association for the Unification of World Christianity, as one of the accused was a pastor of the church, and the sharks were smuggled to destinations throughout the USA and Europe, often using church vessels and businesses associated with the church. An additional USD 410,000 is to be paid by the co-defendants as restitution, and a number of charitable foundations are also contributing money. California leopard sharks are a slow-maturing species found along the coasts of Oregon, California and Baja Mexico.
Source: US Fish and Wildlife Service press release (2007), http://www.fws.gov/news/newsreleases/showNews.cfm?newsId=C6B05122-D6B7-C828-64828C0CBDD0A8DF

Illegal fishing gear to be removed from Cape Cod

The US's National Oceanic & Atmospheric Administration is working with a number of organizations in Massachusetts to find and remove lost fishing gear from Cape Cod Bay and adjacent waters. These waters are used by northern right whales as feeding grounds during the spring, and lost fishing gear poses a serious threat of entanglement to this Endangered species. A gear removal project team will use a boat operated by the Massachusetts environmental police to haul the gear out the water, with advice on gear removal provided by state marine fisheries biologists, including a former lobsterman. Other gear set, stored or abandoned illegally in the bay, such as floating groundline used to connect lobster traps, will also be removed.
Source: Marine Pollution Bulletin (2007), **54**, 372.

Removal of sharks causes ripples through ecosystem

A new study that reviewed fisheries surveys off the east coast of the USA between 1970 and 1995 has revealed that the removal of the area's top predators, sharks, has had a massive effect on the population of a less dynamic group of species, the bivalves. In the 25 years studied, fishermen removed >97% of the tiger, bull, dusky and hammerhead sharks along this coast for their fins, meat and as bycatch. The result of the removal of these species enabled their prey, skates and rays, to increase hugely in number, with the population of one species, cownose rays, increasing tenfold. In turn the rays are now decimating bivalve populations along the coast, which is bad news for local scallop fisheries.
Source: New Scientist (2007), **194**(2598),16.

Single whooping crane survives tornadoes

Florida's tornadoes have claimed the lives of 17 juvenile whooping cranes that were part of a flock created to act as an insurance population for the only self-sustaining breeding group of whooping cranes in the world, which breed in Canada. Amazingly, one bird, Number 15, managed to escape from the enclosure at Chassahowittzka in Florida, where all the other juveniles succumbed to lightening strikes and drowning following a storm surge. This bird was later found by the help of a radio transmitter tag attached to its leg, in a flock of sandhill cranes. Before the tornadoes struck things had been looking positive for the cranes, as the entire flock of juveniles had

https://doi.org/10.1017/S0030605307004132 Published online by Cambridge University Press

followed an ultralight aircraft from Wisconsin to Florida without a single casualty, the first time this had happened for 6 years.
Source: BirdLife International News (2007), http://www.birdlife.org/news/news/2007/02/whooping_crane_storms.html

Wolf pack takes up diplomatic role

Wolf conservation in the USA is on the brink of a new era. Grey wolves were listed on the US Endangered Species Act in 1974, after hunting and poisoning had reduced their numbers to a small population around the western Great Lakes. Now, with that population having grown to 4,000, and with a healthy population in the northern Rocky Mountains, the decision has been made to delist the Great Lakes population, thus passing responsibility of wolf protection from the federal level to the individual state level. Local feeling about wolves runs high, which is why wolf biologist David Mech has founded the International Wolf Center in Ely, Minnesota. The centre has its own 'ambassador pack', which is part of the centre's campaign to educate the public about wolf biology and successful coexistence between wolves and people.
Source: New Scientist (2007), **194**(2599), 12-13.

Rising sea temperature decreases male turtle births

Researchers are warning of serious consequences of sea temperature rise on North America's marine turtles. The sex of turtle hatchlings is determined by the temperature at which the eggs are incubated, and an increase of 1°C would lead to all hatchlings on some beaches being female as males hatch at lower temperatures than females. A rise of 3°C would lead to mass mortality on nesting beaches across the USA. The researchers recommend that conservation efforts are concentrated on the northern nesting beaches; in north Carolina, for example, 42% of hatchlings are male, compared with Florida's nesting beaches where 90% of turtle hatchlings are female. There is some suggestion that turtles from the northern beaches are travelling south to bolster the populations there.
Source: University of Exeter press release (20 February 2007).

Plans for airfield poses threat to wildfowl

The US Navy's plan to build a runway next to the Pocosin Lakes National Wildlife Refuge in North Carolina is causing alarm among conservationists and politicians. The lakes are home to thousands of wildfowl during the winter, including 25,000 tundra swans and 75,000 snow geese and is used as a breeding site by a number of species including Vulnerable red-cockaded woodpecker. The Navy intends to use the area to practice simulated night landings on an aircraft carrier, but admits that the risk of bird strike is very high. To combat this, it proposes changing the crops in the surrounding fields to force wildfowl to feed further from the lakes. The final decision has not yet been made, and the Navy is considering a number of sites, although the Pocosin Lakes remain their first choice.
Source: BirdLife International News (2007), http://www.birdlife.org/news/news/2007/04/pocosins_iba_threat.html

Central America and Caribbean

Amphibians and reptiles decline as leaf litter thins

Data from La Selva Biological Station in Costa Rica that have been collected for the past 35 years have revealed a worrying decline in ground-dwelling amphibians and reptiles. The numbers of these species have been falling steadily in the native forest, although they have increased in abandoned cacao plantations. Because of the increase in cacao plantations it is unlikely that the usual suspects in amphibian decline, fungal infection and pesticides, are to blame. Instead the researchers believe that a reduction in the leaf litter layer of the forest floor, brought about by warmer, wetter climates reducing tree growth, may be to blame. This idea is supported by the fact that cacao plantations produce a heavier layer of leaf litter.
Source: New Scientist (2007), **194**(2600), 16.

Nest predation of parrots declines when trees are trimmed

Two recent studies, from Jamaica and Puerto Rico, which examined nest predation of threatened parrots by snakes have found that removing the vines from the trunk of the nesting tree and isolating its canopy from neighbouring trees can reduce the likelihood of predation. In the case of Vulnerable black-billed amazons, for example, 56% of nests failed before fledging at least one chick, and one-third of these failures was as a result of nestling predation. The type of nest protection depends on the species of snake involved; in Puerto Rico, for example, the Puerto Rico boa has not been observed crossing gaps greater than 0.5 m, so the researchers recommend that canopy gaps of 1.5 m should be sufficient to prevent the boas getting access to tree-nesting parrots.
Source: BirdLife International News (2007), http://www.birdlife.org/news/news/2007/03/tree-trimming_boas.html

Wild bird trade still flourishing in Nicaragua

A glimpse into the extent of the wild bird trade in Nicaragua has been revealed by a journalist posing as a buyer. The journalist was offered a number of parrot species, including an Endangered great green macaw. Previous studies have shown that the parrot numbers are declining in Nicaragua as a result of habitat loss and exportation for trade, a finding that prompted CITES to recommend a ban on all parrot exports from Nicaragua. Conservationists are calling for measures to be put in place to combat the illegal trade, which is mainly driven by economic pressure and lack of awareness, as well as a dearth of resources among those trying to halt the poaching of parrots.
Source: BirdLife International News (2007), http://www.birdlife.org/news/news/2007/04/nicaragua_parrot_trade.html

South America

Bats attracted to smelly foam fruits

Researchers in Brazil have come up with a novel means of attracting seed-dispersing bats to forest remnants in need of regeneration. They extracted essential oils from the fruits of plants belonging to species of *Piper* and *Ficus*, which are attractive to fruit-eating bats, and added these oils to artificial fruits made from foam. The fake fruits were very successful in attracting fruigvorous bats, with preliminary results from other trials suggesting that bats may travel from as far away as 700 m to investigate the fruits. Bats were caught in mist nets and examined to see whether the fruits only attracted hungry bats, which would not be such good seed dispersers as bats with full stomachs, but this was not the case, and the technique is a useful potential tool for forest regeneration.
Source: Biotropica (2007), **39**, 136-140.

https://doi.org/10.1017/S0030605307004132 Published online by Cambridge University Press

Tourism spells trouble for Galapagos Islands

Ecuador's president has become the first Ecuadorean leader to declare openly that the Galapagos Islands are suffering. The president's comments were backed up by a mission from UNESCO that confirmed that the islands are at risk of losing their Natural World Heritage Site status, with uncontrolled tourism one of the main threats facing the islands. A recent assault on the director of the Galapagos National Park Service by members of the Ecuadorean air force, who were apparently involved in running illicit tourism activities in the Islands, illustrates the underlying tensions in the Galapagos. Over 120,000 tourists visited the islands in 2006, bringing in *c*. USD 400 million, and if tourism continues to rise at the current rate the number of people visiting the islands in 2021 is expected to be >400,000.
Source: New Scientist (2007), **194**(2600), 6.

Soybean worse for climate than pasture

A study in the Amazon that examined the effects of different types of land use on climate has found that soybean plantations dried up the skies much more than pastureland. Soybean fields are more reflective than pastureland or forest, meaning that they absorb less solar radiation, which results in the earth's surface not heating up as much, thus decreasing convection and cloudiness, leading eventually to decreased precipitation. The differences in precipitation between soybean fields and pasturelands are large, with rainfall in soybean fields reduced by over four times that of pastureland. About 13% of the original Amazon has been cleared, with 85% turned into agriculture and the rest becoming soybean plantations.
Source: New Scientist (2007), **194**(2600), 12.

Brazil gains new snapper species

A new species of snapper fish, *Lutjanus alexandrei*, has been identified on the reefs of the Abrolhos region of the South Atlantic Ocean. Although the species has been known for years, it was previously always mistaken for a dog snapper *Lutjanus jocu*, a commercial fish in Brazil. Although the new fish is similar to the dog snapper and other members of the Lutjanidae family, it has different markings and colour. Like many fish species *L. alexandrei* spends parts of its life in different habitats, with the juvenile fish taking shelter and finding food in the relative safety of mangroves and the adults occupying reefs and deeper water. This emphasizes the need to develop integrated conservation strategies for different marine habitats and other interdependent ecosystems.
Source: Environment News Service (2007), http://www.ens-newswire.com/ens/mar2007/2007-03-12-05.asp

Owlet in the limelight

One of South America's most enigmatic birds has been photographed in the Abra Patricia-Alto Nieva Private Conservation Area in northern Peru. The Endangered long-whiskered owlet *Xenoglaux loweryi* was discovered in 1976 and has only been observed on a few occasions since this time. The owlet is one of the world's smallest owls and is so distinct from other owl species that it has its own genus, *Xenoglaux*, which means strange owl. The species is listed as Endangered because of its restricted range and the rapid destruction of its forest habitat in the eastern Andes. The Conservation Area in which it was discovered is part of the Alto Mayo Important Bird Area, which is also home to the Endangered ochre-fronted antpitta, another species with a restricted range.
Source: BirdLife International News (2007), http://www.birdlife.org/news/news/2007/03/long-whiskered_owlet.html

Brazilian tribes to get free internet access

The Brazilian Environment Minister has announced that free internet access will be provided to native Indian tribes in a move to protect the Amazon rainforest. Satellite access will be provided to 150 isolated regions by the central government, while state and local governments are required to provide the computers. The government has found it difficult to protect the Amazon rainforest from illegal activities such as ranching and mining, and it is hoped that by working with native tribes such activities will be easier to monitor. Reaction among indigenous people is mixed, with some people fearing that the computers may erode their culture.
Source: BBC News (2007), http://news.bbc.co.uk/1/hi/world/americas/6509973.stm

Eco-friendly fish scheme to protect fishermen's livelihood

For >50 years Brazilian fishermen have paddled through the creeks of the Rio Negro region collecting red-and-blue-striped cardinal tetra fish to supply international markets. Now commercial fish farms in Florida have succeeded in breeding the fussy cardinal tetras in captivity for the first time, prompting fears that tank-bred tetras will replace those caught in Brazil, depriving the fishermen of an income that is currently enough to prevent logging, mining and urbanization from gaining a foothold in the region. To try to combat this threat researchers have come up with a scheme to certify wild-caught fish as an eco-friendly, fairly-traded commodity, in the hope that this will encourage aquarium owners to buy them instead of the cheaper tank-bred tetras.
Source: National Geographic News (2007), http://news.nationalgeographic.com/news/2007/03/070328-pets-fish.html

Lonesome George gets a friend

Lonesome George, thought to be the last remaining individual of the Pinta Island tortoise species *Geochelone abingdoni*, has cause for hope following the discovery of a hybrid tortoise that shares half of George's genes (see also pp. XXX-XXX). The newly found tortoise is the result of a pairing between a Pinta Island tortoise and a tortoise belonging to another species, and was found on Isabela isle. Unfortunately for George the new tortoise is a male, but the finding suggests that there may be more hybrids on Isabela. Speculation surrounds the question of how a Pinta tortoise travelled from Pinta to Isabela isle, as no prevailing currents could carry tortoises in this direction. There is a possibility that whalers, who transported the smaller female giant tortoises in preference to males, may have had a hand in the process.
Source: BBC News (2007), http://news.bbc.co.uk/1/hi/sci/tech/6607197.stm

Australia/Antarctica/New Zealand

Ice shelf collapse provides unique opportunity

The collapse of the Antarctic's Larsen A and B ice shelves, 12 and 5 years ago respectively, opened up one of the planet's most pristine marine habitats, which has now been explored by researchers from the Census of Antarctic Marine Life. The researchers used a remotely-operated vehicle, equipped with cameras, to explore the seabed exposed by the breakup of the ice shelves. There is particular interest in how the ecosystem is responding to the largest known ice shelf collapse, especially as collapses are

https://doi.org/10.1017/S0030605307004132 Published online by Cambridge University Press

likely to occur with increasing frequency under current climate change scenarios. Some of the pioneers in this inhospitable environment were fast-growing sea-squirts, which occur in dense clumps, particularly in the Larsen A area. During the 10-week expedition researchers collected over 1,000 species, some of which may prove to be new to science.
Source: PhysOrg (2007), http://www.physorg.com/news91629811.html

New Zealand rules on long-lining

Conservationists have welcomed the New Zealand government's announcement of three measures to help reduce seabird bycatch. All surface long-lining within New Zealand's Exclusive Economic Zone will be restricted to night setting, and all vessels must use bird-scaring devices (tori-lines). In addition, a notice period for long-line fishing voyages will be implemented with the intention of allowing the Fisheries Ministry to organize observer programmes where necessary. The government's decision is thought to have been prompted by observations of seabird bycatches made by the Fisheries Ministry in late 2006; a vessel fishing in the Kermadec Islands, for example, was found to have caught 50 albatrosses and seven petrels, along with two leatherback turtles, as bycatch.
Source: BirdLife International News (2007), http://www.birdlife.org/news/news/2007/02/new_zealand_longlining_measures.html

Toads march faster and faster

New research has suggested that cane toads, the scourge of Australia's native wildlife, will spread across the country faster than expected. They currently occupy *c*. 1.2 million km^2 in the north-east, but this is likely to increase to 2 million km^2 as the toads move south. Previous models of how the toads' range might increase have only included parts of Australia that are similar to the areas of Central and South America where the toads originally came from, but it would appear that the amphibians have evolved since their introduction to Queensland in 1935 and are now able to cope with conditions beyond those of their countries of origin. Combined with their powerful venom and voracious appetites, this renders them almost invincible.
Source: BBC News (2007), http://news.bbc.co.uk/1/hi/sci/tech/6499713.stm

Yellow-eyed penguins suffer as result of unregulated tourism

A study of yellow-eyed penguins at two sites in New Zealand has found that unregulated tourism at penguin breeding sites results in fewer chicks reaching fledging age. At Sandfly Bay, where tourism has increased dramatically over the last decade, yellow-eyed penguins fledged an average of 0.75 chicks per pair, whereas on Green Island, which is inaccessible except by permit, pairs fledged an average of 1.39 chicks. In addition, hormonal stress levels were higher at the site exposed to tourism, indicating that the birds have become more sensitive as a result of frequent disturbance. The study's authors recommend that tourists are kept away from breeding beaches and that disturbance at penguin landing sites is reduced.
Source: General and Comparative Endocrinology (2007), **152**, 54-63.

Penguins help monitor dwindling fish stocks

Researchers in the Southern Ocean have developed a novel means of monitoring fish stocks. Instead of using trawling nets they have implanted microchips into 50 king penguins on the Crozet Archipelago. The chips monitor the temperature of the backs of the penguins' throats, enabling the researchers to count how many fish the penguins are eating, as the temperature falls when a fish is swallowed. The chips also log pressure and heart rate, the latter being used to determine energy expenditure, using data from previous experiments where penguins walked on a treadmill while their heartbeat was monitored. The information collected from the penguins shows that the birds are having to work harder for less food, indicating that their prey stocks are decreasing.
Source: New Scientist (2007), http://environment.newscientist.com/article/dn11522-penguins-on-treadmills-help-reveal-overfishing.html

Murray-Darling basin running dry

An unprecedented drought in Australia's Murray-Darling basin has forced the authorities to consider banning the use of water for anything other than critical drinking water supplies, including irrigation and the environment. The Murray-Darling basin constitutes 40% of the total value of agricultural production in Australia, as well as supplying drinking water to Canberra and Adelaide. The basin is also home to at least 35 species of threatened birds and 16 threatened mammals. In many places in the basin the drought dates back to 1997, with inflows in the Murray Valley <60% of the previous minimum inflow.
Source: Environment News Service (2007), http://www.ens-newswire.com/ens/apr2007/2007-04-20-02.asp

All internet addresses were up to date at time of writing. This section was written and compiled by Elizabeth Allen and Martin Fisher, with additional contributions from Ros Aveling and Phil Seddon. Contributions from authoritative published sources (including web sites) are always welcome. Please send contributions by e-mail to oryx@fauna-flora.org, or to Martin Fisher, Fauna & Flora International, Jupiter House, Station Road, Cambridge, CB1 2JD, UK.

https://doi.org/10.1017/S0030605307004132 Published online by Cambridge University Press