Briefly

INTERNATIONAL

Organizations team up to achieve Target 12

Of 65,518 species currently on the IUCN Red List of Threatened Species 1,173 are Extinct or possibly Extinct and 20,219 threatened. IUCN and other organizations have come together to support achieving a global biodiversity target to prevent further species loss. The partnership, Friends of Target 12, will offer practical advice to help countries prevent further extinctions and improve the conservation status of rapidly disappearing species. This is to achieve Target 12, one of the 20 Aichi Biodiversity Targets adopted under the Convention of Biological Diversity. The partnership aims to combine the knowledge and experience of government institutions, intergovernmental, non-governmental and community-based organizations, and academic and professional networks and private sector companies working to conserve species. Some Friends of Target 12 partners have made specific commitments to the initiative, with BirdLife implementing the BirdLife Preventing Extinctions Programme.

Source: BirdLife International (2013) www.birdlife.org/community/2013/05/from-words-to-action-key-organisations-team-up-to-stop-the-extinction-crisis

Near real-time deforestation monitoring system to go global...

A near real-time deforestation monitoring system will soon cover all tropical forests. The collaborative terra-i project uses data from NASA's satellite-based MODIS sensors to assess changes in forest cover at a 250-m resolution every 16 days. The system currently provides near real-time data on land-cover change in Latin America and will be producing pan-tropical results over the next few months. The system detects deforestation based on changes in the greenness of natural vegetation, normalizing seasonal vegetation response to rainfall to reduce false positives. The data are mapped and made available for download via www.terra-i.org. For Latin America, data are available at the national level and by protected area, ecosystem, and state or municipality. Terra-i has a range of applications, such as monitoring the effectiveness of conservation and assessing the environmental impact of new infrastructure and the contribution of deforestation to climate change.

Source: terra-i (2013) www.terra-i.org/terra-i/news/Terra-i-deforestation-monitoring-system-going-pan-tropical.html, and *Mongabay.com* (2013) news.mongabay.com/2013/0725-terra-i-deforestation-tracking-system.html

...and deforestation increases in several countries

The Quarterly Indicator of Cover Change, a forest tracking tool developed by NASA researchers, showed that deforestation increased during the first 3 months of 2013 in Malaysia, Nepal, Mexico, Argentina and Madagascar. There were also large drops in deforestation compared to a year earlier in the Democratic Republic of Congo, Thailand, Myanmar, Vietnam, Lao PDR, Gabon, Nigeria, Brazil, Colombia and India. The tool is based on the Moderate Resolution Imaging Spectroradiometer (MODIS) satellite, underpinning the Global Forest Disturbance Alert System (GLoF-DAS). GLoF-DAS uses MODIS to detect changes in forest greenness cover relative to the previous year. Change is registered in forest and woodland areas that have lost at least 40% of green vegetation in the previous year, and areas where deforestation and forest degradation is occurring on a quarterly basis are highlighted.

Source: Mongabay.com (2013) news.mongabay.com/2013/0610-glofdas-deforestation-2013Q1.html

Fishing leads to significant shark population declines

Shark populations are declining, with perhaps 100 million or more sharks lost every year according to a recent study. Shark deaths were estimated at 100 million in 2000 and 97 million in 2010, with a potential range of mortality of 63–273 million annually. The cause of this decline is a combination of a global boom in shark fishing—usually for their valuable fins—and the relatively slow growth and reproductive rates of sharks. Because adequate data for shark catches is lacking for most of the world, the wide range of possible mortality is based on available data for shark deaths and calculated projections for unreported, discarded and illegal catches. Although some sharks are receiving protection through national and international agreements, the researchers suggest legislation should be expanded to a greater number of species.

Source: Marine Policy (2013) 40, 194–204, and *Florida International University Press Release* (1 March 2013)

Key to ocean life shows large regional variations

Iron, key for ocean phytoplankton growth, shows larger variations than previously recognized, with implications for models of climate. Microscopic phytoplankton lock up atmospheric carbon dioxide but a lack of iron limits photosynthesis. The observation that there are regional variations in iron concentration of up to 10,000 times is expected to improve ocean–climate models. Photosynthetic life is limited by low availability of iron in up to one third of the ocean surface. The problem for phytoplankton is particularly acute in the Southern Ocean. Scientists have previously added iron to iron-limited areas of the ocean, which typically generates large blooms of phytoplankton. This has been suggested as a possible geoengineering solution to capture carbon from the atmosphere and transfer it to the ocean. The fate of phytoplankton carbon remains unclear, however, and the role of iron for fertilizing the oceans is a developing field of research.

Source: BBC News (2013) www.bbc.co.uk/news/science-environment-23379646

Blue and beaked whales affected by simulated navy sonar

Recent research has shown that the behaviour of both blue and beaked whales is disturbed by simulated navy sonar. Researchers attached tracking and sound-recording tags to 17 blue whales and two beaked whales, and then played simulated sonar sound through an underwater speaker and measured the animals' responses. Researchers have previously linked mass strandings and deaths of beaked whales to military exercises that use mid-frequency sonar. The experiment revealed that man-made sound caused the deep-diving beaked whales, which use sound to both hunt and communicate, to stop hunting and swim away. Several blue whales also responded to the sound even though they communicate with very low-frequency sound that is below that of naval sonar. Animals that were feeding close to the surface showed almost no response but animals that were diving for krill stopped

feeding and moved away from the sound source.
Source: Biology Letters (2013) dx.doi.org/10.1098/rsbl.2013.0223, *Proceedings of the Royal Society B Biological Sciences* (2013) dx.doi.org/10.1098/rspb.2013.0657, and *BBC News* (2013) www.bbc.co.uk/news/science-environment-23115939

IBAs in Danger

An increasing number of Important Bird and Biodiversity Areas (IBAs) are under threat from damaging development. The IBAs in Danger initiative now provides a focus to help prevent further damage to or loss of these sites of international significance. An initial list of over 300 IBAs in Danger will be used to target enhanced conservation effort at sites that are insufficiently protected or poorly managed. IBAs in Danger are under pressure from 11 main threat types, the most common of which is agriculture and aquaculture, followed by biological resource use (including logging, hunting/trapping and over-harvesting). This initial list of IBAs in Danger will be developed further as IBA monitoring is advanced. The list is not comprehensive and (except for selected High Seas sites) does not cover countries and territories outside the BirdLife network.
Source: BirdLife International (2013) www.birdlife.org/community/2013/06/ibas-in-danger-urgent-action-needed/

New global alliance to stop controversial dam projects

An international alliance called Damocracy has been formed to preserve the last intact rivers. Recently, Damocracy activists blocked the Ilisu dam construction site in Turkey, and among them were Kayapo people from the Amazon, who are also committed to stopping the construction of the Belo Monte dam in Brazil. Damocracy demands the immediate abandonment of the Ilisu project and the recognition and preservation of the antique city of Hasankeyf as a UNESCO world cultural and natural heritage site. A survey has shown that the city and the neighbouring Tigris valley are the only locations to meet nine out of UNESCO's 10 criteria for world cultural and natural heritage sites but the Turkish government intends to flood Hasankeyf and relocate the 65,000 inhabitants. Apparently 70% of the Ilisu dam has already been completed and its flooding is scheduled for summer 2014.
Source: *BirdLife International* (2013) www.birdlife.org/community/2013/07/new-global-alliance-to-stop-controversial-dam-projects

EUROPE

North Sea cod stocks on the road to sustainability

Marine Stewardship Council research suggests that the North Sea fishery, based on current trends, would gain certification within years rather than decades, with North Sea cod stocks recovering. Certification is determined by the state of the stocks, the environmental impact of the fishery and the presence of a management system for maintaining sustainability should circumstances change. The turnaround is largely because of stricter catch limits, which were helped by a public campaign for sustainable fish, although there are other reasons. These include decommissioning schemes, meaning fewer fishing vessels at sea, and improved relationships between scientists and the National Federation of Fishermen's Organisations, leading to a change in mindset in the industry. However an unwanted side effect of the campaign is that red gurnard has been used as an alternative for cod and it is now possible that its stocks may run low.
Source: BBC News (2013) www.bbc.co.uk/news/science-environment-22820162

Two osprey chicks hatch in Dyfi Valley

Two osprey chicks have hatched at a nature reserve in Powys despite fears their parents had paired up too late in the mating season, with the eggs laid 6 weeks later than usual. The parents are one of only two known breeding pairs in Wales, with a second pair nesting near Croesor in the Glaslyn Valley. Ospreys return from migration in late March or April and usually lay eggs 2–3 weeks later. But the parents did not pair until 3 May and their two eggs were laid between 22 and 25 May. Ospreys are still persecuted and egg collecting remains a problem. Volunteers watched the nest 24 hours per day during the 6-week incubation period. Once prolific birds of prey in the UK, ospreys declined after years of persecution, including egg collecting, hunting and taxidermy, and because of loss of habitat.
Source: BBC News (2013) www.bbc.co.uk/news/uk-wales-mid-wales-23130281

Sixty percent of UK species in decline

A report published by a coalition of conservation and research organizations concludes that 60% of species studied have declined in recent decades. Scientists from 25 wildlife organizations did a stock-taking of native species, showing that more than one in 10 of all species assessed is under threat of disappearing from the UK. The State of Nature provides a clear warning that species are in trouble and that many are declining at a worrying rate. The declines are spread across all counties, UK Overseas Territories, habitats and species groups, although indications are that the decline is highest amongst insects such as butterflies, moths and beetles. Threats to the UK's wildlife include habitat loss, changes in countryside management and, more recently, climate change.
Source: RSPB (2013) www.rspb.org.uk/news/346449-sixty-per-cent-of-uk-species-in-decline-groundbreaking-study-finds

Honey bee losses double in a year because of poor winter…

According to the British Beekeepers Association this winter's losses of honey bee colonies are the worst since records began 6 years ago. More than a third of hives did not survive the cold, wet conditions and losses were more than double the previous 12 months throughout England. The main reason for this is the harsh winter following on from the wet summer of 2012. The inclement weather meant bees were unable to forage as much as usual and, in addition, pollen and nectar supplies were scarce. Beekeepers believe that the increased number of infections and diseases that the bees are subject to may have made them weaker and unable to cope with colder conditions. In changeable weather queens may not execute their mating flight correctly and, if not properly mated, they can only lay drones and the hive will not therefore survive.
Source: BBC News (2013) www.bbc.co.uk/news/science-environment-22861651

…and imported bumblebees pose parasite threat to native bees

Bumblebees imported from Europe have been found to carry pathogens that pose a threat to native honeybees and bumblebees in the UK. Between 40,000 and 50,000 bumblebee colonies are imported each year to assist with crop pollination. With the decline in pollinating insects, food producers are increasingly reliant upon imported bees. In 48 colonies bought from three producers in mainland Europe the researchers screened the bees for parasite DNA. Seventy-seven percent had parasites that could infect native bees, including the three main bumblebee parasites, three honeybee parasites, and two parasites that infect both bumblebees and honeybees. The researchers indicated that regulatory authorities need to strengthen measures to prevent

importation of parasite-carrying bumblebee colonies, including checking bees on arrival in the UK and extending regulations to cover imported colonies of the native subspecies.
Source: Journal of Applied Ecology (2013), dx.doi.org/10.1111/1365-2664.12134, and *BBC News* (2013) www.bbc.co.uk/news/science-environment-23347867

Smartphone app highlights disturbance threat to birds

Researchers from the University of Hull have developed a smartphone app that measures the impact of construction work on waterbirds, such as the oystercatcher, in protected areas. The app was developed from a study carried out on behalf of the Environment Agency. By using on-phone noise and GPS facilities the app allows real-time characterization of likely noise effects and provides guidance for mitigation. The software offers advice on how noise levels and other disturbances can affect bird behaviour during a project. It is hoped the app will minimize disruption from flood prevention work and help planners assess possible effects of proposed work before consent is given. On-site contractors will be able to measure noise levels and offer advice on the degree of disturbance to the birds.
Source: BBC News (2013) www.bbc.co.uk/news/science-environment-22843289

UK Parliament backs plans for trial badger culls

The UK government says the spread of tuberculosis (TB), carried by badgers, in cattle has cost farmers and the wider economy more than GBP 500 million. Calls to abandon pilot badger culls in Gloucestershire and Somerset have been rejected by parliament. Cattle infected by TB have to be slaughtered and 28,000 were destroyed last year. Ministers will examine the results of the pilot culls before deciding on further action. Currently plans are that badgers will be shot in the open. There is debate about whether a cull would have the desired effects, and animal rights activists have called for vaccination of badgers as a more effective way to halt the spread of bovine TB.
Source: BBC News (2013) www.bbc.co.uk/news/uk-politics-22775532

Saving Scotland's most threatened tree

Scotland's most threatened tree, the Catacol whitebeam, is the product of a complicated series of hybridizations between the rowan and the much rarer rock whitebeam. There is only one known individual alive in the wild, in Glen Catecol in Arran. Seeds have been collected but were not fertile. In 2012, however, one of 10 cuttings taken survived. This year 200 cuttings have been taken in the hope that at least 20 will survive.
Source: BBC News (2013) www.bbc.co.uk/news/uk-scotland-highlands-islands-22870414

RSPB Scotland in bid to restore bog

The Royal Society for the Protection of Birds (RSPB) Scotland is finalizing plans to restore vast tracts of peat bog in the Flow Country of Caithness and Sutherland. The conservation charity hopes to secure millions of pounds in Lottery funding for the work at its Forsinard reserve. The plans include the removal of commercial forestry plantations. Covering about half a million ha, the Flow Country is one of the world's largest bogs, and it supports rare plant, insect and bird life.
Source: BBC News (2013) www.bbc.co.uk/news/uk-scotland-highlands-islands-23506664

Exotic animals seized at Heathrow and Gatwick airports

A Freedom of Information request to the UK Border Agency has revealed the range of animals seized at Heathrow and Gatwick airports in the previous 2 years. The seizures included three brown lemurs, five serval cats, 180 royal pythons, hard coral, and two tayras (a South American member of the weasel family). Dead animals seized included a cobra, gecko, lizard, hummingbird, peregrine falcon and 90 dead seahorses. The international trade in animals and plants is estimated to be worth billions of dollars annually, and illicit trade in threatened species is a major contributory factor to the threat of extinction faced by many species.
Source: BBC News (2013) www.bbc.co.uk/news/uk-england-23131156

Bean goose breeding grounds revealed by GPS...

Scientists from the Wildfowl & Wetlands Trust, commissioned by Scottish Natural Heritage, fitted tracking devices to six taiga bean geese on the Slamannan plateau last winter. The geese were tracked leaving Scotland in late February, spending a month in north-west Denmark, travelling on in late March to feed for 2 weeks in fields north-east of Oslo, and finally moving to Dalama County in western Sweden, believed to be their breeding ground. Once common in Scotland, bean geese have become rare there, and this is the only Scottish flock, with c. 250 birds.
Source: WWT News (2013) www.wwt.org.uk/news/news/2013/05/wwt-news/bean-goose-breeding-grounds-revealed-by-gps/

...and nightingales' tags reveal habitat change on migratory routes

The number of nightingales has dropped by more than 50% since 1995, with only 6,000 singing male nightingales remaining in the UK. This decline could be a result of changes in the species' habitat along its migratory route to Africa. Last year 10 birds at Grafham Water in Cambridgeshire were fitted with tracking devices. Seven birds have come back with data about their 4,828 km journey to Senegal and The Gambia. Initial findings show the birds make the 6-week journey to Africa via northern France and Spain to Gibraltar, and then along the African coast. In March they begin the journey back to the UK to breed. Having a better knowledge of the migratory rote and stopovers will help provide an understanding of the problems the species face.
Source: BBC News (2013) www.bbc.co.uk/news/uk-england-cambridgeshire-23124278

Puffin census on Farne Islands shows numbers rising

Puffin numbers in the north-east of England are increasing despite many having perished in severe winter storms. A census on the Farne Islands, off the coast of Northumberland, has shown an 8% increase compared to the last count, in 2008. There are now c. 40,000 pairs of nesting puffins across the eight National Trust-owned islands. But numbers are still lower than the 55,674 living on the islands in 2003. Many seabirds were washed up along the coast of north-east England and Scotland in March, apparently as a result of the weather conditions and a shortage of food. The Farne Islands also host thousands of grey seals along with many other species of bird, including Arctic terns, guillemots and razorbills.
Source: BBC News (2013) www.bbc.co.uk/news/science-environment-23370817

Maps offer insights into bat distribution

More than 15,000 bat recordings in the Lake District have helped researchers produce the first detailed, large-scale bat distribution maps in a UK region. The maps could help planners understand how developments could have an impact on bats, which are considered to be effective indicators of the

https://doi.org/10.1017/S0030605313001129 Published online by Cambridge University Press

general health of an area's wider environment. As well as producing eight species-specific habitat suitability maps for the Lake District National Park, the team compiled similar datasets for four other areas in northern England, including the North York Moors and Yorkshire Dales national parks. The maps provide an index rating of habitat suitability for each species to a resolution of 50 m^2 and can be used in a number of ways. When you overlay all of the maps you can see the hotspots that are particularly good for bat activity and should potentially be conserved.
Source: Journal of Applied Ecology (2013) dx.doi.org/10.1111/1365-2664.12117, and *BBC News* (2013) www.bbc.co.uk/news/science-environment-23148612

Biological clocks beat quicker in cities

Researchers have measured the circadian rhythms of urban and rural blackbirds in southern Germany. City birds woke up earlier and rested less than forest birds. Adult male blackbirds were captured in Munich and a rural forest nearby, equipped with a radio-transmitter to monitor daily levels of activity in the wild, and then released. Ten days later they were recaptured and kept in light-proofed, sound-insulated chambers, and their circadian rhythms were measured. Urban birds began daily activities about 30 minutes before dawn compared to forest birds, which began at sunrise. The city birds ended their days about 9 minutes later than forest birds and thus were active for 40 minutes longer each day. Micro-evolutionary changes such as artificial light and increased noise levels could be causing these differences. There is a growing consensus that towns and cities have a profound effect on the internal clocks of humans and animals.
Source: Proceedings of The Royal Society B (2013), dx.doi.org/10.1098/rspb.2013.0593 and *BBC News* (2013) www.bbc.co.uk/news/uk-scotland-glasgow-west-22773792

NORTH AFRICA AND THE MIDDLE EAST

Rediscovered Hula painted frog is a living fossil

Israel's Hula painted frog had not been seen for about 60 years but was rediscovered in 2011, in a patch of swampy undergrowth, after being declared extinct in 1996. Genetic tests and CT scans have shown the frog belongs to the *Latonia* group of amphibians that, although once widespread throughout Europe, died out 15,000 years ago. Before the Hula painted frog was declared extinct only three individuals were seen, despite its distinctive black and white spotted belly. In the 1950s the Hula valley was drained and the swamp destroyed. However, following discovery of an individual by a Park Ranger a further 13 have been discovered since 2011. The species appears to be resilient but re-flooding of part of the Hula valley is required to ensure its survival.
Source: Nature Communications (2013), dx.doi.org/10.1038/ncomms2959, and *BBC News* (2013) www.bbc.co.uk/news/science-environment-22770959

Syrian bald ibis may be down to a single bird

Conservationists monitoring the eastern population of northern bald ibises believe it may have declined to a single breeding individual. The population was believed to have been eradicated but in 2002 a small group was discovered in Syria (see *Oryx*, 38, 106–108). Now this group seems to be vanishing, however. Only one northern bald ibis, Zenobia, has returned to the breeding site in Palmyra. She was formerly paired with a male, Odeinat, but last July his satellite tag stopped broadcasting. This population is genetically different from the western population, in North Africa, and they are the only members of the species to undertake long-range migrations, to the Ethiopian highlands. Hope for the species lies in a semi-wild population of c. 100 individuals in Turkey, although they are not free ranging and do not migrate.
Source: Mongabay.com (2013) news.mongabay.com/2013/0611-hance-syrian-bald-ibis-endling.html

Greater flamingos have best breeding year in Abu Dhabi

In June and July c. 200 greater flamingo chicks were born at the Al Wathba Wetland Reserve in Abu Dhabi. This is the highest number recorded since the species first returned to the Reserve to breed in 2011. In the previous breeding season 39 chicks were born. The breeding is a result of improved habitat conditions and management in the Reserve. In April 2013 the Reserve was declared a Ramsar site, the first in Abu Dhabi. The Environment Agency–Abu Dhabi undertakes routine monitoring of the Reserve's wildlife and operates a flamingo-tracking programme.
Source: Wildlife Extra News (2013) www.wildlifeextra.com/go/news/flamingo-abu-dhabi013.html

SUB-SAHARAN AFRICA

Protection reduces loss of natural land-cover at IBAs across Africa

A study by the BirdLife Africa Partnership and RSPB has shown that legal protection is effective in reducing the loss of natural land cover within sites of high conservation importance. When sets of protected and unprotected Important Bird and Biodiversity Areas (IBAs) in Africa were compared it was found that annual rates of loss of natural land cover in protected IBAs was less than half of that in unprotected areas. Rates of loss in 20 km buffer zones around unprotected and protected areas were similar, with no evidence of displacement of conversion within protected areas to their immediate surroundings, termed leakage. The Parties to the Convention on Biological Diversity have agreed to increase total coverage of land in protected areas by 4% by 2020. This could cost c. USD 76 billion annually, and to justify it the effectiveness of protected areas in reducing deleterious land-cover change needs to be quantified.
Source: PLoS ONE (2013) 8(5): e65370 (dx.doi.org/10.1371/journal.pone.0065370), and *BirdLife International* (2013) www.birdlife.org/community/2013/05/formal-protection-reduces-loss-of-natural-land-cover-at-ibas-across-africa

Illegal marijuana cultivation threatens Nigeria's forests and chimpanzees

Illegal marijuana cultivation is the latest environmental threat in the forests of Nigeria. Marijuana is a quick-growing and lucrative cash crop. In 2012 the Southwest/Niger Delta Forest Project surveyed nine forest reserves to assess populations of the Nigeria–Cameroon chimpanzee *Pan troglodytes ellioti*, considered the most threatened of the four subspecies of chimpanzee and categorized as Endangered by the IUCN Red List. Half of the deforestation occurring in these reserves from 2010 to 2012 appeared to be the result of cannabis cultivation. Concealed within the forest, marijuana growers clear-cut and often burn large patches of land to plant their crop. Because the plants need 12 hours of sunlight, the canopy and any competing plants must be removed completely. Profits from marijuana crops come within 6–8 months of planting, and fetch 2–3 times more money than obtained from cultivating a food crop.
Source: Mongabay.com (2013) news.mongabay.com/2013/0726-kimbrough-marijuana-nigera.html

Kenya seizes ivory going from Uganda to Malaysia

Poached ivory disguised as sun-dried fish has been seized in the Kenyan port city of Mombasa. The consignment of c. 770 pieces had come from neighbouring Uganda and was destined for Malaysia. Fish had been added to give off a pungent smell intended to throw off sniffer dogs. The Kenyan government banned trade in ivory in 1989, and levels of elephant poaching subsequently declined, but there has been a recent rise in the illegal practice. Export documents showed that the ivory had come by vehicle from landlocked Uganda on 12 June. Some bags had worked polished pieces of ivory and others had raw ivory. Kenya has recently taken a more aggressive stance against poaching as it tries to combat the surge in demand for ivory from Asia.

Source: BBC News (2013) www.bbc.co.uk/news/world-africa-23168558

African militias trading elephant ivory for weapons

The Lord's Resistance Army (LRA) is funding its activities using elephant ivory poached in Garamba National Park in the Democratic Republic of Congo (DRC), according to a recent report based on eyewitness accounts from park rangers, LRA escapees and recent senior defectors. It is claimed that the LRA transports the ivory to the Central African Republic, where it is traded with Arab businessmen and officers from the Sudanese armed forces in return for goods, food, cash, ammunition and medical supplies. IUCN has estimated that the global illegal ivory trade has more than doubled since 2007, with raw ivory fetching more than USD 1,300 per pound because of increased demand from Asia. In the 1970s there were c. 20,000 elephants in Garamba National Park but now only c. 1,800 remain.

Source: Mongabay.com (2013) news.mongabay.com/2013/0605-gen-ivory-weapons.html

A new hero emerges

The hero shrew *Scutisorex somereni*, nicknamed for its extraordinary strength, was first described over a century ago but a new, smaller-skulled species of the hero shrew, called *Scutisorex thori*, has now been found in the Democratic Republic of Congo. The unique interlocking vertebrae of hero shrews give them the strength to move large objects. Their strength has given them legendary status in the Congo, where parts of the animal are worn as a talisman in battle. The new species has fewer lower vertebrae and more robust and flattened ribs than its earlier known relative. Hero shrews have twice the number of lower vertebrae of humans and a spine four times more robust relative to its body size. Aspects of *S. thori*'s vertebral column suggest it is a transition between the regular shrew and the original species of hero shrew, which could shed light on how quickly it evolved.

Source: Biology Letters (2013) dx.doi.org/10.1098/rsbl.2013.0486, and *BBC News* (2013) www.bbc.co.uk/news/science-environment-23423436

Deforestation in Africa's Congo Basin rainforest apparently slows...

Satellite images of the Congo Basin have revealed that deforestation has fallen by about a third since 2000. This is believed to be partly because of a focus on mining and oil rather than on clearing of land for commercial agriculture. The Congo Basin rainforest covers nearly 2 million km^2. Satellite images allowed researchers to track how the dense foliage has changed over time. They found that during the 1990s nearly 3,000 km^2 of forest were being felled each year. But from 2000 to 2010 the rate of deforestation slowed, with $<$ 2,000 km^2 of rainforest lost per year. This may be partly because there is a network of protected areas, and also because of a lack of expansion of agriculture and because central African countries are dependent on oil sales and minerals from mining.

Source: Philosophical Transactions of the Royal Society B Biological Sciences (2013) dx.doi.org/10.1098/rstb.2012.0300, and *BBC News* (2013) www.bbc.co.uk/news/science-environment-23382526

...but the evidence is questioned

The NGO Global Witness has questioned the conclusions reached in a recent study of logging in Central Africa's rainforests. The group, which has published a series of investigative reports on abuses by logging companies, said that the research presents a misleading and inaccurate picture of the present and growing threats to the Congo Basin rainforest. The research concludes that logging is not an important deforestation factor because of purported recent efforts of the Congo Basin countries towards sustainable forest management. Global Witness claims that the data used to support such a conclusion consists of satellite imagery and official timber extraction statistics reported by logging concessions to OFAC (an independent forest monitoring body for Central Africa) but that these data are not sufficiently reliable or representative to substantiate this conclusion. Global Witness notes that much logging both within and outside concessions within the Congo Basin countries is illegal and unsustainable.

Source: Mongabay.com (2013) news.mongabay.com/2013/0723-global-witness-congo-logging-study.html

Population of newly discovered lemur in Madagascar down to last 50 individuals

Researchers have discovered a new species of lemur on Madagascar. The Lavasoa dwarf lemur *Cheirogaleus lavasoensis* inhabits three isolated forest fragments in the Lavasoa Mountains in southern Madagascar. Like other dwarf lemurs, the species is nocturnal, dwells in the forest canopy, and hibernates during the cool, dry season. The species was first discovered in 2001 but genetic analysis has only now revealed it to be distinct from the closely-related *Cheirogaleus crossleyi*. Preliminary estimates indicate that there are fewer than 50 individuals remaining. More than 40 new species of lemur have been documented since 2000.

Source: Molecular Phylogenetics and Evolution (2013) dx.doi.org/10.1016/j.ympev.2013.07.019, and *Mongabay.com* (2013) news.mongabay.com/2013/0730-cheirogaleus-lavasoensis.html

SOUTH AND SOUTH-EAST ASIA

Monitor lizards vanishing to international trade in pets and skins

Monitor lizards, especially in South-east Asia, are vanishing because of demand for the international pet trade and for skins for handbags and watch straps. In addition, the rapid destruction of their rainforest is worsening the situation. This group of lizards, which includes the Komodo dragon, are known for their bright colours and apex role in island food chains. Many of the monitor species threatened are protected or regulated by international and national laws but these have not been strong enough or have not received adequate enforcement. The colourfulness, rarity, value and strong protection status drives demand for monitor lizards, with up to four-digit amounts paid for them. Many of the monitors caught for the international pet trade perish before they make it to their destination. Along with these threats, habitat loss to

https://doi.org/10.1017/S0030605313001129 Published online by Cambridge University Press

plantations is having negative effects. Researchers have documented over 70 species of monitor lizards.
Source: Herpetological Conservation and Biology (2013), 8, 1–62, and *Mongabay.com* (2013) news.mongabay.com/2013/0604-hance-monitors.html

Chagos marine park is lawful, High Court rules

The UK government decision to create the largest marine park around the UK-controlled Chagos Islands in 2010 has been upheld by the High Court. As a result of the reserve commercial fishing was banned. The High Court has stated that the marine protected area is compatible with EU law. The Chagos Islands are located in the central Indian Ocean, 1,000 miles from the southern tip of India. Former residents said the reserve would prevent them from returning as fishing is their livelihood. Consultations with the USA ensured its base on the largest island, Diego Garcia, was not adversely affected by the park. Accusations that the park was created to keep Chagossians out were denied. Lawyers for the islanders claimed a classified US government cable published by WikiLeaks supported their accusations. However the judges ruled that under the Diplomatic Privileges Act 1964 it was inadmissible in evidence.
Source: BBC News (2013) www.bbc.co.uk/news/uk-22852375

Nepal's tigers on the rebound

A new survey has indicated that nearly 200 tigers now roam the lowland forests of Nepal. This is a 63% increase in the country's tiger population since 2009, and good news for global efforts to save the tiger from extinction. The survey counted 198 Bengal tigers *Panthera tigris tigris* across five parks and three wildlife corridors in Nepal. Numbers had increased everywhere but in Bardia National Park the population had increased to 50 from just 18 in 2009. At a Tiger Summit in 2010 all 13 tiger range countries pledged to double global tiger numbers by 2022.
Source: Mongabay.com (2013) news.mongabay.com/2013/0730-hance-nepal-tigers.html

Cambodian tailorbird: a new species found in Phnom Penh

A new species of bird has been discovered in Cambodia's capital, Phnom Penh. The Cambodian tailorbird *Orthotomus chaktomuk* was first spotted in 2009 during routine checks for avian flu. More individuals have since been found around the city. Tailorbirds, in the warbler family, get their name from the meticulous weaving of their nests. It is uncommon for undiscovered bird species to be found in urban contexts. This new species appears to inhabit a small area, largely comprising dense scrubland in the floodplain of the Mekong river, at the edge of Phnom Penh. Because of the small and shrinking nature of the bird's habitat, the research team has recommended that the bird be categorized as Near Threatened on the IUCN Red List.
Source: Forktail (2013) 29, 1–14, and *BBC News* (2013) www.bbc.co.uk/news/science-environment-23044469

Palm oil drives Malaysian rainforest tree to extinction

Oil palm plantations have apparently extinguished the last habitat of a rainforest tree in Malaysia. The Forest Research Institute Malaysia announced that the last stands of the Critically Endangered keruing paya *Dipterocarpus coriaceus* in Peninsular Malaysia were wiped out when Bikam Forest Reserve in Perak was cleared for oil palm plantations. More than 450 ha of forest were cleared. Vast areas of natural forest in Malaysia have been cleared for oil palm plantations over the past 30 years, putting plant and animal species at risk.
Source: New Straits Times (2013), www.nst.com.my/nation/general/keruing-paya-now-extinct-1.328029, and *Mongabay.com* (2013 news.mongabay.com/2013/0730-keruing-paya-extinction-palm-oil.html

Conserving the long-neglected freshwater fish of Borneo

On the vast tropical island of Borneo there are many conservation projects focused on orang-utans, rhinos, elephants, sun bears and other charismatic animals. Borneo's freshwater species, however, have previously been neglected despite being diverse and of importance to local people. With almost 40% of freshwater fish species endemic to the island, a new organization, the Kinabatangan River Spirit Initiative, is working to conserve them. The 560 km Kinabatangan River lies within the most isolated of Borneo's watersheds and contains the highest degree of endemism of freshwater organisms on the island. Some of the fish species that local people fish for food are found nowhere else. Threats to the fish include palm oil plantations, deforestation, lack of enforcement of existing regulations, invasive species and overfishing. Terrestrial and aquatic conservationists are now working together to protect this ecosystem, and there are hopes for some level of community-based co-management of fish resources.
Source: Mongabay.com (2013) news.mongabay.com/2013/0611-hance-zacc-poh.html

Asian tigers at risk from domestic dog distemper virus

The evolution of canine distemper virus has meant that it now affects other animals such as big cats that may have direct contact with infected dogs. The dog population acts as a reservoir for the virus. Symptoms include death from respiratory or neurological problems, including reduced fear of people. Some tigers appear to build up immunity but most succumb upon exposure. In the Critically Endangered Sumatran tiger strange behaviour has been noticed, and diagnostic brain testing is needed to determine the cause. The reduced fear of humans increases the risks to the tigers because they can inadvertently come into situations of conflict.
Source: BBC News (2013) www.bbc.co.uk/news/science-environment-22812914

Sumatra's big mammals on the edge of extinction

Contact between people and wild animals is increasing disastrously in Sumatra as a result of deforestation, mining, oil palm plantations, and fragmentation of forests. With an estimated 23–76 tigers, Batang Gadis National Park contains c. 20% of Sumatra's tigers. But tigers are valuable on the black market and poaching is rampant, and it is feared that the Sumatran subspecies could go extinct, as did the Bali and Javan subspecies in 1939 and the 1970s, respectively. Many tigers are being killed by accident in animal traps or by electric fences. A gold mining company has a 200,000 ha concession overlapping Batang Gadis, and illegal logging is encroaching upon the Park from all sides. Sumatran orang-utans are being killed by forest fires, set to clear land for oil palm plantations, and the Sumatran rhino could be extinct within a few years unless drastic action is taken (see *Oryx*, 47, 340–344).
Source: Mongabay.com (2013) news.mongabay.com/2013/0612-gen-sumatra-wildlife.html

US signs debt-for-nature swap to protect rainforests in the Philippines

The US government will redirect USD 31.8 million in debt payments owed to

https://doi.org/10.1017/S0030605313001129 Published online by Cambridge University Press

the US Agency for International Development by the Philippines, to establish a conservation fund for threatened rainforests across the archipelago. The debt-for-nature swap will fund grants to conserve, maintain and restore forests in five regions in the country, which is considered a biodiversity hotspot because of a combination of high levels of biodiversity and rapid rates of habitat destruction. Forest cover in the Philippines declined from 21 million ha (70% of the its land area), in 1900 to c. 6.5 million ha by 2007, according to the national Forest Management Bureau. Most of the deforestation was the result of logging, mining and conversion to agriculture.
Source: Mongabay.com (2013) news.mongabay.com/2013/0726-philippines-dfns-usaid.html

EAST ASIA

Cashmere trade threatens the snow leopard

The global demand for cashmere is threatening the Endangered snow leopard and other threatened species, according to a recent study. Numbers of domestic cashmere goats in parts of Central Asia have almost tripled in the last 20 years, to fuel demand for cashmere. The goats are encroaching on the natural habitats of the snow leopard and their natural prey, and also that of species such as the saiga antelope, Tibetan chiru and Himalayan bharal (or blue sheep). As the snow leopard's habitats converge with domestic goats, the decline in wild prey can lead the leopards to hunt goats, with a consequent increase in retaliatory killings of snow leopards by people protecting their herds. Cashmere production is a complicated issue. Herders are trying to improve their livelihoods but the short-term economic gain is harming local ecosystems.
Source: Conservation Biology (2013) 27, 679–689 (dx.doi.org/10.1111/cobi.12100), and *BBC News* (2013 www.bbc.co.uk/news/science-environment-23417631

Tibetan monks partner with conservationists to protect the snow leopard

The NGO Panthera has set up a programme partnering Tibetan Buddhist monasteries in snow leopard territory in China. Since 2009 a cooperative programme with four monasteries has been initiated, providing training for monks in observing and monitoring wildlife. Categorized as Endangered by the IUCN Red List, with populations having dropped by 20% in the last 16 years, the snow leopard is facing three major threats: poaching for skins, furs and parts, decline of prey such as ibex, and revenge killing because of livestock losses. The monks perform many scientific duties, including monitoring the status of prey and the snow leopard, collecting faeces and maintaining camera traps. By working with local communities to mitigate conflict and killings the monks have proved effective partners. This strategy of monastery-based snow leopard conservation could be extended to other Tibetan Buddhist regions, which cover 80% of the snow leopard's range.
Source: Mongabay.com (2013) news.mongabay.com/2013/0610-hance-zacc-mccarthy.html

New sun moth species discovered in the mountains of Yunnan

A new species of moth *Stenoloba solaris* has been discovered in Yunnan. The moth is known as the sun moth because of the intricate pattern that covers its upper wings and resembles the rising sun. Researchers collected a single male specimen of the sun moth in a river valley in the Baima Xue mountain range, a protected area within a UNESCO World Heritage sight that is known for its biodiversity and healthy ecology. Because of this, the sun moth currently suffers little from human impact on the environment.
Source: ZooKeys (2013) 310, 1–6 (dx.doi.org/10.3897/zookeys.310.5125), and *Mongabay.com* (2013) news.mongabay.com/2013/0717-allen-sun-moth-china.html

NORTH AMERICA

Pollutants threaten iconic Canadian bird

The future of one of the most beloved symbols of Canadian wilderness is uncertain according to a recent report. Currently, loons are successfully producing enough chicks to maintain a stable population but recent research has shown that reproductive success has significantly declined since 1992. If this rate of decline continues, common loon numbers are expected to begin decreasing within 2 decades. The burning of fossil fuels causes mercury and acid emissions and, from the air, these pollutants enter lakes. Mercury and acid precipitation affect lake health and directly impair loon reproductive success. Higher mercury levels make loons slower and affect their behaviour. Adults with higher mercury level spend less time collecting food for chicks and defending breeding territories. Higher acidity means fish are less abundant and the loons produce fewer young.
Source: Avian Conservation & Ecology (2013) dx.doi.org/10.5751/ACE-00569-080101, and *BirdLife International* (2013) www.birdlife.org/community/2013/07/pollutants-threaten-iconic-canadian-bird/

Famed bird reappears after 400,000 miles of flight

A migratory shorebird that has flown more than 400,000 miles has reappeared once again. It is a rufus red knot nicknamed B95 after his leg band or Moonbird after the distance he has flown over his lifespan. Scientists have been tracking him for 19 years and each May his arrival is anxiously awaited by researchers wanting to see whether he has survived his annual 16,000 km migration from the Canadian Arctic to South America's Tierra del Fuego. This year he arrived on 16 May at Mispillion Harbour in Delaware. Rufus red knots once numbered c. 100,000 on Delaware Bay but because of over-harvesting of horseshoe crabs they have declined to a fraction of this number. B95 has become a symbol of the plight of the species. He has been immortalized in a book, and in a statue at Mispillion Harbor.
Source: Mongabay.com (2013) news.mongabay.com/2013/0522-b95-returns.html

Losing just one pollinator species leads to big plant declines

Pollinators worldwide are in decline because of habitat loss, pesticides, disease and other impacts. A new study has found that losing just one pollinator species could lead to major declines in plant productivity. Manipulative field experiments with 10 bumblebee species in Colorado alpine meadows have demonstrated that removing a single bee species cuts flower seed production by one-third. These experimental results suggest that global declines in pollinators could have a greater impact on flowering plants and food crops than previously realized, and contradict modelling studies that have suggested plants would remain relatively unscathed in a world of fewer pollinators. The reduction in seed production was a result of the short-term fidelity of bees to particular flower species over short periods. Removing a

single bee species upset the other bees' fidelity and led to reduced pollination success.
Source: Proceedings of the National Academy of Sciences of the USA (2013) dx.doi.org/10.1073/pnas.1307438110, and *Mongabay.com* (2013) news.mongabay.com/2013/0722-hance-pollinator-loss.html

Yellowstone wolves spur recovery of bears' berries

When wolves were eradicated from Yellowstone in the early 20th Century the elk population boomed, devastating berry-shrubs eaten by bears. But the return of wolves to the Park in the 1990s may be leading to an improvement in the bears' diet. Measurement of the number of berries in bear droppings before and after the reintroduction of wolves has shown that as elk numbers have decreased, berries have increased. Wild fruit is an important part of the bears' diet, especially in late summer when they need to gain weight before winter hibernation, but elk browsing reduces berry production. However, the reduction in elk could affect bears because elk calves are eaten by bears in the spring. Bears eat about three times as many elk calves as wolves do and the reduction in elk and the increase in berry eating could be a feature of the increase in bear numbers.
Source: Journal of Animal Ecology (2013) dx.doi.org/10.1111/1365-2656.12123, and *BBC News* (2013) www.bbc.co.uk/news/science-environment-23495074

Scarlet macaw returns to Mexico

Scarlet macaws, once commonly seen across southern Mexico, have all but disappeared because of habitat destruction and the illegal pet trade and now exist in only 2% of their former range in the country. In April a flock of scarlet macaws was released into Aluxes Ecopark, near Palenque National Park, as part of a reintroduction project to restore this culturally significant bird to the rainforests of Palenque and its southern Mexico homeland. Community-orientated forest restoration projects and conservation awareness campaigns in Palenque National Park, supported by the Mexican environmental agency and the Mexican army, have all but eradicated rainforest destruction, and wildlife trade has declined. In the long term the reintroduction aims to create a corridor reconnecting remnant populations with the reintroduced macaws. All 17 reintroduced macaws are alive and reintroductions will continue into 2015. The macaws are tracked after their release using microchipping, leg bands and radio collars.
Source: Mongabay.com (2013) news.mongabay.com/2013/0610-mexico-scarlet-macaws.html

CENTRAL AMERICA AND CARIBBEAN

Environmentalist pays ultimate price for dedication to sea turtles

On 30 May dedicated conservationist Jairo Mora Sandoval was murdered on Moin beach in Costa Rica, where he monitored marine turtle nests. The murder has shone a light on the violence associated with the poaching of marine turtle eggs, which, on this beach, is linked to the illicit drug trade. With eggs fetching USD 1 and with nests that can contain 100 eggs, a considerable amount can be made; often eggs are traded directly to drug dealers. Six marine turtle species nest in Costa Rica, including the Critically Endangered leatherback turtle, the most common nester on Moin beach. Last year, rising violence led the authorities to begin patrolling the beach, with conservationists, but this stopped during the current nesting season, prior to the murder. Despite evidence of the importance of the beach for nesting there are proposed plans to build a new port and tourist complex there.
Source: Mongabay.com (2013) news.mongabay.com/2013/0610-hance-murder-sandoval.html

Caribbean's dry forest protection expanded

The National Trust of the Cayman Islands has acquired eight more acres to add to the Mastic Reserve, bringing the total amount of land protected by the Trust in this Important Bird Area to 843 acres. Established in 1992, the Mastic Reserve protects the largest contiguous area of old-growth forest remaining on Grand Cayman. Representing some of the last remaining examples of the Caribbean's lowland semi-deciduous dry forest and home to a unique variety of animals and plants, including all of Cayman's species of endemic orchids, trees and birds, the Reserve has high ecological, scenic and ecotourism value. The variety of black mastic *Termenalia eriostachya* var. *margaretiae* in the Reserve was once widespread on the island but by 1800 it was thought to have been harvested to extinction for its ebony-like heartwood. However, it was rediscovered in the Mastic Forest in 1991.
Source: BirdLife International (2013) www.birdlife.org/community/2013/07/carib-beans-dry-forest-protection-expanded

Charcoal trade threatens Jamaica's protected forests

In Jamaica, with a population of 2.7 million and over 17% living below the poverty line, an increasing number of people are earning a living from felling trees to make charcoal for sale to restaurants. One bag sells for c. USD 10 and one kiln produces c. 100 bags, making it a lucrative trade. However, the trade is highly destructive, with charcoal burners often cutting down a large area of trees to obtain wood for the best coal. Making charcoal is legal in most forests but now the practice is spreading to dry limestone forests on the coasts, which are protected by law. One of these areas is The Hellshire Hills, close to the capital Kingston. Enforcement officers patrol these hills, and penalties for charcoal burning include 12 months in prison or fines of USD 5,000 but, with high unemployment, this does not appear to prevent the practice.
Source: BBC News (2013) www.bbc.co.uk/news/world-latin-america-22794929

SOUTH AMERICA

Amazon fire risk on the rise

A fire prediction system developed by researchers using NASA and NOAA data has indicated that the Amazon rainforest faces a higher risk of fires this dry season. The model uses observed correlation between sea surface temperature in the tropical Atlantic and rainfall in the Amazon region. High Atlantic temperatures tend to suppress precipitation in the Amazon by driving moisture into the Gulf of Mexico, resulting in increased incidence of fire across southern parts of the rainforest. Above-average temperatures in the tropical North Atlantic ocean suggests more risk of fire this summer and in the early autumn. A less active fire season was correctly predicted in 2012, when temperatures were cooler and rainfall higher. Amazonian trees are not well adapted to fire, with small fires negatively affecting forest structure and health.
Source: Philosophical Transactions of The Royal Society B (2013), dx.doi.org/10.1098/rstb.2012.0163, and *Mongabay.com* (2013) news.mongabay.com/2013/0608-amazon-fire-risk-tool.html

https://doi.org/10.1017/S0030605313001129 Published online by Cambridge University Press

New poison dart frog discovered in The Lost World

A new species of poison dart frog has been discovered during a study to determine the impact of tourism on biodiversity in a tract of rainforest known as The Lost World in Guyana. The frog has been named *Allobates amissibilis*—in Latin, 'that may be lost'—in recognition of its home, which was the setting for British author Sir Arthur Conan Doyle's 1912 book *The Lost World*. The frog was discovered near Turu Falls, a waterfall at the foot of the Iwokrama Mountains in central Guyana. *A. amissibilis* is now the third *Allobates* species know from Guyana. Like other poison dart frogs, it derives its toxicity from the ants, mites and other invertebrates on which it feeds. The species is thought to be a micro-endemic, found in only a small area of habitat.

Source: Organisms Diversity & Evolution (2013) dx.doi.org/1010.1007/s13127-013-0144-4, and *Mongabay.com* (2013) news.mongabay.com/2013/0719-allobates-amissibilis-frog-guyana.html

Brazil's military takes on illegal loggers to protect nearly-extinct tribe…

Brazil has launched a military campaign to evict illegal loggers working from the fringes of an indigenous reserve that is home to the Awá people of north-east Brazil. Only c. 450 Awá, also known as Guajá, survive. The Brazilian army has sent in soldiers, tanks and helicopters to break up the illegal logging camps, and eight sawmills in the region have been closed. The current campaign comes after 50,000 people called on Brazil's Minister of Justice to take action. Last year a Brazilian judge ordered that all outsiders leave Awá territory by March of this year. In the 1960s a railway was built near Awá territory, to exploit iron ore. The mine and railway brought settlers and this devastated the indigenous people through disease and conflict. Despite the establishment of an indigenous reserve in 2003, the Awá have continued to face encroachment of their territory by illegal loggers.

Source: Survival International (2013) www.survivalinternational.org/news/9376, and *Mongabay.com* (2013) news.mongabay.com/2013/0718-hance-awa-military.html

…and deforestation rate doubles in the Brazilian Amazon

Deforestation in the Brazilian Amazon is 103% higher compared to this time last year, reports the latest assessment by the Brazilian NGO Imazon. Imazon's near real-time deforestation tracking system recorded 1,838 km^2 of forest clearing between 2012 and June 2013, up from 907 km^2 a year earlier. The Brazilian government has also reported a significant rise in deforestation this year. Imazon attributes the increase to last year's relaxation of the Forest Code, which governs how much forest a private landowner must preserve. Macroeconomic trends, including a weakening Brazilian real, which makes agricultural exports more profitable for Brazilian farmers, could also be contributing to this rise in the loss of forest.

Source: Mongabay.com (2013) news.mongabay.com/2013/0718-amazon-deforestation-doubles.html

Galápagos sea lions threatened by human exposure

A recent study of the Endangered Galápagos sea lion has revealed that it is potentially more susceptible to starvation when exposed to humans and associated influences. Over more than 18 months conservationists tagged and monitored the behaviour and physiology of two groups of Galápagos sea lions, one on the inhabited San Cristobal and one on the uninhabited Santa Fe (where there are also no dogs, cats, mice or rats). Exposure to pets and pollution impaired the sea lions' level of immunity, making them less able to hunt and more likely to starve when food is scarce. The immune systems of the San Cristobal sea lions were more active, potentially indicating a threat of infectious disease. Unhealthy sea lions, such as those on San Cristobal, have a thinner than normal layer of blubber.

Source: Mongabay.com (2013) news.mongabay.com/2013/0719-lindstrom-galapagos-sealions-threatened.html

Vocal-sac breeding frog possibly extinct

Darwin's frogs are known for their unique parenting style: the tadpoles are incubated in the father's vocal sac. Until recently they were common in native Chilean pine forests but now it is believed that one of the two species, the northern Darwin's frog *Rhinoderma rufum*, may have gone extinct, probably as a result of deforestation, and the other, *Rhinoderma darwinii*, is struggling. This would be the first extinction of an endemic vertebrate species in Chile. Scientists visited several sites where the species was previously known to occur but no individuals were found and no calls heard. Males of both species protect their tadpoles in their vocal sac but the northern species releases the tadpoles into freshwater whereas the southern species keeps the tadpoles in the vocal sacs until they are fully grown froglets. *R. rufum* remains categorized as Critically Endangered but should probably be added to the Potentially Extinct list.

Source: PLos ONE (2013) dx.doi.org/10.1371/journal.pone.0066957, and *Mongabay.com* (2013) news.mongabay.com/2013/0702-hance-darwins-frogs.html

PACIFIC

British Government launches BirdLife project in Fiji

The British Government has launched a new BirdLife project to conserve Fiji's forest: Delivering sustainable forest management for Fiji's people and wildlife. Fiji's forests are home to the large majority of its native wildlife, whilst also benefiting local people by providing valuable freshwater, fuel, medicine and food. However, half of the native forests have been lost to unsustainable logging. The new 3-year project is being funded by the UK Darwin Initiative, with additional support provided by Aage V. Jensen Charity Foundation, and seeks to protect at least 26,000 ha of woodland for the benefit of nature and people. Led by BirdLife International, it will work with NatureFiji–MareqetiViti, the Department of Forestry and the Ministry of the Environment.

Source: BirdLife International (2013) www.birdlife.org/community/2013/07/british-government-launches-birdlife-project-in-fiji

Scientists describe 101 new beetles from New Guinea

One hundred and one new species of weevils have been described from New Guinea, more than doubling the known species in the beetle genus *Trigonopterus*. To save time in the laborious task of describing species the team utilized a new method of species description known as turbo-taxonomy, which uses a combination of DNA-sequencing and taxonomic expertise. Rainforests are disappearing because of threats from plantations, logging, roads, mining and industrial projects, and turbo-taxonomy helps scientists document and describe species more quickly. Naming of some species was based on family names from the local phone book; e.g. *Trigonopterus moreaorum* after Morea.

Source: ZooKeys (2013), dx.doi.org/10.3897/zookeys.280.3906, and *Mongabay.com* (2013) news.mongabay.com/2013/0603-hance-png-weevils.html

https://doi.org/10.1017/S0030605313001129 Published online by Cambridge University Press

Saving the tenkile

Only 300 tenkile, or Scott's tree kangaroo, remain, in an area of only 150 km^2. According to the Tenkile Conservation Alliance the root of the troubles the tenkile faces comes from a marked increase in human settlements in the Torricelli mountain range. This means the tenkile now struggles to avoid hunters and towns. A cultural shift in Papua New Guinea's Torricelli natives may also have played a part in the species' decline. The tenkile's habitat was previously off limit for hunting because of fear of spirits but now natives hunt there regularly, using guns. The Tenkile Conservation Alliance have begun a camera survey in the Torricelli mountains to collect data to estimate the number of tenkile remaining.

Source: Mongabay.com (2013) news.mongabay.com/2013/0604-dulaney-tenkile.html

AUSTRALIA/ANTARCTICA/ NEW ZEALAND

Plight of wetland bird recognized in Australia

There are fewer than 15,000 endemic Australian painted snipe remaining in the wild and so the Australian Government has added it to the Environment Protection and Biodiversity Conservation Act's Endangered category. Wetlands, which are critical to the species' survival, have been disappearing from the landscape because of inappropriate water management and development. The Endangered listing will help with the protection of the remaining wetlands and the restoration of others. There are concerns over the expansion of a coal terminal at Abbot Point near Bowen in Queensland as this will cause significant degradation of the species' habitat. This snipe relies on wetlands to provide a rich source of food after good rains. In the long term more frequent and more severe droughts are predicted, and thus wetland refuges are becoming more important for the species.

Source: BirdLife International (2013) www.birdlife.org/community/2013/05/plight-of-wetland-bird-recognised-in-australia/

Giant hot pink slug becomes conservation symbol

Hot pink slugs emerging after rainy nights have become a conservation symbol for alpine forests on Australia's Mount Kaputar. They measure up to 20 cm long and are endemic to Mount Kaputar, a volcano. Mostly they remain buried under leaf litter, with their colouration helping them blend into brightly coloured eucalyptus leaves, but huge numbers emerge when conditions are right, to feed on moss, algae and fungi. The presence of unique species, including carnivorous land snails, has prompted the New South Wales Scientific Committee to list the site as an endangered ecological community. The ecosystem represents a remnant of a type of forest that once covered much of eastern Australia. Endemic species restricted to moist refugia at higher elevations are particularly vulnerable. They have evolved from lowland ancestors and were isolated as conditions began to dry. Such species are susceptible to changes such as rising temperatures and shifts in rainfall.

Source: Mongabay.com (2013) news.mongabay.com/2013/0609-hot-pink-slug.html

Fear of sharks helps preserve balance in the world's oceans

A prey's fear of a shark is critical to protecting ocean biodiversity, according to new research. Without this fear, a cascading effect within the ecosystem could destabilize the oceans. Seagrass beds provide habitats for fish and other marine life. When predators such as tiger sharks rove in areas near seagrasses, herbivores including turtles and sea cows often navigate away from these areas. This prevents the seagrasses from being devoured excessively. The researchers amassed more than 15 years of studies of predators and prey combined with experimental work within the seagrass beds of Shark Bay, Australia. This is the first study to examine the viability of seagrasses where herbivore, shark and seagrass populations are intact.

Source: Journal of Animal Ecology (2013) dx.doi.org/10.1111/1365-2656.12097, and *Florida International Press Release* (3 June 2013)

South Georgia rat removal hits milestone

The world's largest campaign to eradicate rats has laid toxic bait on a further 580 km^2 of South Georgia. Poisonous pellets have now been spread on 70% of the rat-infested island. First introduced by sealing and whaling ships in the late 18th Century, millions of invasive rats have long been a threat to the local wildlife, feeding on the chicks and eggs of ground-nesting seabirds, including ducks, diving petrels and prions. The island is separated by several glaciers, so once rats have been eradicated from a region they cannot repopulate it. For the latest mission the team spread nearly 200 t of pellets using helicopters, which enabled them to cover large areas quickly. The project will need to raise a further GBP 2 million to bait the remaining area at the southern end of the island, which they aim to complete in 2015.

Source: BBC News (2013) www.bbc.co.uk/news/science-environment-23143430

Deal on huge marine reserves blocked

International talks on establishing huge marine reserves in Antarctica have failed to reach a consensus. The Russian representative apparently challenged the legal basis that would facilitate the creation of protected areas in the Ross Sea and Eastern Antarctica. The Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) comprises countries with an interest in the Southern Ocean, and includes Australia, the US, the UK, China and Russia. Any decisions taken require a consensus. The meeting was called to deal specifically with proposals for the establishment of reserves that would ban fishing and protect species such as seals and penguins. The fate of the proposed marine sanctuaries now lies with the next annual meeting of CCAMLR in Hobart, in late October.

Source: BBC News (2013) www.bbc.co.uk/news/science-environment-23327315

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