Briefly

INTERNATIONAL

Ups and downs in the latest Red List update...

In the latest update to the IUCN Red List, released in September, the Christmas Island pipistrelle, a bat species endemic to the Australian island, was declared extinct. The species was widespread and common on the island as recently as the 1980s but only one individual remained in 2009, and has not been seen since, despite extensive searches. Other species that are not faring well, according to the Red List, include five African antelopes, which are under pressure from poaching, habitat loss and competition with domestic livestock, and five North American ash trees, which are being decimated by the emerald ash borer beetle. There has also been a dramatic decline in Madagascar's endemic millipedes and grasshoppers. However, some species are showing signs of recovery in response to conservation, and some have been moved to a lower category of threat on the list, including the Rodrigues flying fox and the snow leopard.
Source: New Scientist (2017) newscientist.com/article/2147477-christmas-islands-only-echolocating-bat-has-gone-extinct/

...with largest and smallest vertebrates most at risk of extinction

A global analysis of the relationships between extinction risk and body mass for 27,647 vertebrate species has found that both the lightest and heaviest animals have an elevated risk of extinction. A review of the drivers of extinction risk indicates that the largest vertebrates are most threatened by direct killing by humans, whereas the smallest are threatened by habitat loss and degradation caused by factors such as pollution, agricultural cropping, and logging. Without intervention, this double truncation of the size distribution of vertebrate species will affect vital ecosystem services and fundamentally reorder the structure of life on Earth. There is an urgent need to improve conservation for both small and large species, particularly those that currently receive little attention. For large vertebrates, reducing the global consumption of wild meat to lessen the impacts of hunting and fishing will be a necessary step.
Source: PNAS (2017) dx.doi.org/10.1073/pnas.1702078114, & *BBC News* (2017) bbc.co.uk/news/science-environment-41279470

Few old fish in the sea...

A study of 63 fisheries in the USA and Europe has found that populations of older fish have declined by an average of 72%, based on records spanning 24–140 years, with declines of > 95% in some species, including Pacific cod, Pacific hake, red snapper and Atlantic cod. Older fish are better able to adapt to environmental changes because they are more flexible in their behaviour and tend to spawn at different times and locations. They also tend to be larger individuals and produce the most offspring. Therefore, reduced numbers of older fish leaves fisheries prone to collapse. Potential management measures to reduce the impact of fishing on age truncation could include no-take zones, prohibiting harvesting of fish outside a narrow size range, and stopping fishing activity in certain areas at regular intervals to give populations a chance to recover. Marine reserves can also be beneficial, as they have been found to have more genetically diverse populations of fish, and fish surviving to greater ages.
Source: Current Biology (2017) dx.doi.org/10.1016/j.cub.2017.07.069, & *New Scientist* (2017) newscientist.com/article/2147585-there-are-hardly-any-old-fish-left-in-the-ocean-and-thats-bad/

...but sharks may live longer than we thought

A major review has found that of 53 populations of sharks and rays for which there are good datasets available, 30% have probably had their ages underestimated. A commonly used method to estimate age in sharks is to count the bands in sections of vertebrae, similar to counting tree rings. However, there is increasing evidence that this method may be faulty. Sometimes when sharks stop growing, their vertebrae do too, and therefore counting the rings can lead to underestimates of age. This discovery uncovers the possibility that estimates of how threatened particular species are, and models that guide decisions about catch limits for sustainable fisheries, may be based on faulty data. Living longer may mean that the animals have more breeding years, making populations more robust; however, it may also mean that animals do not start to breed until later in life, making them more vulnerable than previously realized.
Source: Fish and Fisheries (2017) dx.doi.org/10.1111/faf.12243, & *Nature* (2017) dx.doi.org/10.1038/nature.2017.22626

Four additional shark species protected under CITES

In October, the silky shark and all three species of thresher sharks were formally protected under Appendix II of CITES. The listing means that all international trade in the species must be closely regulated, and the sharks and their products can be exported only if the exporting/fishing country certifies they were sourced legally, and the overall level of fishing does not threaten their survival. Although there are already some controls on fishing of these species, they have been largely inadequate to prevent population declines. It is anticipated that many countries and regional fisheries management bodies will need to introduce new management measures to tackle overfishing and facilitate population recovery. These latest listings bring the number of species of sharks and rays to be protected by CITES since 2003 to 20.
Source: TRAFFIC (2017) traffic.org/home/2017/10/4/new-cites-shark-listings-welcomed-now-the-real-work-begins.html

The missing link in climate mitigation efforts

Coastal 'blue carbon ecosystems' such as mangroves, saltmarshes and seagrasses sequester and store carbon dioxide at much higher rates per unit area than terrestrial forests but their role in climate mitigation is still largely overlooked. The degradation, loss or conversion of these ecosystems releases an estimated 0.15–1.02 billion tonnes of CO_2 per year, accounting for up to 19% of carbon emissions from global deforestation, but current data on blue carbon ecosystems are unreliable and improved mapping is necessary. IUCN experts recommend that communities conserving coastal ecosystems receive revenues generated by carbon credits, blue carbon ecosystems are incorporated into already established international mechanisms such as REDD+, and cash-for-management schemes for communities sustainably managing these vital ecosystems are implemented. According to this research, blue carbon ecosystems are threatened not only by pollution and coastal infrastructure projects but by financial constraints, land tenure disputes and a lack of coordination in national programmes.
Source: IUCN (2017) iucn.org/news/marine-and-polar/201709/blue-carbon-climate-mitigation-potential-still-largely-ignored

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Artificial light negatively affects night-time pollinators

Research in Switzerland showed patches of cabbage thistle *Cirsium oleraceum* exposed to mobile street lamps at night received 62% fewer visitations from nocturnal insects than those plots situated in darkness. Crucially, the artificially lit thistles were visited by 29% fewer pollinator species and developed significantly fewer fruits than those in darkness. Daytime pollinators depend on plants such as cabbage thistles for food, so if lights deter night-time pollinators, in turn affecting the number of fruits and plants produced, the ramifications could be felt throughout entire pollinator populations. The study found that despite the presence of numerous diurnal pollinators, the insects were unable to make up the difference in lost pollination of plants kept under artificial lighting. Further research is needed, as artificial light varies in direction, intensity and duration and, as light pollution drives away night-time pollinators, enhanced pollination may actually occur in darker areas.
Source: Nature (2017) dx.doi.org/10.1038/nature.2017.22395

Botanic gardens key to the future of threatened plants

The first in-depth, global assessment of plants managed and conserved in botanical gardens has recorded more than 100,000 species, accounting for about a third of all known plants. The study found that as many botanic gardens are in the Northern Hemisphere, where tropical species are harder to maintain, tropical plants were under-represented in the inventory of species. Botanic gardens are also home to more exotic specimens such as orchids and lilies than primitive plants such as mosses. Botanic gardens could now be the best hope for the future of unique species, as the botanic gardens help protect 40% of threatened species. However, c. 20% of plant diversity is currently under threat but just 10% of global collections are dedicated to threatened species, according to the study of 1,116 botanic collections. In light of this report, experts encourage botanic gardens to conserve and grow species that no other garden can.
Source: BBC News (2017) bbc.co.uk/news/science-environment-41388144, & *Nature* (2017) nature.com/news/world-s-botanic-gardens-should-work-together-1.22662

Neonicotinoids found in honey samples from six continents...

In a study of honey samples from 198 sites on six continents, 75% of samples were found to be contaminated by neonicotinoid pesticides, which are the subject of a long-running debate over their impact on bee health. The honey samples, collected through a citizen science project, were tested for concentrations of five of the most commonly used neonicotinoids. The highest proportion of samples containing at least one neonicotinoid was found in North America (86%), followed by Asia (80%) and Europe (79%). Almost half of the samples contained levels of the pesticides at least as high as those believed, based on previous research, to impair bees' brain function and slow the growth of colonies. Furthermore, 45% of all samples contained at least two types of neonicotinoids. Previous studies on the controversial pesticides have suggested that neonicotinoids lower the nutritional status of honey bees, impair their immunity, and are a particular threat to the queen.
Source: Nature (2017) dx.doi.org/10.1038/nature.2017.22762

... and could wipe out bumblebee populations

Research has shown that the neonicotinoid chemical thiamethoxam can prevent the formation of new bumblebee colonies by reducing egg-laying by queen bumblebees. Researchers exposed approximately half of a population of *Bombus terrestris* to thiamethoxam in spring, when the queens emerge from hibernation to lay their eggs. After observing egg-laying behaviour and death rates for 10 weeks researchers identified that queens exposed to the pesticide were 26% less likely to lay eggs to start a colony than those that were not exposed. A mathematical model then predicted what this rate of decline would mean in a real-world scenario, finding that the chances of local extinction of wild bees was dramatically increased. In 2013 a 2-year temporary ban on the use neonicotinoids on flowering crops was initiated throughout the European Union but conservationists are calling for a permanent ban that extends to all crops.
Source: The Guardian (2017) theguardian.com/environment/2017/aug/14/pesticides-could-wipe-out-bumblebee-populations-study-shows

Species migrate on tsunami debris

Tonnes of debris swept out to sea by a tsunami following an earthquake in Tohoku, Japan, in March 2011, have washed up along the Pacific coast of North America, carrying hundreds of species of living invertebrates and fish from Japan. A barred knifejaw, a small black-and-white fish native to Asian waters, was found on the shores of Long Beach Peninsula, Washington, 2 years after the tsunami. Other species found to have survived the journey include gooseneck barnacles and other crustaceans, a Japanese limpet and other molluscs, annelid worms, jellyfish and other cnidarians, and bryozoans. Given the scale of the migration there is concern that some of these species could establish invasive populations on the North American coast. Furthermore, such mass migration events are likely to become more common as extreme coastal weather events such as hurricanes and typhoons increase in intensity and frequency as a result of climate change.
Source: Nature (2017) dx.doi.org/10.1038/nature.2017.22691

Climate change threatens parasites...

Parasites provide up to 80% of the food web links in ecosystems but climate change could wipe out a third of all parasite species according to the latest research. Parasites such as ticks, lice and tapeworms carry diseases but a wide range of parasites in an ecosystem means that they compete with each other, which can slow the spread of disease. Researchers analysed more than 50,000 records to map the global distribution of 457 parasite species. By applying climate models and future scenarios the study revealed that the average level of extinctions was 10% by 2070, based on loss of habitat, but this rose to a third if the loss of host species was also included. Under a climate scenario in which carbon emissions remain unchecked in contrast to being rapidly reduced, the loss of parasite native ranges rises from 20% to 37%.
Source: The Guardian (2017) theguardian.com/environment/2017/sep/06/climate-change-could-wipe-out-a-third-of-parasite-species-study-finds

... and increases invasions of alien species

Invasive species such as the Argentine ant are establishing themselves in new regions as a result of the changing climate. Some indoor populations of the Argentine ant were known in the UK but in the past couple of years the warming climate has moved these ants outdoors. Argentine ants could displace native ants, having a cascading impact on ecosystems of plants and insects, and may even form super colonies as they will not be competing with neighbouring colonies as they would in their native South America. Islands such as the UK, New Zealand and Japan are hotspots for invasive species, and mink, giant hogweed and Japanese knotweed cost the UK billions of pounds in economic damage every year.

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Researchers have identified the quagga mussel, the Asian longhorn beetle, the American lobster, the African sacred ibis and the Emerald ash borer beetle as high-threat invasive species.
Source: The Guardian (2017) theguardian.com/environment/2017/jul/25/alien-species-invasions-and-global-warming-a-deadly-duo-warn-scientists

Global food supplies as threatened as wildlife

According to a report published by Biodiversity International, the sixth mass extinction of global wildlife is also threatening the plant and animal species that we rely on for food. The loss of agrobiodiversity is overshadowed by the loss of wildlife but as three-quarters of the world's food comes from just 12 crops and five animal species our global food supply is exceptionally vulnerable to disease, pests and climate change. The report notes that 1,000 cultivated species are already threatened, and outlines ways that governments and companies can protect and use little-known food crops. Case studies include Peruvian farmers who have grown a tough, nutritious variety of quinoa that will be more resilient to disease and extreme weather. The destruction of wild areas is not only driving the extinction of wildlife but also threatening wild or rarely cultivated species, which could be crucial food sources in a changing climate.
Source: The Guardian (2017) theguardian.com/environment/2017/sep/26/sixth-mass-extinction-of-wildlife-also-threatens-global-food-supplies

EUROPE

New training for protected area professionals

The European Parks' Academy, a new training format on protected area management, was run for the first time this year in Klagenfurt, Austria. The training components were informed by the outputs of the IUCN World Parks Congress 2014 and included seminars on effective financing of protected areas and new challenges in the governance of protected areas. The academy brought together professionals from across the globe for 2 weeks of training and talks, including a workshop on the IUCN Green List Standard. Participants represented a range of organizations and protected area management authorities, including the Albanian National Agency of Protected Areas, the Plitvice National Park in Croatia, the Ministry of Ecology and Natural Resources of Ukraine and the Biosphere Reserve Nockberge in Austria. Organized by the IUCN World Commission on Protected Areas and E.C.O. Institute of Ecology, Klagenfurt, the next European Parks' Academy will take place in July 2018.
Source: IUCN (2017) iucn.org/news/protected-areas/201708/european-parks´-academy-–-new-training-format-protected-area-professionals

Collaborative efforts underway to conserve Eastern imperial eagles

The eastern imperial eagle *Aquila heliaca* feeds on small farmland mammals such as ground squirrels, hamsters and the European hare. Numbers of this raptor in Europe have been falling, but a 5-year project, PannonEagle LIFE, aims to restore populations across the entire Pannonian region. Only c. 220 breeding pairs remain in the region, and more than 30% of deaths are caused by poisoning and illegal shooting. PannonEagle LIFE involves 11 partners, with EUR 3.5 million in funding, and will use trained dog units and park rangers to investigate incidents of poisoning. The project will work with gamekeepers and farmers, and satellite transmitters fixed on individual birds will facilitate the identification of injured birds and major conflict zones. Eagles use their nests for consecutive years so it is hoped that by protecting existing nests and establishing artificial nests the project will increase the number of breeding pairs to over 250 by 2021.
Source: BirdLife International (2017) birdlife.org/europe-and-central-asia/news/raising-eagle-standard

UK identified as world's largest legal ivory exporter...

A trade analysis of records held by CITES has identified Britain as the world's largest exporter of legal ivory between 2010 and 2015. Under international guidelines it is legal to export ivory worked or carved before 1976 or if it is an antique ivory product manufactured before 1947. During its colonial era the UK transported c. 30,000 tonnes of ivory from Africa and has a stockpile of ivory artefacts from that time. During 2010–2015 the UK sold 370% more ivory than the USA, the next highest exporter, with the majority of exports destined for Hong Kong and China. A total ban on ivory exports in the UK is being called for as conservationists warn UK exports are stimulating global consumer demand and providing opportunities for illegal ivory to be traded. In 2015 Italy overtook Britain as the world's largest single ivory seller.
Source: The Guardian (2017) theguardian.com/environment/2017/aug/10/uk-named-as-worlds-largest-legal-ivory-exporter

... but plans from the government could turn things around

In October the UK's Environment Secretary announced a 12-week consultation to end the trade in ivory of all ages, with draft legislation covering a ban on sales and exports expected in early 2018. Ivory classified as musical instruments, items of significant historic, artistic or cultural value, items for sale between museums, and items with only a small proportion of ivory will still be permitted to be sold under new plans. Conservationists welcome the progress but have expressed concern that these categories of exemption are too broad and could undermine attempts at a ban. Declining elephant populations and a desire to join global efforts to end the ivory trade have prompted the announcement by the UK government, but some may remain sceptical as a ban on sales of ivory produced after 1947 was announced in 2016 but a follow-up consultation never occurred.
Source: BBC News (2017) bbc.co.uk/news/science-environment-41512796

European snake previously thought to be a subspecies now recognized as a separate species

A study of the genetic identity of more than 1,600 grass snakes has led to the barred grass snake *Natrix helvetica* being newly recognized as a distinct species. The identification of the barred grass snake brings the total number of wild snake species in England to four: the barred grass snake, the eastern grass snake *Natrix natrix,* the venomous adder *Vipera berus* and the exceptionally rare smooth snake *Coronella austriaca*. Unlike the eastern grass snake, the barred grass snake has no yellow collar, is more grey than green in colour and has more pronounced dark bands along the length of its body. Both species occur in lowland areas of southern England as well as across Switzerland, Italy, France and western Germany. Under the Wildlife and Countryside Act it is a criminal offence to injure or kill grass snakes in the UK.
Source: The Guardian (2017) theguardian.com/environment/2017/aug/07/new-species-of-grass-snake-discovered-in-england

Night herons breed in the UK for the first time...

Photographs have captured a pair of black-crowned night herons *Nycticorax nycticorax* with one of their two offspring at

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Westhay Moor national nature reserve in Somerset. The sighting marks the first time in recorded history that night herons have been found breeding in the UK. The young have recently fledged and it is thought they were born either on Westhay Moor or the nearby Avalon Marshes. As their name suggests, night herons roost during the day and hunt for fish and frogs at night. According to experts, only a dozen or so visiting night herons have been reported in Somerset since 1800 and although it remains to be seen whether the birds will become established in the UK, driven north by climate change, it is highly encouraging that wetland restoration has provided a habitat suitable for breeding.
Source: The Guardian (2017) theguardian.com/environment/2017/aug/02/incredible-night-herons-breed-first-time-in-uk

. . . and seabirds receive further protection

The newly designated Northumberland marine special protected area (SPA) will extend 12 miles from the coast into the North Sea and support an estimated 200,000 seabirds. The protection of this marine area will build on existing SPAs that cover seabird breeding sites at Coquet Island, Farne Islands, Lindisfarne and the Northumbria Coast. According to Natural England the area is the most important site in the UK for Arctic, common and roseate terns, the second most important site for sandwich terns and the third most important site for Atlantic puffins. The protected area has been designed to minimize disturbance to the birds' open water feeding areas and will cover an area larger than 120,000 football pitches. The UK continues to expand its marine protected area network, with extensions to Hamford Water, Morecambe Bay and Duddon Estuary SPAs.
Source: The Guardian (2017) theguardian.com/environment/2017/sep/07/uk-coast-haven-for-200000-seabirds-becomes-marine-special-protected-area

Ireland's first bat bridge constructed. . .

Ireland's first-ever bat bridge has been constructed over the new M17 motorway in the west of the country, in a bid to conserve an internationally important colony of lesser horseshoe bats. The bridge has been planted with hedgerow vegetation to guide bats across the motorway, which separates their feeding grounds at Coole Park from a roosting site at Kiltartan Cave, and also incorporates a number of other wildlife-friendly features, including underpasses and wildlife fencing. All of the country's 12 bat species are protected under the EU Habitats Directive, being listed under Annex IV, which means they require strict protection. The lesser horseshoe bat is also listed in Annex II and therefore has additional legal protection, with important areas for the species designated as special areas of conservation. Habitat fragmentation by motorway construction is a significant conservation challenge, and the construction of wildlife crossings has become increasingly popular in mainland Europe.
Source: Green News.ie (2017) greennews.ie/44587-2/

. . .and its native honeybee rediscovered

The native Irish honeybee *Apis mellifera mellifera* was believed to have gone extinct after an outbreak of disease in the 19th century devastated the native English bee, but genetic testing has revealed that a pure form of the European black bee with markers specific only to Ireland exists in many parts of the country. Based on the findings of DNA analysis it is deduced that there are millions of the bees living in at least 300 hives. Irish bee populations have been declining steadily, necessitating the importation of bees, which often carried diseases. The subspecies *Apis mellifera mellifera* was once widely distributed across northern Europe but has been extirpated, interbred or replaced by other subspecies throughout much of its native range. The discovery from Ireland raises the possibility that Irish bees could be used to help repopulate northern Europe, although it could be that they are better adapted to Ireland's Atlantic environment.
Source: The Irish Times (2017) irishtimes.com/news/environment/the-native-irish-honeybee-is-not-extinct-after-all-1.3243037

Logging suspended in Poland's ancient forest

An interim decision by the Court of Justice of the EU has ordered immediate suspension of logging activity in Białowieża Forest, Poland's only UNESCO World Heritage Site. Logging began in May 2016 to contain an infestation of the spruce bark beetle and reduce fire risk. Białowieża Forest is home to the largest herd of European bison, c. 1,700 species of plants, 12,000 invertebrate species and 250 bird species, and a range of amphibians, reptiles, mammals and fungi. A revised forest management plan passed in 2016 removed obligations for private landowners to have permission to clear trees, and also allowed the state-owned forest management company to triple timber harvesting in areas that were previously excluded from cutting. Pending a final judgment in the case of Commission v Poland, the Court of Justice of the EU has recognized the potential for irreversible damage to Białowieża Forest, one of Europe's last remaining primeval forests.
Source: IUCN (2017) iucn.org/news/world-commission-environmental-law/201708/court-justice-eu-poland-ordered-suspend-logging-białowieża-forest

Bright future for Slovenia's eyeless salamanders

The blind aquatic salamander *Proteus anguinus,* known locally as olm, has bred for the first time in a controlled environment within Postojna cave, Slovenia. These salamanders are the largest cave-dwelling animals and can live up to a century, in total darkness. The salamanders are highly specialized, with photosensitive skin and the ability to sense the bioelectric fields of their prey, but regular eating is not a necessity as they can survive without food for up to 10 years. The Vulnerable *P. anguinus* exists in the subterranean pools and rivers of the karst outcrops of Slovenia and the north Adriatic coast but is threatened by pollution from nearby factories and the attentions of collectors. In the 24-km-long cave complex of Postojna 21 young olms are now thriving in trays of water after hatching a year ago. It is hoped that establishing a breeding colony in Postojna will help ensure the persistence of this unique species.
Source: The Guardian (2017) theguardian.com/environment/2017/aug/27/slovenia-baby-dragons-postojna-salamaders-olms-proteus-anguinus

NORTH EURASIA

Reintroducing tigers to Kazakhstan

Last September the Republic of Kazakhstan announced plans to reintroduce wild tigers to their historical range in the Ili-Balkhash region, 70 years after the species went extinct there. Habitat loss and uncontrolled hunting and poaching resulted in the disappearance of wild tigers from Central Asia by the 1960s. If successful, Kazakhstan will be the first Central Asian country to bring tigers back to the region. The planned reintroduction will require the restoration of a vast area of riparian forest. A new nature reserve will be designated for this purpose, where existing wildlife will be protected and tiger prey species will be reintroduced. In addition to creating prey populations, the government will work in a joint initiative with WWF to

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tackle poaching and illegal activities, equip rangers and engage local communities in tiger conservation. The reintroduction will be part of the Tx2 initiative by tiger range countries to double the number of tigers in the wild by 2022.
Source: WWF (2017) worldwildlife.org/stories/bringing-tigers-back-home-to-kazakhstan

SUB-SAHARAN AFRICA

Extent of pangolin poaching in Africa revealed

New research on the world's most trafficked wild mammal has found that up to 2.7 million pangolins are killed every year in Africa. Using data on three of Africa's four pangolin species (the giant, white-bellied and black-bellied pangolins) researchers gathered information from hunting sites and bushmeat markets across Central and West Africa. Analysis showed that almost 50% of the pangolins killed were juveniles, which is particularly bad news for pangolin numbers as individuals produce only one pup every 1–2 years. Despite a total ban on the international trade of any pangolin species, the price demanded in urban markets for giant pangolins has risen almost six-fold since the 1990s and the hunting of African species in 2014 was 150% higher than in the 1970s. These new estimates are likely to be minimum numbers as they do not include Africa's fourth pangolin species, the cape pangolin, which occurs outside the study area.
Source: The Guardian (2017) theguardian.com/environment/2017/jul/20/scale-of-pangolin-slaughter-revealed-millions-hunted-in-central-africa-alone

Leopard sighted in Yankari Game Reserve for first time in 30 years

Leopards were once widespread across Nigeria, but habitat loss, depletion of prey, hunting for their skins and the illegal wildlife trade have limited their distribution. Nigeria's leopard populations are now restricted to a few protected areas, including Kainji Lake National Park and Gashaka-Gumti National Park as well as Yankari Game Reserve. Camera traps installed by the Wildlife Conservation Society, which supports management of the Reserve alongside the Bauchi State Government, have confirmed the presence of leopards in Yankari, a region where the species was thought to be locally extinct. As leopards in the region are active only at night it is probable that they have always existed in the area but have escaped observation. As Nigeria's human population continues to grow rapidly, Yankari Game Reserve will be vital not just for leopards but also for one of the largest remaining elephant populations in West Africa.
Source: WCS (2017) newsroom.wcs.org/News-Releases/articleType/ArticleView/articleId/10561/Leopard-Confirmed-by-Remote-Camera-Monitoring-in-Nigerias-Yankari-Game-Reserve.aspx

Invasive snake is actually a unique species

The locally named cobra-preta occurs on the island of São Tomé in the Gulf of Guinea and was believed to have been introduced by Portugese farmers to control rats. The black snake was long thought to to be the forest cobra *Naja melanoleuca,* a snake with a deadly bite and white collar, native to Africa. The forest cobra can reach 3 m in length but researchers studying cobra-pretas found that they tended to be even larger and that the scales on the underside of the snake are less white. Genetic analysis has identified the cobra-preta as a new species, now named *Naja peroescobari.* Local people kill the snakes because of their venomous bites, and the species risked being earmarked for eradication as an invasive species. However, *Naja peroescobari* is unique to the island and may need to be actively conserved rather than eradicated.
Source: Zootaxa (2017) dx.doi.org/10.11646/zootaxa.4324.1.7, & *New Scientist* (2017) newscientist.com/article/2148751-invasive-snake-is-really-a-new-species-and-should-be-protected/

Rhino horn exported as jewellery to evade detection

A report from the wildlife trade monitoring network TRAFFIC has revealed that organized criminal gangs of Chinese origin operating in South Africa are processing rhinoceros horn locally and exporting it in the form of ready-made beads, bracelets and powder to markets in Asia, mainly in Vietnam and China. There have been a number of recent seizures of such products from small home-based workshops, whereas previous seizures have typically comprised whole horns, or horns cut into two or more pieces. This latest method of smuggling rhino horn will be difficult to detect and is likely to pose significant challenges to law enforcement efforts along the supply chain. Over 7,100 rhinoceroses have been killed for their horns in Africa over the past decade, with South Africa bearing the brunt of the losses. The country is home to 79% of the last remaining rhinos in Africa.
Source: TRAFFIC (2017) traffic.org/home/2017/9/17/organized-criminal-gangs-behind-rhino-horn-processing-in-sou.html

South Africa declares new protected environment

Dullstroom and its surrounding grasslands are home to wattled cranes *Bugeranus carunculatus,* yellow-breasted pipits *Hemimacronyx chloris,* white-winged flufftails *Sarothrura ayresi* and many other unique birds. The area is recognized by BirdLife South Africa as the Steenkampsberg Important Bird and Biodiversity Area and also includes peatlands important for mitigating the impacts of climate change. Mpumalanga's Department of Agriculture, Rural Development, Land and Environmental Affairs has now declared the Greater Lakenvlei area as a Protected Environment, the second highest level of formal protection under South African legislation. Protected Environments such as Greater Lakenvlei are divided into zones, and activities such as farming can continue in some zones, whereas more destructive activities are prohibited. The announcement comes after collaborative efforts of the Endangered Wildlife Trust, BirdLife South Africa and Mpumalanga Tourism and Parks Agency.
Source: BirdLife International (2017) birdlife.org/africa/news/new-protected-environment-declared-south-africa-0

Breeding success for translocated birds in Mauritius...

The echo parakeet *Psittacula eques,* the only extant parrot in the Mascarene Islands, and the pink pigeon *Nesoenas mayeri* are Endangered species endemic to Mauritius. Mauritius has the third most threatened flora in the world, which is bad news for birds such as the pink pigeon that feed on the island's flowers, leaves and fruit. In recent years the Mauritian Wildlife Foundation has been translocating birds of both species in an effort to prevent population declines. Following translocation to Ferney in the Bambous Mountains, 73 echo parakeets and 30 pink pigeons have been released. All birds have been marked with ID rings to allow the Mauritian Wildlife Foundation to continue monitoring released birds. Since translocation both spies have bred in the Ferney Valley, the first time that the two species have bred in the Bambous Mountains in over a century.
Source: BirdLife International (2017) birdlife.org/africa/news/reintroducing-pink-pigeon-and-echo-parakeet-mauritius

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. . .and rat-control efforts are underway to protect the endemic olive white-eye

The population of the Critically Endangered Mauritius olive white-eye *Zosterops chloronothos* is extremely small, and the species is declining rapidly as a result of predation by rats and other mammals that have been introduced to its habitat, and a decline in the quality and extent of that habitat. There are an estimated 180–270 of the birds in the Black River Gorges National Park and its environs, where the Mauritian Wildlife Foundation has introduced the use of self-resetting traps to control the rat population. When rats are not controlled, the Mauritius olive white-eye has low breeding success, with < 10% of eggs fledging birds. Rats are a major threat to more than half of the Mauritian fauna, and various methods of control have been used in the past, including the use of anti-coagulant poison. However, the use of poison is time-consuming and has adverse environmental impacts. The use of self-resetting traps offers a more cost-effective and humane alternative.

Source: BirdLife International (2017) birdlife.org/africa/news/introducing-self-resetting-traps-protect-endangered-birds-mauritius

SOUTH AND SOUTH-EAST ASIA

India's first Zoohackathon

India held its first Zoohackathon in October, bringing together young software developers, designers, project managers and subject matter experts to develop tools and applications to tackle wildlife trafficking in the country. The event took place at the WWF-India Secretariat and ran in parallel with a Zoohackathon event hosted by ZSL in London. A Zoohackathon was also held in San Diego in September. At the event in New Delhi 11 teams, and nearly 70 participants, spent 2 days working on solutions to various problems related to the illegal wildlife trade. The winning team, Geeksforgreen, developed a tool for monitoring social media for articles on wildlife trafficking, and the runner up, Zoodesign, developed a tool to analyse images from infra-red camera traps and send an alert when potential poachers are detected in protected areas.

Source: TRAFFIC (2017) traffic.org/home/2017/10/9/coding-to-end-wildlife-trafficking-india-holds-zoohackathon.html

Conservation plan for the world's smallest bear

In September Global experts gathered in Kuala Lumpur, Malaysia, to begin developing a conservation plan for the sun bear *Helarctos malayanus*. The species is categorized as Vulnerable on the IUCN Red List and is threatened by habitat loss and illegal hunting for the exotic pet trade, despite being protected throughout its range. Sun bears have thus far received relatively little conservation attention compared to larger mammals such as elephants, tigers and orang-utans, and the magnitude of the illegal trade in the species is not fully known, although a study in 2012 by the wildlife trade monitoring network TRAFFIC found that c. 523 of the 2,800 bears seized in Asia during 2000–2011 were sun bears. The conservation plan will have input from NGOs, government representatives, field researchers, conservation managers, conservation breeding specialists and environment educators.

Source: TRAFFIC (2017) traffic.org/home/2017/9/12/experts-gather-to-develop-a-sun-bear-conservation-plan-the-f.html

Population pressure increases fatal human–wildlife conflict in India

India's population of 1.3 billion is still increasing and as it does so it encroaches on traditionally wild spaces, resulting in increased incidence of negative human–wildlife interactions. An increase in tiger numbers since the 1970s is exacerbating tensions, as the amount of available space for these wild animals has not increased proportionally. Statistics released by India's environment ministry reveal that 426 people were killed by wildlife in 2014–2015 and 446 in 2015–2016. Many of these fatalities were caused by crop-raiding elephants, and conflicts are on the rise as the elephants' usual paths are now blocked by infrastructure such as highways and railway tracks. Elephants and tigers are among the most hunted animals in India, sought after for their ivory or bones, for the traditional Chinese medicine market.

Source: The Guardian (2017) theguardian.com/environment/2017/aug/01/over-1000-people-killed-india-humans-wildlife-territories-meet

Pakistan surpasses reforestation goals. . .

A project launched in 2015 in Pakistan's Khyber Pakhtunkhwa province has restored and planted trees in 350,000 ha of degraded forest landscapes in the Hindu Kush mountain range. The newly planted trees are reinforcing embankments in catchment areas along the banks of the Indus, Kunhar and Swat rivers and contributing to CO_2 sequestration. The Billion Tree Tsunami project has also successfully established 13,000 private tree nurseries to increase local incomes and empower unemployed youth and women in the province. This reforestation project has helped the Khyber Pakhtunkhwa province to surpass its 348,400 ha commitment to the Bonn Challenge and, having received USD 123 million in funding from the Khyber Pakhtunkhwa province government, with a commitment of an additional USD 100 million, it is one of the largest eco-investments in the country.

Source: IUCN (2017) iucn.org/news/forests/201708/pakistan's-billion-tree-tsunami-restores-350000-hectares-forests-and-degraded-land-surpass-bonn-challenge-commitment

. . .and Himalayas could be vital refuge for tigers

Tigers have been categorized as Endangered on the IUCN Red List since 1969 and there are estimated to be only c. 3,800 remaining. The tiger population in Bhutan is thought to have the highest probability of long-term persistence, and the country is currently home to 103 tigers. Over 72% of Bhutan is covered by forest and 51.4% is under protected areas, providing critical continuous forest habitat and prey for the species. Camera-trap data from the country have shown that tigers move across large landscapes and at a broad elevational range, from 100 m in the south to over 4,000 m in the north. Tigers have been recorded at 4,600 m in Bhutan, the highest documented altitude record of tigers, and in Bhutan they are increasingly known as mountain tigers. Tigers are breeding in these high-altitude landscapes, and the Himalayan highlands could be crucial to conservation of the species.

Source: IUCN (2017) iucn.org/news/species/201707/high-hopes-mountain-tigers-bhutan

Nineteen new gecko species discovered in Myanmar

A research team supported by Fauna & Flora International has discovered 19 new species of geckos, as well as new snakes and frogs, in karst landscapes in east-central and southern Myanmar. In an otherwise flat lowland area, the karst landscape is characterized by blocks of limestone rising up to 400 m, and some just 1 km wide. These blocks are evolutionary islands with high levels of endemism, and although the newly discovered geckos are restricted to

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tiny areas, they are abundant. Most of the new species are bent-toed geckos, of the genus *Cyrtodactylus*, but three are dwarf geckos of the genus *Hemiphyllodactylus*, which are usually found only on cloudy mountaintops. Karst landscapes are threatened by quarrying for the cement industry, and in Myanmar some of the new discoveries were made in rebel-held territory, a further challenge to conservation.
Source: New Scientist (2017) newscientist.com/article/2149587-we-just-found-nineteen-new-species-of-gecko-in-one-tiny-area/, & *FFI* (2017) fauna-flora.org/news/fifteen-new-gecko-species-discovered-in-myanmar/

Wild bird trade in Viet Nam still growing...

A 3-day survey conducted by TRAFFIC in Ha Noi and Ho Chi Minh City found 8,047 birds of 115 species offered for sale by 52 vendors. Over 99% of species were native to Viet Nam, confirming the thriving demand for native birds. Nine of the top 10 most abundant species recorded are not subject to trade controls under Vietnamese legislation, and researchers conclude that range-restricted endemic birds and species categorized as threatened on the IUCN Red List must be covered by Vietnamese law, to protect wild populations. Compared to surveys in 1991, 1998, 2001 and 2008, the April 2016 survey revealed a rise in both the number of species and the number of individual birds for sale. Scaly-breasted munias *Lonchura punctulata* and red-whiskered bulbuls *Pycnonotus jocosus* were most abundant in the survey, and seven species, including the Java sparrow *Lonchura oryzivora* and the silver-eared mesia *Leiothrix argentauris*, are recognized as being directly threatened by trade in the region.
Source: TRAFFIC (2017) traffic.org/home/2017/9/21/new-study-shows-unfettered-bird-trade-in-viet-nam.html

... but NGOs join forces to save Asian songbirds

TRAFFIC, BirdLife International, the IUCN Asian Songbird Trade Specialist Group and The European Association of Zoos and Aquaria have launched Silent Forest, a collaborative effort to save Asian songbird species from extinction. The project will run for 2 years and aims to raise EUR 400,000 from European zoos to save six Critically Endangered flagship species identified by the coalition and IUCN. Silent Forest will not only work on conservation strategies to increase protection for these species, it will also draw attention to the extent of the trade in songbirds. Owning a songbird has long been a traditional part of South-east Asian culture and songbirds are now being sold for increasingly high prices, creating further incentive for trappers of wild birds. Experts behind the project hope that bird song will return to forests if local communities are involved, educational work continues and traders begin to work with conservationists and breeders.
Source: TRAFFIC (2017) traffic.org/home/2017/9/23/traffic-joins-european-zoos-and-others-in-two-year-drive-to.html

EAST ASIA

Investigation reveals how rhino horns reach China

A report from Elephant Action League has documented the journey of rhino horn into China, the largest illegal market for rhino horn. Researchers identified Vietnam as the main entry point into China for rhino horn but the black market is active throughout China, where rhino horn is sold openly in shops. Wildlife contraband, including rhino horn, is smuggled from Vietnam into the Guangxi Zhuang autonomous region, or Yunnan province, via mountain trails. Once in Yunnan, dealers have been known to pay children aged 10–15 years old to smuggle products through Hekou port, because children can avoid jail time by paying small fines. The report from Elephant Action League identifies the players, networks and supply chains involved in trafficking rhino horn into China, and the data, including undercover footage, have been submitted to law enforcement authorities in China and Vietnam as well as to relevant international agencies.
Source: The Guardian (2017) theguardian.com/environment/2017/jul/18/illegal-trade-in-rhino-horn-thriving-in-china-ngo-investigation-reveals

Giant panda habitat fragmented by roads

In 2016 the giant panda *Ailuropoda melanoleuca* was downlisted from Endangered to Vulnerable on the IUCN Red List on the basis of an increasing population, and satellite data show that a steady decline in the species' bamboo forest habitat has been halted. However, despite this positive news and successful conservation efforts by the Chinese government, which has banned logging in many natural forests and increased the area of bamboo forest that is protected in nature reserves, the species still faces significant threats. In particular, its habitat is becoming increasingly fragmented by roads, with the result that there are now 33 isolated populations of giant pandas, compared to 15 previously. Panda experts agree that continued protection and expansion of panda habitat is essential, and recommend the designation of key habitats and the corridors that connect them as mandatory conservation areas, and building tunnels rather than roads in corridor areas.
Source: Nature (2017) nature.com/news/roads-are-slicing-up-giant-pandas-habitat-1.22658

NORTH AMERICA

Funding boost for bat research

The U.S. Fish and Wildlife Service has announced USD 100,000 in new funding for cross-border research on bats, which will support research efforts to identify bat species or individual populations that may be more resilient to white-nose syndrome. The deadly fungal disease has devastated bat populations in eastern North America, wiping out millions of individuals, and scientists anticipate it may soon spread widely across the western half of the continent, and as far north as British Columbia and Alberta in Canada. A multi-disciplinary team is already working on building a picture of bat health and conservation needs across America, working in various fields of expertise, including disease ecology, bat ecology, bat physiology, landscape ecology, and mathematical modelling. The work will help to identify where management efforts are most needed, and which actions will be most effective in protecting bats from the disease.
Source: WCS (2017) newsroom.wcs.org/News-Releases/articleType/ArticleView/articleId/10517/Efforts-to-Help-Bats-Survive-Deadly-Disease-Get-a-Boost.aspx

Right whale deaths cause concern...

2017 was the worst year in decades for the Endangered North Atlantic right whale, with at least 13 deaths recorded, mostly in the Gulf of Saint Lawrence off the east coast of Canada. This is significant for a species with an estimated global population of only c. 450 individuals. At least three of the deaths appeared to have been caused by ships, and one individual died after becoming entangled in fishing gear. In an effort to prevent further deaths, Canadian officials imposed temporary restrictions on shipping and fishing until the whales

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migrated south later in the year, and they are consulting with the shipping and fisheries industries over potential mitigation strategies. There is speculation that the whales are being driven north in search of food sources in response to warming seas. Scientists are testing the use of underwater gliders fitted with sound sensors that could detect whales and send alerts to nearby ships.
Source: Science (2017) dx.doi.org/10.1126/science.357.6353.740

. . . and 50% of Canada's monitored wildlife is in decline. . .

The Living Planet Report Canada analyses the long-term trends of approximately half of the known vertebrates in Canada and reports on 903 of the country's monitored species. The 2017 report found that for the 451 species with declining populations the average loss was 83%. Data from 1970–2014 were used to assess more than 3,700 populations of vertebrates and although populations of the iconic woodland caribou and several species of whales are amongst those in decline, 407 species demonstrated an increasing population and 45 remained stable. The banning of pesticides such as DDT has resulted in increased numbers of raptors, including Cooper's hawks and peregrine falcons, with populations increasing by an average of 88% in recent decades. The report also assessed 64 species protected by federal legislation and found that, since 2002 when legislation was adopted, populations had declined by an average of 2.7% annually.
Source: The Guardian (2017) theguardian.com/world/2017/sep/15/canada-wildlife-study-decline-living-planet-report

. . . but good news as Canada announces new marine protected area

In a landmark victory for the Inuit living in the Baffin region of the Canadian Arctic, who have been seeking protection for their traditional territory since the late 1960s, the establishment of Tallurutiup Imanga–Lancaster Sound National Marine Conservation Area has been agreed. The area is of vast natural importance, providing habitat for the Canadian Arctic's largest density of polar bears, 75% of the global population of narwhals, 20% of the country's beluga population, and other wildlife. Unlike the original 2010 proposal, the new agreement includes areas where Shell Canada previously held oil and gas leases, and now oil and gas development, mining, and waste disposal are banned in the protected area. Crucially subsistence hunting, fishing and gathering, and other traditional activities of the Inuit, are still permitted. This new marine protected area is the country's largest, covering 109,000 km² and increasing Canada's protection of its marine areas from 1.54% to 3.44%.
Source: IUCN (2017) iucn.org/news/protected-areas/201708/canada's-newest-and-largest-marine-protected-area-tallurutiup-imanga-–-lancaster-sound

Mexico trials unique insurance scheme to protect its coral reef

An area of reef off the coast of Cancún in Mexico is now protected by an insurance policy pioneered by the insurance company Swiss Re and the Nature Conservancy. Under the scheme local organizations dependent on tourism will pay the insurance premiums on the policy and a 60 km stretch of reef and connected beach will be monitored. If any storm damage occurs to the reef system the insurer will pay out USD 25–70 million in a given year. These funds will be used to repair the reef, for instance by removing corals from the reef, regrowing them in an appropriate environment, and then re-attaching them to help stimulate growth of the reef after damage. The scheme recognizes the monetary benefits of ecosystem services and the role that reefs play in protecting coasts. It is hoped that a government-backed fund will cover the premiums and that the policy will bolster public–private partnerships.
Source: The Guardian (2017) theguardian.com/environment/2017/jul/20/mexico-launches-pioneering-scheme-to-insure-its-coral-reef

Understanding Mexico's parakeet invasion

Legislation to protect wild parrot populations may have influenced the influx of monk parakeets *Myiopsitta monachus* in Mexico. In 2005 there were only a handful of reported sightings of monk parakeets in Mexico City but by 2015, feral monk parakeets were documented in 97 cities throughout the country. The birds are considered to be agricultural pests and their nests can cause blackouts when built on electrical equipment. In 2008 Mexico made it illegal to purchase native Mexican parrots, in an effort to conserve wild populations, making the monk parakeet one of the few options available to legally purchase a parrot. More than half a million monk parakeets were imported into Mexico as part of the pet trade during 2000–2015, and Mexico declared the monk parakeet an invasive species in 2016. By law the country must now devise a plan to manage the spread of this invasive species.
Source: Nature (2017) nature.com/news/parakeet-invasion-of-mexico-driven-by-europe-s-ban-on-bird-imports-1.22653, & *PLoS ONE* (2017) doi.org/10.1371/journal.pone.0184771

CENTRAL AMERICA AND CARIBBEAN

Restoration of the world's second largest barrier reef

The Mesoamerican Reef stretches over > 1,000 km from Mexico's Yucatán peninsula to the Bay Islands of Honduras and has recently been the focus of a concerted conservation effort. Over 90,000 corals grown in sea nurseries have been planted in shallow reefs, increasing coral cover near Laughing Bird Caye in southern Belize by 35%. Monitoring of the area by the Healthy Reefs for Healthy People Initiative since 2006 has revealed that the coral cover has risen from 10% to 17.5%, a vital improvement as c. 50% of the population of Belize depend on tourism driven by the reef. The conservation effort has involved local fishers, tour guides, scientists and environmentalists but despite progress the site has been on the list of World Heritage in Danger since 2009. Fleshy macroalgae is thriving at the expense of coral, fish stocks are dwindling and the reef is threatened by unregulated development, high numbers of tourists, oil extraction projects and inadequate law enforcement.
Source: The Guardian (2017) theguardian.com/environment/2017/aug/22/belize-coral-reefs-improving-grassroots-restoration

SOUTH AMERICA

More than 4 million ha newly protected in Colombia

Colombia has announced the addition of > 1,700,000 ha to the Malpelo Fauna and Flora Sanctuary, increasing the size of the protected area to 2,677,000 ha. The area is listed as a World Heritage marine site by UNESCO and protects important marine diversity found in submarine mountains, known as dorsals. Following identification of areas vital for sustainable fishing, the creation of Yuruparí-Malpelo National Integrated Management District has also been declared. The area covers over 2,691,000 ha and will be managed jointly by the National Parks service, the

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Colombian Navy and the Autoridad Nacional de Acuicultura y Pesca to ensure that the fisheries sector and inhabitants of the Colombian Pacific coast benefit from the designation. With 13.31% of its marine coastal area listed as protected territory, Colombia has surpassed Aichi target 11, which states that 10% of a country's marine coastal areas should be conserved as protected areas.
Source: WCS (2017) newsroom.wcs.org/News-Releases/articleType/ArticleView/articleId/10509.aspx

Rate of species discovery in the Amazon the fastest this century

According to a report published in August by WWF and Mamirauá Institute for Sustainable Development, a new animal or plant species was discovered in the Amazon every 2 days during 2014–2015, the fastest rate of discovery this century. The new species include a fire-tailed titi monkey, a new species of pink river dolphin, a stingray, a yellow-moustached lizard, and *Nystalus obamai*, a bird named after former U.S. President Barack Obama. The Amazon contains nearly a third of the Earth's remaining tropical rainforests and c. 10% of all known species; however, given its vast size and diversity of habitats, there are still enormous gaps in scientific knowledge about the biome. Huge parts of the forest are under threat from large-scale projects such as road and dam building, and there is a need for urgent action to protect the Amazon's wildlife and the communities that depend on its natural resources.
Source: WWF (2017) wwf.panda.org/wwf_news/?310013/381-new-species-discovered-in-the-Amazon

Peru approves 10-year plan to combat wildlife trafficking

Last September the Government of Peru presented a 10-year strategy to reduce illegal wildlife trade, which is a serious issue in the country. According to the official records of the Peruvian National Forest and Wildlife Service, more than 318 species were confiscated during 2000–2015, including birds (58%), mammals (27%), reptiles (13%) and amphibians (2%). Wildlife and wildlife parts are traded largely within Peru, but are also traded internationally, with buyers in Asia, Europe and North America. The 10-year strategy will involve 35 specific actions, including communications and education, strengthening law enforcement and control of the illegal wildlife trade, forging multisector alliances, and collaborating with neighbouring countries and transit or destination countries for illegal products originating in Peru.
Source: WCS (2017) newsroom.wcs.org/News-Releases/articleType/ArticleView/articleId/10513.aspx

Local governance of protected areas may be most effective

In a study comparing rates of deforestation and forest degradation in areas of the Peruvian Amazon that were unprotected and areas that were protected through government and local management, researchers found that, on average, conservation initiatives led by local and indigenous communities were more successful than those led by the government. However, official recognition of land rights is often a barrier to community-based conservation, and it has been found that recognizing the land rights of indigenous communities increases their ability to protect forest. According to land tenure data, c. 56% of Peru's land area is held or used by indigenous communities, but just over half of this is recognized by the government. Governing authorities are being urged to address the issue, for example by simplifying the application processes and granting more Indigenous Territories.
Source: Scientific Reports (2017) dx.doi.org/10.1038/s41598-017-10736-w, & *Mongabay* (2017) news.mongabay.com/2017/09/local-approaches-to-conservation-may-be-the-most-effective-study-finds/

Blue-throated macaws breeding in artificial nests

The Critically Endangered blue-throated macaw, which occurs only in the Llanos de Moxos in northern Bolivia, was driven to the brink of extinction by trapping for the pet trade. Although live export of the species was banned in 1984, its recovery has been hampered by the conversion of much of its breeding habitat to ranches, and the species has suffered a high rate of nesting failures. To provide the macaws with more nesting options the NGO Asociacion Armonía has been erecting nest boxes across the southern part of the species breeding range since 2006, and 71 chicks have hatched successfully so far. In a notable development, 2017 saw the first second-generation nest box fledging. As more information becomes available about the blue-throated macaw's preferred nesting conditions, Armonía are modifying the design of the nest boxes, for example making them taller and more isolated, to make them more attractive to the birds.
Source: BirdLife International (2017) birdlife.org/americas/news/critically-endangered-macaws-are-learning-trust-artifical-nest-boxes

First marine protected area in Tierra del Fuego

Chile has committed to creating a multiple-use marine and coastal protected area in Admiralty Sound in Tierra del Fuego, which, along with Francisco Coloane and Cape Horn marine parks, will become the core of the Magallanes Network of Marine Protected Areas. Admiralty Sound is an 80-km long fjord that is rich in wildlife, including leopard seals, elephant seals, Magellanic penguins and black-browed albatrosses. However, it is threatened by two introduced mammals: dam-building by beavers is destroying forests and altering watercourses, and mink are a major threat to the albatross colony of the Albatross Islet, feeding on eggs and chicks. Other threats in the area include unregulated tourism and the accumulation of large quantities of marine plastic debris. It is hoped that the new protected area will safeguard the rich cultural and natural heritage of the region while supporting artisanal fisheries and promoting sustainable tourism.
Source: WCS (2017) newsroom.wcs.org/News-Releases/articleType/ArticleView/articleId/10501.aspx

PACIFIC

Giant rodent discovered in the Solomon Islands

After years of uncertainty, the existence of a giant, tree-dwelling rat from the Solomon Islands has finally been confirmed. The vika *Uromys vika* is the first new rodent species to be described from the islands in more than 80 years but experts think there could be no more than 100 individuals left. For decades there were only suggestions of the vika's existence, but a local conservationist finally collected a 46 cm-long, orange-brown rat just as researchers were starting to fear the animal may not be real. The rat was found leaving a tree that had been cleared by a commercial logging company. DNA analysis confirmed it is a new species. The Solomon Islands are biologically isolated and more than 50% of the islands' mammals are endemic to the area, but commercial logging is reducing the available habitat for animals such as the vika.
Source: Nature (2017) nature.com/news/giant-tree-dwelling-rat-discovered-in-solomon-islands-1.22684

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AUSTRALIA/ANTARCTICA/ NEW ZEALAND

Wetland restoration helps save the Great Barrier Reef...

Approximately 10 million tonnes of agricultural run-off washes onto the Great Barrier Reef each year, poisoning and smothering organisms crucial to healthy reefs. Mungalla Station in Queensland was returned to the local Nywaigi people by the Indigenous Land Corporation in 1999 and since 2013 the Nywaigi owners have been working to restore wetlands previously degraded by overgrazing. Cattle are permitted in only one section of Mungalla and removal of a wall built in the 1940s has allowed incoming seawater to kill alien weeds such as marsh grass, water hyacinth and watermoss, which had overwhelmed the native aquatic plants. Native sedges, including bulkuru *Eleocharis spiralis*, are now thriving and their root systems bury silt and farm chemicals, providing a buffer for the Great Barrier Reef. Water quality has also improved, and this kind of wetland restoration could be crucial to meeting the country's target of halving sediment load in the Great Barrier Reef by 2025.
Source: New Scientist (2017) newscientist.com/article/2148247

... but Australia's greater gliders threatened by deforestation...

Logging in an area of Toolangi state forest in the central highlands of Victoria is threatening the habitat of greater gliders and Leadbeater's possums, both of which are listed as threatened by state and federal governments. Reports of sightings of Leadbeater's possums in the area by a citizen science group have resulted in establishment of a buffer zone of 200 m around known colonies, in which logging is prohibited, but no such protection is in place for greater gliders. A government analysis found that in spite of the buffer zone Leadbeater's possums in the area had only a 45% chance of surviving, but an independent assessment found the population could be completely wiped out, as the government's analysis assumed there would be no bushfires over a 200-year period.
Source: The Guardian (2017) theguardian.com/environment/2017/sep/07/greater-gliders-fears-of-catastrophic-consequences-from-logging-in-victoria

... and rate of tree clearing in Queensland is on the rise

During 2015–2016 almost 400,000 ha of forest was cleared in Queensland, a dramatic 33% rise, which means that the state now has two-thirds the annual rate of deforestation recorded in the Brazilian Amazon. According to the Statewide Landcover and Trees Study report, 40% of clearing occurred in reef catchments, and deforestation in this area rose by 45%. The large-scale clearing is forcing sediment into the Great Barrier Reef and also causing 45 million tonnes of additional greenhouse gas emissions. The minority Labor government attempted to increase forest protection in 2016 and some suspect that the recent increase in clearings could be rural landholders anticipating similar changes being approved. Australia is the only advanced economy among the 12 deforestation hotspots in the world, and the number of hectares cleared per year is still rising.
Source: The Guardian (2017) theguardian.com/environment/2017/oct/05/alarming-rise-in-queensland-tree-clearing-as-400000-hectares-stripped

World's largest invertebrate in decline

The Endangered crayfish *Astacopsis gouldi*, commonly known as the giant freshwater lobster, is endemic to the rivers of northern Tasmania and can live for 60 years. Females reach sexual maturity at 14 years and can produce up to 1,300 eggs, although few hatchlings survive. Sediment from clearfell logging operations is covering the rocks and logs at the edges of creeks used as hiding places by young crayfish for up to 7 years until they are large enough to move to open water. There are currently permanent production forests in 17 of the 22 catchments in which the species is known or is likely to occur, and although streamside reserves protect vegetation within 30 m of the bank, sediment can still be washed into the catchment by forestry operations upstream. A new government recovery plan recommends increasing the areas of protected lobster habitat, enhancing efforts to reduce poaching and implementing greater monitoring of the logging industry.
Source: The Guardian (2017) theguardian.com/australia-news/2017/aug/19/numbers-shrinking-for-tasmanias-weird-but-much-loved-giant-freshwater-lobster

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