

Briefly

SPOTLIGHT ON INDONESIA

Javan rhinoceroses poached

Ten per cent of the Javan rhinoceros population was reportedly illegally killed in Ujung Kulon National Park during 2019–2023. Details of the incidents were recorded in public court documents released during the ongoing trial of an individual alleged to be involved. In November 2023, an Indonesian individual was arrested and charged with the theft of four camera traps, illegal killing of Javan rhinoceroses and possession of illegal firearms. The accused has testified to killing rhinoceroses and the subsequent trafficking of their horns, in collaboration with three other individuals. Two further individuals have been arrested for their involvement in these crimes. Javan rhinoceroses were once found across much of Southeast Asia. Following decades of unsustainable hunting and habitat loss, the species has become restricted solely to Ujung Kulon since 2010, with < 80 individuals remaining.

Source: *Save The Rhino* (2024) savetherhino.org/asia/indonesia/our-worst-fears-realised-javan-rhinos-poached-in-ujung-kulon-national-park

Recent births mark conservation progress for Sumatran elephants

In November 2023, a Sumatran elephant named Riska gave birth to a healthy male calf in the Elephant Response Unit at Way Kambas National Park in Indonesia's Lampung province. The mother and baby have been receiving care from the Park's Wildlife Ambulance, which conducts regular medical treatment and healthcare for all captive elephants and supports projects to conserve and monitor wild elephants. There are < 3,000 Sumatran elephants left; the species is categorized as Critically Endangered on the IUCN Red List and threatened by poaching for ivory, habitat destruction and escalating human–elephant conflicts as their natural habitats shrink. The recent birth is part of a series of positive developments in the Park, indicating potential advancements in conservation practices. Way Kambas National Park covers 125,631 ha and is crucial for the survival of > 10% of the wild Sumatran elephant population.

Source: *Earth.Org* (2024) earth.org/sumatran-elephant-birth-marks-progress-in-indonesias-conservation-efforts

... and Endangered zebra sharks

Two newly hatched female zebra sharks, named Lingka and Spotty Doty, were born in Indonesia as part of a programme that hopes to rebuild the population of the Endangered species in the Raja Ampat region. The black-and-cream striped pair were transported as eggs from a breeding programme at the SEA LIFE Sydney Aquarium and conservationists hope they will eventually join four other shark pups that have already been released into the wild by StAR, an international project to reintroduce zebra sharks. Research suggests only 20 zebra sharks remain in Raja Ampat, an area known for its abundant marine life and spectacular coral reefs. The StAR project hopes to build a population of 500 zebra sharks in the region in a decade, the minimum size required for a healthy and genetically diverse population. Once big enough, the pups will be tagged and released into sea pens before eventually heading into the wild. Source: *The Star* (2024) thestar.com.my/aseanplus/aseanplus-news/2024/06/06/endangered-zebra-sharks-hatch-in-indonesia039s-raja-ampat-rewilding-project

Indigenous community fights to save its lands

The Lanun Indigenous community of Indonesia's Belitung Island are faced with increasing environmental damage. In 2013, much of the land around the Lenggang River became a monoculture of oil palm trees. Together with rampant illegal mining this has led to considerable challenges for the community. In August 2016, residents of Lintang village encountered heavy machinery clear-cutting 30 ha of forest they considered to be their customary land. The following year, a flood caused severe damage in the village, prompting the resident Lanun community to draw up grassroots plans for environmental protection. Since then, the Lanun have built skills in advocacy, organizing demonstrations and participating in mediation with companies and the local government. Today, Lanun community rangers are still working to uphold 3,800 ha of forest from externally imposed development plans. In 2021, UNESCO announced this area of Indonesia would become an international geopark, which required collaboration between the government and local communities to conserve a landscape of global significance.

Source: *Mongabay* (2024) news.mongabay.com/2024/04/indigenous-community-fights-to-save-its-lands-on-indonesias-historic-tin-island

New research on reef manta rays

New research has detailed the movement patterns and spatial networks of reef manta rays within the Raja Ampat archipelago, Southwest Papua, Indonesia, providing crucial information to protect this globally Vulnerable species. The study found reef manta rays frequently move short distances between important habitats, such as cleaning stations and feeding sites, and only occasionally embark on long-distance travels within the archipelago. The 5-year study tracked > 70 adult manta rays and used an advanced network analysis based on data from over 30 acoustic receivers. Three subpopulations were identified, suggesting a metapopulation with limited exchanges within Raja Ampat. The findings suggest reef manta rays in each region tend to stay close to home and rarely move between regions.

Sources: *Royal Society Open Science* (2024) doi.org/mw56 & *Conservation International* (2024) conservation.org/press-releases/2024/04/09/new-research-in-raja-ampat-reveals-vital-insights-into-protecting-vulnerable-reef-manta-rays

A champion for women's leadership in conservation

Anis Suratin defies gender norms as the first female Head of the Bogani Nani Wartabone National Park Management Office in Sulawesi. The Park spans 282,009 ha and encompasses 190 villages. For over 3 decades since joining The Ministry of Environment and Forestry, Anis has been committed to safeguarding nature in a male-dominated conservation sector. Violations such as hunting and illegal land clearing predominantly involve men, perpetuating their dominance in park protection. Yet Anis champions inclusivity, stressing that gender should not be a barrier to conservation and underscoring the importance of a shared vision. In collaboration with several organizations, she fosters initiatives such as Inspiring Women Partners of Forest Rangers, which extends conservation outreach efforts, particularly targeting women within communities. By providing training in alternative income-generating activities, the initiative seeks to alleviate reliance on forest resources and reduce the pressure on national park areas. Furthermore, Anis highlights the important role women play through their influence within families, imparting conservation values to future generations.

Source: *UN Development Programme* (2024) undp.org/indonesia/stories/pioneering-conservation-womens-leadership-unveiled

INTERNATIONAL

Study highlights crucial role of scavengers in wetlands

A new study emphasizes the crucial role scavengers play in wetland ecosystems. Among their essential functions are the recycling and transportation of nutrients and the regulation of water quality, benefiting the entire ecosystem, from soil and plants to birds and mammals. The researchers analyzed > 200 studies conducted worldwide over the past 60 years. Although historically scavengers have received limited research attention and it was generally thought that only a small group of species consume dead animals, researchers found significant species diversity. They recorded 176 families of scavengers among small invertebrates, such as flies and beetles. Also, 114 species of vertebrates distributed in 40 families of birds and mammals scavenge. During the carrion consumption process, these organisms perform vital functions in the ecosystem, including nutrient recycling, water quality regulation and pathogen control. This diversity of species and functions underscores the critical importance of scavengers in the health and balance of wetlands worldwide.

Sources: *Biological Reviews* (2023) doi.org/mvkh & *Phys.org* (2024) phys.org/news/2024-04-unveiling-nature-custodians-highlights-crucial.html

WILDLABS Inventory launched

WILDLABS, the conservation technology network, has launched its Inventory, an online resource dedicated to conservation technology tools, organizations, and research and development projects. The Inventory is a dynamic, wiki-style discovery platform for conservation technology, where conservationists can explore what technology is available for their work, how others use it, and what the conservation tech community recommends. Content falls under three main types: Firstly, users can find, review and purchase products such as hardware, software and data source tools, and explore technology used by community members and experts globally. Secondly, visitors can learn about and connect with projects developing diverse technologies, allowing conservationists to stay up to date on development progress and discover how they can collaborate. And thirdly, users can browse conservation organizations, academic initiatives and technology companies to discover projects and products within the conservation technology community and beyond.

Source: WILDLABS (2024) wildlabs.net/article/introducing-inventory

Marine protected areas exclude core habitats of migratory fish

A team of researchers from France have developed a new modeling approach that accurately predicts core and unsuitable habitats of rare and data-poor diadromous fish (fish that migrate between marine and freshwater), such as threatened shads and the Critically Endangered European eel. The researchers found that 62% of marine protected areas (MPAs) that are specifically meant to protect diadromous fish species do not overlap with the core habitats of the fish modelled in the study. Only 55% of the modelled core habitats fell within any MPAs, and of these, only half had specific measures to protect these fishes. When looking at individual species, the team found that < 30% of the core habitat of the Endangered Mediterranean twaite shad was within MPAs. Although other species such as European eel and European smelt had c. 70% of their core habitats within MPAs, only 9% of these MPAs have specific measures to protect the European eel, and none had specific measures to protect European smelt.

Sources: *Journal of Applied Ecology* (2024) doi.org/mzrf & *Phys.org* (2024) phys.org/news/2024-05-marine-areas-dont-line-core.html

Half of all mangrove ecosystems at risk of collapse by 2050

Half of all mangrove ecosystems are at risk of collapse, according to the first global mangrove assessment for the IUCN Red List of Ecosystems. It is the first time an ecosystem group has been assessed globally using this standard for measuring the health of ecosystems. The study classified mangrove ecosystems in 36 different regions and assessed the threats and risk of collapse in each. The findings show 50% of the mangrove ecosystems assessed are at risk of collapse (categorized as Vulnerable, Endangered or Critically Endangered). Mangroves are threatened by deforestation, development, pollution and dam construction, and the risk to these ecosystems is increasing because of climate change, which threatens one-third of the mangrove ecosystems assessed. Yet maintaining mangrove ecosystems across the globe will be key for mitigating the impacts of climate change, as healthy mangroves are better able to cope with sea level rise and offering inland protection from the impacts of severe weather events such as hurricanes, typhoons and cyclones.

Source: IUCN (2024) iucn.org/press-release/202405/more-half-all-mangrove-ecosystems-risk-collapse-2050-first-global-assessment

Use of artificial materials in birds' nests analysed

The use of human-made material in birds' nests has been reported for many decades, with scientific articles highlighting the dangers of artificial materials, which can be inadvertently ingested, wrapped around chicks' necks, and/or cause genotoxic damage. Despite numerous studies on the topic, it was still unclear which factors determine the use of artificial nest materials across different groups of birds and ecological contexts. Researchers have now analysed thousands of lists of nest materials and found that reports of the use of artificial components were more common for species that were well-studied, lived in or near human-modified landscapes, built their nests in artificial locations (e.g. on telephone poles or the roofs of houses), or generally incorporated many different types of materials into their nests. There were also variations between different biomes: birds in deserts were more likely to use anthropogenic nest materials than those in tropical rainforests, even after controlling for research effort and proximity to humans.

Sources: *Journal of Animal Ecology* (2024) doi.org/m2ws & *Animal Ecology in Focus* (2024) animalecologyinfocus.com/2024/03/28/what-kind-of-birds-put-artificial-materials-into-their-nests/

Conservation actions are effective

A new study provides strong evidence that nature conservation is successful. These findings are crucial as > 44,000 species are at risk of extinction. The comprehensive meta-analysis covered 186 studies, including 665 trials, that looked at the impact of conservation actions globally and over time, compared to what would have happened without interventions. The studies covered over a century of conservation action and evaluated interventions at different levels of biodiversity: species, ecosystems and genetic diversity. The researchers found that conservation actions—including establishment and management of protected areas, eradication of invasive species, sustainable management and habitat restoration—improved the state of biodiversity or slowed its decline in most cases (66%) compared with no action taken. And when conservation interventions work, they are highly effective. Moving forward, the authors call for more and rigorous studies that look at the impact of a wider range of conservation interventions, such as pollution control, climate change adaptation and the sustainable use of species, and in more countries.

Sources: *Science* (2024) doi.org/m3fh & *Re:wild* (2024) rewild.org/press/study-definitively-shows-that-conservation-actions-are-effective

EUROPE

Harvest mice reintroduced in London after 45 years

In April 2024, more than 150 captive-bred harvest mice were reintroduced to a nature reserve in London, UK, 45 years after the species was last recorded there. The animals became extinct in the borough of Ealing, with the last official sighting at Perivale Wood in 1979. Habitat loss and fragmentation are probably the main cause of their disappearance from the borough, with habitat loss estimated to have resulted in the British harvest mouse population declining by 70% since the 1970s. More than 1,650 harvest mice have now been released across sites in Ealing as part of the Bringing Harvest Mice Back to Ealing project, with Perivale Wood becoming the fifth release site. Part of the meadows within the woodland have been set aside to create wildlife corridors for small mammals, and dispersal routes along the canal and railside should enable the harvest mouse population to expand its range, making it more likely to be able to survive any habitat stress caused by events such as drought.

Source: London Wildlife Trust (2024) wildlondon.org.uk/news/harvest-mice-have-been-returned-perivale-wood-west-london-first-time-45-years

Bill Sutherland's Conservation Concepts video channel

Professor William (Bill) Sutherland, University of Cambridge, and a member of the *Oryx* International Board of Editors, has recently launched a YouTube channel, Conservation Concepts, which is attracting considerable interest amongst lay and professional conservationists. The short videos typically start with an example in the field, then introduce a general concept and describe the implications of this concept for conservation. The topics covered so far include landscape-scale conservation, the difference between umbrella and flagship species, whether parasites such as yellow rattle increase or decrease diversity, why deserts are where they are, extinction debt and shifting baselines. The aim is to provide an overview of basic concepts for those new to conservation science, or a refresher for those who studied ecology and conservation some time ago, whilst also including material that is likely to be new and of interest to experienced conservation scientists. The hope is that this new channel will be used widely both in teaching and within conservation organizations.

Source: Bill Sutherland (2024) youtube.com/@Bill_Sutherland

Lionfish in the Mediterranean Sea

A comprehensive study on invasive lionfish in the Mediterranean Sea highlights a rapid spread and the potential ecological impacts. The lionfish species *Pterois miles* has significantly expanded its territory in the Mediterranean since it first appeared c. 10 years ago. The fish have established a presence in the eastern Mediterranean, with observations now extending to colder waters previously thought to be unsuitable for the species. Originating from the Indo-Pacific region, *Pterois miles* and *Pterois volitans* are regarded as the most impactful invasive fishes in marine ecosystems, with the capacity to drastically affect local fish communities and biodiversity. Lionfish are generalist predators and prey extensively on local fishes, including endemics of high conservation value. As they are unaccustomed to lionfish, native prey species usually do not flee from this new predator. The Mediterranean is a highly biodiverse basin home to > 11,000 animal species, some of which are found nowhere else. Genetic studies revealed that lionfish found in the Mediterranean originate from the Red Sea and likely entered through the Suez Canal.

Sources: NeoBiota doi.org/mz49 & Phys.org (2024) phys.org/news/2024-04-highlights-impact-lionfish-invasion-mediterranean.html

Fin whale hunts to return in Iceland

On 11 June 2024, following months of deliberation, the government of Iceland announced that it has granted a 1-year fin-whaling license for the country's sole remaining whaling company, amid widespread criticism of the practice. Iceland, Norway and Japan are the only three countries that allow commercial whaling, despite fierce opposition from animal rights activists. In January, Hvalur, the only whaling group left in Iceland, applied for a 5-year permit to hunt whales after its license expired. The government stated that the license would be valid for the 2024 season and permitted the hunting of 128 fin whales, which are categorized as Vulnerable on the IUCN Red List. This is down from 161 whales the previous year, however that hunt was drastically shortened following a government-commission inquiry that concluded the methods used did not comply with animal welfare laws, resulting in a total of 24 whales being killed. According to a survey last June, 51% of Icelanders are opposed to whaling, an increase from 42 percent in a poll 4 years earlier.

Source: France24 (2024) france24.com/en/live-news/20240611-iceland-grants-whaling-license-for-2024-season

Record number of sea turtle nests on Türkiye's Patara beach

A surge in loggerhead sea turtle nesting activity has astonished conservationists on Türkiye's Patara Beach in Antalya, with > 50 nests discovered in May 2024, nearly quintupling the highest count ever recorded for the month of May. This underscores the success of the Sea Turtle Protection and Monitoring Project, which was launched on 1 May 2024. With the help of 20 dedicated volunteers, the project team on Patara Beach have identified and caged nests throughout the nesting season to protect them from predators and human activity on the beach. The team supports conservation efforts with scientific research by closely monitoring variables that affect sea turtles, such as temperature changes, genetic factors and nutrition. In addition to guarding the nests at night, they also provide information about sea turtles to local and foreign visitors who come to the beach during the daytime. Informative seminars, meetings and educational activities have also been organized, encouraging local people and tourists to support turtle conservation.

Source: Daily Sabah (2024) dailysabah.com/life/turkiyes-patara-beach-breaks-record-with-53-sea-turtle-nests/news

Approach to transform land use for a sustainable future

A new report published by the Zoological Society of London and the British Ecological Society shows how changes to UK land use can benefit nature, climate and people. The report calls on the next UK government to take the lead on land use and adopt an integrated approach across departments. Given the relatively small land area of the UK, it is important to prioritize land use opportunities with multiple goals, such as farming in ways that maximize biodiversity and including nature-friendly spaces in new housing developments. To achieve a national land use transition, the report sets out 10 key messages aimed at scientists (e.g. generating evidence and solutions in collaboration with those responsible for the land), civil society (e.g. bringing nature into economic and social policies to ensure attention is given to wildlife recovery) and policy makers (e.g. establishing a national environmental observatory to underpin forecasting models with robust data). With pressure on land growing, combined with climate change and a cost-of-living crisis, it is vital to have a coordinated approach to land use.

Source: British Ecological Society (2024) britishecologicalsociety.org/transform-uk-land-use-approach-for-a-sustainable-future

AFRICA

Scimitar-horned oryx: a conservation success

The scimitar-horned oryx *Oryx dammah* once roamed throughout the northern and southern ranges of the Sahara Desert but populations were decimated through over-hunting for their meat and horns, as well as overgrazing of their food sources by livestock. The last wild individuals were seen in the 1980s, and in 2000 the species was categorized as Extinct in the Wild on the IUCN Red List. However, there have been captive individuals in zoos and private herds since the 1960s, forming a genetically variable population suitable for a captive breeding programme. In 2009, the idea to reintroduce the oryx back into its historical range took shape, and the breeding programme started in 2013. Three years later, 21 oryxes were transported from the breeding population in Abu-Dhabi to a game reserve in Chad to be reintroduced in their native range. Since then, 285 individuals have been released, 600 wild individuals now live in the arid grasslands of Chad, and the species has been recategorized to Endangered in the most recent IUCN Red List update.

Source: *Earth.Org* (2024) earth.org/scimitar-horned-oryx-a-story-of-global-conservation-success

A rare group of monkeys could help save tropical forests

Conservationists from almost 20 institutions in the USA, Europe and Africa have concluded that immediate conservation efforts to protect species of red colobus monkeys could have cascading net positive impacts on African tropical forest health. At a time when hunting of wildlife and habitat loss are driving long-term changes to ecosystems, the scientists identified red colobus monkeys as key indicators of tropical forest health and flagships for local and international conservation initiatives. The study focuses on five priority action areas: legal protection for all red colobus species, ecological surveys to determine populations in need of protection, greater investment in protected area creation and management, engagement with people living in proximity to the monkeys, and better conservation education. These actions build on the Red Colobus Conservation Action Plan that aims to make red colobus a priority conservation target, to help secure Africa's tropical forests.

Sources: *Conservation Letters* (2024) doi.org/10.1017/S0030605324001200 & *Phys.org* (2024) phys.org/news/2024-04-rare-group-monkeys-africa-tropical.html

Great apes threatened by mining

A recent study shows that the threat of mining to the great ape population in Africa has been underestimated. The rising demand for minerals such as copper, lithium, nickel, cobalt and other rare earth elements required for the large-scale transition to cleaner energy is causing a surge of mining in Africa. This is driving deforestation of tropical rainforests, which are home to many species, including the great apes. The study estimates that more than one-third of the entire population of great apes—nearly 180,000 gorillas, bonobos and chimpanzees—are at risk. The researchers also highlight that because mining companies are not required to make biodiversity data publicly available, the true impact of mining on biodiversity may be even higher. Overlaps of high ape density with mining areas were greatest in the West African countries of Liberia, Sierra Leone, Mali and Guinea. More than 23,000 chimpanzees, or up to 83% of Guinea's ape population, could be directly or indirectly affected by mining activities. In general, the most sensitive areas—those with relatively high ape and mining densities—are not protected. These risks are rarely considered and mitigated by mining companies.

Sources: *Science Advances* (2024) doi.org/10.1126/sciadv.adc1234 & *Re:wild* (2024) rewild.org/press/new-research-shows-more-than-one-third-of-africas-great-apes-face-risks

Translocation of 2,000 rhinoceroses

A 10-year mission to translocate > 2,000 captive-bred southern white rhinoceroses to new locations in the wild across Africa has begun. Forty animals—16 males and 24 females—made the 700-km, 14-hour journey from Rhino Rewild, site of the former Platinum Rhino farm, in South Africa's North West province to their new home at Munywana Conservancy, a 74,000-acre private game reserve in Northern KwaZulu-Natal. In September 2023, African Parks bought Platinum Rhino, the world's largest private captive rhino breeding operation, after South African multimillionaire owner John Hume put the farm up for auction. The 2,000 rhinoceroses—more than are currently found in any single wild location in Africa—represent c. 12–15% of the continent's remaining white rhinoceros population. The NGO's plan is to phase out active breeding and translocate all the rhinoceroses and any future offspring over the next decade to protected areas across Africa.

Source: *BBC Wildlife Magazine* (2024) discoverwildlife.com/animal-facts/mammals/southern-white-rhino-translocation-in-africa

East Africa's soda lakes are rising, threatening iconic flamingos

More than three quarters of lesser flamingos are found in the soda lakes of Kenya, Tanzania and Ethiopia, but the species is categorized as Near Threatened and the population is in decline. This is probably because rising water levels at feeding lakes decimate the cyanobacteria the birds have evolved to eat. Researchers used satellites to monitor 22 key feeding lakes across Ethiopia, Kenya and Tanzania between 1999 and 2022 and found that only half of the lakes that provided high-quality feeding habitat in 2000 were still suitable feeding lakes in 2022. The flamingos have a highly specialized feeding strategy and are heavily dependent on certain cyanobacteria. But as lake waters rise, they are diluted, reducing their salinity and alkalinity, which limits the growth of the cyanobacteria. In recent years water levels have risen most in Kenya and Tanzania, particularly at historically important flamingo lakes Bogoria and Nakuru, which supported more than 1 million birds in the past. Rising water levels are likely caused by increased rainfall in recent decades, and deforestation, which causes rainfall to run off directly into the lakes.

Sources: *Current Biology* (2024) doi.org/10.1016/j.cub.2024.03.006 & *The Conversation* (2024) theconversation.com/east-africas-soda-lakes-are-rising-threatening-their-iconic-flamingos-227810

Endangered giant pangolin spotted in Senegal

A giant pangolin has been observed in Senegal's Niokolo-Koba National Park for the first time in 24 years, reviving hopes for the species' survival in West Africa, despite continued threats from poaching and deforestation. The giant pangolin is the only of Africa's four pangolin species thought to be present in Senegal and previously inhabited a wide range of forests and savannahs from Senegal to western Kenya. In recent decades the population has declined because of extensive deforestation and poaching for meat and scales. The species was last formally identified in Senegal in April 1967. Three decades later, an ecological survey discovered two individuals, and none have been spotted since then. But in March 2023, one was photographed by a camera trap as it walked along a dry riverbed at night. The sighting suggests the Park could serve as the last stronghold for monitoring and conserving the pangolin in Senegal.

Source: *New Scientist* (2024) [newscientist.com/article/2433987-endangered-giant-pangolin-spotted-in-senegal-after-nearly-24-years](https://www.newscientist.com/article/2433987-endangered-giant-pangolin-spotted-in-senegal-after-nearly-24-years)

AMERICAS

Two decades of collaboration in the Eastern Tropical Pacific

In June 2024, the governments of Colombia, Costa Rica, Ecuador and Panama came together for the Immersed in Change UN Ocean Conference in San José, Costa Rica, to mark the 20th anniversary of the Eastern Tropical Pacific Marine Corridor (CMAR). Ministers from all four countries reflected on the progress made over the last 2 decades for a regional mechanism of cooperation for the conservation and sustainable use of marine biodiversity, including action for a legally binding agreement for CMAR, progress to establish a transboundary durable financing mechanism, monitoring and enforcement, and a path forward for the next 10 years. CMAR is a vital home to 160 marine species and supports local economies. The 2004 agreement has encouraged collaboration, knowledge sharing and regional leadership, serving as a model for international cooperation for countries that share ecosystems.

Source: *Enduring Earth* (2024) enduringearth.org/20yearsocmar

Local mushroom enthusiasts rediscover species lost to science

The big puma fungus *Austroomphaliaster nahuelbutensis*, an enigmatic species of fungi that lives underground in Chile's Nahuelbuta Mountains, had only ever been found in the wild once in the 1980s, until it was recently rediscovered by an expedition team with the Fungi Foundation and Fundación Nahuelbuta. The team set out for the temperate forests of the Nahuelbuta Mountains in May 2023 to retrace the footsteps of Chilean mycologist Norberto Garrido, who described the fungus to Western science in 1988. As they searched the forest floor, they compared mushrooms they found to illustrations and descriptions Garrido had made of small grayish-brown mushrooms with hints of red and stems that were thicker at the base. On the last day of the expedition, the Fungi Foundation led a workshop and a community hike to look for fungi in a nearby forest. During the hike, two of the local participants found a group of about four mushrooms that all matched the description of the big puma fungus. The team carefully collected the mushrooms, leaving the mycelium in the ground, and took them for DNA analysis that confirmed that it was indeed *A. nahuelbutensis*.

Source: *Re:wild* (2024) rewild.org/press/first-ever-lost-fungi-species-found

Rare sawfish mysteriously dying in the Florida Keys

The Florida Fish and Wildlife Conservation Commission has reported that > 40 Critically Endangered smalltooth sawfish *Pristis pectinata* have been found dead in the Florida Keys, USA, since January of this year. Although their habitat once ranged from Texas to North Carolina, sawfish populations have significantly declined and the Keys is one of the few places where they can still be found in the wild. Sick sawfish have been seen swimming in circles but scientists do not know what is causing this alarming spinning behaviour. As of May 2024, red tide toxins had been ruled out based on water samples taken from the affected area. Necropsy data taken from dead fish samples revealed no communicable pathogens and the fish were negative for bacterial infections. Dissolved oxygen levels, salinity, acidity and temperature are also not suspected to be the causes of the fish kills or spinning. Scientists have speculated the spinning may be related to a toxin called gambierdiscus, which is common in the Keys and causes an illness called ciguatera in people who eat infected fish.

Source: *Miami Herald* (2024) miamiherald.com/news/local/community/florida-keys/article288294350.html

Cocaine trafficking threatens critical bird habitats

In addition to its human consequences, cocaine trafficking harms the environment and threatens habitats important to dozens of species of migratory birds, according to a new study. It reports that two-thirds of the areas that are most important to forest birds—including 67 migratory species that breed in the USA and Canada and overwinter in Central America—are at increased risk from cocaine trafficking activities. Many of these birds inhabit areas that became more attractive to traffickers following peak law enforcement pressure. For example, 90% of the population of golden-cheeked warblers and 70% of golden-winged warblers and Philadelphia vireos winter in those vulnerable landscapes. The largest remaining forests in Central America, which are disproportionately inhabited by Indigenous people, are seeing growing levels of cocaine trafficking. The study builds upon previous ethnographic and modeling work done by researchers examining land-use conditions and decisions made by the traffickers based on perceived risk and profit.

Sources: *Nature Sustainability* (2024) doi.org/10.1038/s41566-024-006-cocaine-trafficking-threatens-critical-bird.html & *Phys.org* (2024) phys.org/news/2024-06-cocaine-trafficking-threatens-critical-bird.html

Thirty islands restored in 30 years

Fauna & Flora, Re:wild and their network of > 50 Caribbean partners have restored their 30th Caribbean island, helping to save over a dozen species from extinction, while improving resilience of the islands and their ecosystems. The Caribbean islands have suffered the highest extinction rates in modern history. Although the islands represent just 0.16% of the Earth's land area, they have accounted for 10% of the world's bird extinctions, 38% of mammal extinctions, and > 65% of reptile extinctions since the first Europeans arrived. In addition to losing biodiversity, the Caribbean Islands, and the millions of people that call them home, are highly vulnerable to climate change. Many species have seen remarkable comebacks since the restoration work began in the early 1990s. The Antigua racer, a snake endemic to Antigua and Barbuda, had been declared extinct three times before it was eventually rediscovered on a single, tiny offshore islet in 1995, by which time only 50 individuals remained. By 2015, the population had increased to over 1,000 individuals, spread over four beautifully rewilded islands off Antigua. Enabling local partners to rewild their islands helps to rebuild ecosystems and increase climate resilience.

Source: *Fauna & Flora* (2024) fauna-flora.org/news/30-islands

Amid a deforestation crisis, two countries plant seeds of hope

Two countries are bucking worldwide deforestation trends and proving that effective laws and governance can stem the decline of forests. In Brazil, primary forest loss dropped by 36% between 2022 and 2023, and in Colombia deforestation nearly halved. Researchers have attributed the progress to leadership changes that have prioritized the environment. In Brazil, President Inácio Lula da Silva has pledged to end deforestation, and in Colombia, President Gustavo Petro Urrego is putting an emphasis on environmental reforms. However, despite the good news in the data, the overall rate of tropical primary forest loss in 2023 remained consistent, pointing to alarming increases in deforestation in Bolivia, Laos and Nicaragua. An area of forest equivalent to the size of 10 football fields is cut down globally every minute. Deforestation is a major cause of climate-warming greenhouse gases, second only to fossil fuel emissions.

Sources: *World Resources Institute* (2024) research.wri.org/gfr/latest-analysis-deforestation-trends & *Conservation International* (2024) conservation.org/blog/amid-deforestation-crisis-two-countries-plant-seeds-hope

ASIA & OCEANIA

Wildlife trade: declines in trade of big cats in South Korea...

A new study suggests considerable progress has been made in curbing the trade of products derived from large felids in South Korea. This achievement, however, comes with a warning of the ongoing risk of small-scale illegal trade within the country. South Korean trade in big cats and their body parts, including Critically Endangered Sumatran tigers and Amur leopards, has significantly reduced since the early 1990s, when the country was one of the main manufacturers of tiger bone products. Attributed to well-implemented trade bans, consumption changes resulting from South Korea's rapid economic growth and decreased social acceptability of such trade, the reported decline provides hope and vital insights for tackling unsustainable wildlife trade across the globe. South Korea joined CITES in 1993 and introduced a commercial trade ban on tiger bone products the following year. Although small-scale trade still persists and there is more progress to be made, current evidence suggests a major shift around public attitudes to trade.

Sources: *PLOS One* (2024) doi.org/mzrc & *Zoological Society of London* (2024) zsl.org/news-and-events/news/major-declines-reported-south-korean-big-cat-trade

... but flourishing trade of chelonians in the Philippines...

There is a flourishing and often illegal trade in freshwater turtles and tortoises on Facebook in the Philippines. TRAFFIC researchers reported finding > 5,000 chelonians offered for sale in the Philippines on 20 Facebook groups during 2019–2020. Most of these were not native to the Philippines and are subject to international trade regulations under CITES. This included species completely prohibited from commercial international trade. Also making an appearance online was the Philippine forest turtle, found only in the country and recognized as one of the world's most threatened turtle species. Checks on the same groups over the first 3 months of 2024 showed a persistent and equally significant trade, with more than 2,000 turtles and tortoises offered for sale. Highly sought after and frequently trafficked to meet the demand for exotic pets, chelonians are one of the most at-risk vertebrate groups.

Source: *TRAFFIC* (2024) traffic.org/news/rampant-cyber-trade-in-freshwater-turtles-and-tortoise-in-the-philippines

... and lizards and birds in the Solomon Islands

An investigation has found that the Solomon Islands have become a key player in the global live animal trade, with foreign collectors sourcing exotic species including some that are subject to trade bans. The country is the only Pacific island that participates in the legal wildlife trade, and its most unusual species are popular pets. One of the most coveted is the prehensile-tailed skink (see Pikacha et al., *Oryx*, 57, 30–39), a native, striped lizard that dangles from trees using its tail. Categorized as Near Threatened on the IUCN Red List, trade in the reptile was suspended in 2001 under an international conservation treaty overseen by the UN. But export figures show a thriving market, with > 2,000 of the skinks sourced from the Solomon Islands in the last 8 years, including c. 1,300 sent to the USA. Online listings show a single juvenile specimen can sell for up to USD 1,500. There are also signs the Pacific nation is a transit point for threatened birds smuggled from elsewhere, for example the Vulnerable chattering lory. Ecologists suspect wildlife trade in the Solomon Islands is intertwined with powerful logging companies, which own vast tracts of rainforest throughout the nation and wield immense political influence.

Source: *France 24* (2024) france24.com/en/live-news/20240607-shadowy-exotic-pet-trade-thrives-in-pacific-island-nation

Japan announces whaling expansion

In June 2024, when a return to whaling was also announced in Finland, the Japanese government confirmed its decision to allow the killing of fin whales. Japan's Fisheries Agency Council approved a proposal to add fin whales to the three species previously approved for commercial whaling. The self-allocated quota for this year is 59 animals. Japan has previously allowed three other large whales to be hunted in its Economic Exclusion Zone—Bryde's, sei and minke—but fin whale meat is highly prized in Japan and has been imported from Iceland in recent years. In 2022, Japan took 25 sei whales, 187 Bryde's whales and 58 minke whales. For many years, Japan described both its North Pacific and Southern Ocean hunts as scientific whaling, but this was discredited and the whaling confirmed to be commercial. The latest decision is linked to Japan's recent launch of its new state-of-the-art whaling mothership, the Kangei Maru, which cost c. JPY 7.5 billion to build.

Source: *Ocean Care* (2024) oceancare.org/en/stories_and_news/japan-whaling-expansion

Wild horses return to Kazakhstan steppes after absence of 2 centuries

A group of Przewalski's horses have returned to their native Kazakhstan after an absence of c. 200 years. The Endangered species once roamed the vast steppe grasslands of central Asia, where horses are believed to have been first domesticated c. 5,500 years ago. People were riding and milking horses in northern Kazakhstan nearly 2,000 years before the first records of domestication in Europe. Human activity, including hunting the animals for their meat, as well as roads fragmenting their population, drove the horses close to extinction in the 1960s. The seven reintroduced horses, six mares and one stallion, are descended from two groups that survived in zoos in Munich and Prague. In 2011, Prague Zoo was involved in a reintroduction of the wild horses to Mongolia. The project continued until 2019 when the population stabilized, and there are now c. 1,500 Przewalski's horses in Mongolia.

Source: *The Guardian* (2024) theguardian.com/environment/article/2024/jun/10/przewalskis-horses-only-wild-species-return-central-asian-steppes-kazakhstan

An uphill struggle for otters in Nepal

In September 2023, Nepali conservationists celebrated the rare sighting of a smooth-coated otter in Chitwan National Park, the first one to be spotted there in 2 decades. The degraded state of Nepal's overexploited rivers has affected otters and other aquatic species. Dumping of raw sewage and industrial waste, leaching of agricultural pesticides and rapid urbanization and infrastructure development are compromising otter habitats across the country. The widespread damming of rivers coupled with unsustainable fishing practices have also reduced food sources for Nepal's otters. The country is home to two, possibly three, otter species, but funding and attention for the animals tend to be overshadowed by that for higher-profile wildlife, such as tigers and rhinoceroses.

Source: *Mongabay* (2024) news.mongabay.com/2024/05/on-world-otter-day-an-uphill-struggle-for-these-creatures-in-nepal

All internet addresses were up to date at the time of writing. The Briefly section in this issue was written and compiled by Emma Sinnott, Julia Hochbach and Martin Fisher, with additional contributions from Bill Sutherland. Contributions from authoritative published sources (including websites) are always welcome. Please send contributions to oryx@fauna-flora.org.