Briefly

SPOTLIGHT ON ISLANDS

Return of rails to Floreana Island, Ecuador

In 1835, during his visit to Floreana Island, Ecuador, Charles Darwin recorded the presence of a small, secretive bird, the Galapagos rail *Laterallus spilonota*. However, the bird has not been seen on the island since. The Galapagos rail, known locally as Pachay, is endemic to the archipelago and has been severely affected by the introduction of invasive species. In 2023, a partnership between Island Conservation, Dirección del Parque Nacional Galápagos, Galapagos Biosecurity Agency, Fundación Jocotoco, Durrell Wildlife Conservation Trust and the Charles Darwin Foundation saw the launch of a large-scale restoration project. A similar project on the nearby Pinzon Island resulted in Galapagos rails reappearing, 6 years after invasive species were successfully removed. Two years into the restoration project on Floreana, rails have already made a reappearance and have been recorded in three distinct sites, for the first time since monitoring began in 2015. This recovery is a great sign for the island, where the partners are now planning to reintroduce 12 locally extinct species.

Source: Island Conservation (2025) islandconservation.org/return-of-the-rails-signs-of-recovery-on-floreana-island

Reef news: new portable system to aid coral restoration . . .

A new portable coral aquaculture system, ReefSeed, is being trialled in the Maldives to support coral reef restoration in remote areas. Developed by the Australian Institute of Marine Science in collaboration with the Maldives Marine Research Institute and CSIRO, ReefSeed is a self-contained, mobile unit housed in sea containers, enabling deployment in isolated locations. It facilitates the collection of coral gametes, which are fertilized and reared into larvae, then settled onto specially designed ceramic substrates before being transplanted onto degraded reefs. The method aims to enhance the genetic diversity and resilience of restored coral populations. The initiative is a step towards sustainable coral reef restoration in the Maldives, combining innovative technology with local expertise.

Source: International Coral Reef Initiative (2025) icriforum.org/coral-reef-restoration-maldives

. . . fishers help Caribbean reef sharks to rebound in Belize . . .

Caribbean reef sharks are recovering in Belize, following a decade-long decline attributed to overfishing. The upward trend is the result of a collaborative effort among local fishers, scientists and government authorities. In 2021, Belize implemented a ban on shark fishing within a radius of 2 nautical miles around its three major atolls: Lighthouse Reef, Glover's Reef and Turneffe Atoll, encompassing c. 1,500 square miles. The National Shark Working Group, comprising government officials, researchers and fishers, played a pivotal role in formulating these regulations. Recommendations were based on scientific data indicating significant declines in shark populations, and fishers contributed their local knowledge, helping to identify critical habitats and supporting enforcement efforts. Many fishers participated in research initiatives such as tagging sharks to monitor their movements and behaviour. Early indicators suggest these measures are successful: fishers report increased sightings of sharks, including in areas where they had disappeared.

Source: Mongabay (2025) news.mongabay.com/2025/03/caribbean-reef-sharks-rebound-in-belize-with-shark-fishers-help

. . . and local communities protect a Honduran reef

In Tela, Honduras, invasive lionfish wreak havoc on coral reefs by consuming small fish that help maintain reef health. With no natural predators in the Caribbean, the population has surged, threatening the marine ecosystem. To combat this, local divers founded the organization Tela Divers-Sealife Conservation in 2017 and began hunting lionfish in 2022. However, specialized equipment was costly—imported spears and containers exceeded local budgets. Leveraging their engineering skills, the divers crafted affordable, homemade gear using metal rods for spears and plastic tubes for safe storage. Their initiative spurred community involvement: in October 2024, a hunting competition organized by the group saw 21 divers capture 140 lionfish. The catch was donated to a local chef who prepared the fish, which is edible once its venomous spines are removed.

Source: Mongabay (2025) news.mongabay.com/short-article/2025/03/to-save-a-honduran-reef-locals-craft-custom-gear-and-hunt-invasive-lionfish

New eDNA tool can detect invasive rodents within 1 hour

A new study reveals environmental DNA (eDNA) technology can detect a single mouse within just 1 hour of its arrival in a controlled environment, potentially offering a powerful tool for protecting island ecosystems from invasive species. Animals and plants are continuously shedding fragments of DNA, and eDNA testing can analyse environmental samples to determine what kinds of organisms are present. Scientists from the USA and New Zealand tested a new eDNA technique that can find traces of mice in environmental samples when the rodents are abundant. Surprisingly, the DNA traces from just one mouse could be found within 1 hour of it entering a controlled area. But when tested outside under more natural conditions, these DNA traces disappeared after 4 days. The discovery helps conservationists better understand when and where to look for signs of mice and how to assess recent visitation.

Source: Island Conservation (2025) islandconservation.org/press-release-new-edna-tool-can-detect-invasive-rodents-within-an-hour

Initiative to rewild three New Zealand islands

Three of New Zealand's ecologically significant islands, Maukahuka (Auckland Island), Rakiura (Stewart Island) and Chatham Island, have joined the Island–Ocean Connection Challenge (IOCC), an international initiative aiming to restore 40 island–ocean ecosystems by 2030. These projects represent the country's most ambitious conservation efforts to date, with each island being 4–15 times larger than any previously cleared of invasive species in the country. Maukahuka hosts > 500 native species, including the Endangered Gibson's albatross, New Zealand sea lion and the rare hoiho penguin. Rakiura is home to the tokoeka or brown kiwi and is a candidate for the reintroduction of the Critically Endangered kākāpō. All three islands face challenges posed by invasive species, which the initiative seeks to identify and remove using advanced technologies. Led by Island Conservation, Re:wild and the Scripps Institution of Oceanography, the project collaborates with the New Zealand government, Māori and Moriori Indigenous communities, and local organizations.

Source: Mongabay (2025) news.mongabay.com/short-article/2025/03/initiative-sets-sights-on-rewilding-three-new-zealand-islands

INTERNATIONAL

Record-breaking wildlife seizures by Operation Thunder

Operation Thunder 2024, coordinated by INTERPOL and the World Customs Organisation, led to the seizure of nearly 20,000 live animals across 138 countries. This record-breaking operation involved police, customs, border control, and forestry and wildlife officials, marking the widest participation since its inception in 2017. Authorities arrested 365 suspects and identified six transnational criminal networks involved in wildlife trafficking. The operation highlighted the critical importance of international collaboration in combating wildlife crime, which is estimated to be worth up to USD 23 billion annually. The seized animals, including big cats, primates, reptiles and birds, were sent to conservation centres for health assessments and rehabilitation. The TWIX (Trade in Wildlife Information Exchange) platform, established by TRAFFIC, played a crucial role in facilitating intelligence sharing and coordination amongst law enforcement agencies.

Source: TRAFFIC (2025) traffic.org/news/record-breaking-wildlife-seizures-by-operation-thunder-underline-importance-of-international-security-collaboration

Number of fungi species on the IUCN Red List surpasses 1,000

The number of fungi assessed on the IUCN Red List has surpassed 1,000, confirming that deforestation, agricultural expansion and urban development are driving these species to decline worldwide. The addition of 482 newly assessed fungi species brings their number on the Red List to 1,300, of which at least 411 are at risk of extinction. Rapid growth of agricultural and urban areas has destroyed fungi habitats, putting 279 species at risk of extinction. Nitrogen and ammonia run-off from fertilizers and engine pollution also threaten 91 species. At least 198 species are at risk because of deforestation for timber production, illegal logging and clearing for agriculture. Clear-cutting of old-growth forests is especially damaging, destroying fungi that do not have time to re-establish with rotation forestry. Thirty per cent of old-growth pine forests across Finland, Sweden and Russia have been cut down since 1975, leading to species such as the giant knight *Tricholoma colossus* to be categorized as Vulnerable.

Source: IUCN (2025) iucn.org/press-release/202503/first-1000-fungi-iucn-red-list-reveal-growing-threats-iucn-red-list

Butterfly diversity threatened by climate change

A new study suggests that because of the lack of comprehensive global data on insects, we may be ill-prepared to mitigate biodiversity loss from climate change for a wide range of species. The study analysed phylogenetic and geographical range data for 12,119 butterfly species worldwide. The researchers discovered butterfly diversity is highly clustered in tropical and subtropical mountain systems, with two-thirds of species living primarily in mountains. However, these mountain ecosystems are quickly changing as a result of global warming. The authors predict that 64% of the temperature niche for butterflies in tropical areas will erode by 2070. The study was the first global assessment to examine the geographical overlap of diversity, rarity and climate change threats for an insect taxon. The results reveal that butterfly diversity patterns differ from those of better studied groups such as birds, mammals and amphibians, and highlight the need for quantitate global assessments of more insect groups to assist with mitigating biodiversity loss.

Sources: Nature Ecology & Evolution (2025) doi.org/g9bfvf & *Science Daily* (2025) sciencedaily.com/releases/2025/03/250331192152.htm

Woolly mouse could be a step towards recreating mammoths

Mice with supposedly mammoth-like traits have been engineered by US-based company Colossal Biosciences as part of its goal to create mammoth-like creatures to help prevent arctic permafrost from melting. Critics argue that making mice hairier is far from creating mammoth-like creatures and label the project as unethical and a publicity stunt. However, Colossal Biosciences defends its work, stating that the woolly mouse is a crucial step towards genetically modifying elephants to be hairy and better suited to cold environments, and that it represents progress towards engineering Asian elephants, the mammoth's closest living relative, with key mammoth traits. The company aims to create herds of mammoth-like creatures to live in the arctic tundra, where their grazing habits could promote grassland growth and reduce carbon dioxide emissions from melting permafrost. The hope is to have the first cold-adapted elephant by 2028 and eventually release these elephants into the wild.

Sources: Nature (2025) doi.org/pks3 & *BBC News* (2025) bbc.co.uk/news/articles/cojg4n776evo

Turtles lead scientists to seagrass meadows

Researchers in Saudi Arabia have discovered a surprising new method for locating seagrass meadows, after satellite-tagging 53 green turtles during 2018–2021 to track their movements while foraging. The turtles led them to 34 previously unknown seagrass meadows in the Red Sea, increasing the region's known area of seagrass by 13%. The turtles were c. 20 times more reliable at identifying the sites than the Allen Coral Atlas, which uses high-resolution satellite imagery to map global coastlines. Seagrass meadows play a vital role in the capture and storage of carbon; together with mangroves and saltmarshes, they are more effective carbon sinks than rainforests. However, according to the study, blue carbon projects are hindered by gaps in our understanding of the distribution and extent of seagrasses. Researchers in the Bahamas have previously used tiger sharks to locate the meadows, but populations of these predators have been depleted in many regions. Green turtles are increasing in some areas and are easier and cheaper to tag.

Sources: Proceedings of the Royal Society B (2024) doi.org/pkvn & *BBC Wildlife Magazine* (2025) discoverwildlife.com/animal-facts/marine-animals/green-turtles-seagrass-red-sea

Governments adopt first global strategy to finance biodiversity

At the resumed COP16 negotiations in Rome in February 2025, governments adopted the first global strategy to finance biodiversity, marking a significant step toward closing the USD 700 billion annual biodiversity funding gap. This agreement sets a framework for mobilizing financial resources to implement the Kunming–Montreal Global Biodiversity Framework (GBF) by scaling up investments, reforming subsidies and strengthening financial mechanisms, including public funding from national and subnational governments, private sector contributions, philanthropic resources, multilateral development banks and blended finance approaches. Importantly, it emphasizes the inclusion of Indigenous Peoples, local communities, women and youth in decision-making processes. The agreement marks a transformative shift in global biodiversity finance, with an unprecedented focus on mobilizing private sector contributions.

Source: UN Environment Programme (2025) unepfi.org/themes/ecosystems/governments-adopt-first-global-strategy-to-finance-biodiversity-implications-for-financial-institutions

EUROPE

Blind mole-rat presumed extinct sighted in Croatia

Scientists have confirmed the existence of a species of blind mole-rat in eastern Croatia, where these mammals were thought to have been extinct for at least 70 years. Blind mole-rats are small, subterranean rodents that lack both eyes and ears, adaptations that suit their underground lifestyle. The animal was rediscovered after causing significant damage to a local vegetable garden, leading to investigation by researchers. In Croatia, the population is confined to a very small area in Vučedol, with estimates suggesting there are only c. 30–50 individuals remaining. The rediscovery of the solitary mammal has sparked a renewed interest in conservation efforts, and scientists are now working to protect these unusual creatures and ensure their survival.

Source: Croatia Week (2025) croatiaweek.com/blind-mole-rat-thought-extinct-is-sighted-in-croatia

Europe moves towards ending lead poisoning

In February 2025, the European Commission published a draft regulation and proposed a ban on lead ammunition and fishing weights. Lead is highly toxic and has been banned in petrol, paint and water pipes in Europe. However, 44,000 t of lead ammunition and fishing weights are still spread annually across Europe, poisoning wildlife, contaminating water and soil, and putting humans and animals at risk. There is no safe level of lead exposure and an estimated 1 million children across Europe are currently at risk of lead exposure from ammunition. The proposal includes measures to remove lead from hunting and fishing activities, therefore significantly reducing the risk to people, wildlife, pets and the environment. With the ban affecting hunting, those who eat game meat will be protected from ingesting lead. The ban of lead use in fishing weights will protect fishers from exposure as well as prevent poisonings in species such as swans and other waterfowl. The proposal does, however, fall short of addressing lead use in sport shooting effectively, with weak cleanup rules, long timelines, and lack of bullet restrictions, allowing lead to persist and increasing the risks of soil contamination and human exposure.

Source: BirdLife (2025) birdlife.org/news/2025/02/27/press-release-europe-moves-towards-ending-lead-poisoning

Beaver dam saves public money in the Czech Republic

A family of eight beavers in Czechia made global headlines earlier this year after building a dam seemingly overnight, saving the country's taxpayers millions. Six years ago, officials in the Brdy Protected Landscape Area, close to Prague, received a permit to build a dam. The goal was to prevent acidic water from two ponds spilling into the Klabava River, which is home to Critically Endangered crayfish. The intended project was predicted to cost approximately CZK 30 million (over GBP 1 million). However, as the land is a former army training site, the project was paused amidst arguments between the military and Vltava River Basin Authorities over land ownership. Not tied down by this, a beaver colony dammed the river in January 2025, turning the site into a wetland with pools and canals. Although appearing to happen overnight, it is likely that the beavers had been working on the dam for weeks without anyone noticing.

Sources: National Geographic (2025) nationalgeographic.com/animals/article/beaver-dam-czech-republic & *EuroNews* (2025) euronews.com/green/2025/03/01/czechias-1m-dam-built-for-free-by-beavers-heres-where-else-theyre-doing-good-work

Prolonged drought followed by severe floods in Spain

In Spain, prolonged drought has been succeeded by severe flooding. Last year, the Sau Reservoir near Barcelona dried up, revealing the submerged 11th-century Sant Roma de Sau church. However, heavy rains have since refilled the reservoir and also led to flash floods that displaced hundreds, and caused significant damage as well as school and road closures. In March, Spain experienced over twice its average monthly rainfall, with Madrid recording its wettest month since records began in 1893. Reservoirs across the country filled up to c. 66%, the highest in a decade. The Sau Reservoir, which supplies water to Barcelona, rose from below 5% of its maximum capacity last year to c. 48%. Climate scientists suggest that such extreme weather fluctuations are becoming more frequent because of climate change. Rising global temperatures accelerate the hydrological cycle, leading to prolonged droughts followed by intense rainfall. Despite the recent rains, experts warn that Spain's water resources remain vulnerable, and sustainable water management is essential to mitigate future climate-related challenges.

Source: Phys.org (2025) phys.org/news/2025-03-parched-spain-emerged-drought.html

London Underground mosquito has surprisingly ancient origins

The results of a genetic analysis, which have been posted on the bioRxiv preprint server, suggest that a variety of mosquito, once thought to have evolved in the tunnels of the London Underground, seems to have originated alongside humans in the Middle East thousands of years ago. *Culex pipiens* f. *molestus* gained notoriety during the Second World War for biting Londoners who were sheltering from German air raids in stations and tunnels. Although the mosquito resembles the common house mosquito *Culex pipiens*, it exhibits different behaviours. For instance, *C. pipiens* lives and breeds above ground, mates in swarms, bites birds and requires a blood meal before laying eggs. In contrast, *C. pipiens* f. *molestus* breeds underground, can mate in confined spaces, bites mammals and the females can lay eggs without having consumed blood. In the 1990s, scientists proposed that the *molestus* form might have evolved within the London Underground tunnels. However, the new study suggests that they first adapted to human environments above ground in what is now Egypt. The findings indicate that these mosquitoes may have spread globally through human migration and trade, adapting to various urban environments along the way.

Sources: bioRxiv (2025) doi.org/g84frz & *Nature* (2025) doi.org/pks6

AI-powered drones track down fires in German forests

German tech firm Dryad has developed an artificial intelligence (AI)-powered drone system aimed at detecting and extinguishing wildfires. Housed in a solar-powered orb resembling a giant golf ball, these drones are designed to autonomously identify and suppress fires within minutes. Dryad is among 30 global teams competing for a multi-million-dollar prize to develop autonomous fire suppression technologies. Their innovative approach includes equipping drones with a so-called sonic cannon that emits low-frequency sound waves to extinguish small fires, eliminating the need to carry heavy water loads. This method aims to enhance the drones' agility and effectiveness. Experts believe such technologies are vital, especially in areas where human settlements border natural landscapes, as they offer a means to combat fires without endangering human lives. Dryad plans to bring this drone system to market by 2026, marking a significant advancement in wildfire management strategies.

Source: Phys.org (2025) phys.org/news/2025-03-ai-powered-drones-track-german.html

AFRICA

South Africa: last-minute deal to protect African penguins . . .

In an effort to help safeguard the African penguin *Spheniscus demersus*, South Africa is in the process of creating six no-fishing zones around key breeding areas. Birdlife South Africa and the Southern African Foundation for the Conservation of Coastal Birds took legal action to protect the penguins from fishing vessels around breeding colonies. Both organizations argued that ministers had failed to sufficiently protect the Critically Endangered species after not implementing key recommendations from a panel of scientists who assessed the risk to the species. The number of penguins had decreased from c. 15,000 in 2018 to < 9,000 in 2023; if this continues, the species could be extinct by 2035. The order, issued by the Pretoria High Court, presents no-go zones for commercial sardine and anchovy fishing vessels around six African Penguin breeding colonies: Dassen Island, Robben Island, Stony Point, Dyer Island, St Croix Island and Bird Island.

Source: BBC News (2025) bbc.co.uk/news/articles/c5yoxl8gp140

. . . and a plant poaching crisis takes root

An arid region of South Africa's western coast, aptly named Succulent Karoo, is the subject of increased wildlife tracffiking activity. The region, renowned for its diverse and rare succulent plants, is facing unprecedented threats from transnational smuggling networks. Low-growing plants, which can take up to 7 years to reach a saleable size, have become highly sought after, driven by a surge in demand fuelled by social media as well as a houseplant craze beginning during the Covid-19 pandemic. Millions of these succulents have been illegally harvested, leading to the functional extinction of at least eight species and pushing hundreds more towards the brink. The region's existing criminal networks, initially involved in diamond smuggling, have seamlessly transitioned to trafficking these succulents. Conservationists and law enforcement agencies are working to combat this crisis by developing community-based strategies and informing national anti-poaching efforts. However, the solutions remain elusive because of rapidly shifting markets and poorly understood consumer demands.

Source: Conservation International (2025) conservation.org/blog/news-spotlight-a-unique-poaching-crisis-takes-root-in-south-africa

Wildlife conservation through sport: the Maasai Olympics

The Olamayio (lion hunt) was previously very common and for generations within the Maasai community served as a rite of passage for young men to show their strength, athleticism and determination. However, in 2008, a group of Maasai elders, known as the *Menye Layiok*, proposed the idea of replacing the traditional lion hunt with a sporting competition, and in 2012 the first Maasai Olympics was held, as a male-only event. It focused on showcasing traditional Maasai warrior skills with the aim of providing young men with a stage to prove themselves to their community and attract the attention of potential partners. The competition has now evolved to include women, with the most recent event in December 2024 including 40 women amongst the 160 competitors. Since the start of the event, there has been a cultural shift away from the Olamayio, which has had a significant impact on both the Maasai community and the wildlife in the Amboseli region. In the early 2000s, the region was home to an estimated 20 lions, which has since increased to 250 individuals.

Source: Chester Zoo (2025) chesterzoo.org/news/empowering-women-through-sport-the-maasai-olympics

Return of mountain bongo to Mount Kenya

In February 2025, 17 mountain bongos *Tragelaphus eurycerus* were successfully translocated from the USA to a specially designed sanctuary on Mount Kenya. The Critically Endangered species, which is the world's largest and most threatened forest antelope, is endemic to Kenya's high-mountain forests, with < 100 individuals remaining in the wild. The Rare Species Conservatory Foundation in Florida has been breeding and managing bongos for species recovery since 1991 and selected the 17 individuals (12 females and five males) to donate to Kenya. They were given vaccinations to protect against tick-borne disease and then sedated for their 30-hour journey. Upon arrival, the Kenya Wildlife Service transported the bongos 250 km by road to their new sanctuary, a 20-acre area built by Lewa Wildlife Conservancy and the Meru Bongo and Rhino Conservation Trust. This is Kenya's first conservation-related public–private–community partnership. The sanctuary aims to support the re-establishment of a sustainable bongo population across the Mount Kenya ecosystem and beyond.

Source: Tusk (2025) tusk.org/news/mountain-bongo-to-kenya

Lost and found: cichlid species rediscovered in Lake Victoria

Lipochromis microdon, a cichlid species endemic to Lake Victoria, was last formally recorded in 1985 and was long presumed extinct as a result of significant ecological changes in the lake. These changes included habitat degradation and the introduction of alien invasive species such as the Nile perch, which led to the decline of many native cichlids. *Lipochromis* cichlids have a specialized diet: they primarily feed on the larvae of other haplochromine cichlids. In a remarkable turn of events, field expeditions in 2023 and 2024 have confirmed the species' survival. Targeted sampling at rocky reefs in the southern Mwanza Gulf resulted in the discovery of two male individuals, one in each year, at the same location. This site had been sampled multiple times during 1989–2015 without any sightings, making the recent rediscovery particularly significant. The findings offer renewed hope for the conservation of the species and highlight the importance of continued monitoring and habitat protection efforts in Lake Victoria.

Source: Shoal Conservation (2025) shoalconservation.org/lipochromis-microdon

Elephants plan their journeys to save energy

A study has revealed that African savannah elephants *Loxodonta africana* base their movements on energy costs and resource availability. Understanding how elephants move through the landscape is vital for designing and implementing effective conservation strategies. Researchers collected data on 157 individuals in northern Kenya during 1998–2020. They found that the elephants strongly prefer landscapes with lower movement costs, avoid steep slopes and rough terrain, and choose areas with higher vegetation productivity. Although water sources do play a role in elephant movements, their journeys are much more complex than simply traveling to the nearest water source. These findings indicate that African elephants make cost–benefit decisions to select the most energy-efficient routes. This behaviour is comparable to birds using favourable thermal uplifts to reduce the energy costs of flying. The new findings have direct applications for conservation: they can help inform the design of protected areas and migration corridors, and predict how elephants may respond to climate change.

Sources: Journal of Animal Ecology (2025) doi.org/pks8 & *University of Oxford* (2025) biology.ox.ac.uk/article/elephants-plan-their-journeys-with-energy-saving-strategies

AMERICAS

Mexican women fight against ghost nets

Abandoned fishing lines, nets and traps, often referred to as ghost nets, are a common and persistent threat to marine life. It is thought that ghost fishing gear accounts for approximately 10% of waste floating in the ocean and experts have estimated that > 300,000 whales and dolphins die each year after becoming entangled. In Baja California, a group of women who call themselves Sirenas de Mexico, comprising local fisherwomen, wives of fishermen, a lifeguard, a marine biologist and an artist, are united in the goal to help protect the ocean. In training led by Conservation International, the Sirenas were taught dive safety practices, underwater signals and how to safely cut, lift and remove ghost gear at depths of up to 18 m. Within 2 days of finishing the training, one woman helped with the removal of nearly 900 kg of ghost nets in the waters near her community, Bahia Kino.
Source: Conservation International (2025) conservation.org/blog/as-ghost-junk-haunts-the-sea-mermaids-are-fighting-back

Potential caterpillar mimicry in a tropical hummingbird

New research suggests that chicks of the white-necked jacobin hummingbird *Florisuga mellivora* may mimic caterpillars to avoid predators. Most hummingbirds are born naked, whereas these birds emerge from their eggs with long, brown natal feathers that make them resemble local stinging caterpillars. Native to Central and South America, the birds were studied in Soberanía National Park, Panama. When researchers approached a nest, a day-old chick twitched and shook its head. The next day, a predatory wasp neared the nest, prompting similar jerky head movements from the chick, causing the wasp to leave without attacking. This behaviour closely mirrors that of certain caterpillars, which also shake their heads to deter predators and can deliver painful or even deadly stings. Researchers believe this combination of appearance and behaviour may be an example of Batesian mimicry, where a harmless species, to protect itself, mimics a harmful one. This type of mimicry is rare in birds and has never before been documented in hummingbirds.
Sources: Ecology (2025) doi.org/pks9 & *Science Daily* (2025) sciencedaily.com/releases/2025/03/250317163417.htm

Bad news in the Amazon: illegal deforestation continues in Brazil . . .

A recent report by the Center of Life Institute reveals that 91% of deforestation in Brazil's Amazon between August 2023 and July 2024 was illegal. Brazilian law allows limited deforestation with government permits, but most recent clearing was not recorded in official systems. Researchers used satellite data, cross-checked with national and state permit databases, and deemed illegal any clearing not backed by permits. The findings highlight major gaps in enforcement and transparency. Only eight of 16 states in these biomes fully share permit data with the federal system, making oversight difficult. The findings emphasize the need for stronger enforcement and financial disincentives to curb illegal forest clearing. Concerns were also raised about legal deforestation in the Cerrado savannah, criticizing overly permissive state approvals and calling for better land-use policies.
Source: Mongabay (2025) news.mongabay.com/short-article/2025/03/91-of-brazilian-amazon-deforestation-last-year-was-illegal-report-finds

. . . Endemic fish wiped out in hydroelectric dam area . . .

A study by the National Institute for Amazonian Research revealed that 35 years after the Balbina hydroelectric dam was built in the Brazilian Amazon, seven fish species native to the Uatumã River have become locally extinct. These rheophilic species, which depend on fast-moving waters, vanished as the dam altered the river's natural flow, replacing dynamic habitats with still, stagnant conditions that no longer support the survival of these species. Fieldwork since 2023 involved 20 hours of diving over 5 days, during which researchers collected 945 specimens and 247 tissue samples. No traces of the missing species were found, indicating a significant loss of aquatic biodiversity. The dam, built in the late 1980s, flooded vast areas of forest, and the resulting vegetation decay continues to degrade water quality. The disappearance of these fish species has broader ecological implications, disrupting habitats and affecting local communities that rely on fishing for food and cultural practices. Conservationists are now focusing on unaffected tributaries, such as the Jatapu River, which may serve as refuges and inform conservation work.
Source: Mongabay (2025) news.mongabay.com/2025/02/endemic-fish-wiped-out-in-brazilian-amazon-hydroelectric-dam-area-study-finds

. . . and Peru's rare peatland swamps at risk from illegal gold mining

Illegal gold mining in Peru's Madre de Dios region is rapidly destroying rare Amazonian peatland ecosystems that are crucial for carbon storage and climate regulation. A study reveals that > 550 ha of peatland have been lost to mining over the past 35 years, with more than half of this destruction occurring in the last 2 years alone. This surge threatens to release up to 14.5 million metric tonnes of carbon into the atmosphere, exacerbating global warming. Researchers utilized 35 years of NASA Landsat satellite data to track the expansion of mining activities, finding that at least 63 of 219 identified peatland areas have been negatively affected, placing > 10,000 ha at immediate risk. The rapid spread of mining is attributed to improved access to remote areas and insufficient law enforcement. Without intervention, the damage could be irreversible, leading to significant environmental, social and economic consequences. Peatlands in the Amazon were only officially documented in studies around 2012, making them a relatively recent discovery for scientists. Their degradation not only threatens unique biodiversity but also undermines ongoing efforts to combat climate change.
Source: Mongabay (2025) news.mongabay.com/2025/03/perus-rare-peatland-swamps-at-risk-as-illegal-gold-mining-expands

How a seaweed problem could power the Caribbean

Sargassum, a type of brown seaweed, has been causing problems in the Caribbean because of its excessive growth, which disrupts marine ecosystems and tourism. However, Grenada is turning this issue into an opportunity by utilizing sargassum in biotechnology and energy production. The sargassum growth has blighted the island for more than a decade, but hotels, businesses and researchers in Grenada are exploring ways to convert the seaweed into biofuel, fertilizers and other products. Sargassum is much cheaper to farm than most other seaweed, and unlike other macroalgae, it does not have a complicated reproductive cycle that requires hatcheries and lots of space, money and infrastructure to farm, making sargassum a valuable resource for the Caribbean. Using sargassum as a resource not only helps to manage the seaweed problem but also contributes to sustainable energy solutions and economic growth.
Source: The Guardian (2025) theguardian.com/environment/2025/mar/25/seaweed-caribbean-grenada-sargassum-biotechnology-energy-climate-crisis-ocean

ASIA & OCEANIA

Airport seizure: red-shanked doucs go back to Thailand

Two Critically Endangered red-shanked douc monkeys *Pygathrix nemaeus*, found only in Viet Nam, Laos and Cambodia, were seized by Kolkata Customs in February 2025. The juvenile primates were discovered in a plastic basket within a consignment from Bangkok on a Thai Airways flight. Wildlife authorities identified the animals. As they lacked health clearance and posed a biosecurity threat, officials arranged their return to Bangkok later that night. The species is listed on Appendix I of CITES and is protected under India's Wild Life (Protection) Act, 1972. Red-shanked doucs are known for their striking colors and are threatened by hunting, habitat destruction and the exotic pet trade.

Source: Times of India (2025) timesofindia.indiatimes.com/city/kolkata/thai-primates-seized-at-kol-airport-sent-back/amp_articleshow/117986238.cms

Tasmanian devils return to mainland Australia after 3,000 years

The Tasmanian devil *Sarcophilus harrisii* was historically common on the Australian mainland but was outcompeted by dingoes and subsequently disappeared from the landscape. Now, 3,000 years later, 26 Tasmanian devils have been released into a protected sanctuary in Barrington Tops, New South Wales. The reintroduction is not just focused on species recovery, but also ecosystem restoration, as the Tasmanian devil plays a crucial role in maintaining ecological balance. As apex predators, devils help control feral cats and foxes, which pose a severe threat to native species. As scavengers, Tasmanian devils also reduce the spread of disease by clearing away carcasses. The 400 ha sanctuary in Barrington Tops provides a safe environment where the animals will be able to establish territories, breed and interact as they would in the wild. Researchers will monitor the devils using radio collars, camera traps and regular surveys. Over the next 2 years, conservationists are hoping to reintroduce six more key species essential for ecosystem restoration. These efforts could help inform conservation and reintroduction strategies worldwide.

Sources: New Scientist (2025) newscientist.com/article/2469406-the-bold-plan-to-bring-back-tasmanian-devils-across-mainland-australia & *Indian Defence Review* (2025) indiandefencereview.com/tasmanian-devils-return-to-australia-3000

Newborn cao vit gibbon in Viet Nam

Conservationists are celebrating a significant milestone in the fight to save the Critically Endangered cao vit gibbon *Nomascus nasutus*, following the sighting of a newborn in Viet Nam's Cao Bang forests. The infant, observed during routine patrols in November 2024, offers a glimmer of hope for a species once presumed extinct and now recognized as the world's second rarest primate. Recent surveys employing advanced monitoring techniques, including drone-mounted thermal imaging and acoustic vocal fingerprinting, have provided a more accurate estimate of the population, revealing only 74 individuals remain across 11 family groups. Despite the sobering numbers, the birth of this infant indicates potential for recovery. Fauna & Flora, in collaboration with local communities, has been instrumental in conservation efforts, establishing protected areas, conducting long-term monitoring and promoting sustainable livelihoods.

Source: Fauna & Flora (2025) fauna-flora.org/news/babies-treetops-newborn-cao-vit-gibbons

Siamese crocodiles released

In a significant milestone for crocodilian conservation, 10 juvenile Siamese crocodiles *Crocodylus siamensis* were released into Cambodia's Virachey National Park in March 2025, the first time the species has been reintroduced to the area. Located in the remote north-east of the country, Virachey borders Laos and Viet Nam. Siamese crocodiles have not been seen in this region for >20 years. Among the rarest crocodilian species in the world, there are <250 mature Siamese crocodiles estimated to remain in the wild. The species was thought to be extinct in Cambodia until a survey by Fauna & Flora in the Cardamom Mountains in 2000 uncovered a small surviving population. This discovery sparked the launch of the Cambodian Crocodile Conservation Project, which includes a captive breeding programme aimed at reintroducing the species to the wild. Each of the released crocodiles was fitted with an acoustic telemetry transmitter that emits soundwaves detectable by receivers placed around the release sites. Conservationists will later retrieve the receivers to analyse the data and assess whether Virachey is a suitable location for future releases.

Source: Mongabay (2025) news.mongabay.com/2025/03/siamese-crocodile-release-into-the-wild-marks-conservation-milestone-in-cambodia

Sihek lay first eggs on new island home

Sihek, an Endangered bird species recently returned to the wild, have laid eggs on their new Pacific island home. These are the first wild eggs for the species in almost 40 years. Nine young Sihek, also known as Guam kingfishers, hand-reared by zookeepers, were released at The Nature Conservancy's Palmyra Atoll Preserve in September 2024 by the Sihek Recovery Program, a global collaboration of conservationists dedicated to rewilding these magnificent, colourful birds. The eggs indicate the birds have flourished since their arrival. Sihek were decimated when the brown treesnake was accidentally introduced to Guam in the 1940s.

Source: The Zoological Society of London (2025) zsl.org/news-and-events/news/bird-species-lost-wild-lays-first-eggs-new-island-home

Has the Moo Deng craze helped wild pigmy hippos?

Moo Deng is a baby pygmy hippo who became an internet sensation in 2024. Despite Moo Deng's viral fame, which included appearances on Saturday Night Live and a theme song in Thai, conservationists report that this popularity has not translated into tangible benefits for pygmy hippos in the wild. Moo Deng was born at the Khao Kheow Open Zoo in Thailand and quickly captured the hearts of millions with her playful antics, and the zoo saw a significant increase in visitor numbers. However, the species is Endangered, with $<2{,}500$ individuals left in the wild and some emphasize that although Moo Deng's fame has raised awareness, it has not so far led to increased funding or direct conservation efforts for wild pygmy hippos. There is still a need for more substantial support and action to protect the elusive species. The Khao Kheow Open Zoo is working on partnerships to support research in the wild, but the impact of Moo Deng's popularity on effective conservation efforts remains to be seen.

Source: Mongabay (2025) news.mongabay.com/2025/02/has-the-moo-deng-craze-helped-wild-pygmy-hippos-at-all-analysis

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