#### SPOTLIGHT ON RIGHTS AND LOCAL PEOPLE

# Briefing paper: restitution of protected areas to Indigenous communities

Indigenous communities in Africa are increasingly assertive about the need to have their customary ownership and custodianship of forests recognized by the state. This includes their forests currently under government ownership and management. A new briefing paper published by the Forest Peoples Programme in March 2023 looks at 20 countries around the world where restitution to communities has already taken place or is proactively demanded. African Indigenous peoples and governments can take inspiration from these examples to adapt and apply them to their own contexts. The publication is part of a series of briefing papers that offers case studies, testimony, research and analysis from the Forest Peoples Programme and its partners. The publications examine the current state of the relationship between conservation and Indigenous peoples and local communities, exposing challenges and injustices linked to conservation operations, and showcasing practical, positive ways forward.

Source: Forest Peoples Programme (2023) forestpeoples.org/en/transformingconservation/03-decolonisation-land-relations

#### Environmental and Indigenous groups sue over Alaska oil drilling project

A group of environmentalists have filed a lawsuit against the Biden administration's approval of the Willow oil and gas drilling project in Alaska, arguing that the government failed to consider the climate risks and potential harm to wildlife. The USD 8 billion project opens three new drilling areas in the remote wilderness of Alaska's western North Slope and is estimated to be capable of producing c. 600 million barrels of oil over its 30-year lifespan. The lawsuit, filed on behalf of a coalition of environmental and Indigenous groups, called on the U.S. District Court for the District of Alaska to revoke the approval because the federal government failed to consider the project's indirect and direct climate risks, as well as harm to subsistence hunting, and to wildlife such as denning polar bears.

Source: Scientific American (2023) scientificamerican.com/article/ environmental-and-indigenous-groupssue-over-willow-oil-drilling-project

### Indigenous women in Colombia record age-old knowledge of bees

A team of 36 Indigenous Yucuna women from the Miriti-Parana Indigenous Reserve in the Colombian Amazon are rescuing and documenting the remaining oral knowledge on bees and their roles in the ecosystem, along with the traditional classification system. Through visiting communities and speaking to elders, they are documenting tales and songs to gather bee names, characteristics, behaviours, roles in crop fields and the places where bees build hives. The aim is to classify the bees according to the cultural system of the Yucuna-Matapí, Tanimuca-Letuama and Tuyuca-Macuna peoples. The collected stories, songs, illustrations and scientific information will be part of a brochure that will be available in Spanish and Yucuna language, to be used in communities and local schools to raise awareness on the importance of protecting bees.

Source: Mongabay (2023) news.mongabay. com/2023/02/indigenous-women-recordage-old-knowledge-of-bees-in-colombiasamazon

#### Rights-based approach to conserving Liberia's biodiversity agreed

In February 2023, > 70 stakeholders representing > 25 national, international and community-based organizations converged in Buchanan City (Gbehzohn in Bassa language), Liberia, for a Conservation Area and Land Dialogue. The goal was to provide a harmonized rights-based approach to the establishment of protected areas while ensuring compliance with the Land Rights Act of 2018. This act was the first time in the country's history that customary rights of local communities had been given full legal recognition. However, opinions are divided as to whether the law has been properly implemented with respect to the role of communities in the establishment of protected areas. The major decisions of the event are captured in the Gbehzohn Declaration, which includes the recognition of local communities as central to advancing the conservation of biodiversity. The Declaration also recognizes that Liberia can meet its 30% national forest conservation target through innovative means beyond the creation of government-controlled protected areas. Source: Front Page Africa (2023) frontpageafricaonline.com/news/gbehzohndeclaration-conservationists-and-landrights-proponents-agree-on-a-rights-basedapproach-to-conserving-liberias-biodiversity

#### **Inclusive conservation partnering**

World Wildlife Day was held on 3 March 2023. The celebration was established in 2013 to honour the day on which CITES was signed in 1973, thus this year marked the 50th anniversary of the international agreement. This year's theme highlighted partnerships for wildlife conservation, to celebrate the people who are working to protect wild fauna and flora and raising awareness of the benefits of that work. The respect that Indigenous Peoples and local communities have for their ancestral lands, and their intimate knowledge of the many animals and plants that live alongside them, have made them the best protectors of their natural surroundings. Groups of Indigenous Peoples and local communities, supported by The Inclusive Conservation Initiative, lead numerous projects globally that contribute to the conservation of rare and threatened species.

*Source: IUCN* (2023) iucn.org/story/202303/ world-wildlife-day-2023-inclusiveconservation-partnering-protectincalculable-value

## Indigenous forests are some of the Amazon's last carbon sinks

A new analysis finds that forests managed by Indigenous Peoples in the Amazon were carbon sinks during 2001-2021, collectively removing a net 340 million t of carbon dioxide from the atmosphere per year. Forests outside Indigenous lands, however, were collectively a carbon source because of significant forest loss. The research emphasizes the need to support Indigenous Peoples and local communities to safeguard their forest homes and preserve some of the Amazon's remaining carbon sinks. For Indigenous Peoples, their land is a primary source of food, medicine, fuel, construction materials, employment, income, welfare, security, culture and spirituality. Research shows that lands managed by Indigenous Peoples have lower deforestation rates. Although many Indigenous communities have successfully shielded their forests from development and other pressures, threats are mounting. Urgent actions needed to protect Indigenous forests include recognizing community lands in climate strategies, securing and protecting community lands and increasing funding to communities.

Source: World Resources Institute (2023) wri.org/insights/amazon-carbon-sinkindigenous-forests

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Oryx, 2023, 57(3), 277–282 © The Author(s), 2023. Published by Cambridge University Press on behalf of Fauna & Flora International doi:10.1017/S003060532300039X https://doi.org/10.1017/S003060532300039X Published online by Cambridge University Press

#### **INTERNATIONAL**

# Ocean treaty: historic agreement reached after decade of talks

In March 2023, after decades of negotiations, UN member countries agreed the first ever treaty to protect the world's oceans that lie outside national boundaries. The High Seas Treaty aims to help place 30% of the sea into protected areas by 2030, to safeguard and restore marine biodiversity. The negotiations had been held up for years over disagreements on funding and fishing rights. The last international agreement on ocean protection was signed in 1982: the UN Convention on the Law of the Sea. That agreement established an area called the high seas-international waters where all countries have a right to fish, ship and carry out research-but only 1.2% of these waters are protected. The new High Seas Treaty establishes marine protected areas in these high seas, putting limits on how much fishing can take place, the routes of shipping lanes and exploration activities such as deep-sea mining. One of the key negotiations concerned the fair sharing of marine genetic resources-biological material from plants and animals that can have benefits for society- between richer and poorer nations. Countries will need to meet again to formally adopt the agreement and substantial work will then be required to implement it.

*Source: BBC* (2023) bbc.co.uk/news/ science-environment-64815782

# British dogs trained to help protect pangolins in Thailand

Two crime-fighting canines named Buster and Bess are to join the team of experts from the Zoological Society of London who are protecting Critically Endangered pangolins in Thailand. The labradors graduated from a training programme with the Metropolitan Police in the UK and will complete their training in Thailand before working alongside conservationists, border force operatives and in-country law enforcement. The dogs are being trained to recognize the scent of pangolins, so that they can sniff out live pangolins being smuggled through airports, ports and roads. Live pangolins are being trafficked all across Thailand, mainly by road, and some vehicles used for smuggling have purpose-built concealed areas to transport the animals. The hope is that with the help of the dogs, such hidden pangolins can be discovered, rescued and eventually released back into the wild. Source: ZSL (2023) zsl.org/news-andevents/news/british-dog-duo-protectcritically-endangered-pangolins

### Sperm whales are being pushed out of their preferred habitat

By analysing centuries-old whaling logs, a new study has revealed how sperm whales in the West Indian Ocean now appear more commonly in deeper ocean basins and near remote islands, rather than along the coastlines of East Africa, Madagascar and the Arabian Peninsula where they were often found in the past. Researchers compared records of North American whalers operating during 1792-1912 with modern scientific surveys, to examine changes in the distribution of these whales in the West Indian Ocean. The study indicates that sperm whales are showing characteristics of so-called refugee species: animals and plants that have been pushed out of their preferred habitat, typically by human activity, and are now confined to areas where it is harder for them to survive. In the past, sperm whales were hunted for their blubber and the waxy oil in their head, causing their population to decline by over two-thirds in < 300 years. Although commercial hunting no longer occurs, the whales are still vulnerable to entanglement in fishing nets, boat collisions and pollution. Studying their current distribution helps researchers determine how they can best be protected. Sources: Conservation Biology (2023) doi.org/10.1111/cobi.14043 & ZSL (2023) zsl.org/news-and-events/news/whalesforced-abandon-historic-coastal-homes

# Significant increase in unregulated squid fishing

Global squid fishing increased by 68% during 2017-2020, according to a new analysis, and almost all of the increase has occurred in unregulated areas. The study found that 86% of squid fishing now occurs in places with little or no scrutiny of catch sizes. The researchers analysed satellite imagery and vessel tracking data to see how many vessels are fishing for squid, and where and how often they operate. Squid fishing vessels are typically fitted with lamps to attract squid to the surface. These lamps are so powerful that they are visible from space, meaning satellite data, along with data from the ships' Automatic Identification System, can be used by authorities to monitor the location and course of registered vehicles. Unregulated fishing poses a significant challenge to fishery sustainability, especially for squid fisheries, which can cover entire oceans. Sources: Science Advances (2023) science. org/doi/10.1126/sciadv.add8125 & The

*Conversation* (2023) theconversation.com/ squid-fishing-grew-by-68-in-just-threeyears-raising-fears-the-industry-is-out-ofcontrol-200943

#### Amazon deforestation linked to reduced snow in Tibet

Research has found that deforestation in the Amazon Rainforest may have knock-on effects for climate in distant regions, potentially pushing key climate parameters close to critical tipping points. Climate is controlled by a complex network of interactions between the Earth's atmosphere, ocean, land, ice and biosphere. Many elements of this system, including the Amazon Rainforest, Antarctic ice sheets, Arctic permafrost and the Great Barrier Reef, are being pushed towards tipping points. To investigate how these different elements may be interconnected, researchers analysed 40 years of hourly near-surface air temperature measurements across a global grid of > 65,000locations. The network of data allowed scientists to investigate how changes in one region ripple through the system to affect other parts of the globe. There was a strong correlation between temperature anomalies in the Amazon Rainforest and the Tibetan Plateau, c. 15,000 km apart. Computer models showed that future extreme climate events in the regions are likely to be synchronized. Sources: Nature Climate Change (2023) doi.org/10.1038/\$41558-022-01558-4 & Mongabay (2023) news.mongabay.com/ 2023/03/amazon-deforestation-linked-toreduced-tibetan-snows-antarctic-ice-lossstudy

# Human infrastructure in 80% of global biodiversity sites

In the first ever assessment of the presence of infrastructure in Key Biodiversity Areas (KBAs), researchers found that infrastructure is widespread globally within these sites. Infrastructure is one of the greatest threats to biodiversity, causing habitat destruction and fragmentation, pollution, increased disturbance and hunting, direct mortality and the spread of invasive species. Researchers from BirdLife International, WWF and the Royal Society for the Protection of Birds, in association with the University of Cambridge, have conducted the assessment of > 15,000 KBAs. They found that infrastructure was present in 80% of the sites, with roads, power lines and urban areas being the most common types of infrastructure. The researchers are concerned that extensive mining and extractive infrastructure is planned to be built in many of the most important sites for biodiversity.

Sources: Biological Conservation (2023) doi. org/10.1016/j.biocon.2023.109953 & The University of Cambridge (2023) cam.ac.uk/ research/news/at-least-80-of-the-worldsmost-important-sites-for-biodiversity-onland-currently-contain-human

#### **EUROPE**

#### A remarkable year for Arctic foxes

After coming close to extinction in Norway and Sweden, with only 40-60 individuals left just over 20 years ago, the Arctic fox has made a remarkable recovery. For the species, 2022 was a record year, with 164 new fox litters registered by the Swedish Environmental Protection Agency. In addition, 88 puppies became adults during the year and researchers estimate there are now over 550 fully grown Arctic foxes in Sweden, Norway and Finland. The strong recovery has been thanks to a number of reasons, one of which being a good supply of small rodents, the Arctic fox's main food. Other conservation measures have included supplementary feeding and the removal of competing red foxes. It is hoped that these combined measures will continue to yield results and further strengthen the Arctic fox population.

Source: Warp News (2023) warpnews.org/ human-progress/record-number-ofnew-arctic-foxes-in-2022

# Robotic bird created to study animal communication

An interdisciplinary team founded by the Human Frontiers Science Program (HFSP) has developed a robotic zebra finch, called RoboFinch, to study the sensory cues that songbirds need to learn their song. By creating robotic models that closely resemble real-life counterparts, researchers can study animal behaviour with stimuli that can be manipulated in a way that would be impossible with live animals. As the RoboFinch allows full experimental control over auditory and visual cues, the researchers are now able to investigate whether seeing how sound is produced is important for learning to sing. The robot produces beak movements that can be exactly matched to the presented song at a high speed, suitable for the zebra finch's highly acute vision. To validate the RoboFinch, the team raised young chicks alongside the robot, throughout the sensitive phase for song learning. They found that the zebra finches, although often careful with new objects, approached the RoboFinch immediately and sang at it. When RoboFinch sang or moved, the birds appeared to listen to it. The researchers hope to use the robot to gain insights into how experience affects the development of vocal behaviour. Sources: Methods in Ecology and Evolution (2023) doi.org/10.1111/2041-210X.14063 & British Ecological Society (2023) britishecologicalsociety.org/robotic-birdcreated-to-study-animal-communication

### Hundreds of lynxes to be hunted in Sweden

Sweden has issued licences to hunters to kill a total of 201 lynxes, weeks after dozens of wolves were killed in the country's biggest wolf cull in modern times. The number of licences to kill lynxes throughout March was more than double the number in recent years. Conservationists have warned that the lynx population in Europe could collapse unless immediate efforts are made to protect the animals. Tests on the remaining individuals in France show that their genetic diversity is so low they will become locally extinct within the next 30 years if there is no intervention. There are around 1,450 lynxes in Sweden, c. 300 fewer than 10 years ago, but the Swedish environmental protection agency, Naturvårdsverket, argues that Sweden only needs 870 animals to maintain a healthy population. Lynxes are hunted using dogs, and the EU Habitats Directive specifies that hunting may be allowed either to prevent damage to livestock or in the interests of public safety, but experts have suggested that it is questionable that either of these conditions apply to the lynx. Source: The Guardian (2023) theguardian. com/environment/2023/mar/02/ hundreds-of-lynx-to-be-hunted-insweden-following-biggest-ever-wolf-cull

### Critically Endangered turtles hatch at Jersey Zoo

Six Critically Endangered Madagascar big-headed turtles, known as Rere in Malagasy, have hatched at Durrell Wildlife Conservation's Jersey Zoo for the first time. A clutch of nine eggs was laid, of which six successfully hatched in late 2022. The juveniles measured c. 3 cm in length when they emerged from the egg but soon doubled in size. The rare turtle is Madagascar's only endemic freshwater turtle and the largest species of turtle on the island. Significant threats to the species include the hunting of turtles and eggs and the loss of wetland habitat. The Zoo's breeding pair was offered in 2019 by Kadoorie Farm and Botanical Garden, which had taken the turtles on after they had been confiscated from smugglers by Hong Kong authorities. Durrell's Head of Herpetology, Matt Goetz, said: 'This is not only significant for our team but is also only the second time a European zoo has had offspring by this species. The hatchlings here will enable us to develop more husbandry insights to advise our Malagasy colleagues at our turtle captive breeding centre in Madagascar.' Source: Durrell Wildlife Conservation Trust (2023) durrell.org/news/critically-

endangered-turtles-hatch-at-jersey-zoo

### Funding boost for Dartmoor's rainforests

The rare and ancient forests of Dartmoor, UK, are to be restored thanks to GBP 38 million of funding from the private sector. Insurance provider Aviva have provided the funds to The Wildlife Trusts as part of a wider programme of nature-based projects to remove carbon from the atmosphere. The project will improve biodiversity and climate resilience by restoring wild places including British temperate rainforests. The allocation of the funds had not yet been confirmed at the time of writing, but a large portion was expected to be heading to Dartmoor to restore some of the best examples of temperate rainforest left in England, such as Fingle Woods, Bovey Woods and Wistman's Woods. Temperate rainforests once covered 20% of the UK, along the west coast of Britain, but the habitat was largely farmed and grazed out of existence over thousands of years, and now covers just 1% of the country. These rare habitats are some of the most biodiverse areas in Europe.

Source: Mid Devon Advertiser (2023) middevonadvertiser.co.uk/news/ dartmoors-forests-expected-to-receivefresh-funding-from-multi-million-poundrainforest-recovery-fund-593002

## Orca appears to adopt (or abduct) a young pilot whale

Researchers have documented the first case of apparent cross-species parental behaviour among whales. A female orca was seen swimming alongside a small long-finned pilot whale calf in Iceland in 2021. The orca, who was showing protective behaviour, appeared to care for it. The calf was, however, in poor condition, and when the orca was spotted again in 2022, the calf was not with her. The researchers have suggested a number of possible explanations for the sighting, one being that the orca came across the stray pilot whale calf and adopted it as a substitute calf. Another possibility is that the orca abducted the calf. Pilot whales will chase off orcas in Icelandic waters, possibly in response to food competition or a perceived predation risk, but in 2022 the researchers have seen this specific pod of orcas retaliating. The study suggests that the now calfless orca may have been repeatedly approaching the pilot whales to try to find another calf she could take, and that's why the pilot whales were chasing her off. The team are collecting data every year on the social interactions between these two species in the hopes of learning more.

Sources: Canadian Journal of Zoology (2023) doi.org/10.1139/cjz-2022-0161 & Live Science (2023) livescience.com/orca-appears-toadopt-or-abduct-a-baby-pilot-whale

#### AFRICA

# Conservation missions to save Earth's biggest frog...

When Cedrick Fogwan, a Cameroonian conservationist, first encountered a goliath frog, he was so impressed by the animal's mighty proportions that he set up a project to fight for the future of the species. For decades, the goliath frog has been hunted for food and the pet trade in Cameroon and Equatorial Guinea. Because of hunting and habitat loss, the species is now categorized as Endangered on the IUCN Red List. Despite the frog's threatened status, many people in Cameroon are unaware of its value to the ecosystem, such as preving on the insects that damage crops. The conservation team, supported by the Conservation Leadership Programme, works with hunters to persuade them to become citizen scientists, recording sightings of the frog rather than hunting it for consumption. They are also helping to set up snail farming to provide an alternative source of food. This work is beginning to pay off, with the goliath frog returning to the Mount Nlonako Reserve in Cameroon. Source: BBC (2023) bbc.co.uk/news/ science-environment-64745722

## ...the world's most trafficked mammal...

The University of Oxford, UK, has announced that it is joining Operation Pangolin, a bold initiative to save the world's most trafficked wild mammals. Tackling the illegal trade is an urgent conservation priority as pangolin populations in Central Africa are under increasing pressure from offtake for local use and international trade of their meat and scales, both of which are highly prized for use as food and in traditional medicine. Operation Pangolin aims to develop pangolin-specific monitoring methods and interventions to prevent illegal trafficking. The research team will work with local stakeholders, including Indigenous Peoples, local communities, wildlife crime authorities and government agencies. They will monitor pangolin populations with new technologies and develop sustainable conservation solutions with deep understanding of the social and ecological networks through which pangolins are harvested. The project also aims to use insights from conservation criminology to prevent the illegal harvesting and trafficking of pangolins, as well as machine learning and artificial intelligence to prevent wildlife crime involving pangolins by uniting data streams and creating predictions.

*Source: Cherwell* (2023) cherwell.org/2023/ 02/23/operation-pangolin-the-quest-tosave-the-worlds-most-trafficked-mammal

### ... and one of Africa's rarest waterbirds

The white-winged flufftail Sarothrura avresi is one of the rarest and most elusive of all waterbirds. Flufftails, all nine species belonging to the genus Sarothrura, are tiny waterbirds endemic to Africa. They are all shy, and white-winged flufftails are rarely seen in the wild. Consequently, little is known about this species, which occurs only in Ethiopia and South Africa and is categorized as Critically Endangered on the IUCN Red List. Before effective conservation strategies can be developed, thorough surveys must be conducted to ensure that the optimal locations are protected. To this end, newly developed motion-detector camera traps, specifically designed to detect the birds in their reedbed habitats, were deployed in several wetlands in South Africa, with the aim to complete data collection and publish results in 2024. Raising awareness among residents, farmers and businesses also forms part of the conservation efforts, as do public fundraising campaigns and management of cattle grazing in the fragile wetlands. Source: BirdLife International (2023) birdlife.org/news/2023/02/21/an-africanenigma-conserving-one-of-the-worldsrarest-waterbirds

## Rare footage of forest elephant fleeing artificial bee sound

Rare footage of a Critically Endangered forest elephant Loxodonta cyclotis fleeing from an artificial bee sound has been captured by a camera trap in Liberia. The footage, filmed during a trial by elephant research and conservation group ELRECO, shows a large male foraging in a forest near farmland. As he starts to approach the community boundary, he triggers a remote sensor and activates a hidden audio tool called a Buzz Box. The device emits the sound of agitated bees buzzing, causing the elephant to stop foraging, turn on his heels and swiftly move away. This suggests that Buzz Boxes may be effective in keeping elephants safely outside farms and could help mitigate human-elephant conflict. The Buzz Box technology was developed specifically for savannah elephants to prevent the pachyderms from using crops. The device is charged by a small solar panel and can be attached to trees or fence posts. The idea was inspired by a beehive fence project, which has an 80% success rate of keeping elephants out of farms and has been adopted in 23 countries across Africa and Asia. Source: Save The Elephants (2023) savetheelephants.org/about-ste-2/pressmedia/?detail=rare-footage-shows-criticallyendangered-forest-elephant-fleeing-newtech-generated-bee-sound-in-liberia

#### Mysterious songbird rediscovered in Madagascar

After eluding ornithologists for 24 years, the dusky tetraka, a small olive and yellowthroated bird, has been rediscovered by an expedition team searching the tropical forests of north-eastern Madagascar. The team found the species in two different remote sites, one in December 2022 and one in January 2023. The last documented sighting of the bird was in 1999, making it one of the top 10 most wanted species in the Search for Lost Birds, a collaboration between Re:wild, American Bird Conservancy and BirdLife International. The two dusky tetrakas found spent the majority of their time in dense vegetation close to the river, presumably looking for insects and other prey in the damp undergrowth. The bird closely resembles a more common species, the spectacled tetraka, and is often misidentified. Prior to the trip, the expedition team had reviewed all historical records of the species, dating back nearly a century, to be sure they could positively identify the bird if they found it. The team hope to visit additional sites where the species may be present to understand its distribution and conservation status.

Source: Re:wild (2023) rewild.org/press/ found-mysterious-songbird-rediscoveredin-madagascar-after-eluding

#### Anti-poaching success in Campo Ma'an as baby chimpanzee rescued

Campo Ma'an National Park, Cameroon, is home to > 80 mammal species, including Endangered chimpanzees. However, the biodiverse landscape is also often targeted by poachers. During a routine patrol, rangers came across a group of poachers who fled the scene, leaving behind a live baby chimpanzee who had been destined for a nearby pet market. The rescued chimpanzee was transferred to Limbe Wildlife Centre, a rescue, rehabilitation and release facility for animals orphaned by illegal wildlife trade in Cameroon, and was named Niété, after the place of her rescue. During 2020-2022, rangers in the Park carried out > 320 antipoaching patrols, covering 20,346 km for over 2,362 patrol days. These efforts led to 16 arrests linked to poaching and 6,836 wire snares being confiscated, along with shotguns, ammunition and wild meat. The African Wildlife Foundation, who are supporting the Park's anti-poaching efforts, work with communities to change their perception of conservation and provide incentives to prevent illegal, ecosystemdegrading activities.

Source: African Wildlife Foundation (2023) awf.org/news/anti-poaching-successcampo-maan-baby-chimp-rescued

### AMERICAS

# Jaguar news: thriving illegal online trade...

A report from the Wildlife Conservation Society analysed online trade of jaguar parts, revealing that most trade is happening in Latin America with little or no response from law enforcement. A team of researchers reviewed online archives of social media sites and online marketplaces for posts related to jaguar sales between 2009 and 2019, in seven languages across 19 countries. They found that 230 posts related to the illegal buying or selling of jaguar parts had been made across 31 platforms during the 10-year period. Searches conducted in Spanish vielded the highest number of results, making up > 50% of all posts. Posts in Chinese were also common because China is a top destination for jaguar parts, which are used for decoration, jewellery and medicinal practices. Teeth were the most traded body part, followed by skins. Online posts are mostly by small-scale sellers and take place less frequently than sales organized by larger criminal groups, but the report highlights there is a missed opportunity for governments to crack down on illegal activity that is relatively easy to trace.

Source: Mongabay (2023) news.mongabay. com/2023/02/the-illegal-jaguar-trade-isthriving-online-why-arent-governmentsstopping-it

#### ... and new births in El Impenetrable National Park

Two new jaguar cubs have been born in El Impenetrable National Park, Argentina, contributing to efforts to recover the species in the region. The new cubs are the product of the second meeting of Tania, a captive female, and Qaramta, one of the few wild jaguars known to live in the Argentine Chaco. Three cubs were born, but the smallest passed away a few days later. The jaguar pair had a previous pair of cubs together in 2021, both of which are living in independent pens until they can be released into the Park. The births are the result of a joint effort between Rewilding Argentina, the National Parks Administration and the Government of Chaco, to reverse the extinction of the species and contribute to their genetic variability in the region. There are no known recent records of female jaguars in the area and therefore the only possibility for Qaramta to reproduce and contribute to the population is currently by breeding with captive females. Source: Rewilding Argentina (2023) rewildingargentina.org/nacimientoyaguaretes-parque-nacional-elimpenetrable-chaco

### Invasive zebra mussels are hitchhiking on fish

Zebra mussels Dreissena polymorpha are one of the most catastrophic aquatic invasive species in North America. Native to Russia and Ukraine, these small molluscs have spread around the world, often carried in ballast water as larvae. They have caused enormous damage to fisheries, water treatment facilities and other aquatic industries by clogging intake pipes and robbing nutrients from ecosystems. Now, researchers have discovered that they are hitchhiking on fish. The scientists were assessing fish communities in a lake in south-eastern Ouebec in 2022 when they found a zebra mussel attached to a lake chub Couesius plumbeus, a minnow c. 12 cm long. This is the only time a nonlarval freshwater bivalve has been observed attached to a fish. The mollusc had latched onto the minnow using byssal threads, which they also use to attach to plants, rocks and concrete. The discovery is particularly concerning because fish are highly mobile and cannot remove such parasites, which could help the mussels spread even faster. Lake chub and similar species are often used as bait by anglers, which means they are frequently carried from one body of water to another.

Sources: Biological Invasions (2023) doi.org/ 10.1007/s10530-023-03036-0 & Science (2023) science.org/content/article/onenorth-america-s-most-dangerous-invasivespecies-hitchhiking-fish

## Conservation groups drop Audubon name in commitment to anti-racism

The National Audubon Society is considering finding a new name as a number of its local groups dropped the Audubon name to draw a line under their association with the ornithologist John James Audubon, who traded slaves and subscribed to race science. Portland Audubon Society announced its intent to drop the name, explaining that the Portland and wider Audubon community had only recently woken up to 'the fact that John James Audubon enslaved and sold black people, opposed the abolition of slavery, and dug up and stole the human remains of Native Americans from their graves'. They urged the National Audubon Society to begin a renaming process, to 'make a strong statement toward the network's commitment to racial equality'. The unaffiliated Audubon Naturalist Society has also changed its name and now goes by the name Nature Forward. Source: Bird Guides (2023) birdguides.com/ news/conservation-groups-drop-audubonname-in-commitment-to-anti-racism

### Deadly parasite threatens California sea otters

Conservationists are concerned about an unusual strain of Toxoplasma gondii that has been found in dead California sea otters. The parasite causes toxoplasmosis, typically leading to brain and heart inflammation in immune-suppressed animals. The recently affected animals had inflamed bumps throughout their body fat and unusual lesions in the pancreas and heart, but very few parasites in their central nervous system. This suggests they died quickly of an acute infection before the parasites could extensively invade their brain. Genetic analyses of the parasites involved in the recent otter deaths showed that they did not match any other known Toxoplasma samples from California wildlife. However, they did match samples taken from two cougars in Canada nearly 30 years ago. How this strain reached the California coast is unknown, as is its current distribution. The new strain complicates treatment of infected sea otters, which can sometimes be treated with drugs used for humans and domesticated animals. If the new strain of Toxoplasma kills as quickly as it seems to, animals may die before they get stranded and could potentially be treated, and also before they have a chance to reproduce, which could have a serious impact on their population. Source: Science (2023) science.org/content/ article/deadly-parasite-threatenscalifornia-sea-otters

# Growing support for campaign to protect Manitoba's Arctic coast

A campaign to see the coastal region of Canada's Western Hudson Bay designated a national marine conservation area, with the aim to help manage and protect beluga whales and their marine ecosystem, is gaining momentum. After years of research and community conversations, the campaign has garnered support from Manitobans, with > 6,300 people sending letters to their federal representatives. Along the shores of Western Hudson Bay, four major rivers spill into the ocean, creating biologically rich estuaries, home to numerous migratory species including seals, polar bears, seabirds, narwhals and beluga whales. Each year as the ice melts, tens of thousands of marine mammals congregate in the warm, shallow waters to give birth, moult, eat and socialize, making it a very important habitat. For generations, this vital ecosystem has also fed Inuit and First Nations communities who depend on the waters and surrounding area for sustenance.

Source: The Narwhal (2023) thenarwhal.ca/ hudson-bay-beluga-protection

#### ASIA & OCEANIA

#### Sydney's new rewilding site to welcome back locally-extinct species

For the first time in more than 100 years, eastern bettongs will be back in New South Wales, Australia, when they are reintroduced to Sydney's Yiraaldiya National Park, a 555-ha area free of feral predators. Eastern bettongs are small marsupials that are considered ecosystem engineers, playing a critical role in the ecosystem by digging and aerating soil in their search for food, creating niches for moisture, spores and seeds. After the initial founding population of up to 40 bettongs is reintroduced, the combined population across all three New South Wales Government coastal sites that are free of feral predators is expected to grow to more than 1,000 within the next decade. The pioneering group of bettongs will be translocated from Mulligans Flat Woodland Sanctuary, where they were reintroduced over 10 years ago. Cats and foxes are a big threat to native species such as bettongs, and are a key driver of extinctions. The reintroduction is the first of an ambitious programme to rewild ecosystems across New South Wales, potentially paving the way for the reintroduction of koalas, bandicoots and locally extinct reptiles. Source: New South Wales Department of Planning and Environment (2023) environment.nsw.gov.au/news/sydneysnew-rewilding-site-welcomes-back-locallyextinct-species

## United Arab Emirates and Oman sign environmental agreement

The United Arab Emirates' Ministry of Climate Change and the Environment and Oman's Environment Authority signed a preliminary agreement to drive sustainable development and boost cooperation in areas related to environmental protection, in March 2023. The Memorandum of Understanding was part of a visit by a United Arab Emirates delegation to Oman. During the visit, ways of enhancing cooperation in fish farming, achieving targets of netzero carbon emissions, mangrove plantation and the United Arab Emirates' preparations for the COP28 climate summit were discussed. As per the agreement, the two sides will exchange best practices and conduct joint research in the fields of environmental preservation, enhancing air quality, biodiversity conservation, achieving Sustainable Development Goals and preparing sustainable development progress reports. Source: Gulf Business (2023) gulfbusiness. com/uae-oman-sign-pact-to-boostenvironmental-efforts

### South African cheetahs arrive to start new lives in India

In February 2023, 12 cheetahs were translocated from South Africa to Kuno National Park in India. The felids will join eight individuals that came in from Namibia last year, as part of India's ambitious restoration initiative called Project Cheetah. The Indian government hopes to bring 50 cheetahs from Africa to India over the next 5 years. The last cheetah in the country reportedly died in 1947, and the species was declared extinct in India in 1952. As part of the current reintroduction effort, experts from Namibia and South Africa-the countries with the largest cheetah populationstrained Indian forest officers and wildlife experts on handling, breeding, rehabilitation, medical treatment and conservation of cheetahs. However, the ambitious project has been criticized by some leading wildlife scientists arguing that introducing African cheetahs to India is ill-advised. According to the critics, consultation with experts has been insufficient, and the project overestimates cheetah carrying capacity in Kuno National Park by not incorporating new research on cheetah home ranges and densities. Source: RFI (2023) rfi.fr/en/science-andtechnology/20230226-south-africancheetahs-arrive-to-start-new-lives-in-india

#### Fence along India–Bhutan border mitigates human–elephant conflict

An 18-km fence erected along the India-Bhutan border helps decrease humanelephant conflict, protecting over 10,000 people in 11 villages in Assam's Baksa district, India. The barrier, erected on the Indian bank of the Bornadi River, has led to a decrease in incidents of elephants from neighbouring Bhutan straying into the villages. Previously, elephants had caused large-scale devastation in the area, destroying farmlands and food stocks, and fatally injuring c. 6-7 people annually. To mitigate these impacts, conservationists, wildlife experts and administration officials decided to install a solar-powered fence that releases weak electric shocks upon contact. Crucially, the local communities affected were fully involved in the project, for example by contributing to the construction costs, forming fence maintenance committees and taking over responsibility for maintaining the fence. The situation has improved considerably in the 2 years since the fence has been erected, with villagers no longer living in fear of elephants. Source: Economic Times (2023) energy. economictimes.indiatimes.com/news/ renewable/solar-fence-along-india-bhutanborder-mitigates-human-elephantconflict/98437574

#### New population estimate for Philippine eagle

The Critically Endangered Philippine eagle Pithecophaga jefferyi, an endemic apex predator, is the national bird of the Philippines. However, there is a dearth of data on the extent of the raptor's range and its numbers in the wild. In a recent study, scientists from The Peregrine Fund and the Philippines Eagle Foundation have identified a total of 2.86 million ha of forest habitat suitable for the species, which they estimate hosts c. 392 breeding pairs. This exceeds previous estimates of 340 pairs in 2018 and 88-221 pairs in 1989. Within the major islands, the researchers identified several mountain ranges as priority conservation areas, narrowing conservationists' search for the remaining eagle families. These findings can help improve the effectiveness of decision-making for the conservation of the eagles. Sources: Animal Conservation (2023) doi. org/10.1111/acv.12854 & Mongabay (2023) news.mongabay.com/2023/03/new-mapboosts-philippine-eagle-populationestimate-but-highlights-threats

# Threatened wildlife available for selfies in Japan's animal cafés

In Japan, exotic animal cafes are popular with local people and visitors seeking novelty and opportunities for taking selfies with wild animals. In an exhaustive survey of 142 such cafes, researchers found 3,793 individual animals belonging to 419 different species, 52 of which are threatened with extinction. Nine of the exotic species they found, including Endangered slow lorises and Critically Endangered radiated tortoises, are strictly banned from international trade. Birds accounted for 62% of the species, and the researchers also recorded dozens of reptiles and mammals. At a typical cafe, individual animals of different species are crammed together in a small room where people are allowed to touch them while having a drink. This is stressful for the animals and poses a high risk of pathogen transmission. Sources: Conservation Science and Practice (2023) doi.org/10.1111/csp2.12867 & The New York Times nytimes.com/2023/03/17/ science/animal-cafes-japan-endangered. html

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