

SPOTLIGHT ON HUMAN— WILDLIFE INTERACTIONS

Elephants become collateral damage in the fight against crop-using boars

Crop use by wild boars is an increasing threat to livelihoods of small-scale farmers in Kerala, India. A government order exists that permits the killing of wild boars under stringent clauses, but many farmers view it as insufficient to address the problem, as it involves a complex and prolonged process. In the absence of easy legal measures to ward off wild boars, farmers look for alternatives that are often illegal, such as cable wires, neem cakes, barbed wires, bamboo fencings, fish nets and firecrackers. Such was the case involving the death of a pregnant wild elephant in Palakkad district in May 2020, which was widely reported and commented on in news and social media. Evidence suggests the elephant had consumed a coconut stuffed with a crude bomb to target wild boars. Wildlife experts say selective culling of boars could be a possible solution, but also call for reducing human disturbances in the buffer zones of forests and protected areas.

Source: *Mongabay* (2020) india.mongabay.com/2020/06/elephants-become-collateral-damage-in-the-fight-against-crop-raiding-boars

Rising waters of Lake Victoria worsen human–wildlife conflict

Kenya Wildlife Service is considering the relocation of hundreds of wild animals from Ndere Island National Park, as rising waters in Lake Victoria threaten the site. Experts have linked the swelling of the waters to climate change. The island, a popular tourist destination, is home to rare Sitatunga antelopes, water bucks, primates, impalas, zebras, warthogs, hippopotamuses and crocodiles. With a large part of their habitats submerged, some of the animals have migrated off the island and towards human settlements in search of food. This causes negative interactions with people, with reports of attacks from crocodiles, hippopotamuses and baboons, as well as crop damage. The community living next to the island has presented a petition to Kenya Wildlife Service, seeking compensation for the damage and asking for a ring fence to be erected around the Park.

Source: *The Standard* (2020) standardmedia.co.ke/article/2001376348/swelling-lake-worsens-human-wildlife-conflict

YouTube could be an effective wolf conservation tool

YouTube could help save wolves from hunters according to a new study that found people who watched positive videos about wolves became more tolerant of them. The study evaluated how a group of 273 people in the USA rated their tolerance for wolves before and after watching either a playlist of five different negative videos, a playlist of five different positive videos, or a neutral video. To measure their tolerance and acceptance of wolves the research team asked participants questions about their overall attitudes towards wolves, such as whether they thought wolves were ‘good’ or ‘bad’, and their level of acceptance of wolves in their state and near populated areas. Participants were also asked about their intended behaviours: whether they would be likely to act for or against wolves or their conservation. The results indicate many survey participants had positive attitudes, acceptance and behaviour intentions towards wolves prior to exposure to any videos, but positive videos could still improve attitudes and increase participants’ willingness to act for wolf conservation.

Sources: *Human Dimensions of Wildlife* (2020) doi.org/10.1080/10871209.2020.1773582 & *Independent* (2020) independent.co.uk/news/science/youtube-wolf-conservation-america-attitudes-ecology-psychology-a9581446.html

New Banff fence will zap bears that try to eat roadside dandelions...

Banff National Park in Canada is trying a new strategy to keep bears off the highway. The Park recently installed 5 km of electrified wire along fencing on the side of the Trans-Canada highway, east of the Banff townsite. Every summer, Park staff observe black bears climbing the fence to eat dandelions and berries on the other side. Staff have already removed berries and other food attractants from the highway side of the fence, and have replaced and upgraded fences to prevent animals burrowing underneath. Now, the new wiring, installed far from any human trails, will deliver strong but non-lethal zaps to encourage the bears to wander off in search of a safer place to cross. A team planned to assess the wire’s effectiveness over the course of the summer. They have also introduced warning signs and highway speed reductions in areas where bears tend to cross the fence, to remind drivers to stay alert.

Source: *CBC* (2020) cbc.ca/news/canada/calgary/banff-electric-fence-1.5604123

... and electric fences keep bears out in Armenia

In recent years, bears have regularly invaded farms in the Vayots Dzor region of Armenia, and local communities have suffered major harvest losses because of this. A balanced approach was required to prevent wild animals from entering agricultural areas, without deepening the human–wildlife conflict. A new programme has now introduced modern electric fencing systems to five affected communities in the Vayots Dzor region. The fences work with high voltage, but low power. As a result the animals are not harmed, but get a sense of discomfort and stay away from the fenced areas. The system consists of a solar panel, a microprocessor, a battery, a generator and a 300 m fence that is easy to assemble and dismantle. The fences are especially suitable for beekeepers who move beehives regularly during the year, and for farmers who go to distant pastures.

Source: *Aysor* (2020) aysor.am/en/news/2020/06/15/vivacell/1708929

Silverback mountain gorilla in Uganda killed by hunters

One of Uganda’s best known mountain gorillas, Rafiki, was killed in June 2020. Investigations showed that he died from injuries inflicted by a sharp object that penetrated his internal organs. There are just over 1,000 mountain gorillas left, and the Uganda Wildlife Authority described Rafiki’s death as a ‘very big blow’. The silverback, believed to be c. 25 years old when he died in Bwindi Impenetrable National Park, was the leader of a group of 17 mountain gorillas. This group was described as habituated, meaning that its members were used to human contact. The death of Rafiki leaves the group unstable and there is the possibility that it could disintegrate, which could negatively affect tourism. The mountain gorillas are a popular draw for visitors to the country and the Wildlife Authority relies on this for revenue. Rafiki himself was very popular with visitors. He went missing on 1 June and his body was discovered the following day. Four men have been arrested; they face a life sentence or a fine of USD 5.4 million if found guilty. One admitted they had been hunting smaller animals in the Park and that he killed Rafiki in self-defence when he was attacked.

Source: *BBC* (2020) bbc.co.uk/news/world-africa-53024073

INTERNATIONAL

Overpopulation one of 10 greatest threats to humanity

A new report identifies the 10 biggest threats to human survival and calls for urgent global action. The Commission for the Human Future is a body of scientists and concerned citizens who came together to share insights into planetary risks and ideas for building a safer, better future. The report, *Surviving and Thriving in the 21st Century*, a result of their first roundtable discussion, states that no government is currently prepared to tackle any of the major crises. The 10 listed major risks are natural resource depletion, mass extinction and ecosystem collapse, human population growth, global heating, pollution, increasing food insecurity, nuclear weapons, pandemics, dangerous new technologies, and denial and misinformation. Population growth increases emissions, pollution, biodiversity loss, emergence and spread of diseases, and shortages of food, water and other resources. The expected fourfold increase in the human population from 1950 to 2050 is a key driver of all catastrophic risks that humanity now faces.

Source: *Population Matters* (2020) populationmatters.org/news/2020/04/23/report-overpopulation-one-ten-greatest-threats-humanity

Climate change in deep oceans could be seven times faster by 2050

A new study showed that the rate of climate change in deep waters could be seven times faster by 2050, even if greenhouse gas emissions would be reduced noticeably. This will force marine organisms to move their habitat to maintain their preferred temperate conditions. The speed at which species need to move from one ocean layer to another as the waters get warmer is called climate velocity. The scientists studied the climate velocities of different layers of the ocean and concluded that contemporary climate velocities are greater in the deep ocean than at the surface. This suggests that although mitigation could limit climate change threats for surface biodiversity, deep-ocean biodiversity faces an unavoidable escalation in climate velocities, most prominently at a depth of 200–1,000 m.

Source: *Nature* (2020) doi.org/10.1038/s41588-020-0773-5 & *FirstPost* (2020) firstpost.com/tech/science/rate-of-climate-change-in-deep-waters-of-the-ocean-could-be-to-be-seven-times-faster-by-2050-even-if-we-reduce-emissions-8418361.html

Coronavirus puts spotlight on landmark year for nature

According to conservation groups, the Covid-19 pandemic has disrupted conservation work and funding, with potential repercussions for years to come. However, it is also an opportunity to push for stronger action to protect the natural world. Although lockdowns have been linked to a number of positive environmental changes, including wildlife reclaiming urban spaces, we know little about how large areas of the world that host vast quantities of biodiversity have been faring. There have been reports of illegal activities that are not being monitored or counted because of the coronavirus lockdown or reduced staff or funds. The impact of these activities on wildlife and biodiversity will not be clear until it can be assessed systematically once lockdowns end. 2020 was meant to be a landmark year for biodiversity, and new goals for protecting the natural world were due to be agreed in October at the UN Biodiversity Conference in Kunming, China. Although this has been postponed to 2021, now is the time for world leaders to set strong goals and highlight that biodiversity is integral to human health and well-being (see also pp. 431–432).

Source: *BBC* (2020) bbc.co.uk/news/science-environment-52648577

Silence is golden for whales as lockdown reduces ocean noise

In cities, human lockdowns during the coronavirus pandemic have offered some respite to the natural world, with clear skies and the return of wildlife to waterways. Now evidence of a drop in underwater noise pollution has led experts to predict the crisis may also be good news for whales and other marine mammals. Researchers studying real-time underwater sound signals from seabed observatories run by Ocean Networks Canada near the port of Vancouver found decreased levels of low-frequency sound associated with ships. They examined sound power—a way of measuring 'loudness'—in the 100 Hz range at two sites, one inland and one farther offshore, and recorded a significant drop in noise for both. The reduction in ship traffic in the ocean has had scientists racing to find out the effect on marine life. A previous study concluded that ship noise is associated with chronic stress in baleen whales and affects their calling behaviour.

Source: *The Guardian* (2020) theguardian.com/environment/2020/apr/27/silence-is-golden-for-whales-as-lockdown-reduces-ocean-noise-coronavirus

Three good things: animals that have staged an unlikely comeback

Imperilled blue whales around South Georgia, Notre Dame's bees and Colorado's wolves appear to be bouncing back from the brink. A team of researchers led by the British Antarctic Survey made 36 sightings of the Endangered blue whale *Balaenoptera musculus* during a 3-week survey in early 2020, identifying 55 animals. This is compared to just one sighting made during the 2018 survey. In Paris, three colonies of bees that survived the devastating fire of the Notre Dame cathedral in April 2019 are thriving, according to their keeper. The population, which is estimated to be 30,000–45,000 bees across three hives, has been living in the rafters of the cathedral since 2013. In Colorado, a bill proposing the reintroduction of the grey wolf is scheduled to be put to voters in November; polling indicates it is likely to pass. The species almost became extinct in the USA, but successful reintroduction programmes have already brought it back to some areas. Wolves boost biodiversity by changing the behaviour of other species: they keep large herbivores moving, which spares streamside plants, and provide leftover meals for scavenging eagles and bears.

Source: *Positive News* (2020) positive.news/environment/three-good-things-animals-making-a-comeback

Over 40 new species described in 2020 by Biodiversity Unit

It is estimated that 15 million different species live on our planet, but only 2 million are currently known to science. Discovering new species is important as it helps to protect them. So far this year, the researchers of the Biodiversity Unit at the University of Turku, Finland, have described 17 new spider species, 23 insects, one millipede and one monitor lizard. The new species have been discovered from the Amazon, Europe, India, the Middle East and the Pacific islands. In addition to the species, the researchers have also described four new genera previously unknown to science. Among the new discoveries is a spider from Iran, whose colouring resembles the face paint of the movie character Joker. *Loureedia phoenixi* was thus named after actor Joaquin Phoenix, who played the Joker in a 2019 movie. In recent years the Biodiversity Unit in Turku has described dozens of new species per year, hoping to draw people's attention to the life of these unique species and thus promote biodiversity conservation.

Source: *Phys.org* (2020) phys.org/news/2020-07-species-group.html

EUROPE

Funding boost to crack down on illegal wildlife trade...

Protected species across the globe including tigers, Asian elephants and chimpanzees were given a boost in May as the UK government announced GBP 3.4 million for new projects from the Illegal Wildlife Trade Challenge Fund. Illegal wildlife trade is a criminal industry worth more than GBP 17 billion per year, threatening wildlife, bringing species to the brink of extinction and causing despair for communities. The Fund supports projects that tackle illegal wildlife trade by strengthening law enforcement, reducing demand for illegally traded wildlife products and empowering people to shift away from illegally trading wildlife to more sustainable livelihoods. The latest round of the Challenge Fund will support important wildlife conservation projects across the globe, including five in Asia, two each in Africa and South America and one in Europe. To date, the Challenge Fund has supported 85 projects to a value of more than GBP 26 million.

Source: UK Government (2020) gov.uk/government/news/funding-boost-to-crack-down-on-the-illegal-wildlife-trade

... and EU pledges to raise EUR 20 billion per year to boost biodiversity

The European Commission has committed to protecting 30% of the EU's land and oceans by 2030 as part of the European Green Deal, a 10-year plan focused on conserving biodiversity. Some sections of the plan act in opposition to the EU's Common Agricultural Policy, a significant and positive change in tone from the targets of 2010. They prioritize high-diversity landscapes (e.g. buffer strips) and policies (e.g. cutting pesticide use by 50%). To fund this ambitious plan, which has received sceptical approval from environmental groups, the commission aims to raise at least EUR 20 billion per year. The stating of a specific funding amount is regarded as a positive step, although it is at the lower end of what is necessary. However, implementation and enforcement continue to be major problems. Although legally binding targets have been promised for EU member states, previous legislation has failed because of a timid attitude to prosecuting. Conservation NGOs agree this needs rectifying for the plan to cause real change.

Source: *The Guardian* (2020) theguardian.com/environment/2020/may/20/eu-pledges-20bn-a-year-on-boosting-biodiversity-ae

UK crane population reaches its highest level for over 400 years

The common crane *Grus grus* was lost from the UK for nearly 400 years, but thanks to conservation efforts population numbers have once again hit record levels. These birds were historically quite common and were frequent fixtures at medieval feasts, but a combination of hunting and wetland decline led to their extinction in the UK in the 1600s. In 1979, a small number of wild cranes returned to Norfolk and conservation groups have been working together to encourage more birds to return to the country. They have now spread to other areas of the UK, benefitting from improved habitats. Cranes recolonized Scotland in 2012 and Wales in 2016. In 2010, the Great Crane Project joined the movement. The project creates and improves existing habitat, as well as hand-rearing young birds for release on the Somerset Levels and Moors. These conservation efforts have yielded impressive results, with 56 pairs recorded in the UK last year. Of these, up to 47 pairs attempted to breed and they raised 26 chicks. The total population is now believed to be over 200 birds, which is a new record.

Source: RSPB (2020) rspb.org.uk/about-the-rspb/about-us/media-centre/press-releases/crane-success

The battle to keep Albania's protected areas protected

Albania is a country rich in nature, boasting some of the last stretches of pristine Adriatic coastline, but less rich economically. As the country develops and aspires for EU membership, its protected areas are coming under threat. One example is Divjaka-Karavasta National Park, home to 260 bird species, 18 of which are globally threatened. A private investor, together with public authorities, proposed a plan to build an extensive tourist facility within the Park. An NGO coalition led by the Albanian Ornithological Society provided strong opposition to the development, eventually ensuring its rejection. However, around the same time, two Albanian government ministries initiated a revision process that would reduce coastal protected area size by an average of 22%. Again, an NGO coalition was formed, this time with 21 organizations voicing their opposition, forcing the government to reconsider their plans. Further threats include a proposed airport development at the Key Biodiversity Area of Narta, but encouragement can be taken from the growing strength of Albanian NGOs.

Source: *Birdlife* (2020) birdlife.org/worldwide/news/battle-keep-albanias-protected-areas-protected

Wild donkeys set to roam free in the Danube Delta region once again

The Tarutino Steppe is an 8,000 ha swathe of grassland on the northern edge of the Danube Delta in Ukraine. In May 2020 a herd of 20 kulan and 8 fallow deer were transported 550 km to be reintroduced to the Steppe. They are being acclimatized in a 31 ha fenced enclosure before being released to freely roam in an environment from which they have been absent for hundreds of years. The kulan is a subspecies of Asiatic wild ass that once ranged from the Mediterranean to Mongolia's eastern border. Overhunting and habitat loss reduced their range by 95%, making this reintroduction an exciting prospect as the first step in a programme to establish a viable herd in the area by 2035. The animals will fill an important ecological niche as they graze, keeping the steppe in its natural grassy state, reducing fire risk from excess vegetation and enhancing food chains. Their reintroduction is part of a large-scale rewilding process occurring throughout the Danube Delta. As a part of the Endangered Landscapes Programme, Rewilding Ukraine also plans to release saiga antelopes, Tauros—an ancient type of cattle—and demoiselle cranes over the next 2 years.

Source: *Rewilding Danube Delta* (2020) rewilding-danube-delta.com/news/kulan-comeback-wild-donkeys-set-to-roam-free-in-the-danube-delta-region-once-again

First brown bear in 150 years in national park in northern Spain

A brown bear has been spotted in a National Park in north-west Spain for the first time in 150 years. Footage of the bear was captured by camera traps set up by a crew shooting a film in the Invernadeiro National Park, in the sparsely populated Ourense province in Galicia. In it, the male bear can be seen foraging for food and engaging in a night-time back-scratching session. The movie's production company, Zeiton Films, said the bear was 3–5 years old, and it was likely the first to have crossed the area since 1870. According to rangers advising the filmmakers, the bear probably spent the entire winter in the region, after heading south from the Sierra de Caurel mountains. In an effort to conserve brown bears, the species received protected status in Spain in 1973. This, however, has not stopped local farmers in the Pyrenees complaining about their presence. In 2018, a group of them organized a blockade in an attempt to stop a female bear arriving from Slovenia.

Source: *Independent* (2020) independent.co.uk/news/world/europe/brown-bear-spain-national-park-galicia-invernadeiro-a9497331.html

AFRICA

New film spotlights female anti-poaching warriors of Zimbabwe

A new short documentary tells the story of Akashinga, the all-female anti-poaching unit in Zimbabwe that is facing down poachers and saving wildlife. *Akashinga: The Brave Ones*, with three-time Academy Award winner James Cameron as executive producer, premiered at the EarthxFilm Festival held virtually during 22–27 April to celebrate the 50th anniversary of Earth Day. It is a National Geographic Documentary Films production. Akashinga, founded by former Australian special forces soldier and anti-poaching leader Damien Mander, is a women-only team of rangers fighting poaching. They are fiercely committed to protecting Africa's most vulnerable species and to securing a positive future for their communities. According to National Geographic Documentary Films, the women are drawn from the abused and marginalized and are revolutionizing the way animals are protected and communities are empowered. The film is a celebration of courage, conservation and unorthodox thinking that is leading to positive change.

Source: *Plant Based News* (2020) plantbasednews.org/culture/james-cameron-film-female-anti-poaching-unit-zimbabwe

Coronavirus: fears for future of chimpanzees in Nigeria

The Whitley Fund for Nature award-winning conservationist Rachel Ashegbofe Ikemeh says she fears for the future of some of the world's most threatened chimpanzees. Devastated by hunting and deforestation, they now face a threat from coronavirus. The forests of south-western Nigeria harbour populations of the most vulnerable of all chimpanzee groups, the subspecies *Pan troglodytes ellioti*. Approximately 100 chimpanzees live in two forested areas, making up a distinct and particularly threatened population. Ashegbofe Ikemeh will use the money from her award to work with the government to establish conservation areas and advocate for tougher wildlife protection laws. Despite the news of a new reserve in the Ise Forest having recently been approved by Nigeria's Ekiti state government, she fears for the chimpanzees' future if coronavirus strikes. It is not known whether great apes can contract the virus, but precautionary measures are being taken. Gorilla tourism in Africa has been suspended and sanctuaries for other apes such as orangutans have closed to the public.

Source: *BBC* (2020) bbc.co.uk/news/science-environment-52471595

The cat's whiskers: new way of counting lions could boost conservation

Scientists face a major problem in their efforts to conserve lions: good population estimates are scarce. Alexander Braczkowski is among a group of researchers refining a new method of understanding not just how many African lions there are, but how they move and where they might be thriving. Braczkowski put the method to the test during a year spent monitoring and filming lions in the Queen Elizabeth conservation area in Uganda. Here, lions have an unusual habit of spending the day-time in trees. Braczkowski used this opportunity to photograph the lions' whisker patterns. The places on the face where the whiskers emerge form a pattern that is unique to each lion. Observers can thus be more confident they are not counting the same animal twice, which leads to more accurate population estimates. The team hopes this approach could be adopted more widely.

Sources: *Frontiers in Ecology and Evolution* (2020) doi.org/10.3389/fevo.2020.00138 & *The Guardian* (2020) [theguardian.com/environment/2020/jun/21/the-cats-whiskers-new-way-of-counting-lions-could-boost-conservation-efforts](https://www.theguardian.com/environment/2020/jun/21/the-cats-whiskers-new-way-of-counting-lions-could-boost-conservation-efforts)

Space technology is helping conservation efforts in Africa

At the Balule Nature Reserve in South Africa, rangers were using decades-old maps to track down poachers. They patrolled the entire 400 km² area, with limited success. In 2014 the Reserve recruited consultant Tom Snitch, who brought in satellite imagery outlining features such as game trails and watering holes. It was the first time the rangers saw an overhead view of the park they patrolled every day. The rangers stuck coloured pins onto the map to mark the spots where they had found a dead elephant, rhino or lion. They identified clusters of pins, all within c. 160 m of some roads outside the Reserve. It became clear that the poachers were driving on the road outside the Reserve's fence, looking in to spot potential target animals. They would then wait until nightfall, cross the fence and kill the animals. In response, rangers started to focus on patrolling the road. If they found animals within 160 m of the road at the end of the day, they encouraged them back into the bush. This was a success: poaching stopped almost immediately.

Source: *Devex* (2020) [devex.com/news/space-tech-is-helping-conservation-efforts-better-inform-development-in-africa-97328](https://www.devex.com/news/space-tech-is-helping-conservation-efforts-better-inform-development-in-africa-97328)

Working with traditional healers to end vulture poaching

African vulture populations have plummeted catastrophically over the last 50 years, with some species declining by as much as 97%. Seven of the eleven African vulture species are at risk of extinction. In West Africa there is high demand for vulture parts, primarily driven by belief-based uses. Vulture heads are thought to contain mystic powers and are used for traditional charms and medicine. Vultures are also sold as food, and their eggs are believed to cure various ailments. In response to the decline of these threatened birds in Nigeria, the Nigerian Conservation Foundation has been engaging traditional healers with the aim of raising awareness about plant-based alternatives to vulture parts. Beginning in October 2019, these meetings have been held in the northern states of Sokoto Kano and Yobe, and the southern state of Ogun. More than 80 traditional healers have taken part in these events. The goal of these workshops is the development of a manual to guide progressive, wildlife-friendly traditional medicine practices such as the use of plant-based medicine alternatives. The manual will be published in local languages to make it as accessible as possible.

Source: *BirdLife* (2020) [birdlife.org/africa/news/working-traditional-healers-end-vulture-poaching](https://www.birdlife.org/africa/news/working-traditional-healers-end-vulture-poaching)

First African pygmy seahorse species discovered

A new species of seahorse the size of a grain of rice was spotted in an underwater photograph taken off eastern South Africa. The African or Sondwana Bay pygmy seahorse *Hippocampus nalu* is one of seven species of pygmy seahorse, five of which are found within the Coral Triangle in the south-western Pacific, and one in Japan. This is the first of its kind observed in the Indian Ocean and off the African continent, 5,000 miles from its nearest cousins. Unlike its relatives, found in calm waters around coral reefs, this species was found living in turf-like algae and sand, exposed to large swells in Sondwana Bay. The African pygmy seahorse exhibits similar morphological features to other pygmy seahorses, although it is set apart by sharp-tipped spines on its back. The authors who described this new species highlight the find as evidence of how little we still know about marine life, and suggest there are probably more pygmy seahorses yet to be discovered.

Source: *National Geographic* (2020) [nationalgeographic.com/animals/2020/05/new-pygmy-seahorse-species-discovered-africa](https://www.nationalgeographic.com/animals/2020/05/new-pygmy-seahorse-species-discovered-africa)

AMERICAS

Forests in the USA are threatened by foreign pests and diseases...

From a deadly fungus that showed its face in 1904 on an American chestnut in the Bronx to a nematode recently found to kill American beeches in Ohio, forests in the USA have faced more than 100 years' worth of attacks from introduced pests and pathogens. A new study suggests the impact is severe, accounting for one-quarter of all tree deaths in forests of the eastern USA over the past 3 decades. That death toll is probably far higher than the mortality caused by introduced species during 1940–1989, and also currently much bigger than any known effect of climate change. Some foreign insects and pathogens have proved extraordinarily destructive, wiping out tree species—or even entire genera—as functioning members of forest ecosystems. To limit the spread of invasive species, advocates have urged state and federal agencies to impose tighter biosecurity measures, from bans on imports of potentially risky plants to stiffer penalties for shippers whose cargo is found to contain live pests.

Source: *Science* (2020) [sciencemag.org/news/2020/05/deadly-imports-one-us-forest-25-tree-deaths-caused-foreign-pests-and-disease](https://www.sciencemag.org/news/2020/05/deadly-imports-one-us-forest-25-tree-deaths-caused-foreign-pests-and-disease)

... and a deadly virus is killing wild rabbits in North America

A deadly virus is spreading quickly among wild rabbits in south-western North America. Rabbit haemorrhagic disease virus first spread worldwide in the 1980s, devastating domestic rabbit populations in China and Europe, and feral rabbits in Australia. Populations began to recover, but then a new strain emerged in France in 2010 that also kills wild species. The new strain is less deadly in adults, but unlike its predecessor it also kills young rabbits. The virus has killed 60–70% of rabbits in populations in the Iberian Peninsula, which in turn has affected predators that depend on rabbits: the Spanish imperial eagle declined by 45% and the Iberian lynx by 65%. In North America, all species of lagomorph, which includes rabbits, hares and pikas, could be susceptible. Biologists have described the outlook as 'unbelievably bleak' and fear that the virus could have a severe impact on some species that are already struggling. Only two species of North American lagomorph are considered stable; the rest are declining because of threats such as climate change and habitat degradation from livestock grazing.

Source: *Science* (2020) [sciencemag.org/news/2020/05/deadly-virus-killing-wild-rabbits-north-america](https://www.sciencemag.org/news/2020/05/deadly-virus-killing-wild-rabbits-north-america)

Funding approved for new projects in Latin America and Caribbean

In June 2020, the Global Environment Facility approved more than USD 27 million for projects to be implemented by the governments of five countries in Latin America and the Caribbean, with the support of the Food and Agriculture Organization of the United Nations. Three country projects and one bi-national project will support communities to conserve marine biodiversity, improve the sustainability of food chains, reverse land degradation, boost sustainable food production and improve public and private management of water resources. In Peru, a new project will focus on sustainable management and restoration of the dry forest of the country's north coast, and Mexico will see the development of a strategy to strengthen sustainable fishing, aiming to safeguard marine biodiversity and food security. Uruguay and Brazil will work on integrated watershed management, and Nicaragua will transform food systems in the protected areas of the biological corridors of the southern Caribbean coast and the San Juan River.

Source: *The Santiago Times* (2020) [santiagotimes.cl/2020/06/05/global-environment-fund-approves-27mln-for-new-projects-in-latin-america-and-caribbean](https://www.santiagotimes.cl/2020/06/05/global-environment-fund-approves-27mln-for-new-projects-in-latin-america-and-caribbean)

Expanding Canada's biggest port will be a blow to wildlife

A new environmental assessment raises concerns about the proposed new container terminal at Vancouver's Roberts Bank. The addition would double the size of the artificial island holding the port and increase the number of container ship berths from four to seven. Among the environmental impacts of the increased ship traffic would be a reduction of the habitat for the area's 72 remaining southern resident killer whales, and decreased availability of chinook salmon, their favoured prey. The expansion would fragment the chinooks' habitat and be a physical barrier to the migration of juveniles, forcing them away from the coast into the open ocean. It would also bring increased noise levels, affecting whales and migratory and resident birds. In addition, the mudflats adjacent to the terminal would become less nutritious for birds that feed there. The report will be considered by Jonathan Wilkinson, the federal minister of environment and climate change, who has until November 2020 to make a decision about whether the project should go ahead.

Source: *Hakai Magazine* (2020) [hakaimagazine.com/news/expanding-canadas-biggest-port-will-be-a-blow-to-wildlife](https://www.hakaimagazine.com/news/expanding-canadas-biggest-port-will-be-a-blow-to-wildlife)

New hope for migratory shorebirds in Guatemala...

In recent years, scientists became gravely concerned about diminishing bird populations returning to nesting grounds in the Arctic. They traced the likely impacts to losses along the birds' migration route and in 2016 identified Guatemala's Pacific coast as a gap in our knowledge about migratory stopovers. The country's marshes, swamps, estuaries and tidal flats are being transformed for highly profitable salt and shrimp farms, which affects the viability of the entire migration route. Thus an international collaboration started to introduce conservation management for shorebirds in farming and aquaculture communities. If salt and shrimp farms are appropriately managed, they can become alternative habitats for shorebirds. Scientists study how birds use these artificial habitats and advise farmers on small tweaks that can offer protection for migratory birds. Sometimes, even an offshore shallow puddle or a planted strip of mangroves can be enough to make a difference for thousands of individual birds from dozens of species.

Source: *Scientific American* (2020) [blogs.scientificamerican.com/observations/new-hope-for-migratory-shorebirds](https://www.scientificamerican.com/observations/new-hope-for-migratory-shorebirds)

... and grey-breasted parakeets in Brazil

Grey-breasted parakeets were once widespread throughout the Atlantic Forest areas of north-eastern Brazil. However, 10 years ago this flamboyantly feathered bird was facing a bleak future, as deforestation and poaching had caused severe population declines and local extinctions. In 2012 a project funded by the Conservation Leadership Programme involved surveys over 4,000 km of forest roads and trails and c. 100 interviews with local people. Apart from one small remnant population, the researchers found no evidence of the birds. The alarming discovery resulted in a government-led Conservation Action Plan for the species. The team provided crucial artificial nest boxes and formed partnerships with residents who agreed to help them monitor the artificial nests on their properties and provide a round-the-clock watch against poachers. The team's strategy was successful: just three fledglings had been recorded in 2010 when the first 30 nest boxes were installed, but in 2019 the cumulative total number of fledglings reached 1,165—an average increase of c. 130 fledglings per year.

Source: *Conservation Leadership Programme* (2020) [conservationleadershipprogramme.org/news/fresh-hope-grey-breasted-parakeets-brazil](https://www.conservationleadershipprogramme.org/news/fresh-hope-grey-breasted-parakeets-brazil)

ASIA & OCEANIA

Sturgeon recovery in Georgia's Rioni River

A promising indication of reproductive success for the Critically Endangered ship sturgeon *Acipenser nudiventris* came in the form of two juvenile specimens identified in the Rioni River, Georgia, in a period of less than 1 month. The fish were caught and released in the spring of 2020, with the anglers reporting their finds to a citizen inspector involved in a conservation monitoring project set up by Fauna & Flora International (FFI) and its in-country partners. A lack of solid scientific research means that little is known about the ecology and distribution of the ship sturgeon, although the species' decline has been severe. Once widespread throughout Europe, sturgeon populations have been hit by a combination of overharvesting, poaching and the loss of traditional spawning grounds. The Rioni is one of the last remaining refuges for these fish, harbouring breeding populations of several species. The FFI team captured a third juvenile, possibly a Colchic sturgeon. FFI's collaborative project has worked to raise awareness and engage local communities in monitoring work to combat the threats to the sturgeon's survival.

Source: *Fauna & Flora International* (2020) fauna-flora.org/news/sturgeon-sensation-dramatic-double-discovery-fish-brink-extinction

Celebrating the first-ever World Albatross Day

The inaugural World Albatross Day was celebrated on 19 June 2020. Albatrosses can be found plying the South Atlantic and North and South Pacific Oceans. They are supremely adapted to life on the high seas, with wingspans of over 3 m, designed for extended gliding and sleeping on the wing. Their noses are equipped with airspeed sensors similar to those on airplanes. Their keen sense of smell guides them hundreds of miles to locate prey at the surface, where they are accessible to these non-diving birds. All of these evolutionary traits are critical to success in a vast, harsh and dynamic ocean. Historically albatrosses were killed for their feathers and meat, and they still face numerous threats today, such as bycatch in long line fishing, invasive species on nesting islands and plastic pollution. Fortunately these birds have proven responsive to conservation actions, and there are many stories of their recovery.

Source: *Audubon* (2020) audubon.org/news/celebrating-first-ever-world-albatross-day

Conservation of Iranian Wetlands Project finalized

The third phase of the Conservation of Iranian Wetlands Project, which outlines key strategies for the next 5 years, was approved as a document of cooperation between Iran and the United Nations Development Program. The project aims to focus on better management of wetlands in accordance with climate change, improving the management of natural resources and emphasizing the role of public participation and raising awareness. The third phase of the project started in June 2020. The project has been operating since 2005, with the aim of reducing or permanently eliminating threats to the wetlands and maintaining sustainability in general. Measures have been piloted in selected and important wetlands to introduce the experiences in the form of the ecological approach while establishing a new management system to implement it in other wetlands in Iran. There are 80 large and small wetlands in the country, with 24 sites designated as Ramsar sites, wetlands of international importance, of which there are 2,290 worldwide. Of Iran's 24 sites c. one-third are under pressure or in a critical condition.

Source: *Tehran Times* (2020) tehrantimes.com/news/449067/Conservation-of-Iranian-Wetlands-Project-finalized

Call for rare tree's conservation decades after its declared extinction

The small, flowering tree species *Wendlandia angustifolia* has had a long history of going unnoticed. Scientists collected the first specimen in 1867 in Kalakad-Mundanthurai Tiger Reserve, India, then did not observe it again until 1917. After that, it remained unseen for another 81 years, but the observation in 1998 was not published until 2000, 2 years after it was declared Extinct on the IUCN Red List. Now we finally know how many individuals exist, how they are doing, and whether they are in need of protection. Researchers found 1,091 individual trees growing along seven streams in the Tiger Reserve. The population is small, with few mature trees, and there are continued threats from flooding and drought. The researchers are preparing a note to the IUCN to finally change the species' status from Extinct to Endangered. The recategorization could inspire new conservation efforts to preserve this rarely seen tree.

Sources: *Journal of Threatened Taxa* (2020) doi.org/10.11609/jott.5148.12.4.15468-15474 & *The Revelator* (2020) therevelator.org/india-rare-tree

Red pandas tracked by satellite

Conservationists are satellite tracking Endangered red pandas *Ailurus fulgens* in the mountains of Nepal to find out more about the threats to their survival. There are only a few thousand left in the eastern Himalayas and south-western China. Ten red pandas have been fitted with GPS collars to monitor their movements in the forests near Mount Kangchenjunga. The six females and four males are being tracked and photographed using camera traps in a project involving scientists, veterinarians and government officials in Nepal, and the Red Panda Network. Habitat loss is the primary threat for the species. Conservationists hope the study over the course of 1 year will give valuable data about how to better protect the remaining populations. Source: *BBC* (2020) bbc.co.uk/news/science-environment-53016616

China raises protection for pangolins by removing scales from medicine list

Pangolin scales have been removed from an official listing of ingredients approved for use in Traditional Chinese Medicine. The move was lauded by animal protection groups as a key step in stamping out trade in the scaly anteater, the world's most trafficked mammal. As many as 200,000 pangolins are consumed annually in Asia for their scales and meat. Over 130 t of scales, live and dead animals were seized in cross-border trafficking busts last year, a figure estimated to represent up to 400,000 animals. All eight species of pangolin are protected under international law and three of the four native to Asia are categorized as Critically Endangered IUCN Red List, including the functionally extinct Chinese pangolin. The delisting from the Traditional Chinese Medicine pharmacopoeia comes after the country's State Forestry and Grassland Administration raised the pangolins' protection status to the highest level in June.

Source: *The Guardian* (2020) theguardian.com/environment/2020/jun/09/china-protect-pangolins-removing-scales-medicine-list-aoe

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