Briefly

SPOTLIGHT ON SEAS AND COASTS

Seabirds along south coast of England enjoyed breeding success in 2020

The 2020 breeding season was a success for seabirds nesting along England's south coast, reports the Royal Society for the Protection of Birds. The sandwich tern colony at Pagham Harbour raised a record 164 chicks, thanks to ideal nesting sites created by the Society's staff and volunteers. One of UK's rarest breeding seabirds, the little tern, also did well. The summer of 2020 saw some of the highest tides ever recorded, and many visitors after the easing of lockdown, posing challenges for Pagham Harbour's little terns. Fencing and signage, and patrols of nesting sites, made sure the birds had the space they needed. Fifteen chicks fledged, the best result in > 4 years. The coast at Chesil Beach, Dorset, saw the largest number of breeding pairs since work began in 2009, with more than 30 chicks fledging. Other areas and species, such as common terns and Mediterranean gulls, also benefitted from targeted conservation work.

Source: BirdGuides (2021) birdguides.com/news/south-coast-seabirds-enjoy-huge-success-in-2020

Restoring the reef at Ste Anne Marine National Park

The Marine Conservation Society Seychelles has started a large-scale coral reef restoration project in Ste Anne Marine National Park, aiming to improve food security and livelihoods, and to mitigate the effects of coastal erosion. Corals have been damaged by bleaching events in the Park, which is managed by the Seychelles National Park Authority. The Society, a local NGO established in 1997, promotes conservation of marine and coastal ecosystems through various programmes. The project team is using a method called coral gardening, a form of asexual coral propagation. Fragments of coral are collected from donor colonies or wild populations and transported to a nursery, where they are grown for 9–12 months. Constant monitoring, maintenance and cleaning are required during this time to prevent harmful algae from settling. During the 6-year project, the Society will be restoring 0.5 ha of degraded coral reef.

Source: Seychelles News Agency (2021) seychellesnewsagency.com/articles/14597/Marine+Conservation+Society+Seychelles+restoring+reef+at+Ste+Anne+Marine+National+Park

New funding to protect Australia's marine life

In April 2021, the Federal Government of Australia announced AUD 100 million funding to improve the health of the oceans. Conservationists welcomed the funding commitment as a vital and promising package of measures to address some key threats such as the loss and degradation of coastal habitat and the capture of wildlife in commercial fishing nets. The funding package includes > AUD 30 million for projects that aim to restore and protect coastal ecosystems including mangroves, salt marshes and seagrasses, which are important to many iconic Australian species. Nearly AUD 40 million are allocated to projects that will improve management, restoration and research in marine parks, and AUD 5 million for measures to avoid bycatch of threatened species. Indigenous people have been custodians of Australia's oceans for thousands of years, and are essential to ensuring long-term, sustainable management. This is also recognized in the funding announcement, which will help to incorporate Sea Country in Indigenous Protected Areas in nine places around Australia.

Source: Australian Marine Conservation Society (2021) marineconservation.org.au/marine-conservationists-welcome-vital-100m-for-our-oceans

Tristan da Cunha becomes leader in ocean conservation. . .

Home to c. 260 people, Tristan da Cunha is the world's most remote island community, located in the Southern Atlantic Ocean between South Africa and Argentina. The Island Council is working to create a marine protected area (MPA) by ratifying its November 2020 commitment to ban harmful activities such as bottom-trawling, tuna fishing, and deep-sea mining from its Exclusive Economic Zone. At almost 700,000 km^2, the MPA will cover 91% of the massive swath of ocean under Tristan de Cunha's jurisdiction, making it the largest no-take zone in the Atlantic, and a haven for the island's incredible biodiversity, much of which is endemic or threatened. Supported by the UK's Blue Belt programme, the new MPA will bring Britain's total overseas protected marine areas to 4.3 million km^2, at a time when the government faces criticism over its failure to effectively protect waters closer to UK shores.

Source: Landscape News (2021) news.globallandscapesforum.org/51227/tristan-da-cunha-becomes-leader-in-ocean-conservation

. . . and UK launches ocean monitoring system to protect biodiversity

The UK government has announced the launch of a pioneering network of underwater camera rigs to collect data on marine life across the British Overseas Territories. Part of the government's Blue Belt programme, the network of 66 stereo-baited remote underwater video stations will include stations in the 10 territories of Pitcairn, Ascension, St Helena, Tristan da Cunha, British Indian Ocean Territory, Cayman Islands, the British Virgin Islands, Anguilla, Montserrat, and Rothera survey station in British Antarctic Territory. The 4-year programme—named the Global Ocean Wildlife Analysis Network—is expected to cost GBP 2 million and will provide video footage and data on marine life in the Caribbean, South Atlantic, Indian, Pacific and Southern Oceans.

Source: UK Government (2021) gov.uk/government/news/fish-eye-lenses-uk-launches-worlds-largest-ocean-monitoring-system-to-protect-wildlife-and-biodiversity

Rising sea levels are creating ghost forests of coastal trees

Sea level rise driven by climate change is making wetlands wetter and saltier in many parts of the world, with dramatic effects on coastal forests. Saltwater seeps into wetland soils and moves through groundwater when freshwater levels are depleted, such as during droughts. Through canals and ditches, propelled by wind and high tides, saltwater penetrates further inland. As the trees die, more salt-tolerant shrubs and grasses move in to take their place. Throughout coastal North Carolina, USA, evidence of forest die-off is everywhere. The region has suffered a rapid and widespread loss of forest, with cascading impacts on wildlife, including the Critically Endangered red wolf and red-cockaded woodpecker. Wetland forests sequester and store large quantities of carbon, so forest die-offs also contribute to further climate change. As global sea levels continue to rise, coastal woodlands around the world could suffer major losses from saltwater intrusion. Many in the conservation community are rethinking land management approaches and exploring more adaptive strategies, such as facilitating the inevitable transition of forests into salt marshes or other coastal landscapes.

Source: PBS NewsHour (2021) pbs.org/newshour/science/rising-sea-levels-are-creating-ghost-forests-of-coastal-trees

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INTERNATIONAL

Arctic ice loss forces polar bears to use more energy to survive

Polar bears and narwhals are using up to four times as much energy to survive because of major ice loss in the Arctic. Once perfectly evolved for polar life, apex predators are struggling as their habitats shrink and unique adaptations become less suited to an increasingly ice-free Arctic. Polar bears are primarily sit-and-wait hunters, adapted to catching seals at their breathing holes, and narwhals have evolved to dive very deep for prey without making fast movements. Now, however, they are having to work much harder to stay alive. Polar bears feed mainly on the energy-rich blubber of ringed and bearded seals, but this food source is harder to come by. The sea ice on which they hunt has shrunk by 13% every decade since 1979. Studies show that polar bears now swim for an average of 3 days to find seals, or search for less energy-dense terrestrial food sources, forcing them to travel greater distances. The decline of polar bears and narwhals is likely to have a knock-on effect on other ice-dependent mammals and their prey, leading to rapid changes in the entire Arctic marine ecosystem.
Sources: Journal of Experimental Biology (2021) doi.org/10.1242/ jeb.228049 & *The Guardian* (2021) theguardian.com/world/2021/feb/24/arctic-ice-loss-forces-polar-bears-to-use-four-times-as-much-energy-to-survive-study

Bottom trawling may release as much carbon as air travel

Bottom trawlers collect fish and shrimp from the oceans by dragging massive, weighted nets across the seafloor, destroying corals, sea sponges and anything else in their path. This alters the sea bed's structure, chemistry and ecology in ways that may take decades or centuries to heal. A new study found that bottom trawlers churning up the seafloor release a gigaton of carbon dioxide per year, equal to the entire aviation industry's annual emissions. The marine sediments that bottom trawlers stir up are the largest storehouse of carbon globally. When this stored carbon dissolves, it contributes to ocean acidification and reduces the ocean's ability to absorb carbon dioxide from the atmosphere. Some portion of this released carbon may also enter the atmosphere.
Source: Smithsonian Magazine (2021) smithsonianmag.com/smart-news/bottom-trawl-fishing-releases-huge-amounts-carbon-180977288

Rivers and lakes are the most degraded ecosystems

Rivers, lakes and wetlands globally are threatened by dams, pollution, habitat loss, sand mining, climate change and the introduction of invasive species. A report by 16 conservation organizations shows that freshwater ecosystems have become the most degraded habitats. There are at least 18,075 freshwater fish species, but freshwater vertebrate populations have declined by 86% since 1970, and almost one-third of freshwater fish species are now threatened with extinction. River protection has long been considered part of terrestrial conservation, although evidence suggests that protecting land areas does not necessarily benefit the rivers and lakes within them. But now freshwater issues are becoming more prominently featured on the conservation agenda. Examples come from Montenegro, where the government designated the lower reaches of the highly biodiverse Zeta River as a nature park, and New Zealand, the first country to grant a specific river legal rights and treat it like a living entity. Bangladesh has done the same with all of its rivers, and the city of Toledo, USA, passed the Lake Erie Bill of Rights to protect the lake's shores.
Source: National Geographic (2021) nationalgeographic.co.uk/environment-and-conservation/2021/03/rivers-and-lakes-are-the-most-degraded-ecosystems-in-the-world

Land could be worth more left to nature than when farmed

The economic benefits of protecting nature-rich sites such as wetlands and woodlands outweigh the profit that could be made from using the land for resource extraction, according to a new study. Scientists analysed 24 sites in six continents and found the asset returns of ecosystem services such as carbon storage and flood prevention created by conservation work was greater than manmade capital created by using the land for activities such as forestry or farming food crops. More than 70% of the nature-rich sites studied were found to be worth more in net economic benefits to people if they were left as natural habitats, and all forested sites were worth more with the trees left standing. The researchers pointed out that many ecosystem services are still not easily evaluated economically, and the results are likely to be conservative estimates.
Sources: Nature Sustainability (2021) nature.com/articles/s41893-021-00692-9 & *The Guardian* (2021) theguardian.com/environment/2021/mar/08/land-could-be-worth-more-left-to-nature-than-when-farmed-study-finds-aoe

Border walls threaten species trying to escape climate change

A new study shows that border walls and fences could obstruct species moving to new areas as climate change shifts their habitats. The researchers modelled the 2070 climate niches of c. 80% of land-based mammals and birds, based on low to high levels of greenhouse gas emissions, and compared the new niches to a map showing international borders. In the highest emissions future, they found that over half of all mammals and birds would see at least 20% of their niche cross a border by 2070. This is especially problematical for non-flying animals confronted with borders that are fortified with walls or fences: these barriers would prevent a total of 696 mammal species from moving with their ideal habitat. The physical barriers that pose the greatest threats to wildlife in the context of climate change are the USA–Mexico border, the Russia–China border and the border fence currently being built between India and Myanmar.
Sources: Proceedings of the National Academy of Sciences of the United States of America (2021) doi.org/10.1073/pnas.2011204118 & *Treehugger* (2021) treehugger.com/borders-harm-non-human-climate-refugees-5113757

Red alert for threatened trees

Trees regulate our climate and provide air, habitat, food and shelter for millions of species, including our own. With 2021–2030 being the UN Decade on Ecosystem Restoration, we are witnessing enormous tree-planting efforts. The 2020 World Economic Forum in Davos spawned a new global commitment to grow, restore and conserve one trillion trees. However, landscape-level afforestation in the form of indiscriminate tree planting may do more harm than good. Choosing the right species in the right place is crucial for ensuring resilient forest, as is safeguarding what remains of our existing, irreplaceable old-growth forests. No amount of mass tree planting will compensate for the rampant destruction of our remaining tropical and temperate forests. Many threatened—and often neglected—tree species play a fundamental role in their respective ecosystems, but $>$ 11,000 of the 60,000 known tree species are threatened with extinction, with $>$ 2,000 categorized as Critically Endangered. Focused conservation efforts are needed to protect these unique species, such as the Cape Verdean dragon tree, Niedzwetzky's apple in Kyrgyzstan (see also *Oryx*, 53, 415–423) or Saint Lucia's pencil cedar.
Source: Phys.org (2021) phys.org/news/2021-03-neglected-speciesred-endangered-trees.html

EUROPE

Britain's insects have both prospered and dwindled during the pandemic

In the silence of environments once bustling with human activity, some indoor insect populations have thrived over the past year. For example, a recent census recorded an 11% increase in insect pests across the UK's National Trust sites in 2020 as the absence of visitors has created the perfect environment for clothes moths, cluster flies, the Australian spider beetle, the common book louse and silver fish. Beyond historic soft furnishings and museum displays, insects have been affected by changed human behaviour in both positive and negative ways. Improved air and water quality as a result of reduced traffic are likely to have had a significant beneficial effect. The lockdown also resulted in non-essential activities such as grass-cutting being stopped, and more people have engaged in wildlife-friendly gardening, creating more habitat, shelter and food for insects. However, as lockdown was lifted last summer, eggs laid by insects in new habitats may have been destroyed by the resumption of grass-cutting. Overall there is little evidence of the pandemic having changed the long-term decline in insect numbers.

Source: iNews (2021) inews.co.uk/news/long-reads/bugs-virus-how-britains-insects-prospered-dwindled-covid-19-pandemic-909415

Iceland's largest bird-nesting cliff protected

One of Europe's largest bird-nesting cliffs and Iceland's largest bird nesting area, Látrabjarg, was officially protected in March 2021 by Iceland's Minister for the Environment. There has been an increase in tourists visiting the cliff, and it is therefore important to manage traffic and strengthen supervision of the area. Hundreds of thousands of birds breed on the cliff annually, including >160,000 nesting pairs of razorbills, which is half of the Icelandic population and one of the largest populations globally. Approximately 226,000 guillemot pairs, 118,000 thick-billed murres, 100,000 fulmar pairs, 50,00 puffin pairs and 32,000 pairs of kittiwakes also nest along Látrabjarg, which is located in the Westfjords region and is the westernmost point in Iceland. The signing to officially protect the area took place in collaboration with local communities, who have been calling for the cliff's protection for years.

Source: Iceland Review (2021) icelandreview.com/nature-travel/icelands-largest-bird-cliff-latrabjarg-protected

Grey partridge bucks Europe-wide decline on Berkshire estate

Grey partridge numbers are on the rise at the Englefield Estate in Berkshire, UK, as a result of a long-term conservation project. Across Europe the species has declined by 94% since 1980, but it has been shown that improving habitats for wildlife can quickly turn things around. Englefield's Grey Partridge Project has seen extensive work take place on farmland to create improved habitats for the species. New hedgerows have been established and 10,000 m of so-called beetle banks, raised mounds of earth sown with tussock grasses across arable fields. Strips of wildflowers are sown alongside them and unharvested cereal headlands are also grown. This habitat combination gives the partridges everything they need to thrive, as the banks create areas to nest, a stable food supply and protection from predators. The changes also benefit many other species such as insects and other birds. A recent count found 70 pairs of grey partridge on the Estate, compared to just two when the project was launched in 2009.

Source: Bird Guides (2021) birdguides.com/news/grey-partridge-bucks-europe-wide-decline-on-berkshire-estate

Italy gives go-ahead for turtle dove hunting this autumn

The Italian government has given its approval for industrial-scale hunting of European turtle doves to take place in the country this autumn. With c. 500,000 licensed hunters in Italy, the permitted quota of 15 doves per hunter during 1–21 September equates to 7.5 million birds. This is the majority of Europe's breeding population, which has declined rapidly across the region in recent decades because of excessive hunting and intensive agriculture. In 2015 the European turtle dove was categorized as Vulnerable, following a 78% decline since 1980. Although it is unlikely that the full quota could be shot, the government's consent suggests that this would be acceptable, despite the conservation concerns. The decision was made in April, when the government met with regional representatives to find an agreement on the protection of the species. The Italian Ministry of Ecological Transition, backed by the Italian National Institute for Environmental Protection and Research, supported a 4-year hunting ban, but the representatives of the regions and the Italian hunting federation have requested permission to continue shooting turtle doves.

Source: Bird Guides (2021) birdguides.com/news/italy-gives-go-ahead-for-turtle-dove-hunting-this-autumn

Brown bear population in the Pyrenees on the rise

The Brown Bear Network, in collaboration with Andorran and Spanish partners, has published a new report on the status of the brown bear *Ursus arctos* in the Pyrenees, along the border between France and Spain. A survey carried out in 2020 showed that the population was 64 individuals including 16 cubs, the highest record of newborn cubs in a year. The first two brown bears (out of a total of 11), originating from Slovenia, were introduced in the French Pyrenees in 1996 when the native population had reached less than 10 individuals. However, because of a strong local political opposition, the Slovenian bears were not released in the area where the native Pyrenees bears occurred. As a result, the native local population became extinct in November 2004, when the last individual was accidentally shot. Tensions between conservationists and local shepherds and hunters remain high, and two bears were shot dead and one poisoned in 2020.

Source: Office Français de la Biodiversité (2021) professionnels.ofb.fr/fr/doc/ours-infos-2020

Fishing and trade of wild sturgeon banned in Romania

Romania has taken a firm decision to indefinitely extend its ban on fishing and selling of all six wild sturgeon species and wild sturgeon products. The ban was initially limited to 5 years; the decision to extend it was supported by scientific evidence gathered during WWF's Life for Danube Sturgeon Project and follows a long campaign by WWF and other conservation organizations. Romania has now joined other countries in the region where sturgeon fishing has been permanently banned. Bulgaria remains the last country in the Black Sea Basin without a permanent ban in place, but it extended its temporary ban on sturgeon fishing in its Danube and Black Sea territory in January 2021 for another 5 years. An important condition of the bans in Bulgaria and Romania is the additional requirement for fishers to report sturgeon bycatch and release any caught individuals immediately, regardless of their state of health. This change is significant because it will enable more efficient enforcement and provide data on the volume and circumstances of bycatch. The ban also prohibits the use of any fishing equipment specifically designed for catching sturgeon, such as ohanas and karmaks.

Source: EU Reporter (2021) eureporter.co/politics/maritime/2021/04/27/conservation-success-fishing-for-wild-sturgeon-and-selling-wild-sturgeon-products-banned-indefinitely-in-romania

AFRICA

Pioneering women are changing wildlife conservation in Africa

Wildlife tourism has long been a male-dominated area, with men filling the more prestigious, higher-paying jobs and women mostly relegated to cooking and cleaning roles. But in the early 2000s, a handful of women defied the objections of friends, family and their communities to take on leading positions, and this female empowerment is growing across Africa. For example, Florence Kagiso became the first female safari guide at Botswana's luxury Chobe Game Lodge in 2004, and her success led to Chobe becoming the first lodge in Africa with a team of all-female safari guides by 2010. Dunia Camp in Tanzania has all-female staff, from rangers to the General Manager. Betty Ataitai, a member of the Maasai community in Kenya, became the country's first female safari guide in 2005, Ugandan wildlife guide Agatha Banura has founded a social enterprise that supports women in local communities, and Zimbabwe's Akashinga are all-female anti-poaching units that have helped reduce poaching by up to 80%.
Source: iNews (2021) inews.co.uk/inews-lifestyle/travel/iwd-women-wildlife-conservation-rangers-poaching-africa-international-womens-day-901686

Crackdown on rhinoceros poaching is starting to pay off

South Africa, Namibia, Kenya and Zimbabwe are home to 97% of African rhinoceroses. Poaching has declined since the historical peak in 2015, when 1,349 rhinos were killed across Africa: in 2018, the number of rhinos poached dropped below 1,000 for the first time in 6 years. Increased law enforcement has been cited as a main driver of this trend. African countries are increasingly considering poaching to be a problem affecting national socio-economic development, rather than only a conservation issue. Legislation has been toughened, with higher fines and longer prison sentences for convicted poachers. Data from CITES show that since 2015, there has been an annual increase in the weight of rhino horn seized per rhino poached—a metric that indicates more effective enforcement. In addition, investigations are becoming more sophisticated, dehorning programmes make rhinos less attractive targets for poachers, and the expanded use of specially trained dogs is helping to detect smuggled horn and other products.
Source: Geographical (2021) geographical.co.uk/nature/wildlife/item/3983-the-crackdown-on-rhino-poaching-is-starting-to-pay-dividends

Conservation criminology reveals the role of restaurants in the urban wild meat trade

Unsustainable and illegal trade of wild meat drives wildlife extinctions and can threaten ecosystem services, local food security and contribute to the risk of zoonotic diseases. The restaurant and catering sectors are key actors between consumers and suppliers of wild meat and thus play a central role in the supply chain. A new study applied a criminological approach to characterize restaurateur perceptions of urban wild meat consumption, identify wildlife species most at risk, and examine the differences between restaurants in Kinshasa, Democratic Republic of the Congo, and Brazzaville, Republic of the Congo. Participants of focus groups in both cities affirmed that in urban centers wild meat is considered a luxury item and sign of wealth. Monkeys were seen as a so-called hot product in both cities, but there was greater variety of hot wild meat products in Brazzaville. Middle-tiered restaurants identified pangolin and antelopes as being hot products, whereas monkeys were more popular upper and lower-tiered restaurants.
Source: Conservation Science and Practice (2021) doi.org/10.1111/csp2.368

First conference on African manatees

In April, scientists and environmental managers gathered virtually to discuss conservation of the African manatee, an elusive and little-studied species found in 21 nations. The species is considered vulnerable to extinction with < 10,000 individuals remaining in the wild. It is threatened by entanglement in fishing equipment, poaching and habitat loss. The 4-day conference brought together more than 75 specialists from 17 countries, including 11 African nations, to exchange research findings and lessons from the field. As a follow-up, the participants are planning a series of virtual meetings, lectures, and webinars covering specific topics, such as manatee genetics, the illegal wildlife trade, and the writing of research grant applications. There are several countries with no or few researchers on manatees, and the team hopes to continue to increase the number of researchers working with the species. They also aim to develop more collaborative projects between countries and regions to pool resources for greater impact, and to attract larger funding sources to support African researchers.
Source: The Pew Charitable Trusts (2021) pewtrusts.org/en/research-and-analysis/articles/2021/04/13/first-ever-conference-on-african-manatees-supports-coordinated-species-conservation

Artificial colonies provide hope for penguins in South Africa

In the last few decades, the population of Endangered African penguins *Spheniscus demersus* has dramatically decreased because of egg collection and guano harvesting for fertilizer, as well as reduced food availability as a result of overfishing. Once numbering c. 1.5–3 million individuals, the African Penguin population dropped to 300,000 by 1956, and the numbers kept on falling. In 2020 there were fewer than 13,000 pairs in South Africa. African Penguins generally breed on islands where they are safe from predators. Because of shifts in the distribution of their prey, there is now a mismatch between penguin breeding islands and the fish stocks. To counter this situation, BirdLife South Africa is investigating options of creating new penguin colonies on a stretch of the south coast of South Africa that has no offshore islands but high fish abundance. The aim is to create resilience in the penguin population by increasing the number of colonies and to bridge the gap between the west and east populations and enable penguins to breed in a region that has healthy prey supplies.
Source: BirdLife International (2021) birdlife.org/africa/news/artificial-colonies-provide-hope-african-penguins-south-africa

Decisions by global conservation group to save Africa's elephants

Two important decisions have been made in relation to African elephants that will have implications for their survival. Firstly, the African elephant has been recognized as two species: the forest *Loxodonta cyclotis* and savanna elephant *Loxodonta africana*. This matters because the elephants' populations are smaller when counted as separate species, and because the two species face different threats. Secondly, in March 2021 African elephants were recategorized on the IUCN Red List. As a single species, African elephants were previously categorized as Vulnerable, because there had been a reduction of more than 30% of the population in the past three generations. The IUCN has now categorized the forest elephant as Critically Endangered and the savanna elephant as Endangered. Treating the African forest elephant as a distinct species will change how these animals are studied and conserved. Measures required to stop forest elephant decline are effective anti-poaching strategies within the range states, disrupting trafficking networks and reducing or eliminating demand for ivory.
Source: The Conversation (2021) theconversation.com/new-decisions-by-global-conservation-group-bolster-efforts-to-save-africas-elephants-158157

AMERICAS

Genetic tools help determine the fate of reintroduced howler monkeys

The black and gold howler monkey *Alouatta caraya* is the primate most hunted and captured for the illegal pet trade in Argentina. Confiscated animals, or those surrendered by their owners who are unable to care for them, often end up in rescue centres and are eventually released in the wild. However, little is known about the success of these reintroductions. In a new study, scientists monitored the reintroduction of 12 howler monkeys onto Isla Palacios, a protected island in the Río Urugua-í. Four individuals disappeared, and through genetic analysis of the scats of pumas and jaguars in the area, the team were able to determine that two had been predated by a jaguar. The findings show that genetic analyses can help identify the remains of predated individuals, and can support the design of reintroduction policies that are based on scientific evidence.

Source: Primates (2021) doi.org/10.1007/s10329-021-00896-9

Plans to conserve 30% of USA land and water by 2030

In May 2021, the Biden administration outlined in a report how it aims to achieve its goal of conserving 30% of the USA's lands and waters by 2030. Developed by the Departments of the Interior, Agriculture and Commerce, and the White House Council on Environmental Quality, the report lays out recommendations for a decade-long initiative. It reflects the need to support conservation and restoration efforts across all lands and waters, not solely on public lands. The plans aim to incentivize voluntary stewardship efforts on private lands and support the efforts and visions of States and Tribal Nations. There are, however, divergent views from some of the stakeholders, including over how to define conservation and how to measure the success of these efforts. The report notes that there is no single database that could capture the texture and nuance of the economic and social values of every restoration or conservation action. In light of these concerns, two main mechanisms for measuring conservation progress are recommended: a new interagency working group to track conservation information and develop metrics for success, and the publication of annual updates on the campaign, which has been named 'America the Beautiful'.

Source: CNN (2021) edition.cnn.com/2021/05/06/politics/conservation-plans-biden-administration/index.html

Volcanic eruptions on St Vincent threaten wildlife

The violent volcanic eruptions that shook St Vincent and the Grenadines in April could have distressing consequences not only for the islanders themselves, but also for their forests and native wildlife. The St Vincent and the Grenadines Forestry Department are not in a position to assess or mitigate the environmental impact of the eruptions. Several countries have come forward with generous offers of support, and getting aid to affected areas must be the first priority. However, care is needed with these shipments. In the past, aid supplies to Caribbean islands have led to the introduction of invasive species on cargo ships. Such arrivals can threaten fragile island ecosystems in the wake of natural disasters, as was seen in Dominica following Hurricane Maria in 2017, but this problem can be largely avoided by inspecting the cargo carefully for stowaways.

Source: Fauna & Flora International (2021) fauna-flora.org/news/violent-volcanic-eruptions-island-st-vincent-threaten-communities-wildlife-conservation-hotspot

Virginia approves groundbreaking migratory bird protection regulation

The Department of Wildlife Resources in Virginia, USA, has approved a groundbreaking new regulation, setting a precedent for the protection of migratory birds. The approved regulation aims to reduce the loss of migratory birds from incidental take—the unintended but predictable killing of birds through industrial activities. The new system is the first of its kind in the USA, providing a model for other states to follow. The conservation benefits are clear, and the rule also provides clarity to industry on the circumstances under which unavoidable incidental take is allowed. This all occurs through the use of established industry-specific best practices aimed at reducing impacts. The federal Migratory Bird Treaty Act, now over 100 years old, provides clear protections for migratory birds. Discussions about strengthening its implementation and enforcement have been underway for many years, leaving an opportunity for leadership at the state level. Virginia's actions follow 3 years of regulatory rollbacks at the federal level. The current administration has begun steps to restore lost protections for birds; in the meantime, declining bird populations are at greater risk.

Source: American Bird Conservancy (2021) abcbirds.org/article/virginia-approves-groundbreaking-migratory-bird-protection-regulation

Brazil joins global biotrade pact

Brazil has become the 130th country to ratify the Nagoya Protocol, which lays out specific rules for protecting a country's claims to its biodiversity. Signees agree to not remove biological material from a country without permission and to share profits from any drugs or other commercial products developed from such material. The move comes as Brazil's current government, under President Jair Bolsonaro, has drawn substantial criticism for weakening environmental protections. However, observers say the decision reflects Brazil's long-standing interest in reaping the potential economic benefits of exerting greater control over its biological resources. Aside from potential economic benefits, ratification gives Brazil a chance to restore some of its tarnished image as a leader in biodiversity protection. Scientists worry that new rules will make it more difficult to conduct biodiversity research in Brazil. Supporters of ratification hope it will help bolster efforts to oppose Bolsonaro's environmental policies, but ongoing efforts to weaken federal environmental agencies could undermine progress.

Source: Science (2021) sciencemag.org/news/2021/03/amid-criticism-its-conservation-policies-brazil-joins-global-biotrade-pact

Belize gets highest overall score in Healthy Reef Audit

Since 2011, the Healthy Reef for Healthy People's Eco-Audit of the Mesoamerican Reef has evaluated the progress of Belize, Guatemala, Honduras and Mexico towards implementing 28 recommended management actions that serve as indicators of healthy reefs. The indicators cover seven themes: Marine Protected Areas, Ecosystem-based Fisheries Management, Coastal Zone Management, Sanitation and Sewage Treatment, Research, Education and Awareness, Sustainability in the Private Sector, and Global Issues. Each of these indicators is assessed with specific grading criteria using verified data, measuring both annual change and overall progress since 2011. This year, Belize scored highest, with 70% for its implementation of the recommended actions, followed by Honduras (66%), Mexico (64%), and Guatemala (62%). Belize has now fully implemented a total of eight recommendations. However, Healthy Reefs has expressed concern that progress in all participating countries has been too slow, and the pace of implementation must increase if the reefs are to survive.

Source: Amandala (2021) amandala.com.bz/news/belize-gets-highest-overall-score-in-healthy-reef-audit

ASIA & OCEANIA

Scientists urge Australian government to continue protecting humpback whales

Scientists and environmental groups are urging the federal government not to remove the humpback whale *Megaptera novaeangliae*, categorized as Vulnerable, from Australia's list of threatened species. The government sought to justify delisting the whale in a discussion paper that pointed to the recovery of populations since the end of the whaling era, during which humpback whale populations off Eastern and Western Australia were decimated. The paper suggests populations have now returned to their original size, but scientists are concerned that some of the data used is outdated. They also argue that although whaling is no longer a major industry, whales now face more complex threats, including ocean heating and acidification, habitat degradation, pollution, underwater noise and collisions with shipping vessels.
Source: The Guardian (2021) theguardian.com/environment/2021/apr/08/australia-warned-humpback-whales-still-in-danger-as-government-moves-to-take-them-off-threatened-species-list

Predators exert a larger influence on young coral than expected

The impact of corallivores such as parrotfish and pufferfish on coral growth and survival was believed to be small compared to heatwaves, ocean acidification and competition from algae. But researchers have found that young corals are quite vulnerable to these predators. Large disturbances including cyclones and marine heatwaves periodically devastate the reefs of Moorea, French Polynesia, where the research was conducted. To examine the effects predation and density had on young coral colonies, the team planted Pacific staghorn coral at various locations, either alone, or in groups of four or eight. Some groups were protected by metal cages and others were left exposed. The researchers found that protection was key to the corals' futures. After 30 days, nearly all of the unprotected nubbins had been completely consumed, and density had virtually no effect on this outcome. The researchers let the experiment run for 1 year, after which almost none of the unprotected specimens remained, whereas the caged corals had grown considerably.
Sources: Coral Reefs (2021) dx.doi.org/10.1007/s00338-021-02076-z & *Phys.org* (2021) phys.org/news/2021-04-coral-predators-exert-larger-young.html

Rafflesia sanctuary destroyed

A nature group has called for an investigation into the irreversible destruction of a rafflesia sanctuary in March 2021 in Tasik Kenyir, Terengganu, Malaysia. All that remained at the site was a single, broken sign attesting to the rare *Rafflesia cantleyi* that once held strong in this patch of forest. Categorized as Vulnerable on the IUCN Red List, the rafflesia is found in only five countries in South-east Asia. It is located in four states in Peninsular Malaysia. The flower bud can take up to 1 year to grow to full size, after which the large flower blooms for only a few days. The site had been managed well before the incident and many studies had been carried out there. Malaysian Nature Society Terengganu suspects the forest patch was cleared during works to repair a bridge adjacent to the site, and asked for a full and transparent investigation.
Source: Free Malaysia Today (2021) freemalaysiatoday.com/category/nation/2021/03/07/rafflesia-sanctuary-destroyed-says-nature-group

Action Indonesia: a global collaboration to conserve large mammals

The anoa, banteng, babirusa and Sumatran tiger are amongst Indonesia's most threatened large mammals. Action Indonesia is a collaboration of over 50 implementing partners—including government departments, IUCN Species Survival Commission (led by the Asian Wild Cattle Specialist Group), and national and international zoos—that has been implementing Global Species Management Plans (GSMPs) for these species since 2016. These holistic conservation strategies use the IUCN Conservation Planning Specialist Group's One Plan Approach. Achievements include the development of a global cooperative breeding programme to create stable ex situ populations, with a particular focus on Indonesia. Training delivered by GSMP experts and the Indonesian Zoo Association has helped build the capacity of over 250 Indonesian practitioners in husbandry and public outreach. The collaboration established Action Indonesia Day, an annual global awareness-raising initiative to improve education about the conservation of these flagship species. The GSMPs also include in situ assessments to monitor the status of wild populations. There is considerable awareness of the GSMP framework in the Indonesian conservation community, providing an opportunity to include additional Indonesian species in future.
Source: BULLetin (2020) asianwildcattle.org/uploads/1/2/1/8/121825577/progress_of_the_action_indonesia_gsmps_2016-2020.pdf

Hatching of rare albatross chick sparks hope for remote New Zealand colony...

A sole Antipodean albatross chick hatched on the remote Chatham Islands has delighted conservationists who hope the bird may usher in the start of a new nesting colony. The Antipodean albatross is categorized as nationally critical in New Zealand, with just 3,000 breeding pairs remaining. The birds only breed in the New Zealand region and, if mating is successful, raise a single chick every 2 years. Conservationists have attached a tracking device to the young bird to monitor its sea-faring explorations. The chick fledged on 27 December 2020, and since then tracking equipment has logged > 12,500 km of flying across the South Pacific around the Chatham Islands. Scientists hope the tracker will help identify fishing fleets that overlap with the bird's flight path, as the vessels often cause death or injury to the animals.
Source: The Guardian (2021) theguardian.com/world/2021/feb/19/birth-of-rare-albatross-chick-sparks-hope-for-remote-new-zealand-colony

... and world's oldest known wild bird has another chick at age of 70

Wisdom the albatross, the world's oldest known wild bird, has had a chick at the age of at least 70 years. The Laysan albatross hatched the chick on 1 February 2021 in the Midway Atoll national wildlife refuge in the North Pacific Ocean. Laysan albatrosses usually only live for 12–40 years, but Wisdom was first identified by researchers in 1956, when she was already at least 5 years old. The father of the new chick is Wisdom's partner, Akeakamai, who she has been with since 2012. Albatrosses usually mate for life, and it is believed Wisdom had other partners in the past that she outlived. The U.S. Fish & Wildlife Service says she has had at least 30–36 chicks so far. Albatrosses only hatch one egg every few years, and male and female share incubation and feeding duties. The Midway Atoll wildlife refuge is home to the largest colony of albatross in the world.
Source: BBC (2021) bbc.co.uk/news/world-us-canada-56281983

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 Corinne Bailey, David Brugiere, Luciana Oklander and Annkathrin Sharp. Contributions from authoritative published sources (including websites) are always welcome. Please send contributions by e-mail to oryx@fauna-flora.org.