IUCN Red List

2017–2020 Report

ENDANGERED

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Contents

Explainer

IUCN

A membership Union founded in 1948, uniquely composed of both government and civil society organizations. It provides public, private and non-governmental organizations with the knowledge and tools that enable human progress, economic development and nature conservation to take place together.

SSC

The Species Survival Commission (SSC) is the largest of the six expert commissions of IUCN and enables IUCN to influence, encourage and assist societies to conserve biodiversity by building knowledge on the status and threats to species, providing advice, developing policies and guidelines, facilitating conservation planning, and catalysing conservation action. Members of SSC belong to one or more of the 140 Specialist Groups, Red List Authorities and Task Forces, each focusing on a taxonomic group (animals, fungi and plants), or a disciplinary issue, such as sustainable use and livelihoods, translocation of species, wildlife health, climate change and conservation planning.

GSP

The Global Species Programme (GSP) is part of the IUCN Secretariat and works closely with the SSC at the forefront of the global fight to save species from extinction. Comprising teams in Belgrade, Brussels, Cambridge, Cameroon, Gland and Washington D.C, the GSP main functions are to generate, curate and disseminate The IUCN Red List of Threatened Species™ and to advance conservation action and policy.

Red List Partnership

The IUCN Red List of Threatened Species is made possible through the active participation of the Red List Partners and their respective networks. As a result, the IUCN Red List represents an enormous investment of time, expertise and financial resources by a large number of individuals and organizations. IUCN gratefully acknowledges the contributions, dedication and commitment from its Partners and the extensive network of people who make the production of The IUCN Red List possible. The IUCN Red List of Threatened Species is produced by the Red List Partnership, currently: ABQ BioPark, Arizona State University, BirdLife International, Botanic Gardens Conservation International, Conservation International, International Union for Conservation of Nature (IUCN), Missouri Botanical Gardens, NatureServe, Re:Wild, Royal Botanic Gardens Kew, Sapienza University of Rome, IUCN Species Survival Commission, Texas A & M University and Zoological Society of London.

Executive Summary

This report captures the highlights of the conservation impact of the The IUCN Red List of Threatened Species 2017–2020. It represents the collective efforts of the IUCN Red List Partnership and reports against the ten target Results of the IUCN Red List Strategic Plan (2017-2030).

Five Key Messages

1. **A global standard.** The IUCN Red List is the acknowledged authority on species extinction risk and an authoritative compendium of information on the global conservation status of species. Use of the IUCN Red List and Red List Index increased, with the Sustainable Development Goals, the private sector, multilateral environmental agreements, global media outlets, digital platforms, and donors all relying on its content to either make decisions or communicate about the biodiversity crisis.

2. **A Barometer of Life.** The IUCN Red List tracks and measures the status and trends in wild species across the globe. Assessments of all major species groups such as plants, fungi, invertebrates, reptiles, and fish, continue to expand in number and scope. The IUCN Red List of Threatened Species expanded its coverage of the world's biodiversity by 51% between 2017 and 2020.

3. **A global measure of success.** The IUCN Red List data provided evidence of improvements in species' status due to conservation action, demonstrating that 'conservation works'. We need to scale up these efforts to address the biodiversity crisis.

4. **A global partnership.** The IUCN Red List Partnership provides the long-term commitment and collaboration needed to deliver the complexity and scale of the IUCN Red List.

5. **A global public good.** With the growing understanding that a healthy and functioning natural world delivers countless benefits, the Red List provides a potential benefit to all people in all countries.

Status and Trends in Global Biodiversity

The world aspires to stabilise the decline in biodiversity and put nature on the path to recovery by 2030. The IUCN Red List gives a window into the state of nature and a way of tracking biodiversity recovery, or decline, over time. Without the IUCN Red List, work to stop the decline in biodiversity would be little more than guesswork.

The IUCN Red List includes 128,918 species of which 35,765 (28%) are threatened with extinction. Certain groups are known to be considerably threatened, such as amphibians (41%), sharks (31%) and corals (33%) with increased extinction risks observed since 1990.
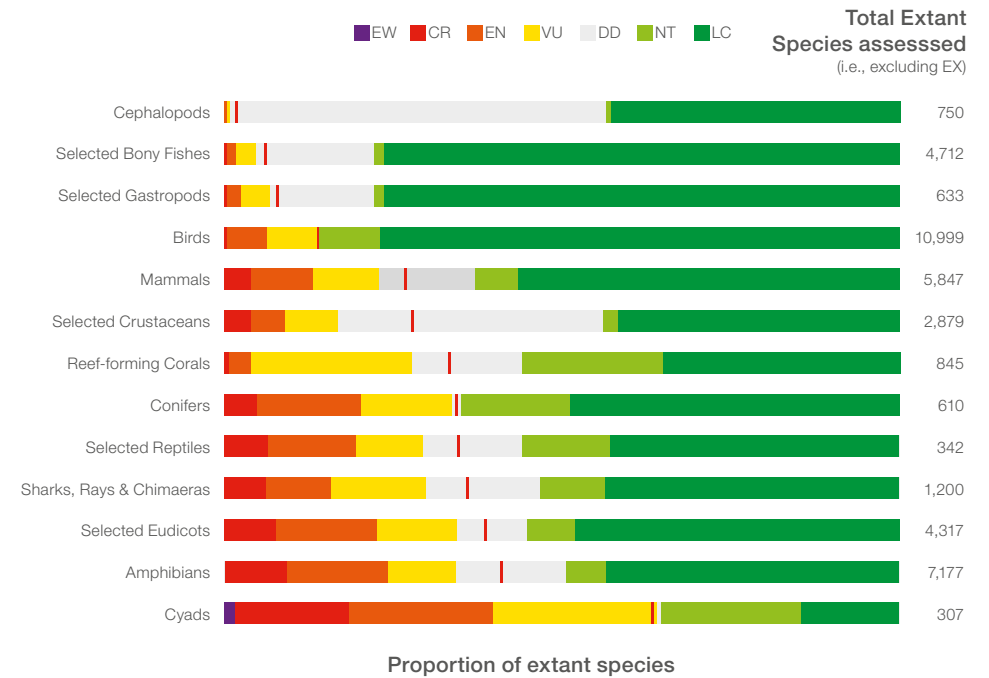
The Red List Index

Key: Extremes - - - [   ] ← Most likely value
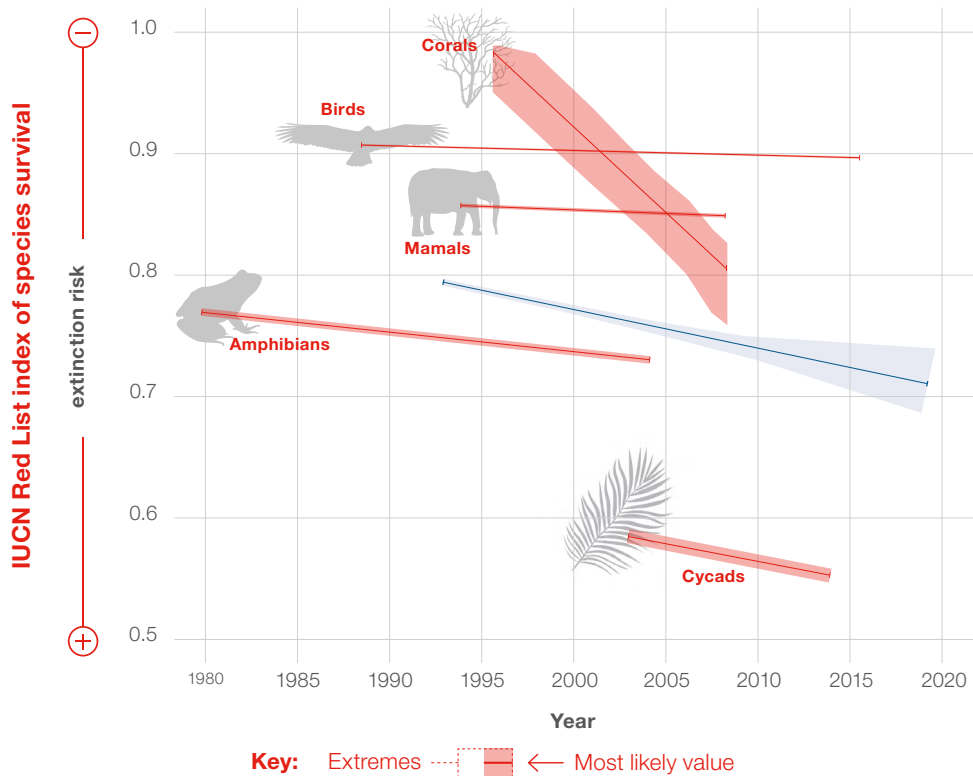
The Red List Index (RLI) of species survival for taxonomic groups that have been assessed for the IUCN Red List at least twice.The blue line indicates the overall RLI for all the taxa combined. A value of 1 is equivalent to all species being categorised as Least Concern; a value of zero is equivalent to all species being classified as Extinct.

The Extinction Risk of Species

assessed in each category for the more comprehensively assessed (i.e., at least 80% of the species in the group has been assessed) groups containing ≥150 species

Legend: EW CR EN VU DD NT LC

Total Extant Species assesssed (i.e., excluding EX)

Group	Total Extant Species
Cephalopods	750
Selected Bony Fishes	4,712
Selected Gastropods	633
Birds	10,999
Mammals	5,847
Selected Crustaceans	2,879
Reef-forming Corals	845
Conifers	610
Selected Reptiles	342
Sharks, Rays & Chimaeras	1,200
Selected Eudicots	4,317
Amphibians	7,177
Cyads	307

Proportion of extant species

Proportion of species threatened with extinction in different taxonomic groups that are comprehensively assessed for the IUCN Red List. Species are grouped into classes (with the exception of reef-forming corals, which includes species from classes Hydrozoa and Anthozoa), and are ordered according to the vertical dark red lines, which indicate the best estimate for the proportion of extant species considered threatened, assuming that Data Deficient species are equally as threatened as non-Data Deficient species. The numbers to the right of each bar represent the total number of extant species assessed for each group. Taxonomic subsets included in the groups labelled 'selected' are detailed at **https://www.iucnredlist.org/resources/summary-statistics**

The IUCN Red List tells us which species are the most likely to go extinct, where these species occur, the threats causing the extinction pressure and the conservation actions needed.

Conserving species using the IUCN Red List

The IUCN Red List was used in many different ways to drive, monitor and communicate about conservation.

The IUCN Red List of Threatened Species™ is the most comprehensive compendium of information on the global conservation status of animal, plant and fungi species. Systematically collated, the IUCN Red List showcases the changing state of life on earth and the risk of extinction over time for major groups of species. This knowledge also enables us to forecast changes in rates of biodiversity loss, map the way forward for biodiversity conservation, and track conservation success. Far more than a list, The IUCN Red List is a vital indicator of the health of biodiversity, at national, regional, and global levels; it is widely used for societal decision making, helping donors decide how to allocate their funds and the private sector minimise their footprint. It also informs conservation planning, telling us which species need to be conserved, at which sites, and what actions are needed for their recovery.

"The IUCN Red List is the gold standard globally in conservation data. It helps set priorities way beyond what IUCN itself does. From the outset it has helped set priorities for the Global Environment Facility, as well as influencing priorities regionally and nationally. It is the Rosetta Stone for conservation."

Thomas E. Lovejoy
University Professor In Environmental Science and Policy, George Mason University; Senior Advisor to the Chair, Scientific and Technical Advisory Panel, Global Environment Facility. Blue Planet Prize Laureate 2012

Global Species Monitoring

Statistics from The IUCN Red List and the Red List Index were used as indicators of biodiversity for global agreements and reports mandated by the United Nations. Examples of the IUCN Red List and the Red List Index as the primary source of information on the global status of species in UN-mandated assessments are shown below

2020: Global Biodiversity Outlook 5

2020: UNEP and FAO report on The State of the World's Forests
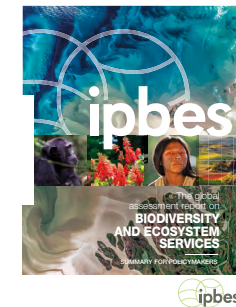
2019: IPBES Global Assessment Report on Biodiversity and Ecosystem Services

2018: UNEP and RAMSAR's Global Wetland Outlook: State of the World's Wetlands

Sustainable Development Goals and other global agreements

The Red List Index shows trends in overall extinction risk for species, and is used by governments and others to track their progress towards targets for reducing biodiversity loss. This is only made possible by regular updates of species assessments on the IUCN Red List and data and graphs on different Red List Indices are available on the IUCN Red List website.

The Red List Index serves as the single indicator adopted by the UN Member States, supported by the UN Statistical Division, for tracking progress towards delivery of SDG 15.5. For more, see the SDG **annual report** and **platform**.

The United Nations Convention to Combat Desertification uses the IUCN Red List and Red List Index as an indicator for Strategic Objective 4.

Two of the UN's species-focussed global agreements, on migratory species and internationally traded species, used the IUCN Red List as a basis for guiding decision making. The IUCN Red List was used to guide decisions under CITES related to (i) the inclusion of new species in the Convention - **more here**, (ii) assessments of the risk posed by international trade to species that can be legally traded and (iii) assessing the conservation status of species for which commercial trade is prohibited.

It is also used in the Living Planet series of **reports**

Influencing Global Ambition for Species Conservation

Analyses of the IUCN Red List delivered compelling high-level messages to policy-makers and the global media through:

The convening power of IUCN

The IUCN Red List helped shape the 2019 **Abu Dhabi Call for Species Conservation Action** that encourages governments and donor institutions to allocate substantial additional resources for conservation of species and their habitats to halt the decline in biodiversity.

This led to the **Global Species Action Plan** which addresses the deterioration of our life support system through the essential but often neglected lens of species conservation.

It calls for collaborative efforts by the biodiversity-related conventions, by State and non-State actors, and society as a whole to act now to ensure we pass on a rich natural heritage to future generations.

The IUCN Red List is also the foundation on which 'Reverse the Red' was conceived. **Reverse the Red** aims to ignite optimism and collaborative action to guarantee the survival of all species we share this planet with, and the ecosystems they live in. It aims to empower communities around the world to reverse the declining trajectory of biodiversity.

VULNERABLE

VU

Image credits: Chinese Water Dragon *(Physignathus cocincinus)* © Michael Cota

Messages from Scientists to Policy Makers

These clear and compelling messages were made possible through analyses of the IUCN Red List data.

Pervasive human-driven decline of life on Earth points to the need for profound change

Diaz et al. 2019 showed that "the fabric of life on which we all depend-nature and its contributions to people-is unravelling rapidly. Despite the severity of the threats and lack of enough progress in tackling them to date, opportunities exist to change future trajectories through transformative action. Such action must begin immediately, however, and address the root economic, social, and technological causes of nature's deterioration."

How many bird and mammal extinctions have been prevented through recent conservation action?

Bolam et al. 2020 showed that even though 10 bird and five mammal species have become extinct since 1993, extinction rates would have been 2.9–4.2 times greater without conservation action. While policy commitments have fostered significant conservation achievements, future biodiversity action needs to be scaled up to avert additional extinctions.

Examples of recovery and avoided extinction

Guam Rail
Hypotaenidia owstoni

second bird in history to recover after being declared Extinct in the Wild, after the California Condor (*Gymnogyps californianus*). Thanks to a 35-year captive breeding programme, the Guam Rail is now established on the neighbouring Cocos Island. However, the bird is still classified as Critically Endangered – one step away from extinction.

Echo Parakeet
Alexandrinus eques

continues its recovery thanks to conservation efforts, including a highly successful captive breeding programme. There are now more than 750 Echo Parakeets in the wild, and in the 2019 Red List update the species was reclassified as Vulnerable, following its improvement from Critically Endangered to Endangered in 2007.
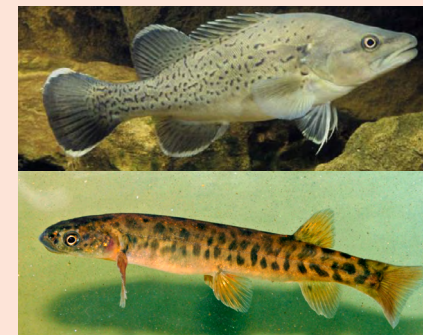
Two freshwater fish species – the Australian Trout Cod (*Maccullochella macquariensis*) and Pedder Galaxias (*Galaxias pedderensis*)

have likewise improved, from Endangered to Vulnerable and Critically Endangered to Endangered respectively. Decades of conservation action have focused on establishing additional subpopulations through reintroductions and wild-to-wild translocations.

Image credits: Guam Rail (*Hypotaenidia owstoni*) ©del Hoyo et al
Echo Parakeet (*Alexandrinus eques*) ©DurrellTrust
Australian Trout Cod (*Maccullochella macquariensis*) ©Gunther Schmida
Pedder Galaxias (*Galaxias pedderensis*) © Rudie H. Kuiter / Aquatic Photographics

Global messaging using the IUCN Red List

IUCN Red List media releases generated global interest in the featured species, while underlining that, in the face of the biodiversity crisis, conservation efforts are working and require more support. Most of IUCN's top releases since 2016, measured by quality and quantity of media coverage, have announced IUCN Red List updates. These have received coverage across dozens of countries around the world, in influential media such as the New York Times, BBC, Le Monde, El País and The Nikkei, and in major news agencies worldwide.

The IUCN Red List is also the most popular IUCN product in media queries, with significant demand for the kind of data and news it provides. This strong media presence makes the IUCN Red List central to shaping IUCN's external image and positioning.

Conservation efforts bring cautious hope for African rhinos

Click here

IUCN Red List media release, 2020

Species recoveries bring hope amidst the biodiversity crisis

Click here

IUCN Red List media release, 2019

European bison recovering, 31 species declared Extinct

Click here

IUCN Red List media release, 2020

Australia's reptiles threatened by invasive species, climate change

Click here

IUCN Red List media release, 2018

Almost a third of lemurs and North Atlantic Right Whale now Critically Endangered

Click here

IUCN Red List media release, 2020

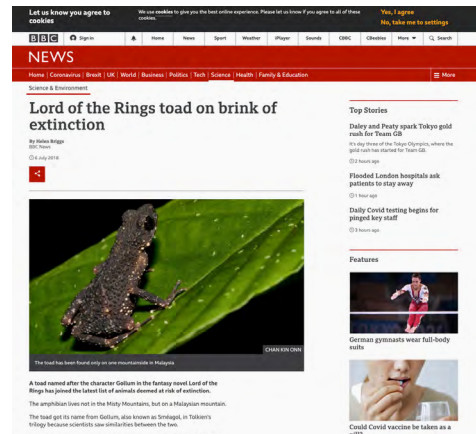## Unsustainable fishing and hunting for bushmeat driving iconic species to extinction

Click here
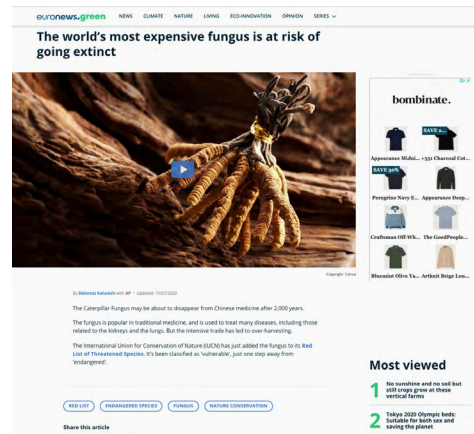
IUCN Red List media release, 2019

Through these media releases, IUCN is able to generate global interest in highly threatened species that would otherwise remain largely unknown, as well as mainstream issues of critical importance such as climate change and unsustainable exploitation of nature.

Examples:

Lord of the Rings toad

World's most expensive fungus

The Amazing Species campaign featured species of interest and raised the profile of biodiversity conservation and the IUCN Red List. **https://www.IUCNredlist.org/resources/grid**

Guiding Decision-making to Conserve Species

The IUCN Red List is used to power different digital platforms that influence and guide decision-making across sectors.

The IUCN Red List is used by businesses throughout the process of planning and implementing projects, in order to understand and manage potential impacts on biodiversity. It informs screening and impact avoidance, baseline survey design, impact assessment and mitigation, biodiversity action plan development, and offset design and implementation.

The Integrated Biodiversity Assessment Tool (**IBAT**) is a web-based map and reporting tool that provides fast, easy and integrated access to The IUCN Red List of Threatened Species, World Database on Protected Area and the World Database of Key Biodiversity Areas. It provides access to the most authoritative global biodiversity datasets, and is used by the private sector for early stage, high-level risk screening.

IBAT is used by some of the largest, most recognised companies in the world – 29 of IBAT's subscribers are considered "large-cap" companies, with a market capitalization of over US$10 billion each. IBAT also plays a crucial role in the financial sector, helping organisations to screen potential investments for biodiversity risks.

IBAT is currently used by 11 Public Development Banks, who together finance over US$330 billion annually of direct investments across the globe. IBAT currently has 99 commercial users that access the data, tools and reports through subscription or pay-as-you-go services.

A third of the income generated for investment into the three under-lying datasets supports activities that maintain the IUCN Red List.

Examples:

- **International Olympic Committee:** The IOC uses IBAT as a key tool during the initial dialogue with cities interested in hosting the Olympic Games.

- **International Finance Corporation:** The International Finance Corporation (IFC), a member of the World Bank Group, uses IBAT to screen for biodiversity risks and critical habitat values in project locations globally as part of its environmental due diligence.

Data and metrics derived from the IUCN Red List were used by a number of the globally recognised online platforms to support decision making by governments, civil society and the private sector. Red List data are downloaded, or accessed directly, from the IUCN Red List website in accordance with the Terms of Use.

Global Forest Watch's map layer '**Global Biodiversity Significance**'

UN Biodiversity Labs

Naturemaps

Global Biodiversity Information Facility

Usage of **the IUCN Red List website** remains very high with users responding well to the new version launched in 2019 and the many improvements in functionality.

38,822 assessment data downloads

(average 9,700 per year)

81.5 million page views

(average 20 million per year)

The IUCN Red List has users in every single country of the world

16.2 million unique visitors

(average 4 million per year)

28 million website sessions

(average 7 million per year)

189,458 individual spatial data downloads

(average 47,364 per year)

190 million species maps downloaded

(average 47.6 million per year)

Catalysing Conservation Action

IUCN follows an Assess-Plan-Act approach that uses the IUCN Red List as the basis for guiding and conducting conservation actions.

Direct conservation action is catalysed by the IUCN Red List through:

- Addition of a species to the IUCN Red List in a highly threatened category
- A species moving from a lower to higher extinction risk on the IUCN Red List
- A status review, or conservation plan, of the species using the IUCN Red List highlights the actions needed to promote recovery
- Environmental safeguarding measures can be triggered by the presence of threatened species

The IUCN Red List catalyses conservation. Species extinction would have been greater without conservation action and many species have undergone dramatic recoveries due to sustained interventions over time. Successful conservation action and policies need to be scaled-up and expanded to halt the decline of biodiversity and to put nature on the path to recovery by 2030

CRITICALLY ENDANGERED
CR

Image credits: Madame Berthe's Mouse Lemur (*Microcebus berthae*) © Russell A. Mittermeier

IUCN's Lemur SOS is a good example of Assess-Plan-Act:

In July 2012, the Lemur Red-listing and Conservation Planning Workshop took place in Madagascar. Twenty-eight priority sites were chosen based on the number of Critically Endangered and Endangered species present, overall species richness, and whether they included species found only in a single location. This led to the IUCN Save Our Species Lemurs initiative — a six-year programme to provide grants to civil society organisations in Madagascar to support the conservation of lemurs. Through this initiative, and thanks to the generous donation of a Geneva-based private foundation, IUCN Save Our Species has channelled close to 6 million CHF to on-the-ground lemur conservation projects throughout Madagascar. Over the course of three calls for proposals, IUCN Save Our Species has been able to provide 52 grants to civil society organisations in Madagascar. These are providing conservation benefits to 50 lemur species and subspecies (from a total of 113 currently described taxa) and their habitats, as well as the people who depend on them. As such, the SOS Lemurs initiative is making direct contributions to the implementation of 18 site-based action plans included in the Lemur Conservation Strategy 2013–2016.

Scaly-footed snail and deep sea biodiversity

A scientific contribution to the journal Nature highlighted that '**Red Listing can protect deep-sea biodiversity**'. The Scaly-foot Snail (*Chrysomallon squamiferum*) was the first species endemic to deep-sea hydrothermal vents on the IUCN Red List of Threatened Species and the first animal to be listed as Endangered due to deep-sea mining. This species is only known from three locations on deep-ocean ridges in the Indian Ocean, between 2,400 to 2,800 metres below sea level occupying an area of less than 0.02 km^2. The listing of deep-sea species represents a first step towards a global assessment for these habitats, and towards ensuring that deep-sea species have a seat at the table in discussions about managing the ocean floor. **Amazing Species**.

A New Protected Area Planned for Beetles

All 12 assessed species of Ironclad Beetles (*Tarphius spp.*) are considered threatened with extinction. These beetles rely on decomposing wood, mosses and fern cover for survival, but the Kahili Ginger (*Hedychium gardnerianum*), a plant introduced from the Himalayas, is slowly replacing native plant species. The Terceira Island Ironclad Beetle (*Tarphius relictus*) has been particularly affected by this change and is now limited to a range of less than one hectare. The recent establishment of a protected area by the Azorean Government, based on the draft assessment of the Ironclad Beetle, provides some hope for the future of this species.
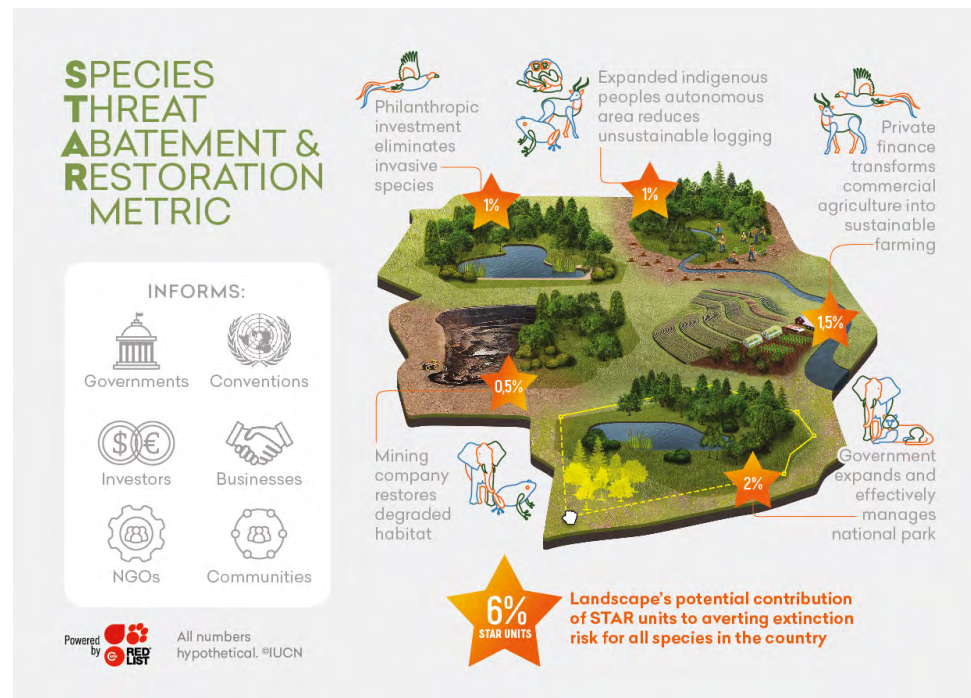
Science-based Species Conservation

New metrics using the IUCN Red List were developed and launched to drive species recovery efforts and assist all stakeholders in conservation to make science-based contributions to the next inter-governmental global biodiversity agreement:

IUCN developed a new metric using the IUCN Red List called the 'STAR - Species Threat Abatement and Restoration'.

This documents the contribution of specific conservation and restoration actions in specific places by businesses, governments, civil society, and other actors towards global goals for halting extinctions. As such STAR helps identify actions that have the potential to bring benefits for threatened species, and it supports the establishment of science-based targets for species biodiversity. **More information.**

IUCN Green Status of Species
A global standard for measuring species recovery and assessing conservation impact
Prepared by the IUCN SSC Species Conservation Success Task Force
Version 2.0

INTERNATIONAL UNION FOR CONSERVATION OF NATURE

Click here

The Green Status of Species was approved by IUCN Council in 2020 as a new component of the Red List of Threatened Species. Green Status assessments are the world's first standardized method for assessing species' progress toward recovery. It recognises that although preventing extinction is the first critical step toward successful conservation, it is not the end goal. Rather, the true mark of success would be to recover species to the point where they can fulfil their ecological functions throughout their range - resulting in species that are not just surviving, but thriving. **More information.**

Influencing Resource Allocation

Betts et al. (2019) identified 41 species-focused funding bodies and found that 66% requested that applicants state the IUCN Red List status of the focal species (66%). Some examples of these are shown below:

- The Rufford Foundation provided conservation and research grants for species listed as threatened on the IUCN Red List

- Mohammed Bin Zahed Species Conservation Fund generally gives priority to projects on species facing a high threat of extinction, with an emphasis on Critically Endangered and Endangered species.

- IUCN's Save Our Species funded projects that focussed on Critically Endangered, Endangered or Vulnerable Species

- The Franklinia Foundation supported in situ conservation projects for trees that are globally threatened on the IUCN Red List

The Global Environment Facility's System for Transparent Allocation of Resources (STAR) used a metric derived from the IUCN Red List as part of the formula to determine the amount of GEF resources that a given country can access in a replenishment period.

An updated and improved IUCN Red List

The IUCN Red List of Threatened Species expanded its coverage of the world's biodiversity by 51% between 2017 and 2020.

The IUCN Red List was expanded and updated. Previously under-represented groups were added for the first time and re-assessments of species already on the IUCN Red List were completed to monitor for change to extinction risk.

The IUCN Red List of Threatened Species expanded its coverage of the world's biodiversity by 51% between 2017 and 2020
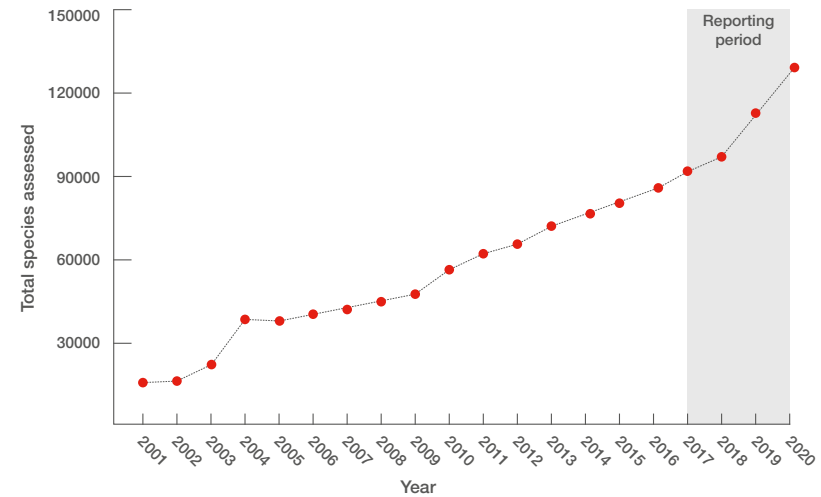
Expanding the IUCN Red List

- A further 43,662 species were added to the IUCN Red List during 2017–2020

- Major progress towards completing first ever global assessments of reptiles, freshwater fish, dragonflies and trees.

- Unprecedented progress on fungi

- 15,760 species were re-assessed to check for changes in extinction risk

- Major progress to completing the global re-assessments of amphibians, birds and mammals.

Species Reassessed
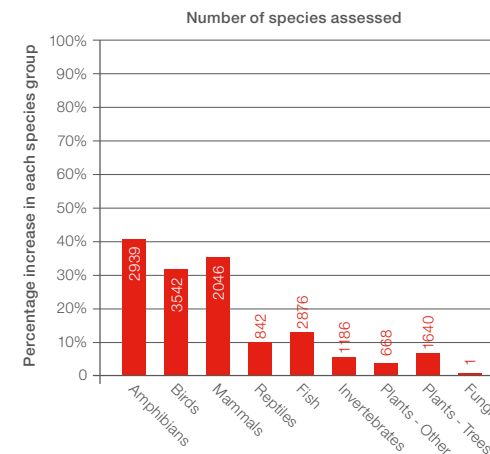
Species Added
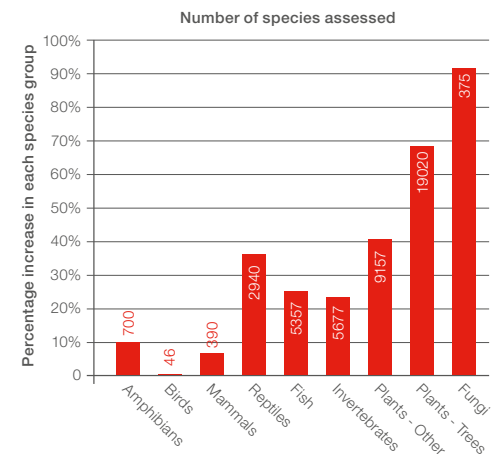
New Entries on the IUCN Red List

Fan Mussel
Pinna nobilis

This marine mollusc has entered the Red List as Critically Endangered. A newly discovered pathogen, (*Haplosporidium pinnae*), is causing dramatic declines in the population throughout the Mediterranean Sea where it is endemic. Causing the deaths of 80 to 100% of affected Fan Mussels, this amounts to a mass mortality event.

Barbie Pagoda
Podoserpula miranda

This rare and unusual New Caledonia fungus entered the Red List as Critically Endangered. Clearance of its forest habitat and habitat degradation caused by introduced pigs, feral cattle and horses are its main threats.

Eucalyptus trees

All known eucalypt species worldwide have been assessed, revealing that almost 25% are threatened with extinction.

Giant Pseudoscorpion
Garypus titanius

The world's largest pseudoscorpion has entered the Red List as Critically Endangered. Reaching 1.5cm, this giant mini-beast related to scorpions lives on a 5-hectare islet off the UK Overseas Territory of Ascension Island. The Giant Pseudoscorpion is under threat due to invasive predatory invertebrates, such as the American Cockroach (*Periplaneta americana*). Control and management of these invasive predators is the key to its long-term survival.

Kalimantan Mango
Mangifera casturi

Four wild mangos were listed as Endangered, and the Kalimantan mango (*Mangifera casturi*) was listed as Extinct in the Wild. These species are relatives of the common mango (*Mangifera indica*) and are threatened by habitat loss. Native to South Asia, mangoes are now cultivated in many tropical and subtropical countries and they are one of the most commercially important fruits in these regions.

Species that are recovering

Kinabalu Slender Litter Frog
Leptobrachella arayai

This amphibian moved from Vulnerable to Least Concern in 2018. It is known from Kinabalu National Park and Crocker Range National Park (Trus Madi) in Malaysia. In 2004, the major threat to this species was rapid logging of sub-montane forests for timber. However, industrial logging activities at Trus Madi have nearly ceased and are not occurring at elevations where this species occurs. Both of the national parks are well protected and well-managed, and Trus Madi is a High Conservation Value Forest.

Okarito Kiwi
Apteryx rowi

Intensive predator control on small New Zealand islands led to the re-categorisation of the Okarito Kiwi (*Apteryx rowi*) and the Northern Brown Kiwi (*Apteryx mantelli*) from Endangered to Vulnerable. Both species of Kiwi have been facing threats including habitat loss and predation by introduced mammals, such as stoats and feral cats. Government and community conservation efforts have focused on predator control, and removing and incubating eggs for release into the wild.

Image credits: Kinabalu Slender Litter Frog (*Leptobrachella arayai*) ©Andreas & Christel Nöllert, Jena
Okarito Kiwi (*Apteryx rowi*) ©Grant Maslowski

Species that are declining

Madagascar's lemurs

with 103 of the 107 surviving species threatened with extinction, mainly due to deforestation and hunting in Madagascar

The Irrawaddy Dolphin
Orcaella brevirostris
and Narrow-ridged Finless Porpoise
Neophocaena asiaeorientalis

have both declined, moving from the Vulnerable to the Endangered category. Numbers more than halved over the past 60 years for the Irrawaddy Dolphin, and over the past 45 years for the Finless Porpoise.

Image credits: Golden Bamboo Lemur (*Hapalemur aureus*) ©Nick Garbutt
The Irrawaddy Dolphin (*Orcaella brevirostris*) ©Isabel Beasley

IUCN Red List at Regional and National Levels

IUCN Red List assessments at national and regional levels can be provided in two ways:

- Application of the IUCN Red List Categories and Criteria for **global assessments** summarised at the national or regional level

- Application of the IUCN Red List Categories and Criteria at the **national or regional levels**

Regional IUCN Red List Assessments

European Red List of saproxylic beetles (2018). Saproxylic beetles are insects that depend on dead and decaying wood for at least part of their lifecycle, and play important ecological roles in European habitats.

European Red List of terrestrial molluscs: snails, slugs, and semi-slugs (2019). Overall, 21.8% and 22.5% of the 2,469 native species of terrestrial mollusc are considered threatened
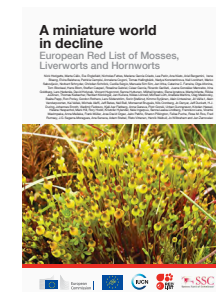
A miniature world in decline : European Red List of mosses, liverworts and hornworts (2019). This publication is a summary of the conservation status of the European species of mosses, liverworts and hornworts, collectively known as bryophytes.

European Red List of lycopods and ferns (2017). With 194 species assessed, this assessment highlights that 19.9% of lycopod and fern species are threatened with extinction in Europe.
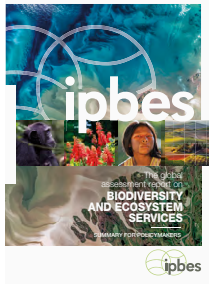

European Red List of trees (2019) this publication summarises results for all Europe's native species of tree (454 species), of which 265 species (over 58%) are endemic to continental Europe, with 56% (252 species) endemic to the 28 EU Member States.
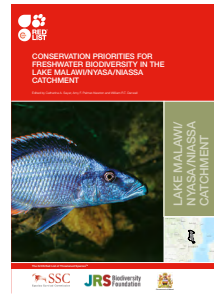

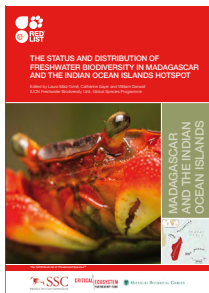**The conservation status of marine biodiversity of the Western Indian Ocean (2021).**

Regional IUCN Red List Assessments

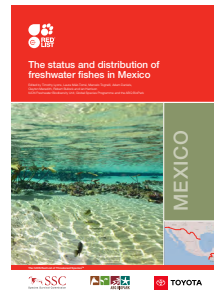[The status and distribution of freshwater biodiversity in Madagascar and the Indian Ocean islands hotspot (2018)](#)

[Conservation priorities for freshwater biodiversity in the Lake Malawi/Nyasa/Niassa catchment (2019)](#)

[Freshwater biodiversity in the Lake Victoria Basin : guidance for species conservation, site protection, climate resilience and sustainable livelihoods (2018)](#)

[IUCN Report](#)

[The status and distribution of freshwater fishes in Mexico (2020)](#)

Use of the IUCN Red List at the national and regional level was further enhanced during 2017–2020 by the inclusion of new functionality on the IUCN Red List website to accommodate other languages (French, Spanish and Japanese) and a translation facility (Google Translate).

The IUCN Red List website, from 2020, provides Red List Index graphs and data for 253 individual countries and 31 regions or subnational divisions.

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Image credits: White-barred Boxfish (*Anoplocapros lenticularis*) © CaitlinChilds

New IUCN Red List website

The IUCN Red List website is a digital platform of critical importance for species conservation. It is linked to the IUCN Species Information Service database (SIS) which holds all of the IUCN Red List data and information. A new IUCN Red List was launched in November 2018 which featured a number of new tools and functions. Major improvements to SIS were also completed during 2017–2020.
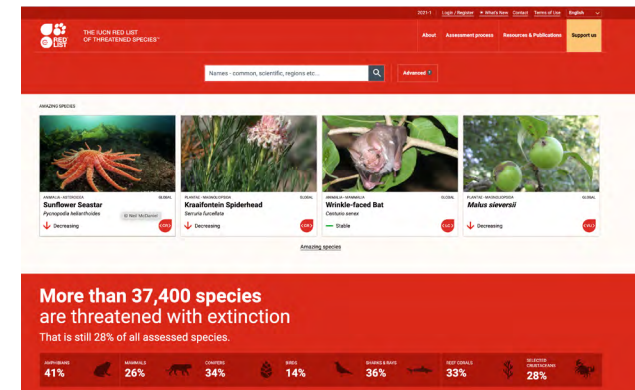
Key features of the IUCN Red List website and SIS which were delivered, or significantly improved, during the reporting period:

- Completely new website with **updated guidelines and statistics**

- Fully updated **Resources and Publications** section

- Improved **data download** section, including multiple download types as well as options for accessing > 110,000 species range maps for non-commercial use

- Pages available in Spanish, French and Japanese, as well as embedded translate function for species assessment pages

- The data can be filtered in numerous ways, and results presented interactively in a clean and fast manner for the user.

- Advanced search through user selected filters and map with results displayed as Graphs or List or Grid

- Interactive automated statistics tables available for decision-makers, which links to download options.

- Improved Application Programming Interface (API): software intermediary that allows external users to directly access the IUCN Red List

- **Red List Index graphs and data** for countries, Sustainable Development Goals, and thematic groups of species (e.g. freshwater, migratory

- SIS Connect: a mechanism that enables the submission of multiple species assessments from external data systems

- SIS: new Red List index module for collecting and storing such information

https://www.IUCNredlist.org/resources/sis-updates

Scientifically strong IUCN Red List

Scientific studies by Red List Partners and other scientists were used to strengthen the methods that underpin the IUCN Red List. These scientific advances are essential to securing the trusted reputation of the Red List as well as for developing new and improved methods. Four examples of the 21 peer-reviewed publications on Red List methodology are shown here:

Bachman et al. (2020). Rapid least concern: Towards automating red list assessments. Biodiversity Data Journal, 8(1),

Bird et al. (2020) Generation lengths of the world's birds and their implications for extinction risk. Conserv. Biol. doi.org/10.1111/cobi.13486

Brooks et al. (2019) Measuring Area of Habitat (AOH) and its utility for the IUCN Red List. Trends Ecol. Evol. 34: 977-986

Akcakaya et al. (2017) Inferring extinctions III: A cost-benefit framework for listing extinct species. Biological Conservation. 214: 336-342

An updated and improved IUCN Red List

IUCN strives to provide top-quality training, guidance and support to the network of global, regional and national Red List experts.
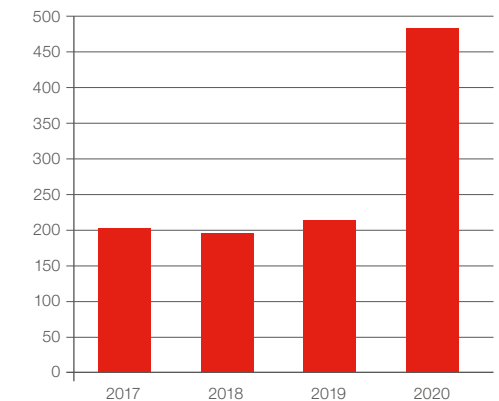
Online Red List Training

IUCN provides free, self-paced training through the online IUCN Red List course **(www.conservationtraining.org),** delivering Red List knowledge and skills to current and future generations of Red List experts. In 2020, the online course was rewritten and updated to improve content and performance, including the addition of a new Mapping Standards module.
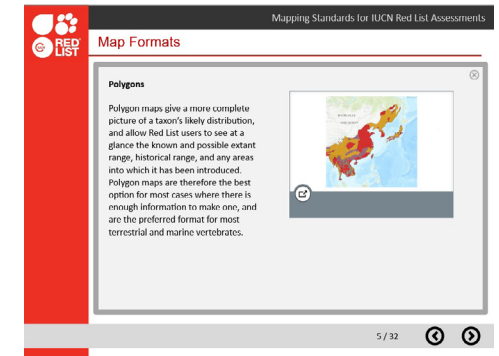
Number of people successfully completing course modules and final exam (2017–2020):

- Global Red List course: 1,464

- Regional & national Red List course: 1,323

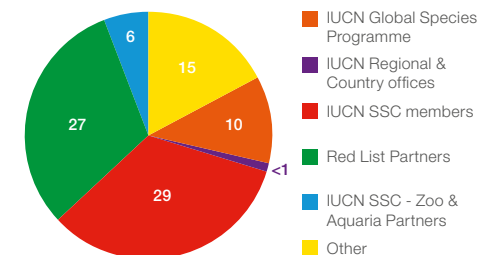- Final exam passes: 1,102 (average 23 per month)

Online IUCN Red List exam passes

Red List Trainers

To accommodate the global demand for Red List training, IUCN developed a Red List Trainer course. Between 2017 and 2020, five Red List Trainer courses were held resulting in 42 newly certified trainers entering the IUCN Red List Trainer network.

Certified Red List Trainers (2020)

- IUCN Global Species Programme
- IUCN Regional & Country offices
- IUCN SSC members
- Red List Partners
- IUCN SSC - Zoo & Aquaria Partners
- Other

Red List Training Workshops

The network of certified IUCN Red List Trainers works hard to provide Red List training wherever this is needed. Training workshops give participants direct access to Red List experts who can answer their questions and help them develop the skills to produce high-quality Red List assessments.

Wherever possible, training workshops are held in-person. In 2020, IUCN modified the Red List Training Workshop curriculum to allow Red List Trainers to facilitate training workshops online.

Throughout 2017–2020, 48 certified Red List Trainers provided 120 training workshops and events (98 in-person, 22 online):

- 46 full Red List Training workshops (3-4 days).

- 35 short Red List Training workshops (1-2 days).

- 39 Red List sessions (<1 day events attached to other meetings and workshops).

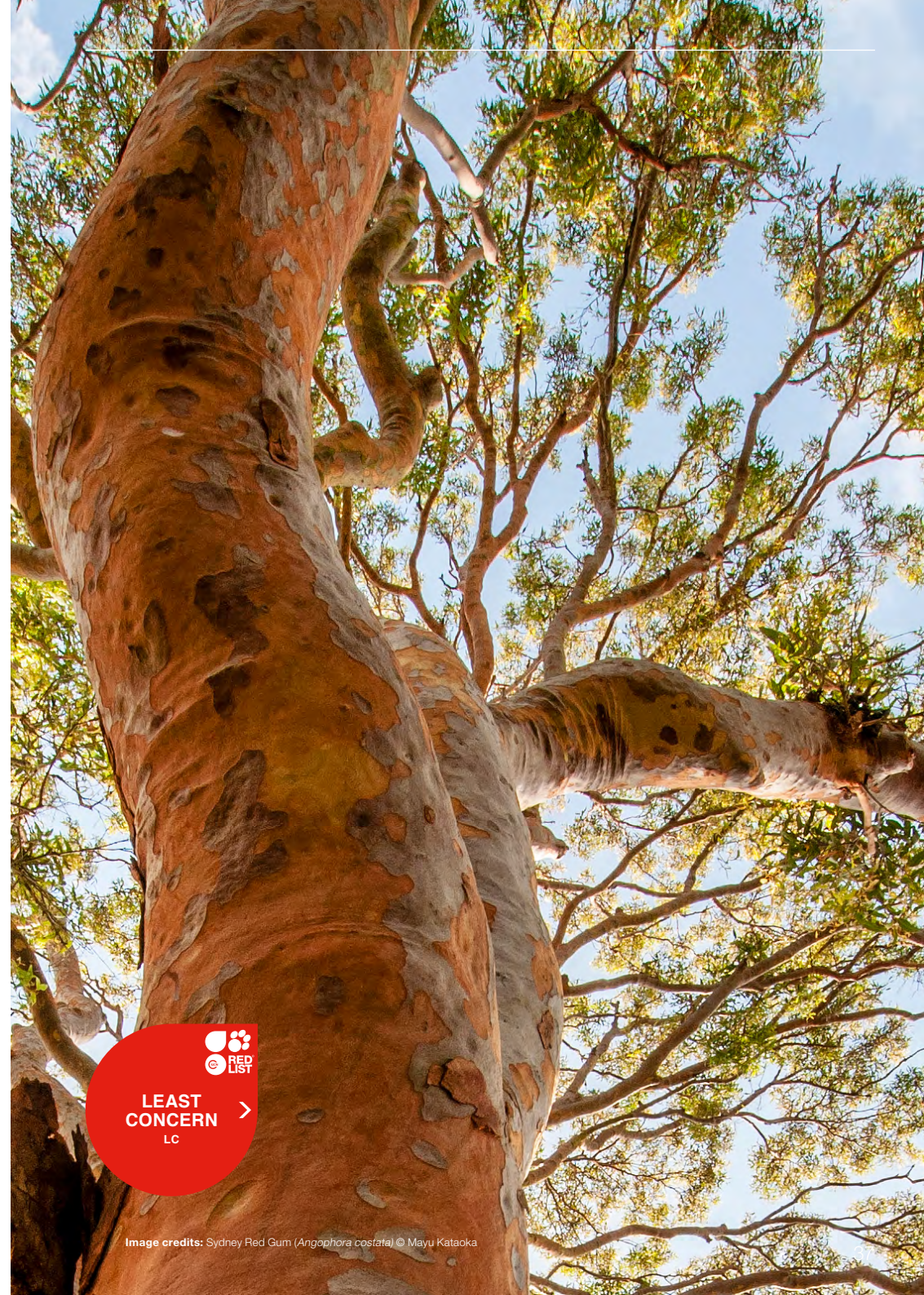- Over 2,700 people from 61 countries participated.

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Image credits: Sydney Red Gum (*Angophora costata*) © Mayu Kataoka

The IUCN Red List partnership

The IUCN Red List of Threatened Species is made possible through the active participation of the Red List Partners and their respective networks. As a result, the IUCN Red List represents an enormous investment of time, expertise and financial resources by a large number of individuals and organizations.

The Red List Partnership also serves as an important means for the partners to coordinate activities related to biodiversity assessment and analysis, and to share information, expertise and insights in ways that enable the partners to achieve their own strategic goals for science-based biodiversity conservation.

During the period 2017–2020 IUCN welcomed three new institutions to the IUCN Red List partnership:

- Re:wild
- Missouri Botanical Garden
- ABQ Biopark

Each of the 13 Red List Partners committed significant institutional resources to implementing the IUCN Red List Strategic Plan, totalling $13.8 million. The major progress reported above in terms of expanding and updating the IUCN Red List, as well as the examples of impact, could not have been achieved without this collaborative, committed effort by IUCN the Red List Partners.

Red List Partners contributed mainly to assessing and reassessing species on the IUCN Red List. Important contributions by the partnership were also made to maintain the scientific credibility of the IUCN Red List, with 99 peer-reviewed publications published 2017–2020.

24	guiding policy and action
22	highlighting extinction crisis
19	improving methods
30	advancing knowledge of species
4	other

The IUCN Red List: Oversight and financing

IUCN is the custodian of the The IUCN Red List of Threatened Species and convenes the Red List Partnership to advance the development, maintenance, promotion and use of the IUCN Red List. The partnership is convened by the Director General of IUCN and the Chair of the IUCN SSC and oversight is provided through the IUCN Red List Committee which has representation from all partners.

The IUCN Red List is funded by institutional resources from each of the IUCN Red List Partners. Strategic targets are agreed by the partnership and are integrated into IUCN's higher level objectives (e.g. IUCN Programme 2017–2020) and the partners' own institutional plans. All partners raise funds to support the delivery of their institutional commitments to the IUCN Red List. In 2017–2020 a joint fundraising approach was piloted. IUCN receives an annual contribution ($80–175k) from the licensed use of Red data for commercial purposes by the **Integrated Biodiversity Assessment Tool** which is used to support the implementation of the IUCN Red List Strategic Plan. Across the partnership, IUCN estimates that a minimum of $5.4 million is required annually for the IUCN Red List to deliver its full potential to society.

Acknowledgments

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Image credits: Splendid Waxcap (*Hygrocybe splendidissima*) © John Bjarne Jordal

Donate:

The IUCN Red List depends on donations and long-term partnerships to continue its important work assessing and reassessing the conservation status of the world's species.

Contact

Find out how you can work with us to create a more complete Barometer of Life:

**IUCNredlist.org/support/donate
redlist@IUCN.org**

The IUCN Red List of Threatened Species™ is produced by the Red List Partnership, currently: ABQ BioPark, Arizona State University, BirdLife International, Botanic Gardens Conservation International, Conservation International, International Union for Conservation of Nature (IUCN), Missouri Botanical Gardens, NatureServe, Re:Wild, Royal Botanic Gardens Kew, Sapienza University of Rome, IUCN Species Survival Commission, Texas A & M University and Zoological Society of London.