RED LIST © Guiding Conservation for 50 Years

THE IUCN RED LIST OF THREATENED SPECIES™

RED LIST ®

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IUCN SSC Species Survival Commission

Pygmy Slow Loris (*Nycticebus pygmaeus*) Vulnerable
Photography © David Haring

The IUCN Red List of Threatened Species™ is the world's most comprehensive information source on the global conservation status of animal, fungi and plant species and their links to livelihoods.

Our goal is to catalyse action for biodiversity conservation by providing information and analysis on the world's species, including threats, population status and trends.

"A sustainable future cannot be achieved without conserving biological diversity—animal and plant species, their habitats and their genes—not only for nature itself, but also for all 7 billion people who depend on it. The IUCN Red List is a clarion call to world leaders to secure the web of life on this planet."

Julia Marton-Lefèvre, Director General IUCN (International Union for Conservation of Nature).

Eyelash Frog (*Ceratobatrachus guentheri*) Least Concern
Photography © Robin Moore

RED LIST®

NOT EVALUATED	DATA DEFICIENT	LEAST CONCERN	NEAR THREATENED	VULNERABLE	‹ ENDANGERED ›	CRITICALLY ENDANGERED	EXTINCT IN THE WILD	EXTINCT
NE	DD	LC	NT	VU	EN	CR	EW	EX

Green Turtle (*Chelonia mydas*) Endangered
Photography © Kathryn Pintus

About The IUCN Red List

The IUCN Red List is a rich compendium of information on threats, ecological requirements, and habitats of species; and on conservation actions that can be taken to reduce or prevent extinctions.

It is based on an objective system for assessing the risk of extinction of a species based on past, present, and projected threats.

Species assessments are conducted following a standardized process using the rigorous IUCN Red List Categories and Criteria, ensuring the highest standards of scientific documentation, information management, expert review, and justification.

There are eight IUCN Red List Categories based on criteria linked to population trend, size and structure, and geographic range. Species listed as Critically Endangered, Endangered or Vulnerable are collectively described as threatened.
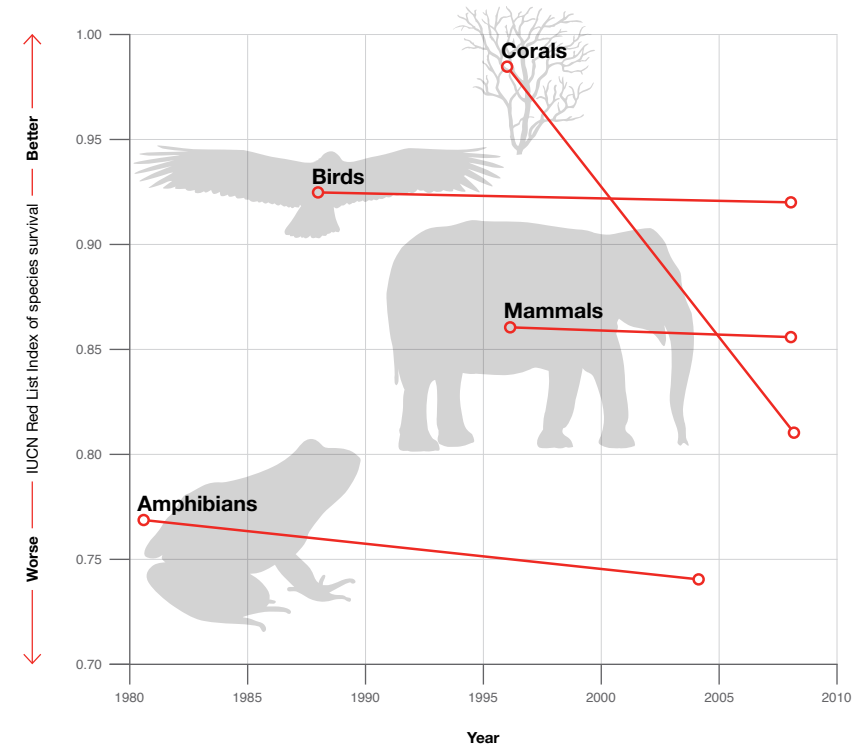
IUCN Red List Index

The IUCN Red List Index (RLI) reveals trends in the overall extinction risk of species and provides an indicator that is used by governments to track their progress in achieving targets that reduce biodiversity loss.

The Red List Index has been adopted by the United Nations as one of the indicators for the 2015 Millennium Development Goal 7 on environmental sustainability.

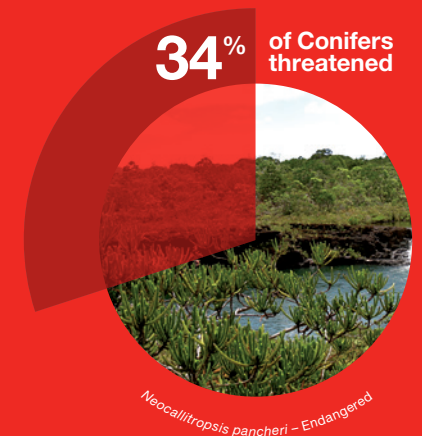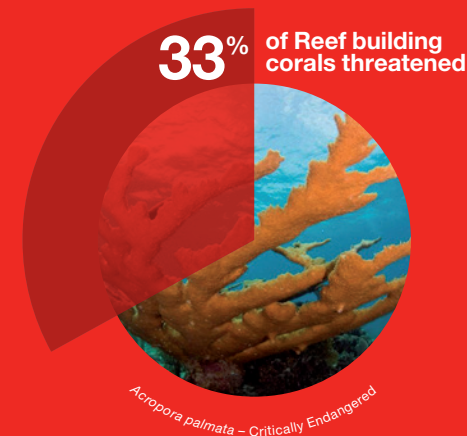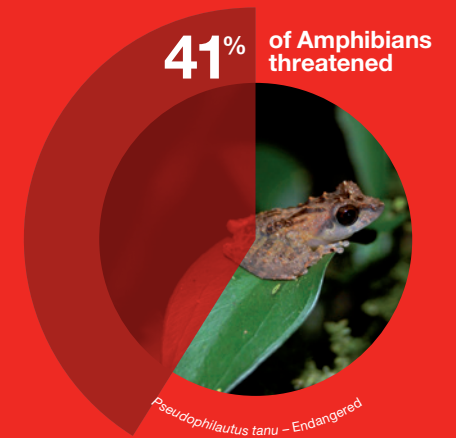It is also a useful tool for assessing progress towards achieving Target 12 of the Aichi Biodiversity Targets.

The RLI is calculated from the genuine changes in IUCN Red List Categories of all assessed species in a taxon over time. A decreasing RLI value means the expected rate of extinctions is increasing (i.e. the rate of biodiversity loss in increasing). An upward trend or increasing RLI value means that there is a decrease in expected future rate of species extinctions (i.e. a reduction in the rate of biodiversity loss).

Species on The IUCN Red List

More than 73,600 species have been assessed on The IUCN Red List. This figure includes most of the known species of amphibians; birds; mammals; angelfish; butterflyfish; crocodilians; freshwater crabs and crayfish; groupers; gymnosperms (including cycads and conifers); lobsters; mangroves; marine turtles; parrotfish; reef-building corals; seagrasses; seasnakes; sharks and rays; tunas and billfishes; and wrasses.

The results are disturbing - with several species groups facing a severe threat of extinction.

"The services and economic value that species provide are irreplaceable and essential to our well-being. Unless we live within the limits set by nature, and manage our natural resources sustainably, more and more species will be driven towards extinction. If we ignore our responsibility we will compromise our own survival."

Dr Jane Smart
Director, IUCN Global Species Programme

63% of Cycads threatened

Encephalartos laevifolius – Critically Endangered

41% of Amphibians threatened

Pseudophilautus tanu – Endangered

33% of Reef building corals threatened

Acropora palmata – Critically Endangered

34% of Conifers threatened

Neocallitropsis pancheri – Endangered

25% of Mammals threatened

Tarsius tumpara– Critically Endangered

13% of Birds threatened

Mergus octosetaceus – Critically Endangered

About The IUCN Red List

The IUCN Red List Partnership

Working together for conservation

The IUCN Red List is produced and managed by the IUCN Global Species Programme, the Species Survival Commission (SSC) and The IUCN Red List Partnership.

The IUCN Red List partners are: BirdLife International; Botanic Gardens Conservation International; Microsoft; NatureServe; Royal Botanic Gardens, Kew; Sapienza University of Rome; Texas A&M University; Wildscreen; and Zoological Society of London.

"The IUCN Red List tells us where we ought to be concerned and where the urgent needs are to do something to prevent the despoliation of this world. It is a great agenda for the work of conservationists."

Sir David Attenborough

How is The IUCN Red List used?

Guide scientific research

Scientific journals regularly cite The IUCN Red List in peer-reviewed literature. Each year numerous new conservation articles examine the values of The IUCN Red List and refer to its important contribution to conservation planning. Downloads of IUCN Red List data from the website show that academics from research institutions worldwide export IUCN Red List data for research purposes on a daily basis.

Inform Policy and Conventions

The IUCN Red List is used to inform decisions taken by Multilateral Environmental Agreements. It is often used as a guide to revise the annexes of some agreements, such as the Convention on International Trade in Endangered Species (CITES) and the Convention on Migratory Species (CMS).

The IUCN Red List assessments of freshwater species have also contributed to the work of the Ramsar Convention in selecting sites that are important for freshwater biodiversity.

The IUCN Red List will contribute to the function of the Intergovernmental science-policy Platform on Biodiversity and Ecosystem Services (IPBES) to strengthen the science-policy interface on biodiversity and ecosystem services to improve decision making.

Photography © Robin Moore

How is The IUCN Red List used?

IUCN Red List data are being used to report on and measure progress toward the Aichi Biodiversity Targets, adopted by governments at the Conference of the Parties to the Convention on Biological Diversity (CBD), 2010 - in particular, Target 12: *By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained.*

CBD Strategic Goal	Aichi Targets for 2020	IUCN Red List
A: Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society.	1: Public awareness increased.	✔
	2: Values of biodiversity recognized.	
	3: Incentives reformed.	✔
	4: Sustainable production and consumption promoted.	✔
B. Reduce the direct pressures on biodiversity and promote sustainable use.	5: Habitat loss reduced.	✔
	6: Towards sustainable management of fisheries.	✔
	7: Sustainable management (agriculture, aquaculture and forestry).	
	8: Pollution reduced.	✔
	9: Invasive alien species combated.	✔
	10: Pressures on vulnerable ecosystems impacted by climate change or ocean acidification minimized.	✔
C: improve the status of biodiversity by safeguarding ecosystems, species and genes.	11: Protected areas increased.	
	12: Extinction prevented.	✔
	13: Genetic diversity maintained.	✔
D. Enhance the benefits to all from biodiversity and ecosystem services.	14: Ecosystems are restored and safeguarded.	✔
	15: By 2020, ecosystem resilience enhanced.	✔
	16: Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization is in force.	
E. Enhance implementation through participatory planning, knowledge management and capacity-building.	17: National biodiversity strategies and action plans developed.	✔
	18: Traditional knowledge respected and reflected in the implementation of the Convention.	✔
	19: Knowledge and technologies improved and shared.	✔
	20: Financial resources increased.	

How is The IUCN Red List used?

The IUCN Red List shows where action needs to be taken to save the building blocks of nature from extinction. It provides a straightforward way to factor biodiversity needs into decision-making processes by providing a wealth of useful information on species.

Influence Resource Allocation

The Global Environment Facility (GEF) has included information from The IUCN Red List in its resource allocation framework since 2008. Other foundations and funding instruments, such as the Critical Ecosystem Partnership Fund; SOS – Save Our Species; and Mohamed bin Zayed Species Conservation Fund also use the results of The IUCN Red List assessments to guide their investments in conservation.

Inform Conservation Planning

Several conservation planning methodologies use The IUCN Red List to identify important areas for conservation including: Important Bird Areas; Important Plant Areas; and Alliance for Zero Extinction sites. For example, one of the criteria that Alliance for Zero Extinction sites must meet is that they contain at least one Endangered or Critically Endangered species, as listed on The IUCN Red List.

Improve Decision-making

The IUCN Red List can help guide environmental impact assessments. The wealth of information on habitats and threats to species are used in biodiversity management plans and site rehabilitation plans. Combining conservation planning analyses with information on threats from The IUCN Red List has also lead to partnerships with industry to explore opportunities to reduce the negative impact on biodiversity and promote more sustainable production. Initiatives of the petrochemical, mining, aggregate and financial industry such as Net Positive Impact (NPI) and No Net Loss, benefit from access to information on the distribution of species and their conservation status.

Awareness and Education

New information from The IUCN Red List generates significant media interest resulting in hundreds of articles on the web, printed newspapers, television, radio and special interest magazines; raising public awareness of the plight of species and the larger environmental issues surrounding them. The Zoo, Aquarium and Botanic Garden networks are supporting The IUCN Red List by including the IUCN Red List status on their species information signs.

The IUCN Red List website is also regularly used by educators and students of all ages. www.iucnredlist.org

Health Care

The IUCN Red List distribution information is frequently used by researchers in the health sector to look at the distributions of species which are known or suspected vectors of human and domestic-animal diseases to develop models on predicted future occurrences of the diseases. The IUCN Red List also helps to highlight those medicinal plants which are being unsustainably harvested to ensure appropriate conservation actions can be implemented to conserve these species.

Humphead Wrasse (*Cheilinus undulatus*) Endangered
Photography © Christian Laufenberg

Conservation Action

Conservation action delivers results. Many species on The IUCN Red List have been saved from extinction through conservation programmes based on sound science. These are a few examples selected to illustrate the breadth of successful interventions which have happened across the world.

a Valerian
(*Centranthus trinervis*)

This herbaceous plant is endemic to Corsica (a Mediterranean island) and it is threatened mostly by human disturbance, recreational activities such as climbing and grazing from goats. This species' habitat is now included in the Natura 2000 network, and is managed in a way that favours the conservation of this species. Climbing equipment on the cliff has been removed, and The Conservatoire du Littoral bought the area where this species is present to keep the population protected. In 2011 it was down-listed from Critically Endangered to Endangered.

a Saproxylic Beetle
(*Cucujus cinnaberinus*)

This beetle is found throughout much of Europe. The main threats are degradation or loss of habitat quality; and fragmentation and increasing isolation of beetle populations. It is listed on Appendix II of the Bern Convention and Annex II and IV of the EU Habitats Directive and is legally protected in many countries. With better protection of its habitats, this beetle is expanding its distribution in central Europe, although it is still declining in surrounding areas. In 2010 it was down-listed from Vulnerable to Near Threatened.


Asian Crested Ibis
(*Nipponia nippon*)

The Asian Crested Ibis historically nested in the Russian Far East, Japan, and China. The species declined rapidly from the late 19th century due to the degradation of nesting and feeding habitat, over-hunting, and the use of agrochemicals in rice-paddies, which causes reductions in the abundance of its prey. Since the 1980s regulations have been enacted to prohibit logging, the use of agrochemicals in rice-fields and the use of firearms for hunting. Nest trees have also been declared state property and protected. Captive breeding and reintroduction programmes have been initiated and released birds are breeding successfully. In 2000, it was down-listed from Critically Endangered to Endangered.

Black-footed Ferret
(*Mustela nigripes*)

The Black-footed Ferret was considered Extinct in the Wild in 1996. A captive breeding program initiated in 1985 by the Wyoming Game and Fish Department in cooperation with the US Fish and Wildlife Service resulted in more than 6,000 Black-footed Ferrets being born in captivity. Ferrets have been reintroduced in western US states and in Mexico. In 2008 this species was reassessed for the IUCN Red List as Endangered. Ongoing conservation is essential to continue their recovery.
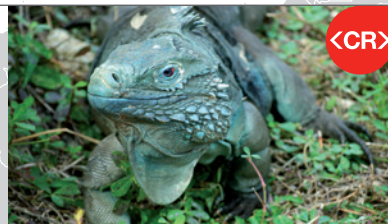

Grand Cayman Blue Iguana
(*Cyclura lewisi*)

Found only on Grand Cayman, this iguana is severely threatened by introduced species (such as feral dogs, cats, and rats) and habitat conversion. In the early 1990's the wild population was believed to be less than 25 individuals. Conservation programmes, such as captive breeding, have resulted in the release of over 600 animals into three protected areas, where feral predators are controlled. Whilst still listed as Critically Endangered, the future looks encouraging due to the extensive conservation work.

Australian Grayling
(*Prototroctes maraena*)

Native to Australia, these fish need to migrate to and from the sea to complete their life cycle. The construction of barriers such as dams and weirs, water quality decline and competition from introduced brown trout have had a major impact on populations in some river systems. Now the focus of a number of conservation measures, the population has started to recover, and in 2009 it was down-listed from Vulnerable to Near Threatened.
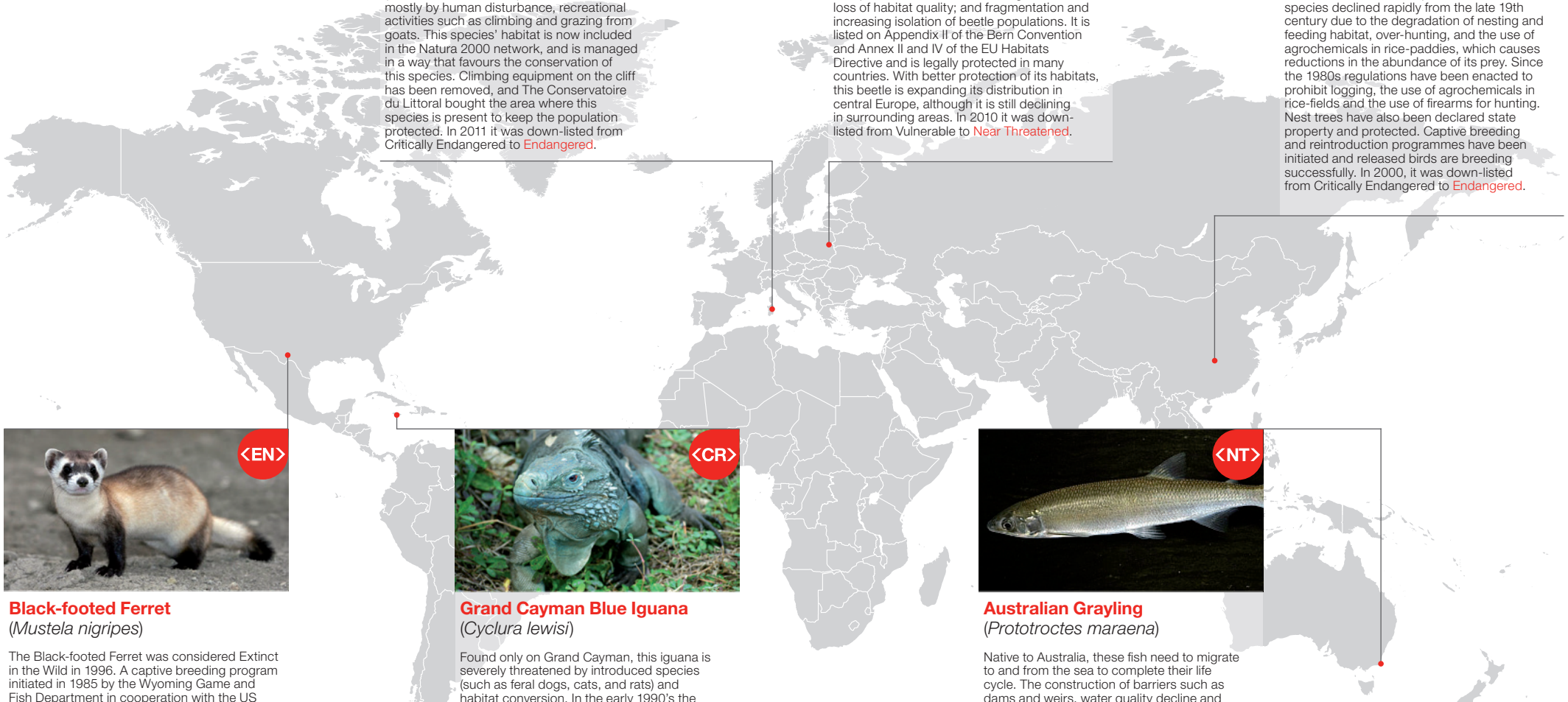
Conservation Action

Mallorcan Midwife Toad
(*Alytes muletensis*)

VU

Endemic to Mallorca (a Mediterranean island), the major threats faced are predation by the introduced Viperine Snake, competition for space with Perez's Frog and development. Conservation programmes have been put in place to remove the Viperine Snake from the toad's range, and the Balearic Government and Jersey Wildlife Preservation Trust have undertaken captive breeding, re-introduction and other conservation initiatives. At least 10 populations have been successfully reintroduced. In 2006 it was down-listed from Critically Endangered to Vulnerable.

Nile Crocodile
(*Crocodylus niloticus*)

LC

Native to Africa, the Nile Crocodile is at threat from hunting for their meat (which is believed to have curative properties) and leather; pollution and entanglement in fishing nets. International trade controls and national laws are now in place, and the extinction risk to the Nile Crocodile has decreased. In 1996 it was down-listed from Vulnerable to Least Concern, although it may still be threatened in parts of its range.

Humpback Whale
(*Megaptera novaeangliae*)

LC

By 1968 commercial whaling had seriously depleted all Humpback Whale populations. Conservation action came via the International Whaling Commission in the form of protection from commercial whaling. The species has demonstrated remarkable resilience, and most populations have increased since the end of whaling. In 2008 they were reassessed from Vulnerable to Least Concern on the IUCN Red List, with a population that is estimated at over 60,000 animals and is increasing.

Lear's Macaw
(*Anodorhynchus leari*)

EN

This rare bird is severely threatened by trade, and in 1983 the global population was estimated to number just 60 birds. It is listed on CITES Appendix I and II and is protected by Brazilian law. Infiltrations of trading networks and improved surveillance at breeding sites have resulted in arrests of poachers, smugglers and collectors. In 2009 this species was reassessed from Critically Endangered to Endangered, and the most recent population estimates are of over 1000 birds.

Seychelles Magpie Robin
(*Copsychus sechellarum*)

EN

Originally present on several islands in the Seychelles, but by 1965 only 12-15 birds remained – all on one island. The major causes of the decline were predation and competition by introduced species such as cats and rats, and reduction in the quality and quantity of habitat linked with the commercial production of crops such as banana. A recovery programme was initiated in 1990. In 2005 the species was down-listed from Critically Endangered to Endangered, and in 2006 the population reached 178 birds on four islands - a tenfold increase in forty years.

Arabian Oryx
(*Oryx leucoryx*)

VU

The regal Arabian Oryx was hunted to near extinction, with the last wild individual believed to be shot in 1972. Thanks to successful captive breeding and re-introduction efforts the Arabian Oryx is now facing a more secure future with its wild population standing at around 1,000 individuals. In 2011 it was down-listed from the Endangered category to Vulnerable.

Our target is to make
The IUCN Red List a more complete

"Barometer of Life"

A broader taxonomic base to species assessments will enable better conservation and policy decisions.

A provisional target of 160,000 assessed species has been proposed and the estimated cost of this ambitious plan is USD 60,000,000.

160,000
GOAL

73,686
SO FAR

Asessement Goal – 160,000
Species Assessed 2014 – 73,686
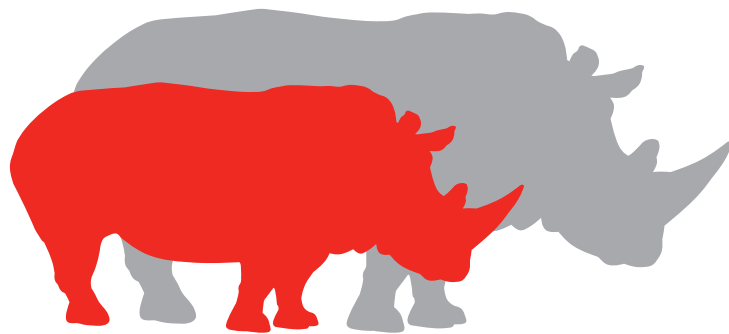Described Species – 1,889,587

White Rhinoceros (*Ceratotherium simum*) Near Threatened
Photography © Robin Moore

Comma (*Polygonia c-album*) Least Concern (European regional assessment)
Photography © Marilyn Peddle

Nature's backbone
Vertebrates

An estimated 99% of all organisms are
Invertebrates

Assessment Goal 61,635
Species Assessed 37,568 (2014)
Described Species 64,788

Assessment Goal 45,344
Species Assessed 16,726 (2014)
Described Species 1,359,365

Werauhia insignis (Mez) Not Evaluated
Photography © W. Till Barfuss and R. Samuel

Amanita muscaria Not Evaluated
Photography © Christine Majul

The Earth's lungs
Plants

Assessment Goal 38,521
Species Assessed 19,374 (2014)
Described Species 310,129

The most under-researched and under-funded
Fungi and other species groups
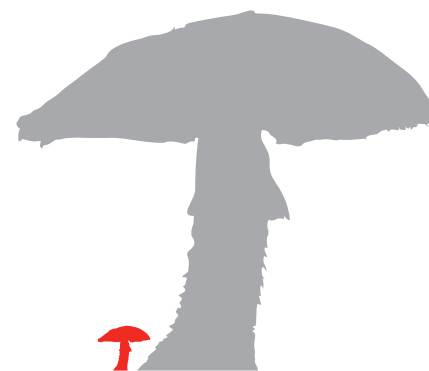
Assessment Goal 14,500
Species Assessed 18 (2014)
Described Species 165,305

The IUCN Red List is the starting point for conservation action

Species are the building blocks of life. The loss of species diminishes the quality of our lives and our basic economic security. By saving species we save biodiversity and the ecosystems that provide the natural resources we need to live.

For The IUCN Red List to become a more complete "Barometer of Life" investment is needed to: increase the number of experts trained to carry out IUCN Red List assessments; significantly increase the number of species being assessed each year; and carry out regular re-assessments of species groups.

How can you help? Contact
iucnredlist@iucn.org
for more information

"Enabling the IUCN Red List to reach its full potential as a 'Barometer of Life', would from an economic perspective, be one of the best investments for the good of humanity."

Dr Simon Stuart
Chair, IUCN Species Survival Commission

Zanzibar Red Colobus Monkey (*Procolobus kirkii*) Endangered
Photography © Robin Moore