



FERDINAND REUS

The status of a few mammalian species has improved in recent years. For example, the African Elephant (*Loxodonta africana*) moved from "Vulnerable" to "Near Threatened," although its status varies considerably across its range.

## CONSERVATION ALERT

World's Mammals in Crisis<sup>1</sup>

The most comprehensive assessment of the world's mammals has confirmed an extinction crisis, with almost one in four at risk of disappearing forever. According to The IUCN Red List of Threatened Species, the new study assessing the conservation status of the world's mammals shows at least 1,141 of the 5,487 mammals on Earth are known to be threatened with extinction, and at least 76 mammals have become extinct since 1500. "Within our lifetime, hundreds of species could be lost as a result of our own actions, a frightening sign of what is happening to the ecosystems where they live," says Julia Marton-Lefèvre, IUCN Director General. "We must now set clear targets for the future to reverse this trend to ensure that our enduring legacy is not to wipe out many of our closest relatives."

The IUCN Red List of Threatened Species ([www.iucn.org/redlist](http://www.iucn.org/redlist)) classifies species according to their extinction risk. It is a searchable online database containing the global status and supporting information on 45,000 species. Its primary goal is to identify and document the species most in need of conservation attention and provide an index of the state of biodiversity. The IUCN Red List threat categories are, in descending order of threat: "Extinct" or "Extinct in the Wild," "Critically Endangered," "Endangered," and "Vulnerable" (all for species threatened with global extinction), "Near Threatened" (species close to the threatened thresholds or that would be threatened without ongoing specific conservation measures), "Least Concern" (species evaluated with a low risk of extinction), and "Data Deficient" (species not assessed because of insufficient data). "Critically Endangered-Possibly Extinct" is not a new Red List category, but is a flag developed to identify those Critically Endangered species that are in all probability already Extinct but for which confirmation is required (for example, through more extensive surveys being carried out and failing to find any individuals).

The real situation could be much worse, as 836 species are listed as "Data Deficient." With better information, more species may well prove to be in danger of extinction. "The reality is that the number of threatened mammals could be as high as 36%," says Jan Schipper, of Conservation International and lead author of a forthcoming article in *Science*. "This indicates that conservation action backed by research is a clear priority for the future, not only to improve the data so that we can evaluate

*"Reliable data are the foundation for conservation planning that hopes to drive effective conservation action on the most endangered species and sites. For the first time, good data, contributed and validated by the best experts on Earth, show the patterns and extent of the pressures on the viability of mammal species. This trend is particularly dramatic for Southeast Asia which suffers from increasing human activities, deforestation being the major issue."*  
Prof. Luigi Boitani, Sapienza Università di Roma.

threats to these poorly known species, but to investigate means to recover threatened species and populations."

The results show 188 mammals are in the highest threat category ("Critically Endangered"), including the Iberian Lynx (*Lynx pardinus*), which has a population of just 84–143 adults and has continued to decline due to a shortage of its primary



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GIORGIO FERRELLINI

The Iberian Lynx (*Lynx pardinus*) is "Critically Endangered," and has continued to decline due to a shortage of its primary prey, the European Rabbit (*Oryctolagus cuniculus*).

<sup>1</sup> Adapted from a 06 October 2008 IUCN Press Release.

prey, the European Rabbit (*Oryctolagus cuniculus*). China's Père David's Deer (*Elaphurus davidianus*), is listed as "Extinct in the Wild." However, the captive and semi-captive populations have increased in recent years, and truly wild populations could be re-established soon. The time may already have passed to save the

*"This assessment establishes a platform from which all future conservation efforts can be measured. It captures data on the mammal fauna of the world in a unique database that has been structured to highlight conservation, and which is designed to be a living database to incorporate future data and trends on mammals. This effort will hopefully spur greater attention on the conservation of mammals and the habitats they occupy, for the benefit of all biodiversity."* Dr. Andrew Smith, School of Life Sciences, Arizona State University.

additional 29 species that have been flagged as "Critically Endangered-Possibly Extinct," including Cuba's Little Earth Hutia (*Mesocapromys sanfelipensis*), which has not been seen in nearly 40 years.

Nearly 450 mammals have been listed as "Endangered," including the Tasmanian Devil (*Sarcophilus harrisi*), which moved from "Least Concern" to "Endangered" after the global



ALICIA HIGGINS

The Fishing Cat (*Prionailurus viverrinus*) of southeastern Asia moved from "Vulnerable" to "Endangered" due to habitat loss in wetlands.



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WAYNE MCGEAN

The Tasmanian Devil (*Sarcophilus harrisi*) moved from "Least Concern" to "Endangered" after the global population declined by more than 60% in the last 10 years.

population declined by more than 60% in the last 10 years due to a fatal infectious facial cancer. The Fishing Cat (*Prionailurus viverrinus*), found in southeastern Asia, moved from "Vulnerable" to "Endangered" due to habitat loss in wetlands. Similarly, the Caspian Seal (*Pusa caspica*) moved from "Vulnerable" to "Endangered." Its population has declined by 90% in the last 100 years due to unsustainable hunting and habitat degradation — and numbers continue to decline.

Habitat loss and degradation affect 40% of the world's mammals. It is most extreme in Central and South America, western, eastern, and central Africa, Madagascar, and in southern and southeastern Asia. Over-harvesting is wiping out larger mammals, especially in southeastern Asia, but also in parts of Africa and South America. The Grey-faced Sengi or Elephant-shrew (*Rhynchocyon udzungwensis*) is known from only two forests in the Udzungwa Mountains of Tanzania, both of which



LINDA FEUREN

Cuba's Little Earth Hutia (*Mesocapromys sanfelipensis*) has not been seen in nearly 40 years and is considered "Critically Endangered-Possibly Extinct."

are fully protected but vulnerable to fires. The species was first described this year and has been listed as "Vulnerable."

However, the study also shows that conservation can bring species back from the brink of extinction, with 5% of currently threatened mammals showing signs of recovery in the wild. The Black-footed Ferret (*Mustela nigripes*) moved from "Extinct in the



MIKHAIL YERSHIN

The Black-footed Ferret (*Mustela nigripes*) moved from "Extinct in the Wild" to "Endangered" after a successful reintroduction by the U.S. Fish and Wildlife Service.

Wild" to "Endangered" after a successful reintroduction by the U.S. Fish and Wildlife Service into eight western states and Mexico from 1991–2008. Similarly, the Wild Horse (*Equus ferus*) moved from "Extinct in the Wild" in 1996 to "Critically Endangered" this year after successful reintroductions started in Mongolia in the early 1990s. The African Elephant (*Loxodonta africana*) moved from "Vulnerable" to "Near Threatened," although its status varies considerably across its range. The move reflects the recent and ongoing population increases in major populations in southern and eastern Africa. For the moment, these increases outweigh any decreases taking place elsewhere.

"The longer we wait, the more expensive it will be to prevent future extinctions," says Dr. Jane Smart, Head of IUCN's Species Program. "We now know what species are threatened, what the threats are and where — we have no more excuses to watch from the sidelines."



FRANCESCO ROVERO

The Grey-faced Sengi or Elephant-shrew (*Rhynchocyon udzungwensis*) was first described this year. Known from only two forests in the Udzungwa Mountains of Tanzania, the species has been listed as "Vulnerable."

The project to assess the world's mammals was conducted with help from more than 1,800 scientists from over 130 countries. It was made possible by the volunteer help of IUCN Species Survival Commission's specialist groups and the collaborations between top institutions and universities, including Conservation International, Sapienza Università di Roma, Arizona State University, Texas A&M University, University of Virginia, and the Zoological Society of London.

## More Than Mammals

Overall, the IUCN Red List now includes 44,838 species, of which 16,928 (38%) are threatened with extinction. Of these, 3,246 are in the highest category of threat, "Critically Endangered," 4,770 are "Endangered," and 8,912 are "Vulnerable." New groups of species have appeared on the IUCN Red List for the first time, increasing the diversity and richness of the data. Indian Tarantulas (*Poecilotheria regalis*), highly prized by collectors and threatened by the international pet trade, have made their first appearance on the IUCN Red List. They face habitat loss due to new roads and settlements.

"No other tool is as valuable for conservation as the Red List, which provides scientists and decision makers with an important set of information, freely available to the public, to improve the effectiveness of our conservation efforts." Dr. Russell Mittermeier, Chair of IUCN's Primate Specialist Group and president of Conservation International.