

The Rarest of the Rare



Amur or Siberian tiger (*Panthera tigris altaica*).

Source: Julie Larsen Maher/WCS



Some of the World's Most Endangered Animals

Extinguishment is tragic, especially if it is preventable. Today, many species are threatened by habitat destruction, overhunting, and the loss of prey and food sources. The complete list of Earth's rarest creatures is too long for these pages. Instead, each volume of *State of the Wild* highlights a selection of life forms that are inching closer to extinction, representing different taxonomic groups and all regions of the globe.

The following species are listed as Critically Endangered by the International Union for Conservation of Nature (IUCN), a global network of almost 11,000 volunteer scientists who compile and update the comprehensive Red List. The IUCN Red List categorizes rare species as Near Threatened, Vulnerable, Endangered, or Critically Endangered based on observed and estimated populations, threats, and specific biological parameters. Critically Endangered species face an "extremely high risk of extinction in the wild," often meaning that the species' numbers have been reduced by approximately 80 percent in the last 10 years (or three generations). Unfortunately, as of 2009, the total number of Critically Endangered plant and animal species was well over 3,200, a statistic that grows with each assessment. Thankfully, some saw genuine improvement in their conservation status: 37 mammal and two bird species are now less threatened than they were. Species on the road to recovery, two of which are featured in the following text, prove that conservation action can indeed help.

Cuban crocodile: The Cuban crocodile (*Crocodylus rhombifer*), which reaches a maximum size of about 11 feet (3.5 m) in length, is currently restricted to two small areas of Cuba. Illegal hunting continues to be a threat, chiefly for meat for restaurants serving the tourist industry. There is also evidence of extensive hybridization with American crocodiles (*Crocodylus acutus*), which are found throughout Central and northern South America. The estimated population of Cuban crocodiles is 4,000, but it is highly likely that a growing number of these animals are hybrids.¹

Florida bonneted bat: The Florida bonneted bat (*Eumops floridanus*) was thought to be extinct until 2002, when a small colony was discovered in a North Fort Myers suburb. The bat, the largest in Florida, with a 21-inch (53 cm) wingspan, is critically endangered due to the loss of roosting sites, a cumulative result of the felling of old trees in hurricanes and for construction. Pesticide spraying for mosquitoes may contribute to a decline of these insectivorous bats. Their population is estimated at about 100, and they were recently reviewed for potential Federal protection.²

Green-eyed frog: Chytrid fungus, fatal to amphibians, has reduced the population of the green-eyed frog (*Lithobates vibicarius*) to only a few hundred. This frog, which grows to an average of 2.5 inches (6.5 cm), was once common in Costa Rica and Panama. Agriculture and logging have now limited its range to Costa Rica where a population near Parque Nacional Juan Castro Blanco exhibited physical deformities likely due to agricultural chemicals easily absorbed by frogs. One hope for the species is captive breeding.³

Source: Julie Larsen Maher/WCS



Cuban crocodile.

Source: Merlin D. Tuttle, Bat Conservation International, www.batcon.org



Florida bonneted bat.

Source: 2005 Robert Puschendorf



Green-eyed frog.

Grenada dove: The national bird of this Caribbean island nation, the Grenada dove (*Leptotila wellsi*) numbers fewer than 150. The pink-breasted bird is legally protected and has been featured on the country's postage stamp. Nevertheless, habitat loss in Grenada, compounded by introduced predators such as mongooses, cats, and rats, has pushed the remaining Grenada doves to Mt. Hartman National Park and Mt. Hartman Estate. Despite plans to develop part of this area as a resort, a 10-year recovery plan hopes to restore enough habitat to support four subpopulations totaling several hundred doves.⁴



Grenada dove.

Source: Bonnie L. Rusk 2004

Hirola: The hirola or Hunter's hartebeest (*Beatragus hunteri* or *Damaliscus hunteri*) is one of the most highly threatened antelopes in Africa. It is now found only in an approximately 2,900-square-mile (7,600 km²) area along the border of Kenya and Somalia. White markings around the hirola's head give it the appearance of wearing glasses. The main threats to the species include disease, predators, habitat loss due to encroachment by cattle farmers, and severe drought. The species has been legally protected from hunting in Kenya since 1971 and in Somalia since 1977, but lack of effective enforcement leaves it vulnerable to poaching. An estimated 600 individuals survive.⁵



Source: Winfried Wisniewski/FLPA

Hirola.

Ploughshare tortoise: The ploughshare tortoise (*Astrochelys yniphora*) is found in the Baly Bay region in northwestern Madagascar. The current wild population is nearly 200 mature animals (400 individuals in total). The tortoise was historically threatened by hunting and frequent human-caused fires. Illegal collection of ploughshare tortoises for the international pet trade continues to be a threat. Smuggling has increased since the 2009 political unrest in Madagascar. The tortoises are now restricted to five small, unconnected subpopulations, posing a genetic concern for the species. Ploughshare tortoises are nearly certain to go extinct within 30 years if current threats continue unabated.⁶



Source: WCS

Ploughshare tortoise.

Island gray fox: The island gray fox (*Urocyon littoralis*), at 3 to 4 pounds (1.5 kg), is the smallest fox in the United States, and it lives only on six of the California Channel Islands. The fox is vulnerable to canine diseases introduced to the islands by domestic dogs and also heavily preyed upon by the golden eagle (*Aquila chrysaetos*). It is believed that there are fewer than 1,000 individuals left. Even so, in the past decade, gray foxes were euthanized on San Clemente Island to protect another rare species, the endemic loggerhead shrikes (*Lanius ludovicianus mearsi*). Because both the shrikes and the foxes are so rare, the fox-control efforts ceased in 2003, and the focus is now on restoring habitat and reducing the populations of introduced species on the islands.⁷



Source: Moose Peterson/ardea.com

Island gray fox.

Sumatran orangutan: The majority of Sumatran orangutans (*Pongo abelii*) live in the province of Aceh in northern Sumatra, Indonesia. They were originally considered a subspecies of the neighboring Borneo orangutan (*Pongo pygmaeus*) but were classified as a distinct (and much rarer) species in 2004. The Sumatran orangutan population is believed to have declined by 80 percent based on a variety of surveys over the past 75 years. A 2008 estimate places the population of Sumatran orangutans at around 6,600 left in the wild. Most orangutans live outside protected areas, and their forest habitat is seriously threatened by logging and deforestation for palm oil plantations. As more forest is converted, young orangutans are orphaned, illegally captured for the international pet trade, killed as pests for raiding fruit crops, or even killed for food.⁸



Source: Anup Shah/naturepl.com

Sumatran orangutan.

Vaquita: The five-foot-long (1.5 m) vaquita (*Phocoena sinus*) is the smallest marine cetacean and is known to occur only in the northern Gulf of California in Mexico. This porpoise has distinctive dark rings around its eyes and dark patches on its beak. The main threat to the vaquita is getting caught and drowned in fishing gillnets used in these waters. In addition, the vaquita may be affected by reduced water flow into the Gulf from the Colorado River, and the increase in pesticide and fertilizer pollution in that water. A population estimate conducted in 1997 estimated that 567 vaquitas survive, but their current number is estimated at 150. In 2009, the Mexican government passed a resolution to ban trawling in part of the vaquita's range.⁹



Source: Filip Nicklin/Minden Pictures/
National Geographic Stock

Vaquita.

White-headed langur: The white-headed or Cat Ba langur (*Trachypithecus poliocephalus*) lives on Cat Ba Island in Halong Bay off the northeastern coast of Vietnam. There may be as few as 59 individuals remaining, the result of a 98 percent decline over the last 40 years. The major threats to this species are hunting for “monkey balm,” a traditional Chinese medicinal preparation, and the destruction and exploitation of their forest habitat. Prior to 1979, few people lived on Cat Ba Island, but now approximately 12,300 people live in the buffer zone of Cat Ba National Park. The white-headed langurs are split into just a few isolated subpopulations, many of which are all-female groups. This fragmentation results in low reproductive rates and a danger of inbreeding.¹⁰



Source: Terry Whittaker/AUSCAPE

White-headed langur.

Road to Recovery

Romer's tree frog: The tiny Romer's tree frog (*Chirixalus romeri*), averaging less than 0.8 inches (2 cm) in length, is found only on the islands of Hong Kong. Romer's tree frog was first discovered in the 1950s and then was long thought to be extinct because its natural habitat was almost completely destroyed by the construction of an airport. However, in the 1990s, captive breeding and release programs were initiated by a collaboration of the Melbourne Zoo, World Wildlife Fund-Hong Kong, Hong Kong University, and the Kadoorie Farm and Botanic Gardens. A few thousand frogs were released at various sites, and while it appears that the population has not grown significantly, the species has survived where it was once thought lost.¹¹



Source: Chun Chiu, Pang

Romer's tree frog.

Przewalski's horse: The stocky, short-necked Przewalski's horse (*Equus ferus przewalskii*) is the only true living species of wild horse. It is native to the steppe of Central Asia and became extinct in the wild, existing only in zoos and animal parks. Projects spearheaded in the early 1990s by the Mongolian Association for Conservation of Nature and the Environment, the Foundation for the Preservation and Protection of the Przewalski's Horse, and the International Takhi Group have reintroduced the horse into its native habitat in three areas in central, northwest, and southwest Mongolia. As of January 2008, there are more than 300 free-ranging reintroduced and wild-born Przewalski's horses and the number is increasing. Further initiatives are under way in neighboring China. There are hopes that there will soon be large, self-sustaining wild populations of the once extinct animal.¹²



Source: Eric Bacega/naturepl.com

Przewalski's horse.