











Six of the 25 "Most Wanted" species, as determined by Global Wildlife Conservation. | Alexis Rockman

**>** CONSERVATION

# These Are the World's Top 25 'Most Wanted' Animals for Conservationists

A duck with a bright pink head, a flying squirrel, and a kangaroo that climbs trees are among the lost species that scientists are hoping to find and protect in the wild.







The world's most extensive quest to find species that have not been seen in the wild in decades has just been announced by Global Wildlife Conservation (GWC), an organization that is working with local partners to send scientific expeditions to some of the most remote and uncharted places on Earth.

The initiative has narrowed the search to focus on 25 species species. GWC compiled the list with the help of more than 100 specialist groups under the Species Survival Commission at the International Union for Conservation of Nature. The list of species was selected from a total of more than 1,200 species that are considered lost across more than 160 countries. Each of the species on the final list has not been seen since before 2007. Some may even be extinct.

"Expeditions for lost species are going to take scientists across the planet from the dark depths of the ocean to the bottom of rushing freshwater rivers, from the lush jungles of the tropics, to the seemingly barren wastelands of the desert," Don Church, GWC president and director of conservation, said in a statement. "The hope that we can preserve as much of Earth's beauty and wonder as possible will drive the adventurers to overcome the elements, logistical mishaps and the race against time."

Fundraising for the expeditions, set to launch this fall, is now underway. One challenge is that researchers on the missions may only have scientific descriptions to go by, since photographs of the animals are incredibly rare or non-existent. Images created by artist Alexis Rockman, who also creates works for the Turtle Conservancy, illustrate what some of the species are thought to look like, based on available data.





#### Miss Waldron's Red Colobus (Piliocolobus waldronae)

Last Seen: 1978 in Côte d'Ivoire

Years Lost: 39

Conservation Status: Critically Endangered

Hunting and habitat loss threaten all 10 of the recognized species of red colobus monkeys. Named after a researcher from the British Museum, Miss Waldron's red colobus is believed to be the most endangered among these African primates. "I have personally visited and photographed a population of the Endangered Zanzibar red colobus and, having spent time with these amazing animals, have a personal affinity for them," Robin Moore, GWC's communications director and a conservation biologist told Seeker. "Miss Waldron's red colobus is an ideal flagship for conservation and, if rediscovered, could help catalyze support for conservation programs involving local communities in these important and biodiverse areas."



Pink-headed Duck (Rhodonessa caryophyllacea). | Philip Nelson

Last Seen: 1949 in Myanmar

**Years Lost: 68** 

**Conservation Status:** Critically Endangered

Avian enthusiast Richard Thorns has been looking for the pink-headed duck for over a decade. During that time, he has been on six expeditions to north Myanmar. "My interest was started in 2007 when I first picked up a book on endangered birds, which also included three case histories of extinctions: the dodo of the Mascarenes, the great auk of the north Atlantic and India's pink-headed duck," he told Seeker. Thorns was captivated by the prose describing the latter, and discovered that some bird experts believed the duck could still exist. "I decided to make it my life's work to rediscover the duck," he said.

#### **RELATED: Endangered Turtle's Rare Eggs Discovered and Under Guard**

Moore at first was skeptical. "With such bright-colored plumage, it would seem the pink-headed duck would be hard to miss if it's still out there," he explained. On the other hand, armed conflict in the duck's suspected habitat has prevented researchers from properly exploring the region. "Now that the political tides have turned," Moore said, "we're hoping to work at the local level to go to places previously unexplored, where the duck may still hang on. To me, this species represents the kind of whimsy that really catches the imagination."



Wondiwoi Tree Kangaroo (Dendrolagus mayri). | Alexis Rockman

Last Seen: 1928 in Indonesia

**Years Lost:** 89

**Conservation Status:** Critically Endangered (Possibly Extinct)

As this kangaroo's name suggests, it lives in trees, or at least did so when it was known to exist. "The Wondiwoi tree kangaroo is one of the most poorly known mammals on Earth," Moore said. "That such a large-bodied mammal could be so elusive and unknown intrigues me intensely."



New Zealand Greater Short-tailed Bat (Mystacina robusta). | Don Merton, Crown Copyright/Department of Conservation

#### New Zealand Greater Short-tailed Bat (Mystacina robusta)

Last Seen: 1967 in New Zealand

Years Lost: 50

Conservation Status: Critically Endangered (Possibly Extinct)

The New Zealand greater short-tailed bat not only made this "most wanted" list, but it is also on the list of Evolutionarily Distinct, Globally Endangered (EDGE) mammals. "Bats are often maligned, but are truly fascinating animals, and it is remarkable that a species like this could go missing for decades in a

relatively well-studied country like New Zealand," Moore said. He added that if the bat is rediscovered, "it will inspire confidence that other species can be hiding out in the more remote reaches of the planet."



Namdapha Flying Squirrel (Biswamoyopterus biswasi). Wikimedia Commons

#### Namdapha Flying Squirrel (Biswamoyopterus biswasi)

Last Seen: 1981 in India

Years Lost: 36

**Conservation Status:** Critically Endangered

There are 44 species of squirrels that can glide, and they do so with the aid of a furry, parachute-like membrane that stretches from their wrists to their ankles. Once airborne, these squirrels can steer by moving their limbs and tail, altering the tension in the membrane. Moore and his colleagues believe that the Namdapha flying squirrel could still exist within northeast India's Namdapha National Park, which he said "is home to other threatened and charismatic species, including tigers, snow leopards and Asian elephants."



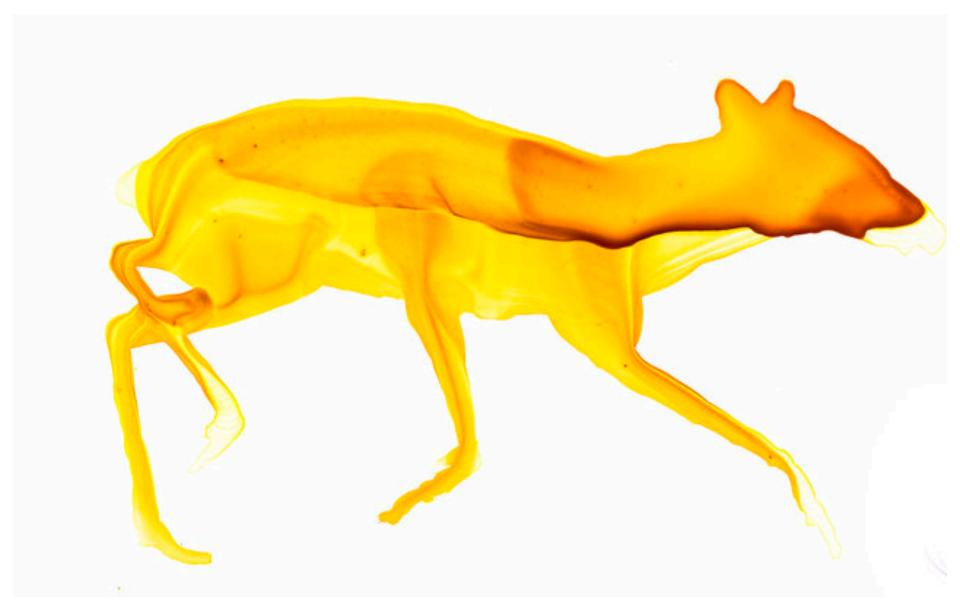
#### Attenborough's Long-beaked Echidna (Zaglossus attenboroughi)

Last Seen: 1961 in Indonesia

**Years Lost:** 56

**Conservation Status:** Critically Endangered

Echidnas, often called spiny anteaters (although they are not related to anteaters), are mammals that lay eggs and are native to Australia and New Guinea. The only other egg-laying mammal is the platypus. "Attenborough's long-beak echidna provided some tantalizing evidence of its existence, through accounts by locals and holes left behind where it may have used to hunt worms, in 2007," Moore said. "But no live individuals of this species have been confirmed since 1961, and no photos or video of a live animal exist."



## Silver-backed Chevrotain (*Tragulus versicolor*)

Last Seen: 1990 in Vietnam

Years Lost: 27

Conservation Status: Data Deficient

The silver-backed chevrotain, also known as the Vietnamese mousedeer, has only been recorded once since 1907. "We know virtually nothing about this species," Moore said. "The Annamite Mountains, where it is known from, are a hotspot of biodiverisity at a global scale, and one of Global Wildlife Conservation's priority regions for protection." He explained that the forests are subject to very high levels of indiscriminate hunting, especially snaring for small game, such as chevrotains and civets. "The rediscovery of this species could give conservation in the area an important boost."





Ilin Island Cloudrunner (Crateromys paulus). | Alexis Rockman

#### Ilin Island Cloudrunner (*Crateromys paulus*)

**Last Seen:** 1953 in the Philippines

Years Lost: 64

**Conservation Status:** Data Deficient

"Known from just one specimen that was purchased on Ilin Island, but has never been sighted in the wild, it's hard to find a more mythical creature, and especially one with the name 'cloudrunner," Moore said. The specimen was spotted in a collection at the Smithsonian Museums decades after being donated. "Surveys with locals have failed to reveal any further information on the cloudrunner," according to Moore. "The rediscovery of this species would be incredible, and provide a glimpse into the life of a truly enigmatic creature."



#### Somali Sengi (*Elephantulus revoilii*)

Last Seen: Before 1968 in Somalia

Years Lost: At least 49

**Conservation Status:** Data Deficient

Moore said that when sengis were first described by scientists in the mid to late 19th century, they were considered to be closely related to shrews, hedgehogs, and moles in the order Insectivora. There has been an increasing realization that they are not closely related to any other group of living mammals, however. "Sengis also caught our attention with a fun reproductive fact," he said. "At low latitudes, the reproduction of sengis is continuous, but at higher latitudes, it is seasonal."



De Winton's Golden Mole (Cryptochloris wintoni). | Alexis Rockman Last Seen: 1936 in South Africa

Years Lost: 81

**Conservation Status:** Critically Endangered (Possibly Extinct)

Although Swedish botanist Carl Linnaeus (1707-1778) first documented the existence of golden moles nearly 250 years ago, this is a group of animals that remains elusive and "rather unknown," Moore said. He added, "Their 'golden' name refers to the iridescent sheen of coppery gold, green, purple or bronze (depending on the species) on their fur. De Winton's golden mole, like other moles, is subterranean, giving us a chance to explore not just the species in the depths of the ocean or rainforests, but also those that dwell within the earth."



Omiltemi Cottontail Rabbit (Sylvilagus insonus). | Alexis Rockman

## Omiltemi Cottontail Rabbit (*Sylvilagus insonus*)

Last Seen: Early 1900s in Mexico

**Years Lost:** Around 100

Conservation Status: Endangered

"Those of us living in the United States have no shortage of rabbits hopping around our yards each spring, so it's probably hard to imagine a lost rabbit, other than the elusive Easter Bunny," Moore said. "But the Omiltemi cottontail rabbit is, indeed, one of the most endangered rabbit species in the world. Nobody has even gotten a photo of one. We think it has rather long ears and a distinctive coat of grey, reddish and black. So in addition to being just a cute and cuddly variety of mammal, its rediscovery would be rediscovered beauty, like finding an old, lost Picasso painting."



Himalayan Quail (Ophrysia superciliosa). | National Museum of Natural History, Naturalis

Himalayan Quail (Ophrysia superciliosa)

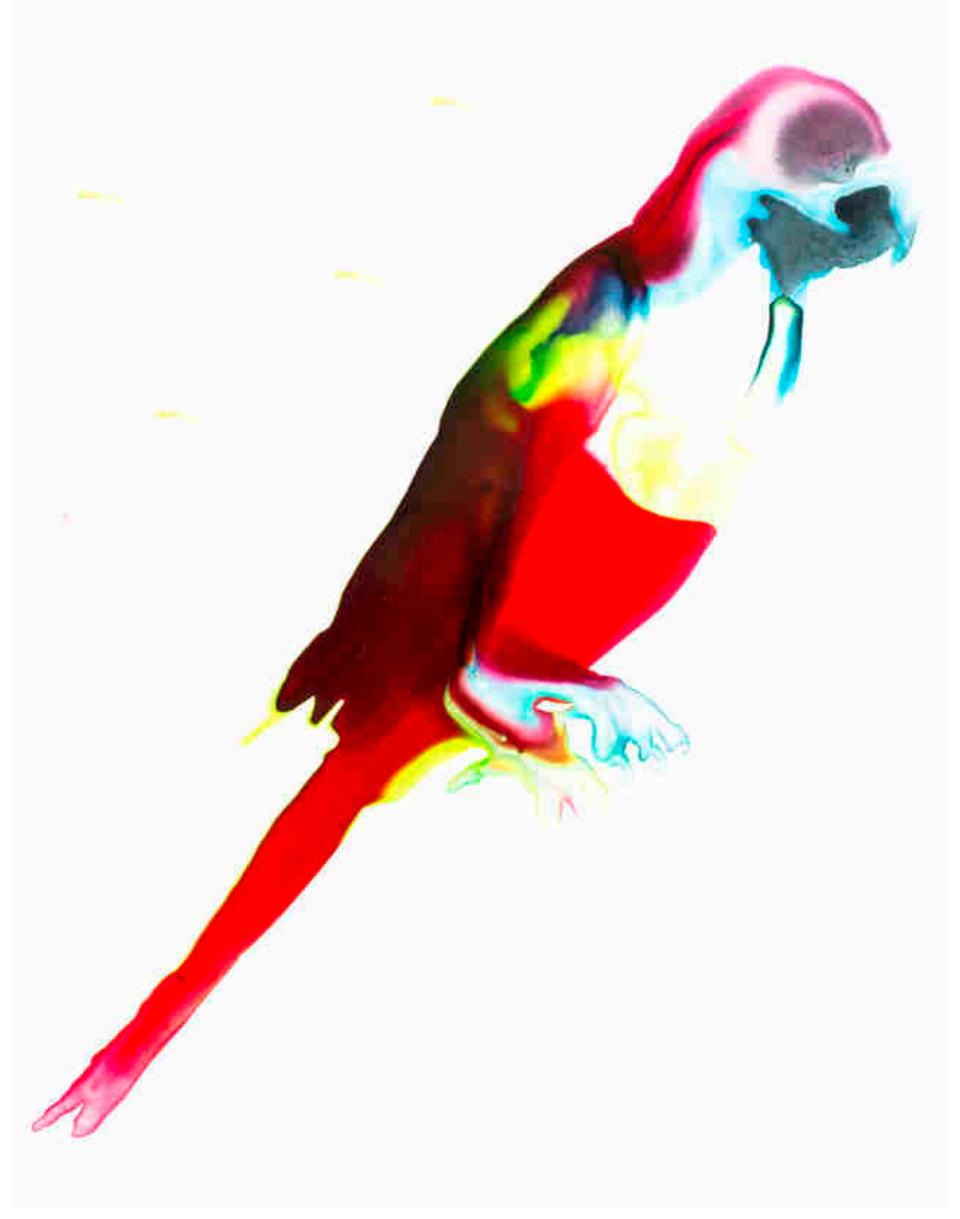
Last Seen: 1876 in India

Years Lost: 141

**Conservation Status:** Critically Endangered (Possibly Extinct)

Avian experts have a theory as to why the Himalayan quail population plummeted, perhaps even to the point of extinction. "The reluctance of the Himalayan quail to fly — unless it is almost stepped on —

may explain why it has not been seen since 1876, and provides a glimmer of hope that it could simply be hiding out in dense, long grass in the lower or middle Himalayan range, where there are local efforts encouraging people to go out and look for it," Moore said.



#### Sinú Parakeet (Pyrrhura subandina)

Last Seen: 1949 in Colombia

Years Lost: 68

**Conservation Status:** Critically Endangered (Possibly Extinct)

For years, Paramillo National Park has been closed to visitors because of armed conflict. The recent peace agreement is going to make it possible to visit that area, so Moore and his colleagues will be working with an intrepid team in search of the colorful parakeet, known only from Colombia's Sinú Valley. He said, "The beautiful Sinú parakeet seems to be touched by a rainbow, sporting an array of colors: green, maroon, blue, red and grey."



Zug's Monitor (Varanus zugorum). | Gou Suzuki

Zug's Monitor (Varanus zugorum)

Last Seen: 1980 in Indonesia

**Years Lost: 37** 

Conservation Status: Not yet assessed

The Zug's monitor, also known as the silver monitor, is a rare species of lizard. Moore said, "I have

spoken with an expert who spent five months looking for this on the island of Halmuhera (the largest of the Maluku Islands), where it is believed to exist. He said that not even local hunters reported seeing this monitor, adding to the mystery of whether it exists, and where."



Voeltzkowi's Chameleon (Furcifer voeltzkowi). | Alexis Rockman

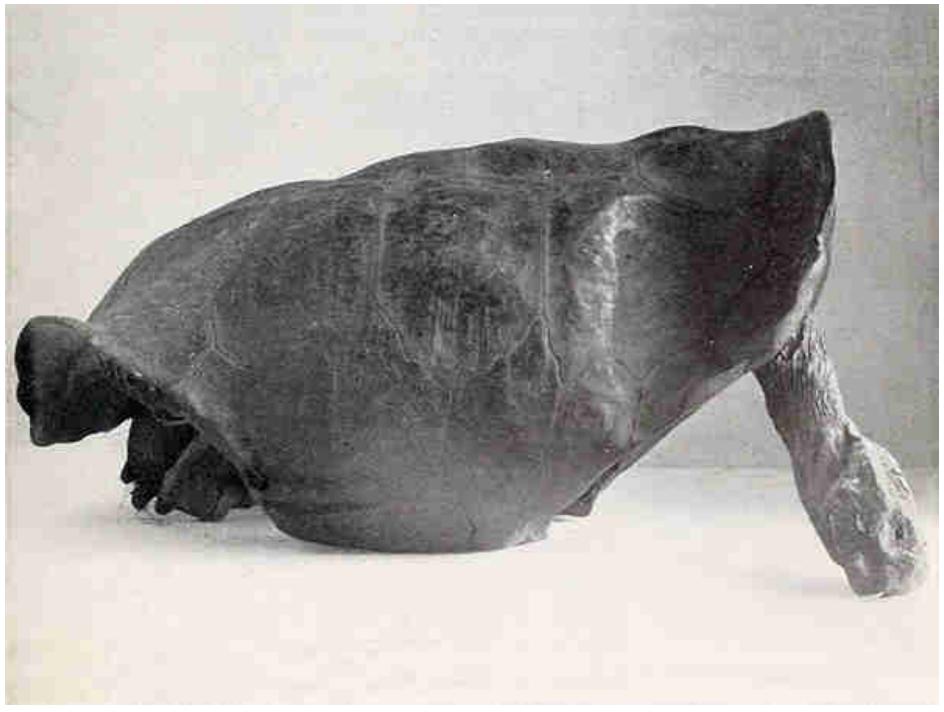
Voeltzkowi's Chameleon (Furcifer voeltzkowi)

Last Seen: 1913 in Madagascar

Years Lost: 104

Conservation Status: Not yet assessed

An expedition to search for Voeltzkowi's chameleon would, in fact, be a search for three lost chameleon species that have not been seen in decades in the same part of northeast Madagascar, Moore shared. The expedition would also serve as a springboard to explore, and shine the spotlight on, the Sorata Massif, which comprises the northernmost tip of the rainforest belt of eastern Madagascar. Moore said, "This poorly studied area is likely a hotbed of species unknown to science, such as a newly discovered species of frog with unusually long-legs."



Fernandina Galápagos Tortoise (Chelonoidis phantastica). | John Van Denburgh

## Fernandina Galápagos Tortoise (Chelonoidis phantastica)

Last Seen: 1906 in the Galápagos

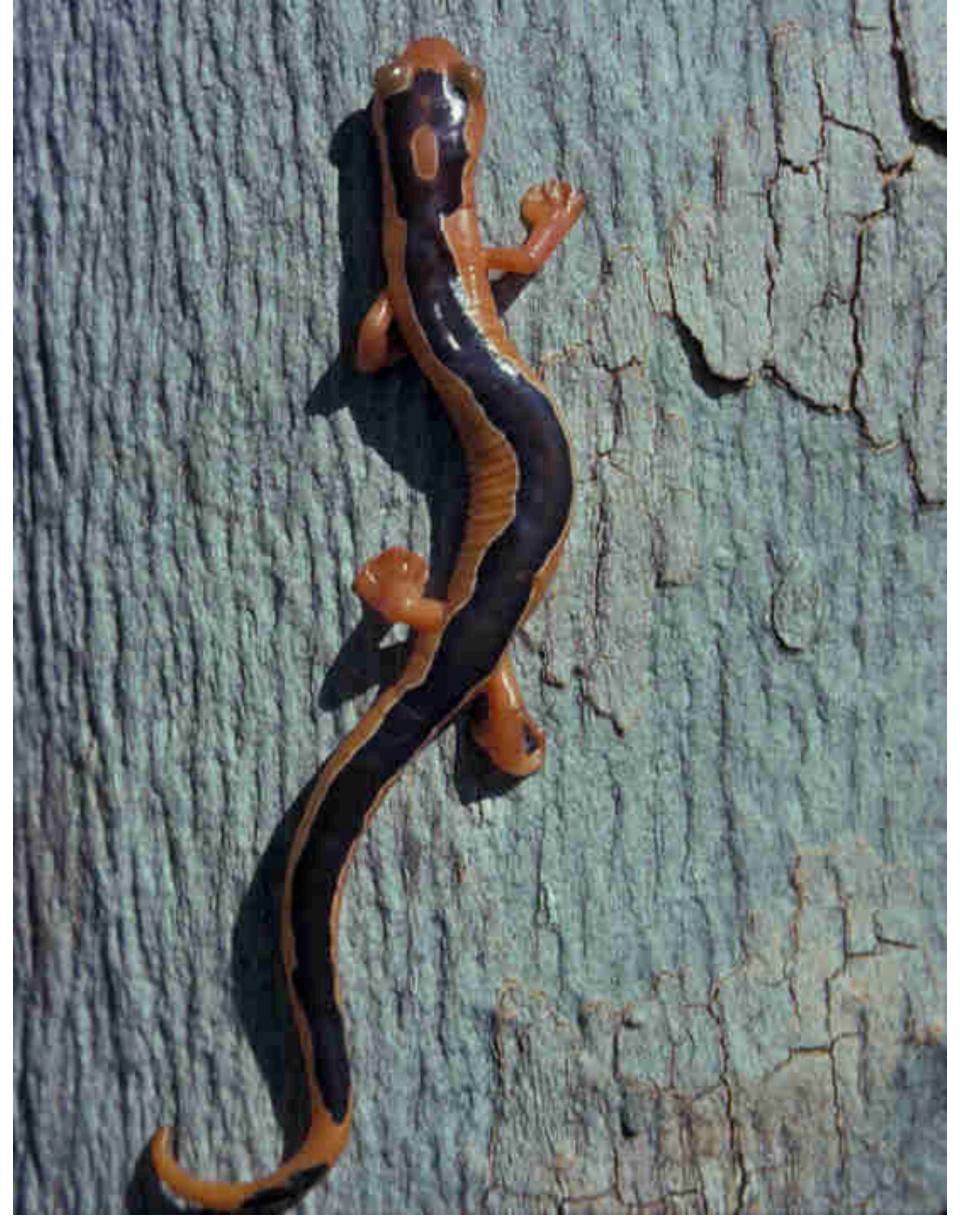
Years Lost: 111

**Conservation Status:** Critically Endangered (Possibly Extinct)

"It's very hard to imagine that nobody has caught site of a giant tortoise that lives on ... an island," Moore said. "But this isn't just any island. Fernandina Island is the youngest and most volcanically active of the Galápagos Islands. The whole island is one single massive volcanic cone, covered in near-impenetrable scrub. Someone could walk within five feet of a three-foot tortoise on the other side of the shrub and miss it entirely."

## **RELATED: Humans Are Eating Wild Mammals Into Extinction**

Ross Kiester, chief program officer for the Turtle Conservancy, is planning to travel to the Galápagos Islands soon, in hopes of locating the tortoise. He told Seeker, "I looked for this species in 1964 and found droppings and bite marks. The idea is that I'll go back after 53 years plus."



#### Jackson's Climbing Salamander (Bolitoglossa jacksoni)

Last Seen: 1977 in Guatemala

Years Lost: 40

Conservation Status: Data Deficient

Jackson's climbing salamander was called the "golden wonder" when it was first found by explorer Jeremy Jackson in the remote cloud forests of northern Guatemala in 1977. Moore said. "The rediscovery of two salamander species — the Finca Chiblac salamander and long-limbed salamander — in the same forests after 30 years without trace gives us hope that Jackson's climbing salamander still exists. That only two individuals of the species were ever seen during six months of fieldwork by Jackson and his colleague Paul Elias speaks to the elusive nature of this species, which possibly inhabits the canopy."



Scarlet Harlequin Frog (Atelopus sorianoi). | Enrique La Marca

#### Scarlet Harlequin Frog (Atelopus sorianoi)

Last Seen: 1990 in Venezuela

Years Lost: 27

**Conservation Status:** Critically Endangered

The scarlet harlequin frog's "bright orange appearance resembles that of the iconic golden toad of Costa Rica," Moore said. He added that 38 species of harlequin frog (genus *Atelopus*) are also considered to be "lost" now, with many populations dying off due to a fungus that can infect amphibians. "The rediscovery of any harlequin frog species is important as we try to unravel the mystery of what set apart those populations and species that were decimated by the deadly chytrid fungus, and those that survived."



Syr Darya Shovelnose Sturgeon (Pseudoscaphirhynchus fedtschenkoi). | Bernard R. Kuhajda

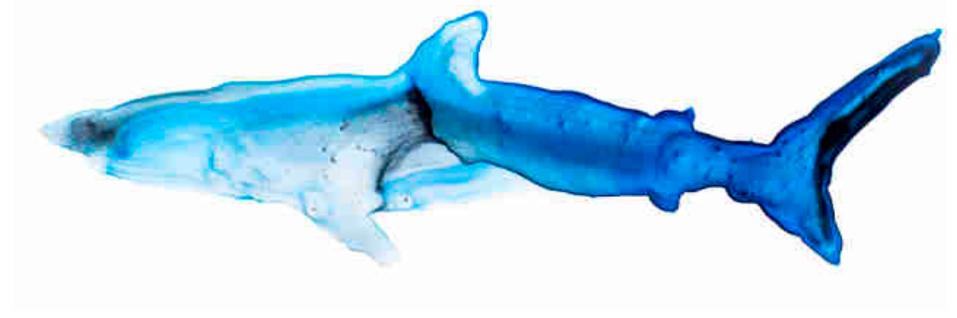
### Syr Darya Shovelnose Sturgeon (Pseudoscaphirhynchus fedtschenkoi)

Last Seen: 1960s in Kazakhstan

**Years Lost:** About 57

**Conservation Status:** Critically Endangered

Moore and his team were captivated by the appearance of this fish. "The Syr Darya shovelnose sturgeon is wild looking, something seemingly straight out of a book of mythology," he said. "Finding the species will be no small task. We'll have to maneuver political challenges, logistical issues and without knowing much about their natural history, we won't know exactly where to start the search in the Syr Darya River. We suspect that their rediscovery could have some cultural significance in this region of the world, but that is one of many questions we'd like to be able to answer in this search."



Pondicherry Shark (Carcharhinus hemiodon). | Alexis Rockman

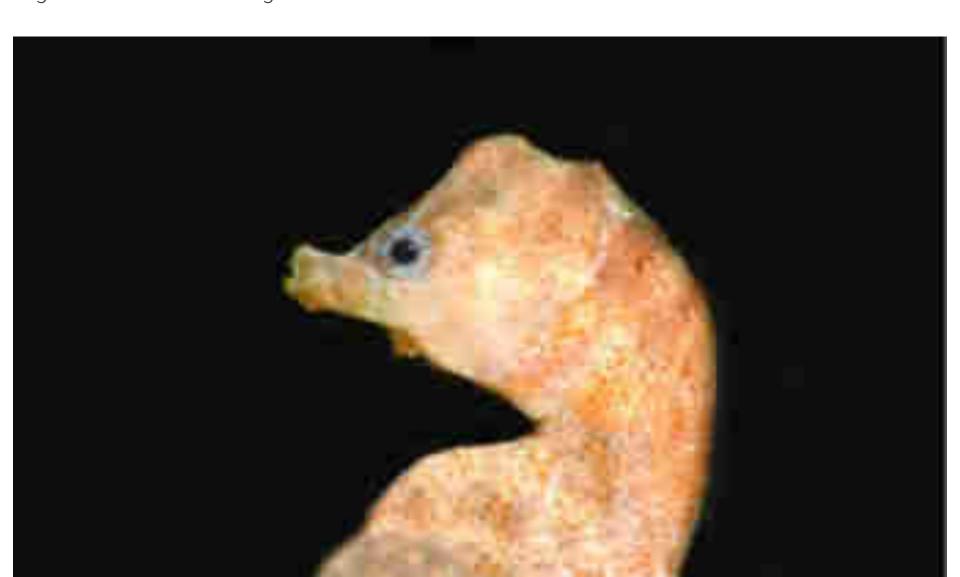
## Pondicherry Shark (*Carcharhinus hemiodon*)

Last Seen: 1979 in India

Years Lost: 38

**Conservation Status:** Critically Endangered

There have been several possible sightings of this shark in recent years, including a sighting in fresh water in Sri Lanka. Moore described it as being "a small and stocky shark that doesn't grow much larger than three feet in length."





Bullneck Seahorse (Hippocampus minotaur). | Martin Gomon/Museum Victoria

**Bullneck Seahorse (Hippocampus minotaur)** 

Last Seen: Last collected in 1996, from Australia

Years Lost: 21

Conservation Status: Data Deficient

"The deep sea is a place full of mystery, and this pygmy seahorse may be lost somewhere in the vastness of it all," Moore said. "We were intrigued that nobody has actually seen this seahorse in the wild and nobody really knows a thing about it, other than that it is tiny and elusive. Do they come in different colors? Where do they live? What are the biggest threats to their survival? What can they tell us about seahorses more generally? But we start with the most important question: Are they still out there? Through deep sea diving and fisheries sampling, we'll find out."



Wallace's Giant Bee (Megachile pluto). Clay Bolt

## Wallace's Giant Bee (Megachile pluto)

Last Seen: 1981 in Indonesia

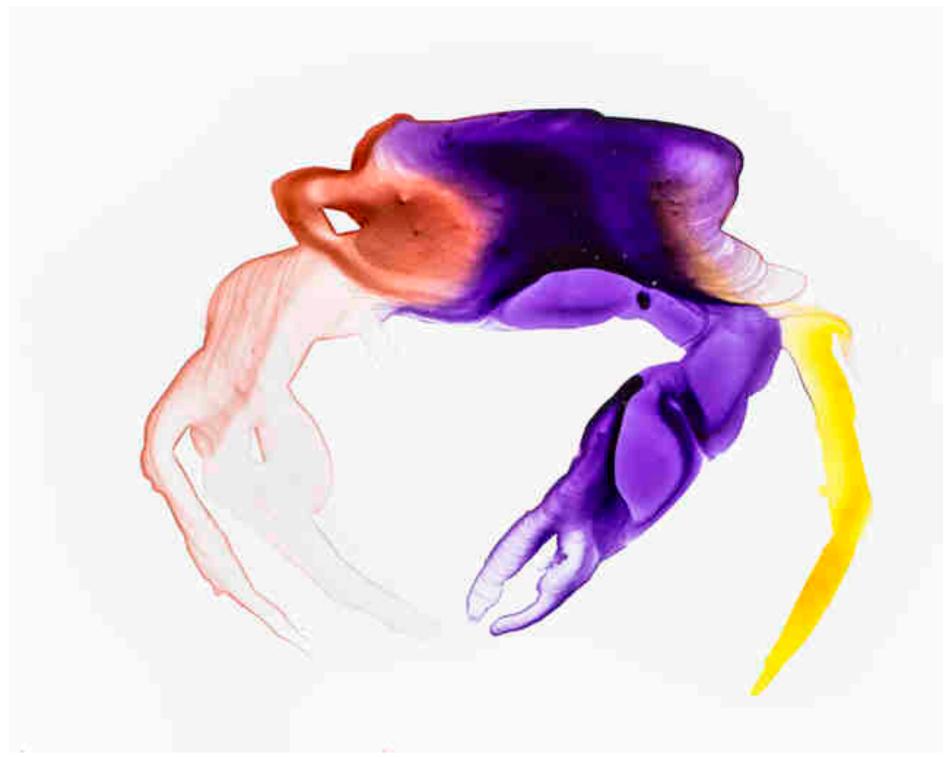
**Years Lost: 36** 

Conservation Status: Vulnerable

Natural history photographer Clay Bolt has been searching for Wallace's giant bee for many years. He

told Seeker that "this bee is found in a region of the world that is experiencing tremendous habitat loss, so we are anxious to see if it actually still exists. After reviewing satellite imagery, we are hopeful that its habitat is still intact." The bee, which has a wingspan of 2.5 inches, builds communal nests using tree resin inside inhabited nests of the tree-dwelling termite *Microcerotermes amboinensi*.

"Its record size (females can grow up to 1.5 inches long) and overdeveloped mandibles alone make it a source of great intrigue," Bolt said, "but combine that with its unusual life history traits and its geographic range being limited to a few remote Indonesian islands seldom visited by all but the most intrepid travelers, and you have the stuff that field biologists dream of."



Sierra Leone Crab (Afrithelphusa leonensis). | Alexis Rockman

Sierra Leone Crab (Afrithelphusa leonensis)

Last Seen: 1955 in West Africa

**Years Lost:** 62

Conservation Status: Data Deficient

Moore said, "When we heard about these crabs in Guinea and Sierra Leone that may be missing merely because they live in places people wouldn't think to look — like trees and caves — we knew we wanted to see if we could send a team to rediscover them. Plus, experts we've talked to have said these crabs are likely quite colorful and oddly shaped, with puffed up carapaces and long legs, and we'd love to get a picture to show the world."



#### Wellington's Solitary Coral (Rhizopsammia wellingtoni)

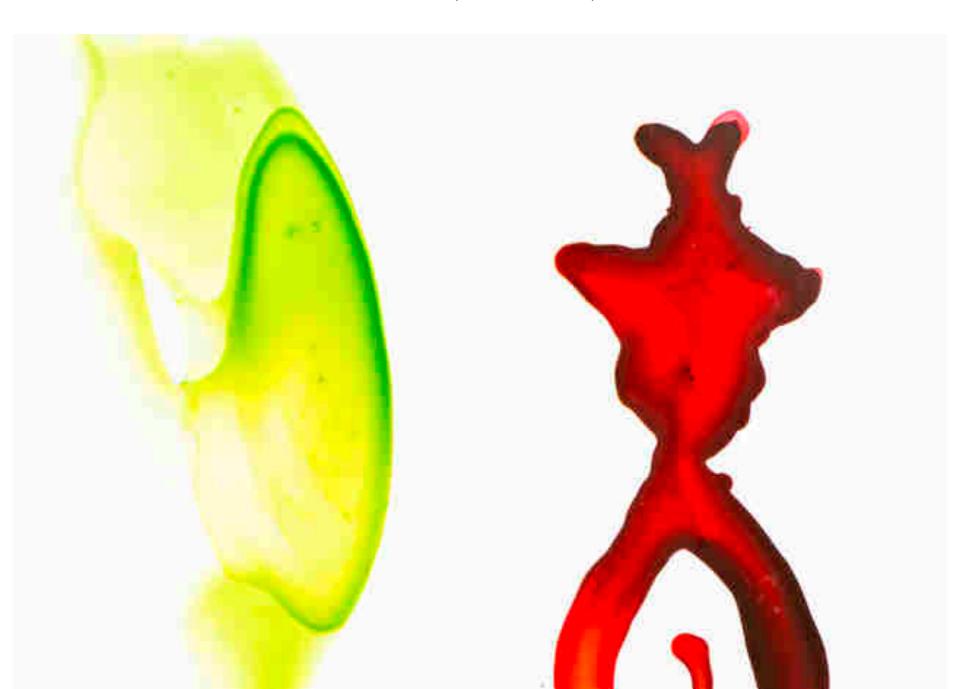
Last Seen: 2000 in the Galápagos

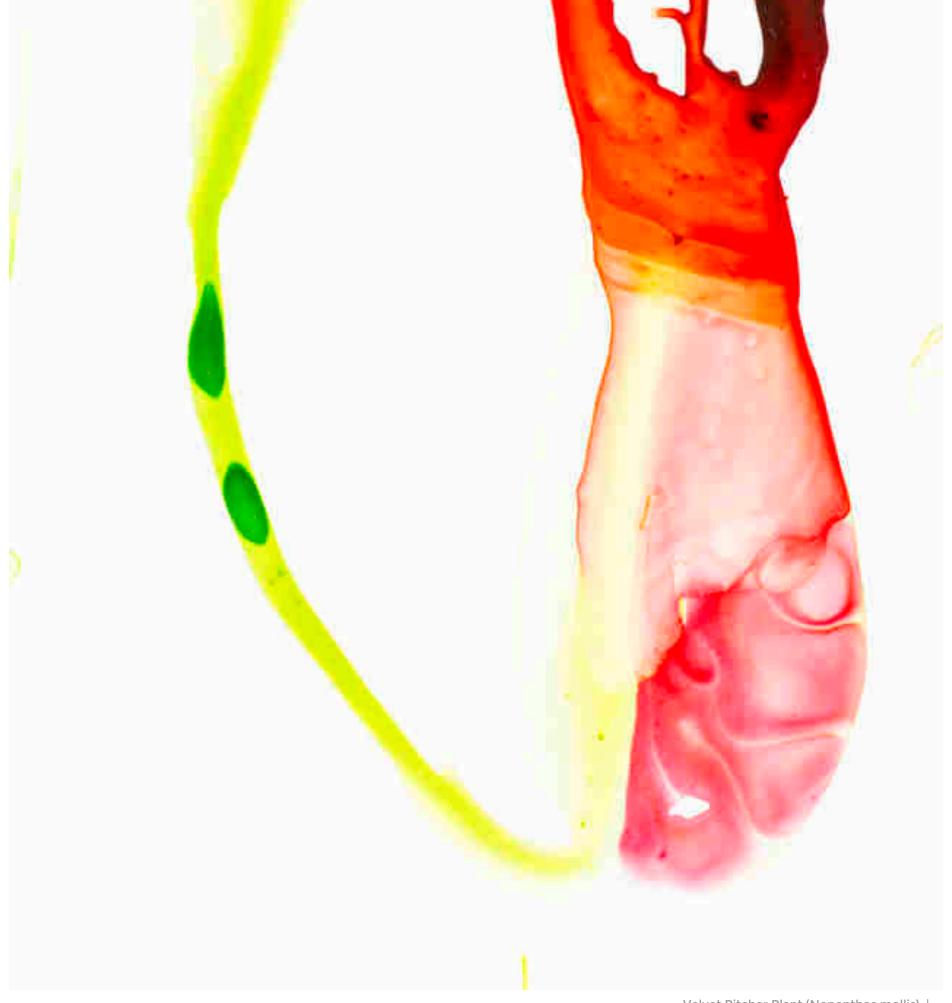
Years Lost: 17

**Conservation Status:** Critically Endangered

Climate change threatens the future of species the world over, sometimes exacerbating other threats, such as habitat fragmentation and emerging pathogens. "In the case of coral," Moore said, "the threat of global warming is direct, and there's no doubt that El Niño demolished Wellington's solitary coral in the Galápagos."

He continued, "We know, however, that nature, given a chance, can sometimes hold on even in the most brutal conditions, and we hope that this is the case for this coral — and that we can learn how it is surviving. Coral reefs determine the health of entire ocean ecosystems, so it's important for us to understand what we have and how we can best protect those species."





Velvet Pitcher Plant (Nepenthes mollis). | Alexis Rockman

Velvet Pitcher Plant (Nepenthes mollis)

Last Seen: 1918 in Indonesia

**Years Lost:** 99

Conservation Status: Data Deficient

Moore said, "The Little Shop of Horrors' Seymour has nothing on this carnivorous plant other than, well, size. The fact that pitcher plants set a trap for their live prey, and then digest that prey in digestive juices, is a thing of nightmares, at least for the insects that fall into the plant's cavity. Pitcher plants are so strange that the scientists we're working with are willing to hike for two weeks, potentially in treacherous conditions, to get to the location this species was last seen."

If the velvet pitcher plant and any of the other "lost" species are found, GWC and the researchers involved in the Lost Species campaign would work toward conserving these species and their habitats.

Lindsay Renick Mayer, GWC's associate director of communications, said: "We're clearly in need of some good news for wildlife and are certain that the stories of adventure and hope that emerge from this campaign will provide a powerful antidote to the despair that today dominates headlines about the future of our world's wildlife and wildlands."