INTRODUCTION: SECTION II

Recent discoveries have reminded us that a species can go unobserved for years (sometimes decades) and still not be extinct. One of the most exciting areas of zoology is the quest to rediscover presumably lost animals. For some, that quest becomes a near obsession, as when conservationist Peter Zahler doggedly searched the mountains of Pakistan until the world's largest squirrel—long presumed extinct—was practically dropped in his lap.

There are many other recent examples. Take Lowe's servaline genet, a predator related to the mongooses. *Genetta servalina loweia* is a sleek-bodied, spotted mammal about three feet long. This animal was collected once, in 1932, and then vanished from the view of science until it was photographed in Tanzania seventy years later. Even very large animals can pull disappearing acts under the right conditions. Recent rediscoveries include the Vietnamese population of the Javan rhinoceros, not confirmed since the 1960s, and the giant black sable antelope of Angola, a subspecies written off for forty years before it was located once again in 2002.

Leaving aside the mammals, there are examples from every corner of the animal kingdom. Take owls. The Indian forest owlet, the Madagascar red owl, and the Congo bay owl were found in the last few years after going missing for a long time—113 years, in the owlet's case. The nineteen-inch lizard *Gallotia gomera* of the Canary islands was known only from remains estimated to be 500 years old until the discovery of living specimens was announced in March 2000. One of this animal's closest relatives was the Hierro giant lizard (*Gallotia simoni*), which was also thought extinct until its rediscovery in 1975.

Those survivors still awaiting discovery may include some spectacular creatures. Does the thylacine still haunt the forests of Tasmania—or even Australia? Has the Eastern cougar slipped back into its old haunts in eastern North America? Could the Caribbean monk seal still be frolicking in the warm waters of its habitat? Not all of these creatures will be rediscovered, but some likely will be.

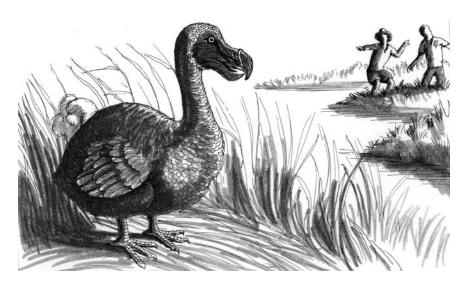


Steller's sea cow, believed hunted to extinction in the 18th century.

That's enough of a reason to keep up the scientific detective work in the hopes of restoring a precious piece of the natural world.

Today, any believable hint of an "extinct" species' survival immediately captures the attention of scientists and conservationists. An example of the eagerness to explore any hope for a species involved the ivory-billed woodpecker (*Campephilus principalis*). The world's largest woodpecker, this magnificent bird was nicknamed "the Lord God bird" after the exclamation many people uttered when sighting one. This species' existence has not been confirmed in the U.S. since 1950, although scattered reports, like a sighting claimed by ornithologist John V. Dennis in East Texas in 1966, kept interest alive. When, by 1991, sightings also ceased in the bird's last refuge in Cuba, ornithologists generally felt the ivory-bill had flown its last.

In April 1999, David Kulivan, a graduate student in wildlife biology, was hunting in Louisiana's Pearl River Wildlife Management Area when two woodpeckers alighted in a nearby tree. Kulivan was certain the birds were ivory-billed woodpeckers. A flock of birders and ornithologists, convinced by the details Kulivan provided, descended, followed by a top-rank scientific team with the latest in high-tech gear to pick up the faintest of woodpecker sounds. At this writing, the birds have not been found.



The dodo bird, symbol of extinction.

Searchers and recording devices have reported what sounds like the distinctive double rap the ivory-bill makes when hammering the bark off trees. While some of the sounds have been identified as reverberating gunshots, these events have nonetheless has re-ignited at least a faint hope for the species. Fish and Wildlife Service biologist Bob Russell believes he heard an ivory-bill in early 2003 as he followed up a report in Arkansas' White River National Wildlife Refuge, over 200 miles north of Pearl River area. The Louisiana Ornithological Society has even put out an ivory-bill T-shirt captioned, "I Want To Believe," a mantra from the paranormal TV series *The X-Files*.

To keep up the search for "lost" species is not just a scientific desire, but a moral imperative. Estimates of the number of species becoming extinct each year vary from one (the average rate for documented extinctions of known species) to an extreme of 40,000. Even given that the latter figure is an unverified worst-case estimate, the situation is serious at best.

Even among our closest relatives, the primates, the World Conservation Union estimates 130 of the 600-odd known species are endangered. Several species and subspecies are in a frightening twilight stage, where we simply don't know whether they still exist at all. In September 2002, a subspecies of large African monkey, Miss Waldron's Red Colobus, was declared extinct. This marked the first known primate extinction in modern times. (The pronouncement of the species' death might have been premature—John Oates of New York University, coauthor of the paper declaring the animal

extinct, now thinks there's a tantalizing chance he may have been wrong. The bad news is the new evidence came in the form of three kills by African hunters, and any lingering population is a hair's-breadth from vanishing for good.)

The International Union for the Conservation of Nature (IUCN) regularly puts out a Red List of threatened species worldwide. The 2003 edition is not a heartening document. The number of mammal species labeled "Critically Endangered" rose from 169 on the 1996 list to 184, as birds climbed from 168 to 182 and reptiles from 41 to 57. The number of mammals in one of the Red List categories of concern (Critically Endangered, Endangered, or Vulnerable), was 1130 in 2003, almost a quarter of the total mammal species examined.

Examples like this are fueling a growing consensus that to drive another species unnecessarily into extinction is not acceptable if we are to call ourselves "human." One need not agree with the radical "terrists" who claim humans are "a cancer on the planet" to recognize that the loss of species is a tragedy which must be prevented whenever possible.

In 1906, William Beebe expressed the thinking behind this concern in these words:

The beauty and genius of a work of art may be reconceived, though its first material expression be destroyed; a vanished harmony may yet again inspire the composer; but when the last individual of a race of living things breathes no more, another heaven and another earth must pass before such a one can be again.