ANIMALS

Meet the American animals that bounced back in 2019

This year, a gecko, a songbird, and a minnow joined the short list of recovered American endangered species.

4 MINUTE READ

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AS THE DECADE draws to a close, one little reptile is going out on a high. After 37 years as an endangered species, the Monito gecko has finally received a new, official distinction: recovered.

The inch-and-a-half-long gecko, endemic to a single tiny island in Puerto Rico, is one of three formerly endangered species to hit that milestone this year. The others—the Kirtland's warbler, a petite, chartreuse-bellied songbird, and the Foskett's speckled dace, a spotted minnow native to two springs in Oregon—join the gecko to become the 25th, 26th and 27th U.S. animal species in history to make it successfully off the Endangered Species Act's list.

The list of 27 (plus specific recovered populations of an additional five animal species) is modest when put into context. Since the Endangered Species Act took effect in 1973, 719 animal species native to the U.S. have been declared threatened or endangered under the law. Of those, some, such as the Caribbean monk seal, have subsequently been declared extinct. The rest remain on the list—federally protected, but still imperiled. (See a different endangered animal in every U.S. state in this interactive map.)

The process of taking a species off the list, called delisting, is complex. Recovery can be lengthy in the best of circumstances and impossible in the worst. But when it happens, sometimes through decades of effort, it signals conservation triumph manifesting the full intent of the Endangered Species Act: the ability not just to protect animals, but to actually bring them back from the brink.

The Monito gecko had a few things going for it: Scientists knew exactly *why* it was endangered (invasive predatory rats), they had a pretty good guess of *how* to help it (get rid of the rats), and the entire species was contained to a single, 40-acre rock.

Between 1992 and 1999, the U.S. Fish and Wildlife Service's Caribbean field office led two separate rat eradication campaigns, using poison that attracted the rats but not the geckos. It worked. By 2014, experts found Monito island to be rat-free, and the gecko population seemed to have rebounded. In 2016, they did a formal population assessment, estimating that about 7,600 geckos lived on the island.

"The Monito gecko is a pretty good example of the [recovery] process going well," says Noah Greenwald, the endangered species director at the Center for Biological Diversity, a nonprofit conservation organization.

The goal of the Endangered Species Act, says Christina Meister, a public affairs specialist at the U.S. Fish and Wildlife Service (USFWS), the agency that enforces the law, "is to conserve species to the point that they can survive on their own in the wild." To start, the Service <u>must demonstrate that a species has met its recovery goals</u>. From there, the agency has to ensure that there is no threat to its habitat, that it isn't at risk for disease or predation, and that it won't face excessive demand by people, such as for hunting, scientific research, or other uses. (<u>Read about how a species gets on the list</u>.)

If all criteria are met, the Service proposes delisting. Other federal agencies, as well as state biologists, species experts, and the public, are able to weigh in. The Service then makes a final ruling.

How can you determine if a species has recovered?

With the Monito gecko, it was a matter of counting. When USFWS officials began the 2016 population survey, they divided the island into about 40 plots and split up to count geckos. Two people counted geckos individually in every plot and then compared notes afterwards. "You can talk to each other [during the count], but you can't say how many geckos you found!" says Jan Zegarra, a field officer in the Caribbean division of USFWS and a member of the survey team.

The small, isolated range was an advantage—but the team had to count at night, when the geckos are most active. And even then, they were still difficult to find "because of their habitat," says Zegarra. "It's all crevices and holes."

Other species pose their own challenges to assessing population, he says. When counting parrots, for example, "we spread through forest, climb trees onto platforms, and wait for them to fly by."

Is every listed species a candidate for delisting?

Not necessarily, says Greenwald. Some species are conservation-reliant, he says, which means that they likely require indefinite protections in order to remain stable. Some Hawaiian seabirds, for example, are threatened by invasive predators, like rats and mice. "They don't occur on a small island where you can just eliminate them," says Greenwald, referencing the rats on Monito Island. Active conservation efforts include eradicating the predators around seabird nesting sites. "It works really well," says Greenwald, "but there's a sense that this probably needs to happen in perpetuity."

Delisting means losing the protections afforded by the Endangered Species Act. The law mandates, however, that a delisted species be monitored for five years under a pre-approved plan once it's removed from the list. Two of the species delisted this year—the Monito Gecko and Foskett's speckled dace—live on protected lands. The Kirtland's

warbler is migratory, but the Fish and Wildlife Service has put in place <u>a</u> <u>long-term conservation plan</u> to protect its nesting sites.

No delisted species have been re-listed. But Greenwald argues that some should be reassessed, pointing to the case of a small bird, called the Tinean monarch, native to the Northern Mariana Islands, a U.S. commonwealth. The monarch was delisted in 2004, but in a 2013 lawsuit, the Center for Biological Diversity petitioned for it to be relisted, <u>arguing that it faces new threats</u> from a planned U.S. Marine Corps training facility in the middle of its critical habitat (The petition was denied in 2018, and Greenwald says that CBD is considering challenging.) The gray wolf, delisted in some locations but not in others, <u>has sparked more debate still</u>.

While the recovery of the Monito gecko—and the Kirtland's warbler and Foskett's spotted dace—is a conservation success story, Greenwald and other conservationists have new concerns for the hundreds of animal species protected under the Endangered Species Act. On Thursday, Aurelia Skipwith, who once worked for agrochemical corporation Monsanto, was confirmed as the director of the Fish and Wildlife Service. Some 40 conservation groups opposed the appointment, including the Center for Biological Diversity, noting that Skipwith has been involved in efforts to ease protections of threatened species, including supporting West Virginia officials' efforts to obtain mining permits in threatened crayfish habitat.