SUMMIT DAILY

Imperiled Summit County toad on road to federal protection

Breeana Laughlin September 27, 2013

There may be new hope for a Colorado toad described as being on the fast track to extinction.

Earlier this month, the boreal toad was included in the report "Dying for Protection: The 10 Most Vulnerable, Least Protected Amphibians and Reptiles in the United States."

But just days ago, the Center for Biological Diversity reached a settlement with the U.S. Fish and Wildlife Service that will speed federal protection for the threatened species.

While Summit County still has several active boreal toad breeding sites, boreal toads now exist in less than 1 percent of their historic breeding ground. The toads have been nearly extirpated in southern Wyoming and were likely extirpated in New Mexico prior to a recent reintroduction effort, according to the Center for Biological Diversity.

The boreal toad is Colorado's only alpine forest-dwelling toad species. The amphibians grow to about 3 or 4 inches, have shiny, speckled skin with a wart-like appearance and often have a light stripe along the middle of their back.

Boreal toads can breed in a variety of habitats, including lakes, ponds and bogs, and they feed on an assortment of insects.

Researchers in Colorado started paying special attention to the toad in the 1990s when they noticed frog populations were dwindling, said Harry Crockett, native aquatic species coordinator with Colorado Parks and Wildlife.

Over the years, the scientists pinpointed the main contributor to the death of the toads: the chytrid fungus, a disease that has been linked to devastating population declines and species extinctions in amphibians around the globe.

Within just a year or so of detecting the chytrid disease in Colorado, researchers began seeing complete mortality of frog populations, Crockett said. The problem is, even though scientists were able to diagnose the threat, there is little they can do to combat it.

"Once we put our finger on the disease, we could better understand what was going on — but not necessarily do anything about it because we don't know how to control the spread of it," Crockett said.

Adult toads infected with chytrid show symptoms of lethargy, reluctance to flee, skin abnormalities, loss of reflexes and extended back legs, according to the National Wildlife Health Center. There are no documented cases of an infected population recovering following infection.

"It's a frightening epidemic that is wiping out amphibian populations all over the world, and it's hitting the boreal toad really hard," said Collette Adkins Giese, a staff attorney at the Center for Biological Diversity.

Giese said the settlement her organization reached with the U.S. Fish and Wildlife Service is a big step to avoid boreal toad extinction. The agreement will require the federal agency to make a decision regarding boreal toad Endangered Species Act protection in fiscal year 2017.

Giese said an Endangered Species Act designation is the surest way to bring a species back from the brink of extinction.

"It provides a road map of all the steps that need to be taken to protect a species," she said.

But Colorado Parks and Wildlife aquatic species coordinator Crockett isn't so sure.

"Because this is a disease, and is the overriding reason for the boreal toad's decline, it's not clear to me that a federal endangered listing will do much to bolster the status of this species," he said.

The key to saving the species, in his mind, is finding a way to combat the mysterious and deadly amphibian epidemic.

"It's not a situation where you have impending development about to take out the last population. Being listed is not going to protect (boreal toads) from chydrid," he said.

While Giese agrees there remain many questions to be answered regarding the mysterious disease, she said the steps her organization has taken to protect the species is likely to spuraction for research and funding, and force stakeholders to "get their act together."

"Even though it hasn't been protected yet, the species will benefit in the meantime," she said.