

# SUMMIT COUNTY CITIZEN VOICE

## Decline of once-common Colorado high-elevation toad a symptom of global amphibian decline



A boreal toad survey team member holds one of two adult toads found in Cucumber Gulch, in Breckenridge, Colorado, during the summer of 2005. Since then, no more boreal toads have been documented in the wetlands preserve. bberwyn photo.

By Bob Berwyn  
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FRISCO — While remnant populations of boreal toads in Colorado appear to be relatively stable for now, federal biologists are still considering whether the amphibians need protection under the Endangered Species Act.

In the latest twist, conservation groups said they've reached an agreement with the U.S. Fish and Wildlife Service on a timeline to make a listing decision, giving the agency four years to decide whether boreal toads in the southern Rocky Mountains, Utah, southern Idaho and northeastern Nevada should be formally classified as endangered or threatened.

According to the Center for Biological Diversity, toad populations are in steep decline due to a deadly fungal disease and habitat destruction.

“This agreement will move these boreal toads toward the protection they desperately need to avoid extinction,” said Center attorney and biologist Collette Adkins Giese. “In the southern Rockies boreal toads have been waiting nearly two decades for Endangered Species Act protection — protection that’s needed to address the drastic decline of these animals and the forces destroying their habitat.”

Across much of the Southern Rockies, the toads are found in less than 1 percent of their historic breeding areas, where a globally occurring amphibian disease known as chytrid fungus has wiped out most populations. Boreal toads have been nearly extirpated in southern Wyoming and were likely extirpated in New Mexico prior to a recent reintroduction effort.

Amphibians are declining globally for a variety of reasons, including the chytrid fungus, at an alarming rate that has triggered cries of concern about an amphibian extinction crisis. Learn more at [Amphibianark.org](http://Amphibianark.org).

The only remaining large population in the southern Rockies is in Colorado, and even there, the toads are only found in a small percentage of their historic range. But on the positive side, state biologists have been finding new active breeding sites, while some other known populations have winked out.

“They offset each other, but in general, we’ve documented more breeding sites this last summer than in the past few years,” said Colorado Parks and Wildlife biologist Harry Crockett. “We might have more toads on the ground out there than we thought,” he said, adding that the chytrid fungus is still taking a big toll on particular populations, with “huge mortality” in sites that become positive for chytrid.

That includes a test site on the Grand Mesa, near Grand Junction, where state biologists tried to establish a new population of toads with lab-reared tadpoles. Initially, the site was thought to be chytrid-negative around the time the first tadpoles were planted in the pond, about 2003, according to Crockett.

But the fungus was detected right around that same time. The state wildlife agency continued with the translocation project to try and learn more about toad persistence and potential resistance to the fungus.

“In all, tadpoles were released from 2003-2006. Monitoring continued and intensified from 2007-09 because during these years the survivors would have reached sexual maturity and begun returning to the site to breed,” Crockett said via email. “However, only juvenile toads were ever detected. So the project yielded some good information but was ultimately unsuccessful at establishing a new toad population.”

To gain federal protection for the toads the Center, Rocky Mountain Wild and Biodiversity Conservation Alliance filed Endangered Species Act petition in 2011. Last year the U.S. Fish and Wildlife Service issued a positive 90-day finding and initiated a full status review. The Center sued after the agency failed to make a final decision within one year, as the Endangered Species Act requires. Under Monday’s settlement agreement, the toads will get a decision on Endangered Species Act protection in fiscal year 2017.

“The boreal toad is the region’s only alpine, forest-dwelling toad,” said conservation biologist Megan Mueller of Rocky Mountain Wild. “Protections of the Endangered Species Act are needed to help safeguard the boreal toad from slipping over the brink of extinction. Protecting habitat for this unique toad will also improve the health of our mountain streams and wetlands.”

Endangered Species Act protection for the toad could spur increased federal funding for research to stem chytrid fungus and help save high-elevation stream and wetland habitat from threats like pollution and poorly managed recreation and livestock grazing.

Conservation advocates sought protection for boreal toads as early as 1993 and federal biologists added them to the endangered species candidate list in 1995, then reversed course in 2005, saying that the Southern Rockies populations were genetically related to other, less-threatened populations.

Since then two genetic studies have shown that boreal toads in the southern Rockies are part of an evolutionarily significant “clade” that includes boreal toads in Utah, northeastern Nevada and southern Idaho. This unique

population of boreal toads contains as much genetic diversity as previously recognized species.

The 2011 petition filed by the Center, Rocky Mountain Wild and Biodiversity Conservation seeks protection for this population. The Service's positive 90-day finding recognizes the scientific evidence showing that these genetically unique boreal toads are experiencing significant declines in population size and distribution.

The boreal toad is one of 10 species that the Center prioritized for protection this year under a 2011 multi-species settlement agreement with the Service. That landmark settlement is expediting protection decisions for 757 species and has already resulted in the protection of 109 plants and animals. Monday's agreement gives the boreal toad a place in the long line of species awaiting protection decisions.