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Global Warming Distresses Tiny Mountain Dweller

A hamster-sized, fur ball of a creature with short legs, known as the American pika, makes its home in high mountain slopes. However, as climate change causes warming, the tiny pika is forced to scuttle a little farther upslope to seek cooler dwellings, the Associated Press accounted.

The trouble is, in some places they have run out of slope to escape to, making it quite difficult for the pika to endure.

Conservationists are working hard to grant the pika the first species in the lower 48 states to receive federal endangered species protections chiefly as a result of climate change.

Earthjustice attorney, Greg Loarie, said, "It's feeling an exaggerated brunt of global warming." Loarie, who actively involves himself with lawsuits to get the pika protection informs, "Unlike others, it can't move north. It's stuck."

To determine whether the pika requires an in-depth look or should be on the endangered species list, the U.S. Fish and Wildlife Service have allotted themselves time until May 1st to make this assessment.

Threats of global warming will inevitably cause species declines in the very near years. The polar bear is the first to make the list, and the pika may very well be next, indicated Dan Ashe, science advisor to the head of the Fish and Wildlife Science.

"It's like the 'check engine' light that comes on in your car. It tells you something's going on here," Ashe said.

In the Great Basin areas of Nevada and Utah, pikas are already suffering perilous conditions.

Pikas once typically dwelled at about 5,700 feet above sea level, but know they are averaging higher than 8,000 feet, according to the 2005 research of University of Washington's archaeologist, Donald Grayson.

"In the Great Basin, pikas now are at such high elevations, there's not any place for them to go any higher," he said. "I actually think that pikas in the Great Basin are probably doomed."

The pika also inhabits parts of California, Colorado, Idaho, Montana, New Mexico, Oregon, Washington and Wyoming.

In 2003, a study was conducted to count the populations in the Great Basin. What resulted were six of 25 previously known pika populations had disappeared. There have been more recent trips to the 25 sites, but researchers have not published their findings yet.

Erik Beever, a U.S. Geological Survey ecologist in Anchorage, Alaska suggested: "Climate seems to be the single strongest driver but it's interacting" with other contributors such as grazing, habitat loss, roads and human disturbance. Beever studied pikas for about 15 years, including the Great Basin study as a graduate student in 2003.

Pika's possess odd traits including dense fur, slow reproductivity and a thermal regulation system making it best suited for alpine climates, and is quite intolerable of temperatures exceeding 78 degrees.

"There's not a lot of wiggle room with these guys," Beever said, referring to the small difference between pikas' average body temperature and fatal temperature.

That could potentially be detrimental for the pika, especially in parts of the West where climate change is anticipated to create some of the most considerable temperature changes in the country.

Fortunately, pikas are not facing danger everywhere.

Alpine ecologist with the U.S. Forest Service, Connie Millar, dedicates much of her research time in the Sierra Nevada Mountains noting and recording signs of pikas.

She has found only 2 percent of 279 pika dwellings to have been abandoned over the last two years. Some of her sightings revealed that pikas were even showing up at lower elevations than typical. However, evidence of pikas leaving in parts of the Great Basin proved higher, about 17 percent of expected pika dwellings showed no indication of animals.

It is not expected that a widespread species like the pika have uniform effects. Climate change, interacting with complex ecosystems, will surely cause a variety of different outcomes.

"What it's doing in one place, it might not be doing elsewhere," Millar said.

Last summer, research teams set out across Utah hunting for pikas at 113 spots where they were thought to be living. Of those, approximately 75 percents showed indications, state officials said.

Pikas are common to hikers along high, rocky slopes in major national parks like Yellowstone, Glacier and Yosemite, but population investigations have been infrequent across their range.

The federal government was sued by an environmental group, the Center for Biological Diversity, to force protection for the pika under the Endangered Species Act. A comparable suit was also filed against the state of California.

A settlement was attained in February for the federal lawsuit requiring a decision from the Fish and Wildlife Service by May 1. A hearing has been scheduled for later this month in the California lawsuit. State wildlife officials disagree that pikas are truly threatened.

"What the loss of the pika shows us is that global warming is impacting wildlife here in our own backyard," said Shaye Wolf, a San Francisco-based biologist for the environmental group. "It provides an early indicator of what's to come if we don't reduce our greenhouse gas pollution."

Listing the pika, however, or any other species due to danger from global warming brings about a new set of questions for wildlife managers.

The polar bear was the first listed endangered species during the Bush administration in 2008 due to threats of global warming. Officials promptly finalized regulations, though, to guarantee the listing could not be utilized to block ventures that add to global warming. That pronouncement is now being tested in court.

It is vague, Ashe said, specifically what measures could be taken to care for the pika and protect it from climate change. Climate change has international causes and inferences, making it difficult to pinpoint a recovery plan as it would be for specific threats such a grazing or roads.

The Earthjustice attorney, Loarie recognizes it is a new and changing territory for wildlife managers, yet it should not excuse aggressive efforts from being made.

"The pika is the tip of the iceberg," he urged. "Scientists are saying if global warming continues on this track, there are more extinctions coming. I don't think that most people are willing to accept that."