

KNPR Fifth Street Newsletter
A Mystery Solved?
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Ecologist Jim Boone thinks he knows what's destroying desert plants. But it's cold comfort.

IN THE LOCAL conservation community, the most talked-about plant to have possibly been eviscerated by small mammals dying of thirst is the rare Tiehm's Buckwheat. But it's far from the only one.

The Center for Biological Diversity, which has long lobbied for Tiehm's Buckwheat protection under the Endangered Species Act, has said it believes humans were responsible for recently digging up some 17,000 of the Nevada flowering plants on a site near Tonopah, where Australian company loneer has proposed a lithium mine. Retired wildlife biologist Jim Boone isn't so sure.

Boone says he went to the site in September full of righteous indignation and prepared to document a case of eco-terrorism. What he found, instead, was further evidence that the Southwest's prolonged drought is driving rodents to gnaw on desert plants in a desperate search for moisture. The jury may still be out on what destroyed the Tiehm's buckwheat, but Boone's theory is based on observations beyond that single site. As he documented in a blog post on his popular Bird and Hike website and discussed on "KNPR's State of Nevada," Boone has observed similar destruction, in unusually high amounts, all over the Nevada desert. Though humans might not be directly responsible in the Tiehm's Buckwheat case, he notes, humankind generally is implicated in the environmental degradation caused by climate change.

Here's a visual tour of the damage Boone has observed this year, along with descriptions, both as told to Desert Companion and written by him.

"Driving north out of town, I was stunned to see the desert so dry — the plants clearly were suffering. The creosote bushes were brown, and our usually bright-green Mojave yucca (pictured) had turned sickly yellow — miles and miles of sickly yellow as I drove up the highway."

"It's not unusual to see Joshua Tree leaves chewed on by wood rats, but I'd certainly never seen them chewing the bark off a J-tree (pictured). You'll find where a Desert Tortoise has chewed on a Beaver Tail Cactus or jackrabbits have chewed on Barrel Cacti, but it's rare enough that when you see it, it's worth stopping to take a picture. Now you see it everywhere. That's one thing that's remarkable about this. We've seen damage in Mojave National Preserve, Gold Butte National Monument, Red Rock National Conservation Area, Basin and Range National Monument, up at Tonopah, and some mountain ranges up there."

"It would be interesting to do a study to find what percentage of the Joshua Trees have been damaged and how many would die. ... As for the animals that are doing it — that are likely dying of thirst — it's probably white-tailed antelope squirrels and desert wood rats. The antelope squirrel is the one everyone calls a chipmunk."

"We've seen it in virtually all the cactus species. The yuccas — Joshua Tree, Banana Yucca, Mojave Yucca and Utah Yucca, Silver Cholla (pictured), Buckhorn Cholla; and cacti — Beaver Tail, Pincushion, Barrel, Pineapple ...

But then also, honey mesquite, catclaw, they're stripping the bark off the branches of those, too."

"Nothing on this scale has happened before. At this point, it's running around throwing your hands in the air yelling there's a problem that people need to pay attention to. Hopefully, the drought will end, and it won't be a problem long-term. ... Drought, rodents trying to survive, and mega fires blowing smoke across the landscape. Indeed, something is wrong in the desert this year."