

Lake County News

State endangered species status sought for Townsend's big-eared bat

SUNDAY, 04 NOVEMBER 2012 / SHEILA PELL



Townsend's big-eared bat is the focus of a new California Endangered Species Act petition filed on Thursday, October 18, 2012, by the Center for Biological Diversity. Photo by Ann Froschauer, US Fish and Wildlife Services.

LAKE COUNTY, Calif. – For the second time in recent months, a conservation group has filed a petition that would protect a Lake County native species.

The first petition seeks both state and federal protection under the Endangered Species Act for a fish, the Clear Lake hitch. Now a mammal is in the spotlight.

On Oct. 18, the nonprofit Center for Biological Diversity filed a petition with the California Fish and Game

Commission, calling for threatened or endangered listing for the Townsend's big-eared bat throughout its statewide range.

That range includes Lake County, but all throughout the West the Townsend's bat – a species with long, rabbit-like ears – is disappearing.

In California, despite its wide range, surveys show "serious declines in the number of colonies, colony

size, and availability of suitable roosting habitat,” said Noah Greenwald, endangered species director at the Center for Biological Diversity and the author of the 80-page petition, which draws on surveys and studies by bat biologists Elizabeth D. Pierson and William E. Rainey, and others.

As old mines are cleaned up or reopened throughout the Coast Ranges, the need for better protections has increased, bat advocates say.

Townsend’s bat preferred roosting sites are mines and caves, where they are easily disturbed by human activities.

Bats also are threatened by the release of toxics from mines where they roost and forage. According to the US Geological Survey, mercury accumulation in the tissues of wildlife is linked with “neurological and behavioral abnormalities, low reproductive success, and direct toxicity.”

Yet cleaning up the mines presents another threat. According to one study by Pierson, public lands policy manuals don’t often recognize mines as habitat. “Some of the most pressing conservation issues facing bats today arise from their propensity to roost in mines.”

A USGS investigation of the Helen, Chicago and Research mines concluded that “release of mercury from the mine sites has increased its concentration in invertebrates and fish.”

Higher concentrations of dangerous methylmercury were found in invertebrates from the upper sites on Dry Creek. “Mammals and birds could consume water from the drainages, or eat the sediments, invertebrates, and vertebrates in the area,” the study said.

Other threats are habitat loss, pesticide poisoning and the westward expansion of white-nose syndrome, a fungal disease that has wiped out millions of bats on the East Coast.

Bats provide vital ecological services, experts say, consuming mosquitoes and agricultural pests.

Townsend’s bats feed heavily on Noctuidae moths, which are pests that can harm crops.

Greenwald thinks that the state has been too slow to act.

In 1986, California Fish and Game designated the Townsend’s bat a “species of special concern.” According to the department’s Web site, “Species of concern receive no legal protection.”

The goal of the designation is to halt their decline “by calling attention to their plight” and to address the problem “early enough to secure their long term viability,” according to Greenwald.

In 1987, the department hired UC Davis researchers Pierson and Rainey to conduct a survey of the state’s Townsend’s bat populations.

Their report, finalized in 1998, offered fresh evidence of the bat’s dire situation.

The four-year survey found steep population declines over the past 40 years. Overall, the number of animals had dropped 55 percent and the size of colonies had plummeted as well.

Of the 37 known colonies, which held about 4,250 adult females, only three had protected roost sites.

There were significant losses at Lake County’s four important hibernating sites, which included Bartlett Mountain. Historic records showed that the largest number of individuals in Lake County had been 55. Pierson and Rainey’s survey found only 17.

The primary cause of its decline: “human disturbance of roosting sites,” the survey found.

In 2011, a Fish and Game status review of the 25 bat species in California found that Townsend’s bat has the greatest need for conservation.

A brew of factors was cited: disturbance at caves and mines, loss of habitat to mining, logging and urban development, white-nose syndrome and others.

Still, no new protections were put in place, Greenwald’s petition noted.

The California Department of Fish and Game developed a draft conservation plan for bats, with

Townsend's the greatest concern, but never finalized it.

Without state protection, there is no assurance the bats won't be disturbed during the cleanup of old mines on public lands.

In his petition Greenwald mentioned the "extraordinary measures" experts recommend when doing roost surveys. Everything from the noise of rustling fabric to using the right lighting must be considered.

The Bureau of Land Management considers Townsend's bat a "sensitive species." That means, where the bat lives on Bureau land, "the use of all methods and procedures necessary" to improve their condition and habitats.

But the bats often evade detection without careful surveys, according to reports by Pierson.

Townsend's bat has been documented at old mine sites near Middletown. The Helen, Chicago and Research mercury mines are slated for cleanup – and the Bureau has evidence of the bats' presence on at least one site.

A 2008 BLM resource report for the Helen Mine found five sensitive species "are present in the vicinity of the Helen Mine," including Townsend's bat. The Bureau did not recommend mitigation measures to protect them during cleanup.

Bureau Supervisor Gary Sharpe said the Townsend's bat was "documented north of the Helen Mine, at the Chicago Mine on BLM land, rather than on the Helen Mine site proper."

He added, "There is one partially collapsed adit at the Helen Mine site that did not appear to be suitable for the bats nor was it identified as a location occupied by the bats."

Since the partially collapsed adit – a mine entrance – "did not appear to be a public hazard, it was not disturbed during the mine remediation activities," Sharpe said.

He assumes the bats do roost in the mine tunnels at the Chicago Mine. "The one I believe they have been identified as occupying is dangerous to the public," he said.

"I don't have the designs done for the Chicago Mine site cleanup, but can assure you that the bats will be taken into account and their habitat protected," Sharpe said.

The petition will next undergo a 90-day review period by the U.S. Fish and Wildlife Service and the California Fish and Game Commission.

If the bat becomes a candidate species, another evaluation will follow: a one-year review of the Townsend's bat status.