

UC SANTA CRUZ CAMPUS NATURAL RESERVE

TOWNSEND'S BIG-EARED BAT



Alex English

Scientific Name: *Corynorhinus townsendii*

Common Name: Townsend's Big-eared Bat

Global Rarity: Apparently Secure

U.S. or State listing: California Species of Special Concern; Imperiled

UCSC Rarity: Extirpated



General Description

Townsend's Big-eared Bats are medium-sized bats with very long ears that can reach 38 mm. Their fur is brown above and does not contrast strongly with their buff-colored undersides. The fur is gray at the roots. The bats feature fleshy bumps on either side of their nostrils. Their wingspan is 30 to 33 cm and they weigh between 9-12 g. This species roosts in caves, mines, or in the West, buildings and hunts flying insects at night with its acrobatic flight.



Identification

General Color: Pale gray or brown fur with gray roots and buff coloration on the underside of the body.

Characteristics: Very long ears and fleshy bumps on its nose.

Size: Ears can reach 38 mm and the wingspan is 30-33 cm inches.

Geographic Range

This species is distributed in the north from southern British Columbia, Canada, east to Montana, and south along the Pacific Coast into Baja California and east to West Texas, with a few isolated eastern U.S. populations which contain two subspecies listed as federally endangered. They also range down into southern Mexico. Range in California shown to the right.





UCSC Distribution

Townsend's Big-eared Bat is presumed extirpated from UCSC, where it may have formerly occupied Empire Cave.

Life history

Habitat: Townsend's Big-eared Bats roost inside and near the entrance of caves, buildings, or mines, where they roost in open areas, as opposed to within cracks and crevices. They hunt high in the treetops or low over fields. Their habitats range from wooded canyons to arid pine forest to desert scrub.

Reproduction: Nursery colonies of a dozen to approximately 1000 individuals form in the late spring. Only one young is born per female, typically between May and July.

Behavior: These bats are agile fliers that typically emerge to hunt well after nightfall.

Diet: These bats eat moths, mosquitoes, and other flying insects.

Predators: Likely similar to other bat species, which can be preyed upon by owls, cats, snakes, raccoons, and hawks.

Research Highlights and Fun Facts

- Their ears are nearly as long as half of their body length.
- A study at Point Reyes National Seashore in coastal California showed that females traveled greater distances than males while foraging, most foraging took place along the edges of riparian corridors and close to vegetation.
- Maternity roosts have been found in the basal hollows of large, live redwood trees in northwestern California.



Conservation Status

California Species of Special Concern; State Imperiled

Populations are declining in most areas of its range. Two subspecies in the eastern U.S. are federally endangered.



Threats

Rangewide:

Townsend Big-eared Bat is threatened rangewide by:

1. Habitat loss, alteration, or conversion
2. Human disturbance of roost sites
3. Full closure of abandoned mines
4. The fungus that causes White Nose Syndrome in bats has been detected on this species, but thus far no diagnostic sign has been observed on Townsend's Big-eared Bats.

Mine Hazards:

The absolute closure of abandoned mines poses a huge threat to the Townsend's Big-eared Bat. Wildlife permeable gates have been effective in maintaining habitat for this, and other, bat species.



Ways you can help

1. Support organizations that research and monitor White Nose Syndrome.
2. Reduce pesticide use and advocate for reduction of pesticides in your community.
3. Keep out of caves and abandoned mines to minimize disturbance to Townsend's Big-eared Bat roosts.

References and Photo Credits

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