Long-Legged Myotis

Boulder County

Parks & Open Space

USFWS/Bekee Hotze

Long-legged myotis (*Myotis volans*)

Background

The long-legged myotis is typically dependent on wooded habitats, usually at elevations below 9,000 feet. They rely on large trees with suitable bark (peeling) for roosting. They forage over ponds, streams, and in forest clearings, often on moths.


J. SCOTT ALTENBACH

Species Description

Description: The largest-bodied myotis species in Boulder County, this bat is brown and relatively nondescript. It is mostly confused with little brown bats (*Myotis lucifugus*) but can be distinguished by its keeled calcar.

Look Alikes: Little Brown Bat (*Myotis lucifugus.*)

Habitat: Forages within forest canopies. Roosts in trees, rock crevices, and buildings. Hibernates in caves/ mines. Only one maternity roost known for Boulder County.
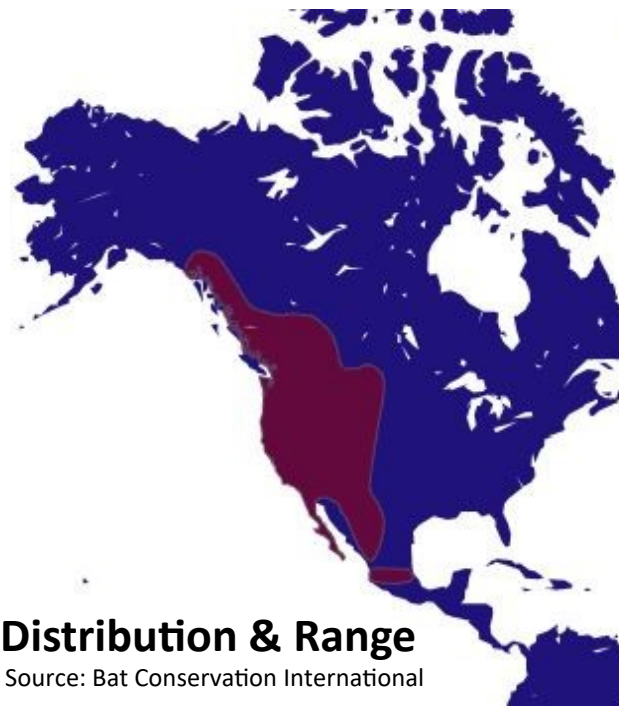
Distribution & Range
Source: Bat Conservation International

Threats

Human Disturbance: It has been noted that this species does not form colonies in occupied human dwellings, suggesting that it is intolerant of human activity around its roosts.

Large-scale forest disturbance: The long-legged myotis is a forest-reliant bat for roosting and foraging, so large-scale changes in forest structure pose a threat.

Oil & Gas Development: Developments pose threats to populations. Studies have shown that the long-legged myotis, *in general,* avoided active well pads.

Mining: This species is known to use abandoned mines. Any abandoned mines in Boulder County should be examined for use by bats and protected, if so.

Wind Energy: Wind turbines have dire consequences for many bats, especially migratory species. This species can be killed from flying into or being struck by the moving propeller blade and by barotrauma caused by low pressure pockets near the turbines.

Climate Change: The long-legged myotis is known for being active in cooler climates. With the warming climate we can expect them to move to higher elevations. They appear to be the most sensitive of the myotis species in Boulder County to high summer temperatures.

Pesticides: Insectivorous bats are highly susceptible to pesticide poisoning due to their high trophic positions in food webs and high metabolic rates.

Photo Credit: Michael Durham

Management Considerations

Secure water sources in Boulder County: Securing water sources where bats can drink to replenish daily evaporative water losses is critical to reproductive success in most, if not all, Boulder County bats.

Temper forest stand disturbances in high activity area: The long-legged myotis is a relatively agile species that forages in ponderosa pine as well as douglas fir and lodgepole pine stands. It appears to prefer stand densities that provide relative cover but also foraging pathways that are not too dense.

Survey abandoned mines and cliff-faces for bat roosts: Any abandoned mines should be monitored for bat species activity in the autumn and summer.

Limit the use of pesticides in areas with suitable bat habitat: It is highly recommended that pesticides be continuously researched for potential impacts and not be applied in areas where foraging bats and other wildlife species may come into contact.

Species Conservation and Recovery Plan

2021

The areas displayed in this map indicate known and potential locations of the following species of special concern in Boulder County:

Myotis volans

Long-legged myotis
Photo Credit: Michael Durham

The long-legged myotis occurs in wooded habitat from the foothills up to 11,500 feet. This species roosts in trees under peeling bark, in caves or mines and infrequently in buildings. It is listed as a Boulder County Species of Special Concern due to threats from human disturbance at roost sites, forest alteration or disturbance, wind energy, and climate change.

Potential Location

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