

Long-legged Myotis (*Myotis volans*)

Species Status Statement.

Distribution

Long-legged myotis is widely distributed in western North America, from Alaska to central Mexico and eastward to the western Dakotas, west Texas, and northwestern mainland Mexico. This bat occurs throughout Utah (Oliver 2000, UDWR data).

Table 1. Utah counties currently occupied by this species.

Long-legged Myotis
ALL

Abundance and Trends

Long-legged myotis is common and abundant in much of the West (Adams 2003). In Utah, both capture and acoustic surveys frequently detect this bat. Monitoring surveys since 2009 show stable occupancy (UDWR data).

Statement of Habitat Needs and Threats to the Species.

Habitat Needs

Long-legged myotis is commonly associated with forested habitats, although surveys also find it in a variety of open habitats (Oliver 2000, UDWR data). Roost and maternity sites include:

- snags and live trees with loose bark, long vertical cracks, or hollows;
- cracks and crevices in rocks, stream banks, and the ground;
- buildings;
- bridges, caves, and mines (Hayes and Wiles 2013).

The wintering habitats of long-legged myotis in Utah are unknown. Presumably, it hibernates below the frost line. Elsewhere, surveyors have found long-legged myotis hibernating in mines and caves.

Threats to the Species

The invasive fungal disease white-nosed syndrome (WNS) is the greatest threat known to long-legged myotis. The disease affects bats during hibernation leading to dehydration, emaciation,

and eventual death. Managers in South Dakota confirmed WNS in a long-legged myotis there in 2018. However, there are currently no estimates of population impact.

Table 2. Summary of a Utah threat assessment and prioritization completed in 2014. This assessment applies to the species' entire distribution within Utah. For species that also occur elsewhere, this assessment applies only to the portion of their distribution within Utah. The full threat assessment provides more information including lower-ranked threats, crucial data gaps, methods, and definitions (UDWR 2015; Salafsky et al. 2008).

Long-legged Myotis
High
Disease – Alien Organisms

Rationale for Designation.

As of 2019, Utah managers have not detected WNS in the state. Elsewhere, managers have documented the causative fungus as near as eastern Wyoming and western Washington. Given its past rate of spread, WNS will probably reach Utah within 5 years.

The impact of WNS on bat populations is highly variable. Some species experience population declines of greater than ninety percent, while other species exhibit more moderate population declines, and still others show no population-level impacts (Lanwig et al. 2016). Managers do not know how WNS will affect long-legged myotis populations, but given the rapid declines in other small-bodied bat species, there is cause for increased conservation attention.

Conservation actions will focus on implementing the Utah Bat Conservation Plan and WNS Management and Surveillance Protocol (Oliver et al. 2009, Roug et al. 2016). These documents outline goals, objectives, and strategies designed to prevent this disease from establishing in Utah bat populations, and provide management and surveillance strategies should WNS be detected in Utah.

Economic Impacts of Sensitive Species Designation.

Sensitive species designation is intended to facilitate management of this species, which is required to prevent Endangered Species Act listing and lessen related economic impacts. Endangered Species Act listing of other bat species in eastern states has prompted requirements for extensive regulatory compliance for a wide variety of project categories including transportation, utility rights-of-way, habitat management, and forest management. Given the wide distribution of this bat, formal and informal consultation could be required for most projects with a federal nexus. Restrictions would be placed on activities around sensitive areas including maternity roosts and hibernacula. Even where mitigation is not ultimately required, ESA compliance increases the cost and alters timelines of many projects.

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