

Fringed Myotis - *Myotis thysanodes*

Abundance: Rare

Status: NSS3 (Bb)

NatureServe: G4G5 S2

Population Status: distribution is restricted but extirpation is not imminent; The Western Bat Working Group considers rangewide population at high risk of imperilment.

Limiting Factor: Habitat (and Human Activity): limiting factors are severe; similar to cave and abandoned mine dwelling bats, the species is sensitive to human disturbance; disturbance results in abandonment of young and roosts; abandoned mines continue to be closed for human safety issues

Comment: Change is due primarily to new matrix definitions

Introduction

The fringed myotis is a medium-sized bat with long ears that inhabits most of the western United States from British Columbia south to southern Mexico (O'Farrell and Studier 1980). Similar to other bat species, the little brown bat emerges from its roost at dusk to begin foraging. The fringed myotis forages by gleaning insects from vegetation and other surfaces (O'Farrell and Studier 1980). It preys primarily on beetles while opportunistically feeding on a broader range of insects (e.g., moths, lacewings, leafhoppers, etc.) when available (O'Farrell and Studier 1980). The fringed myotis has been reported to migrate, although little information is known about the specifics, consequently these may reflect altitudinal movements in pursuit of suitable roosts (O'Farrell and Studier 1980). It is a year-round resident in Wyoming, is found throughout the state, and is considered rare (Orabona et al. 2009).

Habitat

The fringed myotis is found in a wide range of habitats, including coniferous forests, woodlands, grasslands, and shrublands, although it is probably most common in xeric woodlands, such as juniper, ponderosa pine, and Douglas-fir (O'Farrell and Studier 1980). During summer, it uses a variety of roosts, including rock crevices, tree cavities, caves, abandoned mines, and buildings (Schmidt 2003). During winter, it hibernates in caves, abandoned mines, and buildings, all known roosts in Wyoming are in caves (Priday and Luce 1999).

Problems

- h No ongoing efforts to delineate important habitats in Wyoming.
- h Population densities and trends are not well known.
- h Species is susceptible to decline from recreational activities (such as spelunking and rock climbing) that impact roosting habitat (e.g., caves, abandoned mines, and rock crevices).
- h Species is susceptible to declines due to broad-scale insect control programs.

Conservation Actions

- h Conduct inventories for species in all suitable habitats in the state.
- h Delineate important habitats and work cooperatively with land management agencies to maintain these within the designated areas
- h Determine the effects of recreational and commercial activities on populations.
- h Educate the public about the ecological role of the species and their habitat requirements.
- h Minimize disturbance of caves or abandoned mines where species is roosting.

Monitoring/Research

Forest habitats are being inventoried and funded through State Wildlife Grants. Project is scheduled to be completed in June 2012.

Recent Developments

None.

References

Keinath DA. 2004. Species assessment for fringed myotis (*Myotis thysanodes*). Laramie: Wyoming Natural Diversity Database. Forthcoming.

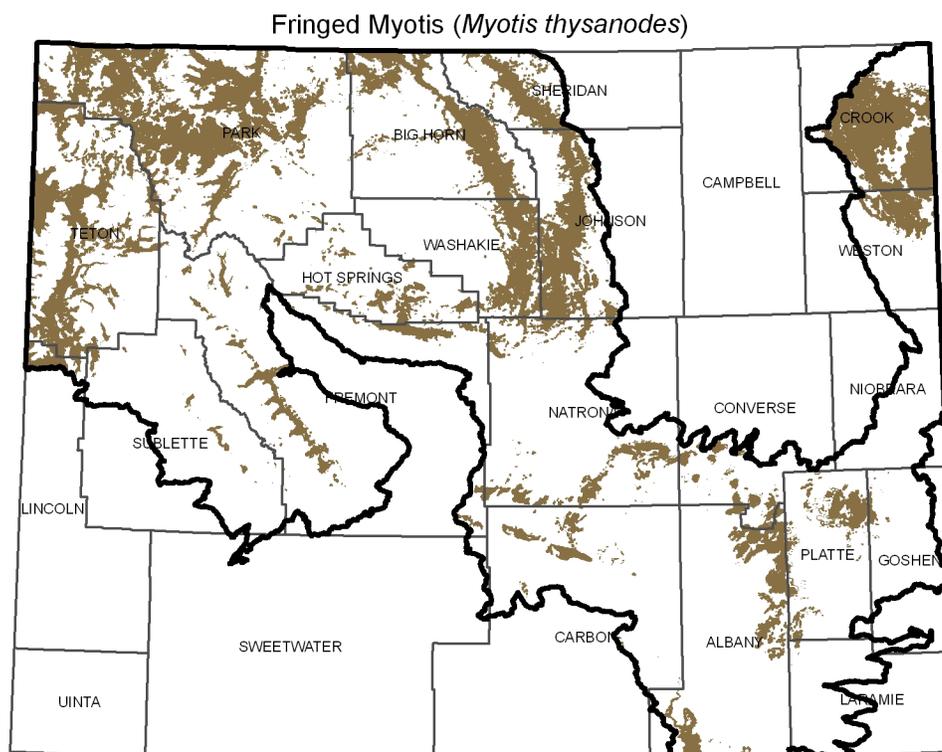
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Pierson ED, Wackenhut MC, Altenbach JS, Bradley P, Call P, Genter DL, Harris CE, Keller BL, Lengus B. 1999. Species conservation assessment and strategy for Townsend's big-eared bat (*Corynorhinus townsendii townsendii* and *Corynorhinus townsendii pallescens*). Boise: Idaho Conservation Effort, Idaho Department of Fish and Game. 68 p.

Schmidt CA. 2003. Conservation assessment for the fringed bat in the Black Hills National Forest, South Dakota and Wyoming. Custer (SD): USDA Forest Service, Black Hills National Forest. 20 p. Online www.fs.fed.us/r2/scp/species_assessment_reports.shtml.

Oakleaf B, Cerovski AO, Luce B. 1996. Nongame bird and mammal plan: a plan for inventories and management of nongame birds and mammals in Wyoming. Wyoming Game and Fish Department, Nongame Program. 183 p.



SOURCE: Digital maps of ranges and predicted distributions for Wyoming Species of Greatest Conservation Need: April 2010. Wyoming Natural Diversity Database. University of Wyoming, Laramie, Wyoming. Note that brown indicates the predicted distribution of the species; heavy black lines indicate outermost boundaries of possible occurrence.