

## Townsend's Big-eared Bat - *Corynorhinus townsendii*

Abundance: Rare

Status: NSS2 (Ba)

NatureServe: G4 S2

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

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

Comment:

### Introduction

The Townsend's big-eared bat inhabits most of western North America from British Columbia to central Mexico, and east to western South Dakota and Texas (Pierson et al. 1999). Similar to other bats, the Townsend's big-eared bat emerges from its roost at dusk to begin foraging. It preys primarily on moths and preys on other soft-bodied insects on occasion opportunistically (Pierson et al. 1999). The Townsend's big-eared bat is considered to be somewhat sedentary and typically does not make long-distance migrations (Pierson et al. 1999). It hibernates during the winter months and may migrate altitudinally in pursuit of suitable roosts (Pierson et al. 1999). It is a year-round resident in Wyoming, is found throughout the state, and is considered rare (Orabona et al. 2009).

### Habitat

The Townsend's big-eared bat occupies a variety of xeric to mesic habitats, including coniferous forests, juniper woodlands, deciduous forests, basins, and desert shrublands, and is absent only from the most extreme deserts and highest elevations (Pierson et al. 1999). It is a caves and abandoned mine specialist and typically utilizes these sites during all seasons and stages of its life cycle, and its distribution is strongly correlated with the availability of these features (Pierson et al. 1999).

### Problems

- h Species is vulnerable to incompatible mine closures.
- 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.

### Monitoring/Research

None.

### Recent Developments

None.

### References

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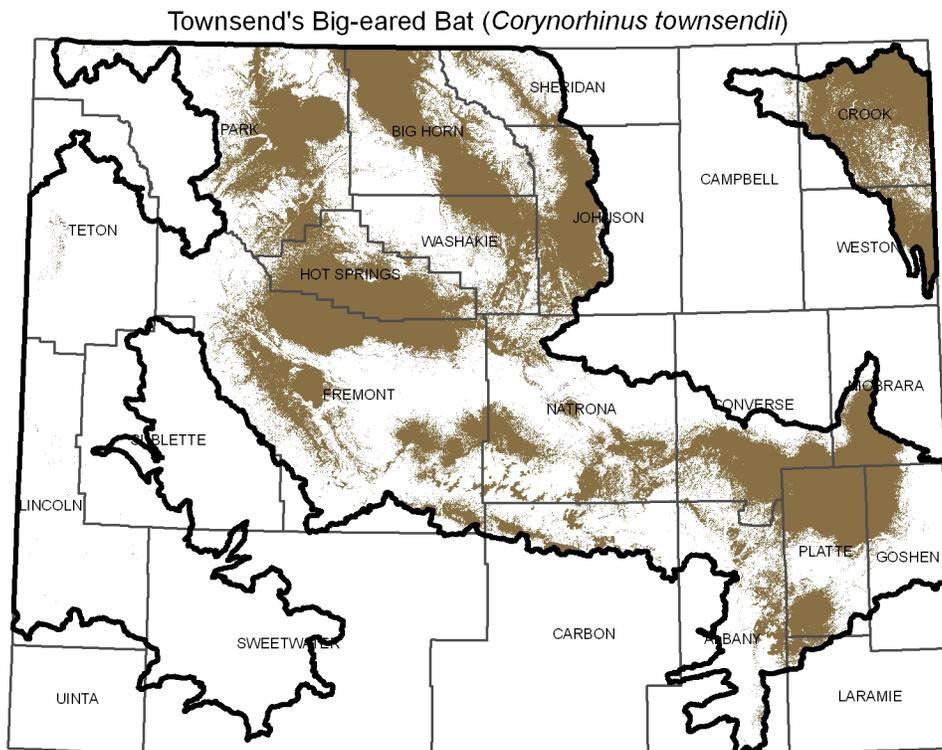
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SOURCE: Digital maps of ranges and predicted distributions for Wyoming Species of Greatest Conservation Need: April 2010. Wyoming Natural Diversity Database. University of Wyoming, Laramie, Wyoming. Note that brown indicates the predicted distribution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