

SPECIES: Scientific [common]	<i>Corynorhinus townsendii</i> [Townsend's Big-eared Bat]
Forest:	Bridger-Teton National Forest
Forest Reviewer:	Randall Griebel, James Wilder
Date of Review:	08/10/2018; 4/23/2025
Forest concurrence (or recommendation if new) for inclusion of species on list of potential SCC: (Enter Yes or No)	NO

FOREST REVIEW RESULTS:

1. The Forest concurs or recommends the species for inclusion on the list of potential SCC:
Yes ___ No X ___
2. Rationale for not concurring is based on (check all that apply):
Species is not native to the plan area _____
Species is not known to occur in the plan area _____
Species persistence in the plan area is not of substantial concern X ___

FOREST REVIEW INFORMATION:

1. Is the Species Native to the Plan Area? Yes X ___ No ___

If no, provide explanation and stop assessment.
2. Is the Species Known to Occur within the Planning Area? Yes X ___ No ___

If no, stop assessment.

Table 1. All Known Occurrences, Years, and Frequency within the Planning Area

Year Observed	Number of Individuals	Location of Observations	Source of Information
2012	3	Greys River drainage; Outside of Alpine WY and near White Creek	Wyoming Natural Diversity Database (August 2018)

**ID made by recording of echolocation, which is not reliably diagnostic for this species.*

- a. Are all Species Occurrences Only Accidental or Transient?

Yes ___ No X ___

If yes, document source for determination and stop assessment.

- b. For species with known occurrences on the Forest since 1990, based on the number of observations and/or year of last observation, can the species be presumed to be established or becoming established in the plan area?

Yes ___ No X ___

If determination is no, stop assessment and provide explanation for determination.

All of Wyoming is within the range of Townsend's big-eared bat (Map 1). The Bridger-Teton National Forest is located within the Townsend's big-eared bat modeled distribution (Map 2). The species is considered a cave obligate, requiring natural caves or cave-like structures, such as abandoned mines, throughout the year (WGFD 2017). Townsend's big-eared bats will occasionally roost in abandoned buildings or large hollow trees. There are very few cave or cave-like structures on the BTNF.

According to the Wyoming Natural Diversity Database, there have been three Townsend's big-eared bat occurrences on the Bridger-Teton National Forest in 2012 at two locations (Table 1). However, the record indicates that the observation was from an echolocation recording, which is not a reliable means of documenting this species presence. In 2017, acoustic bat surveys on the Bridger-Teton National Forest concluded that of 12 bat species that had potential for being present on the Forest, the Townsend's big-eared bat was not one of the species detected. The 2024 NABat acoustic results for the Bridger-Teton National Forest also did not detect Townsend's big-eared bats. The low occupancy suggests that there are currently no established populations of Townsend's big-eared bat on the Bridger-Teton National Forest.

Wyoming Game and Fish Department. 2017. State Wildlife Action Plan. Townsend's big-eared bat (*Corynorhinus townsendii*).

Surveys for Townsend's big-eared bats were conducted in 1991 on the BTNF and nearby Targhee National Forest (TNF). A total of 56 areas were sampled including specific areas, transects, caves and roosts, several areas were sampled repeatedly. Surveys were conducted through mist-netting, bat detectors and cave/roost site reconnaissance. No Townsend's big-eared bats were detected during this survey. The author felt that most of the caves in this area are too high in elevation and subsequently too cold to support populations of Townsend's big-eared bats, or other cave dwelling bats. Additionally, Townsend's big-eared bats are typically found roosting in exposed areas near the entrance of caves and are typically highly visible; thus, they likely would have been detected during the survey (Garber 1991).

Garber, C.S. 1991. A survey for Townsend's big-eared bat (*Plecotus townsendii*) and the spotted bat (*Euderma maculate*) on the Bridger-Teton and Targhee National Forests in Wyoming. Wyoming Natural Diversity Database, Laramie, WY.

- c. For species with known occurrences on the Forest predating 1990, does the weight of evidence suggest the species still occurs in the plan area?

Yes ___ No ___

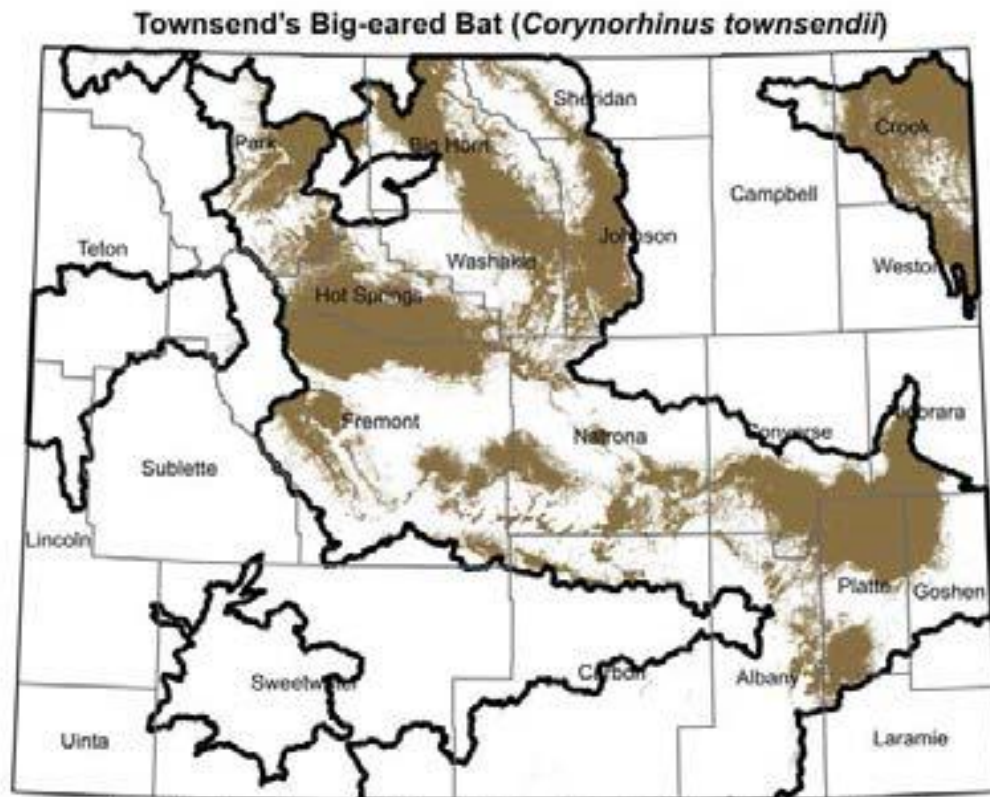
If determination is no, stop assessment and provide explanation for determination.

d. **Map 1**, Townsend's big-eared bat range map of North America.

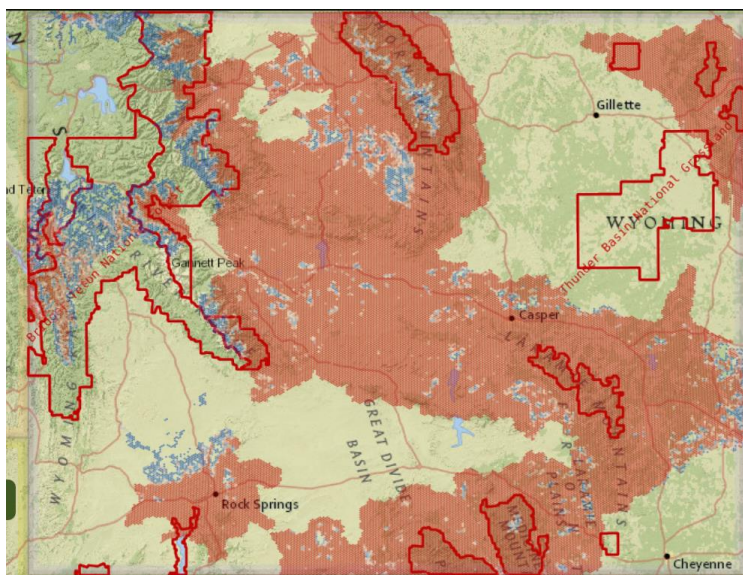


Wyoming Game and Fish Department. 2017. State Wildlife Action Plan. Townsend's big-eared bat (*Corynorhinus townsendii*).

- e. **Map 2**, Range and predicted distribution of *Corynorhinus townsendii* in Wyoming (Wyoming Natural Diversity Database [April 2025]).

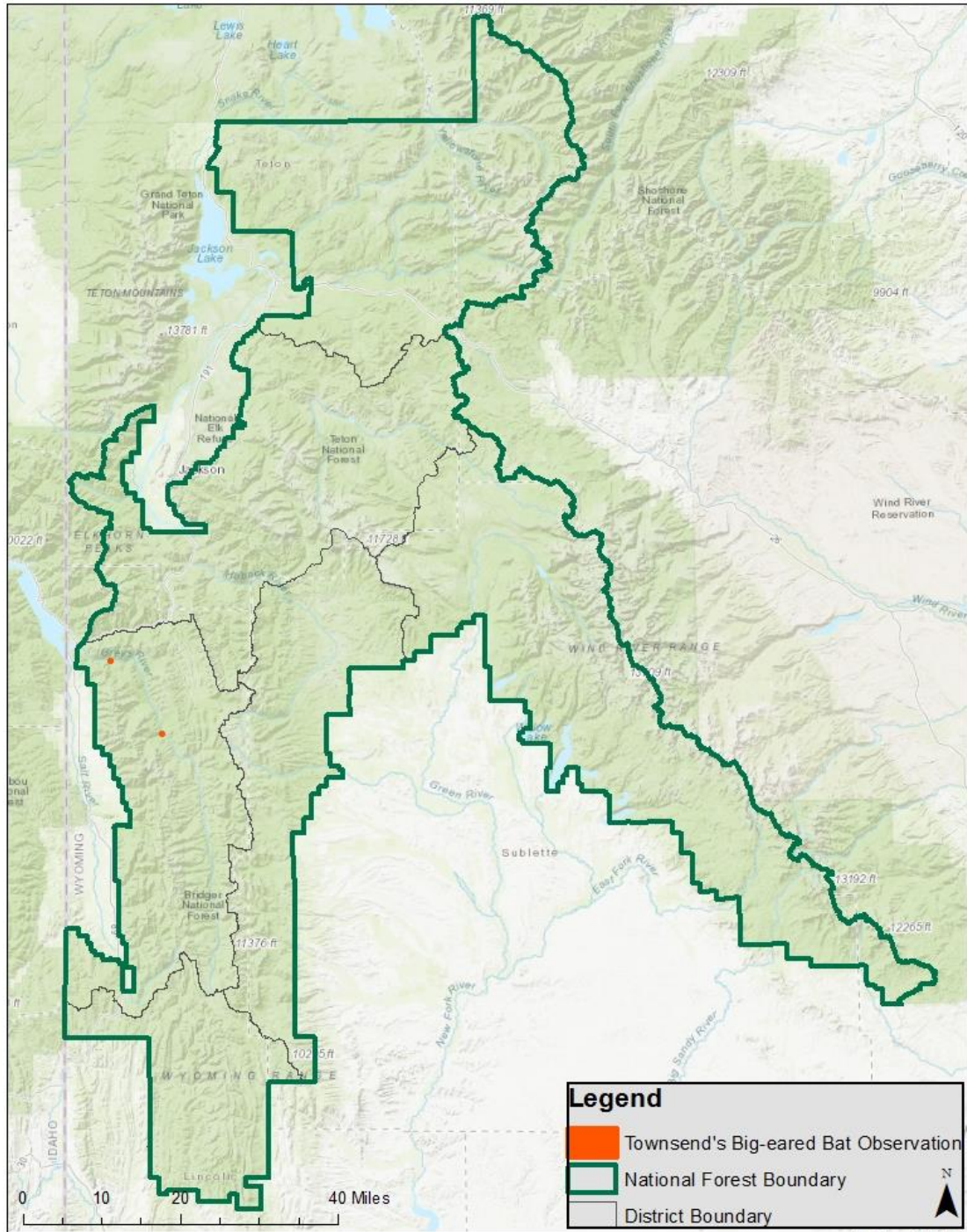


SOURCE: Digital maps of ranges for Wyoming Species of Greatest Conservation Need: Sept. 2016. Wyoming Game and Fish Department and Wyoming Natural Diversity Database, University of Wyoming, Laramie, Wyoming. Note that brown indicates the predicted distribution of the species; heavy black lines indicate outermost boundaries of possible occurrence.



- f. **Map 3**, Map of Townsend's big-eared bat occurrences on the Bridger-Teton National Forest (Wyoming Natural Diversity Database [August 2018]).

Townsend's Big-eared Bat (*Corynorhinus townsendii*)



3. Is There Substantial Concern for the Species' Capability to persist Over the Long-term in the Plan Area Based on Best Available Scientific Information?

Table 2. Status summary based on existing conservation assessments.

Entity	Status/Rank (include definition if Other)
<p>NatureServe Global Status</p>	<p>G4 - Apparently Secure</p> <p><i>Large range spans North America; very large number of known roost sites and locations; substantial overall population size, but local populations tend to be small; overall recent trend not well known; apparently declining in abundance in portions of the range but stable or increasing in other areas; increasing in abundance in the east as a result of effective conservation measures; many roosts are vulnerable to disturbance and/or destruction (e.g., recreational caving or mine exploration, mine reclamation, and renewed mining in historic districts); not yet known to be afflicted by white-nose syndrome, but this fungal disease of bats now occurs throughout much of the eastern portion of the range of <i>C. townsendii</i>; currently not known to be threatened by mortality caused by wind turbines, but this might pose a threat in the future.</i></p>
<p>NatureServe State Status</p>	<p>S2 - Imperiled</p> <p><i>Imperiled in the nation or state/province because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the nation or state/province.</i></p>
<p>WGFD</p>	<p>NSS3 (Bb), Tier II</p> <p><i><u>Population Status:</u> Vulnerable - Population size or distribution is restricted or declining but extirpation is not imminent</i></p> <p><i><u>Limiting Factors:</u> Severe - Limiting factors are severe and are not increasing significantly</i></p> <p><i><u>Tier II:</u> Moderate priority</i></p> <p><i>[The WGFD's Species of Greater Conservation Need (SGCN) designation process is based upon its Native Species Status (NSS) classification system that compares population and limiting factor variables using a 16 cell matrix. As a species moves from a placement closest to the upper left corner of the matrix (Aa/NSS1) toward the lower right corner (Dd/NSS7) the species' population status in Wyoming is considered more secure. Numerical scores were assigned to each of these variables and summed to provide a total score (i.e. NSS3). SGCN were placed into one of three tiers based on their total score: Tier I – highest priority, Tier II – moderate priority, and Tier III – lowest priority.]</i></p> <p><i>(WGFD - Wyoming Species of Greatest Conservation Need)</i></p>
<p>WYNDD</p>	<p>Species of Concern</p>

	<p><i>Species vulnerable to extirpation at the global or state level due to:</i></p> <ul style="list-style-type: none"> <i>a. their rarity (e.g., restricted distribution, small population size, low population density)</i> <i>b. inherent vulnerability (e.g., specialized habitat requirements, restrictive life history)</i> <i>c. threats (e.g., significant loss of habitat, sensitivity to disturbances)</i> <p>(Wyoming Natural Diversity Database - Species of Concern)</p>
USDA Forest Service	<p>Region 4: Sensitive Species</p> <p><i>Those plant and animal species identified by a Regional Forester for which population viability is a concern, as evidenced by</i></p> <ul style="list-style-type: none"> <i>a. Significant current or predicted downward trends in population numbers or density.</i> <i>b. Significant current or predicted downward trends in habitat capability that would reduce a species' existing distribution.</i> <p>(FSM 2670.5 – Threatened, Endangered & Sensitive Species)</p>
UDI FWS	No Special Status
WY BLM	<p>Sensitive</p> <p><i>1. Sensitive species must be native species found on BLM-administrated lands for which BLM has the capability to significantly affect the conservation status of the species through management, and either:</i></p> <ul style="list-style-type: none"> <i>a. There is information that a species has recently undergone, is undergoing, or is predicted to undergo a downward trend such that the viability of the species or a distinct population segment of the species is at risk across all or a significant portion of the species range, or</i> <i>b. The species depends on ecological refugia or specialized or unique habitats on BLM-administrated lands, and there is evidence that such areas are threatened with alteration such that the continued viability of the species in that area would be at risk.</i> <p><i>2. All federally designated candidate species, proposed species, and delisted species in the 5 years following their delisting shall be conserved as Bureau sensitive species</i></p> <p>(BLM Wyoming Sensitive Species Policy and List; March 31, 2010)</p>
IUCN	<p>LC – Least Concern</p> <p><i>A taxon is Least Concern when it has been evaluated against the criteria and does not qualify for Critically Endangered, Endangered, Vulnerable or Near Threatened. Widespread and abundant taxa are included in this category.</i></p> <p>(IUCN – Red List Categories and Criteria)</p>

Table 3. Status summary based on best available scientific information.

Species (Scientific and Common Name): <i>Corynorhinus townsendii</i> [Townsend's Big-eared Bat]	
Criteria	Rationale
Distribution on Bridger-Teton National Forest	NA
Abundance on the Bridger-Teton National Forest	NA
Population Trend on the Bridger-Teton National Forest	NA
Habitat Trend on the Bridger-Teton National Forest	NA
Vulnerability of Habitats on the Bridger-Teton National Forest	NA
<p>Summary and recommendations: The Bridger-Teton National Forest is generally outside the identified distribution for the Townsend's big-eared bat and there is very little suitable habitat for this species on the Forest. Additionally, occurrence records suggest that established populations of Townsend's big-eared bat are not present on the BTNF. Due to the species low abundance and little suitable habitat, there is no concern for this species capability to persist on the planning unit at this time. Therefore, it is recommended that the Townsend's big-eared bat is not a Species of Conservation Concern for the Bridger-Teton National Forest.</p>	
<p>Evaluator(s): Ashley Egan, Randall Griebel Date: August 7, 2018</p>	