

SPECIES: Scientific [common]	<i>Oreohelix strigosa</i> [Rocky Mountainsnail]
Forest:	Bridger-Teton National Forest
Forest Reviewer:	Randall Griebel, James Wilder
Date of Review:	02/10/2020; reviewed 4/25/2025
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 (USFS District, Town, River, Road Intersection, HUC etc.)	Source of Information
Unknown	Unknown	Bridger-Teton National Forest, Cliff Creek Canyon, 28 mi S of Jackson	GBIF (2019)

- 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 ___ Unknown X

If no, provide explanation and stop assessment

- 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?

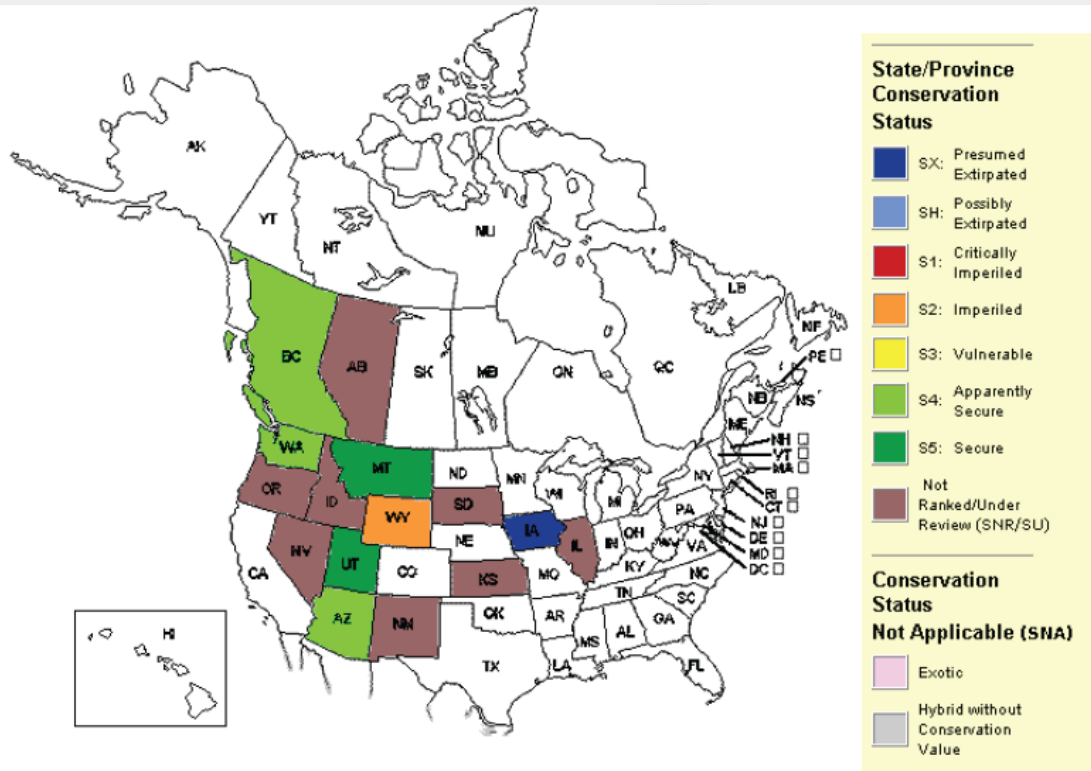
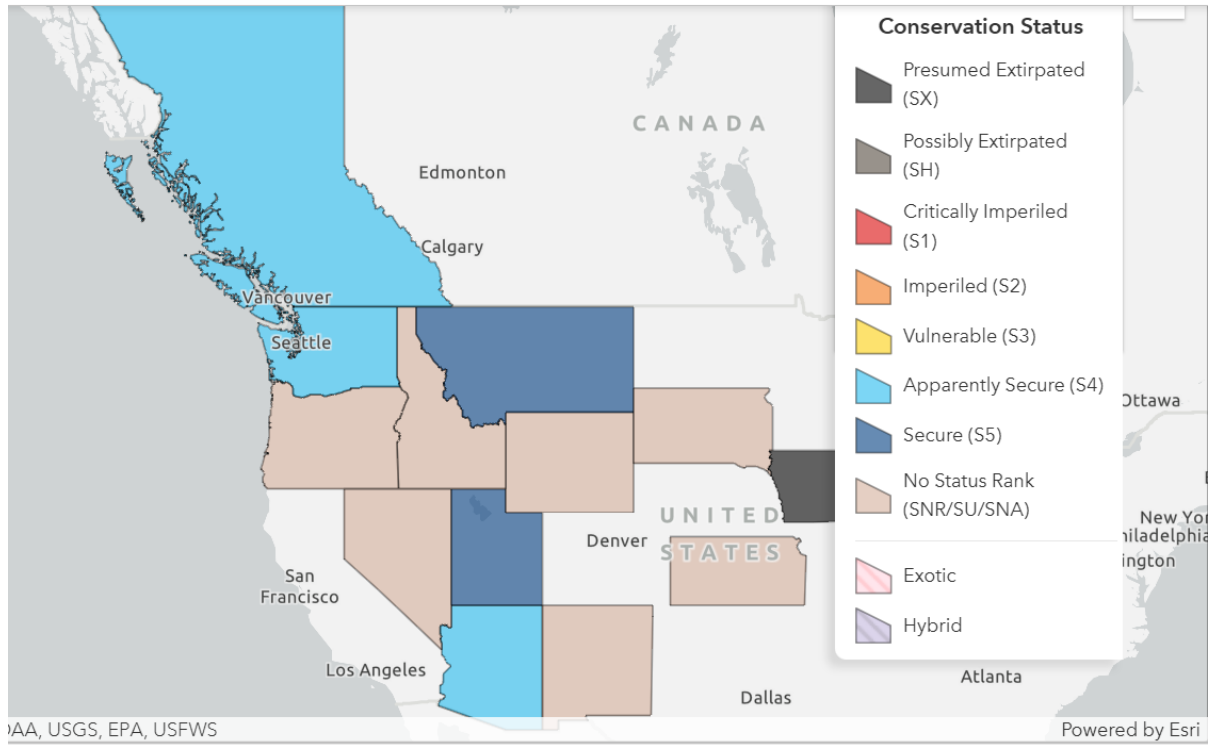
Yes ___ No ___ Unknown X

Provide explanation for determination

There is one *Oreohelix strigosa* occurrence on the Forest of unknown date.

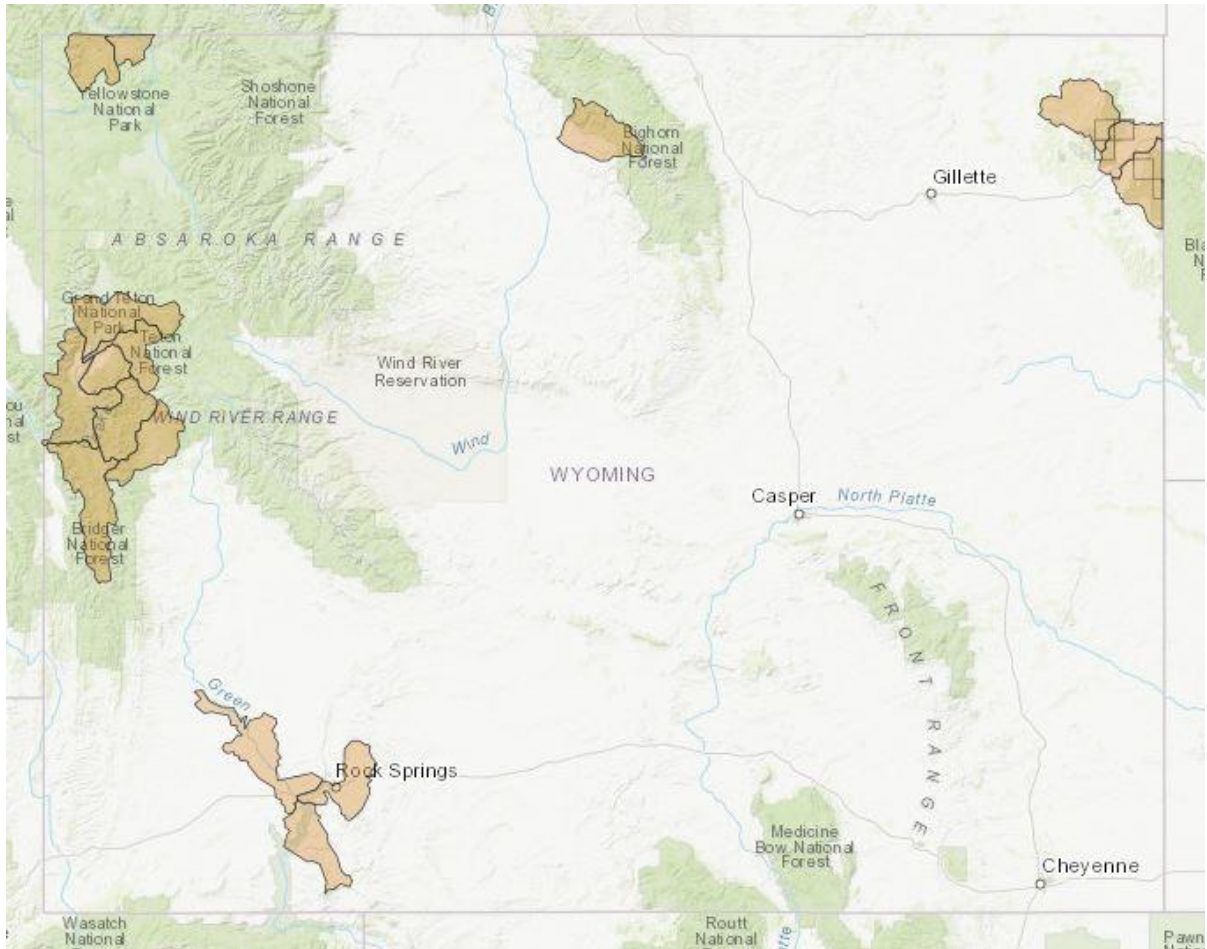
If determination is no, stop assessment

d. **Map 1.** Range of Rocky Mountainsnail (*Oreohelix strigosa*) in North America.



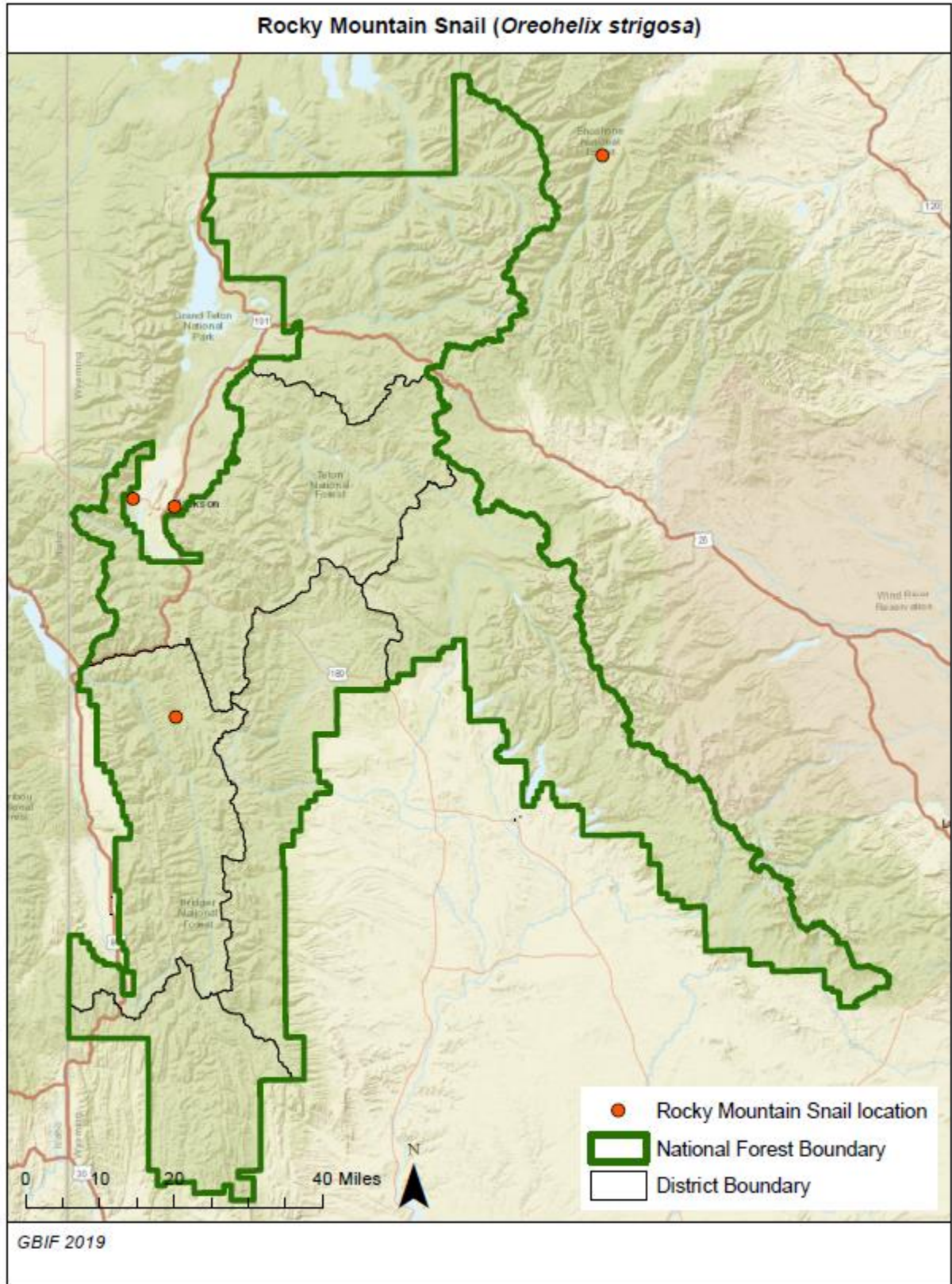
NatureServe (2025)

e. **Map 2.** Range of Rocky Mountainsnail (*Oreohelix strigosa*) in Wyoming.



WYNDD (2019)

- f. Map of Rocky Mountain snail (*Oreohelix strigosa*) range and occurrences on and near the Bridger-Teton National Forest (WYNDD 2025).



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)
NatureServe Global Status	<p>G5 —Secure <i>Common; widespread and abundant.</i></p>
NatureServe State Status	<p>SU—Unrankable <i>Unrankable —Currently unrankable due to lack of information or due to substantially conflicting information about status or trends.</i></p>
WGFD	<p>NSSU (I), Tier III <u>Population Status: Unknown</u> <u>Limiting Factors: Unknown</u> <u>Tier III: Low priority</u></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> (WGFD, 2017 - Wyoming Species of Greatest Conservation Need)</p>
WYNDD	<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>

	(Wyoming Natural Diversity Database - Species of Concern)
USDA Forest Service	Not Listed
UDI FWS	Not Listed
WY BLM	Not Listed
IUCN	Not Listed

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

Criteria	Rationale
Distribution on the Bridger-Teton National Forest	<i>Oreohelix strigosa</i> is widespread, abundant, and, within its range, apparently one of the most secure of all mollusk species, including exotic introductions (NatureServe 2025). It generally occurs throughout the mountainous areas of interior western North America. Although there is only a single occurrence on the Forest from 1940 (WYNDD 2025), it is thought to be widespread throughout the mountains of Wyoming (WGFD 2017). Therefore, is likely present on suitable habitat within the Forest, though populations may be sparse and isolated.
Abundance on the Bridger-Teton National Forest	There are no abundance data available for this species on the Forest; information is insufficient to assess this criterion.
Population Trend on the Bridger-Teton National Forest	There is no population data available for this species on the Forest; information is insufficient to assess this criterion.
Habitat Trend on the Bridger-Teton National Forest	<p>Mountainsnails live in the mountains in areas with canopy cover and leaf or needle litter. They are generally found in moist, cool areas such as north facing slopes or near streams. This species has also been found in drier sites including talus slopes and vegetated rockslides or stony ground. Dominant plant species where it occurs range from sagebrush to a wide variety of deciduous and coniferous shrubs and trees. Substrate, specifically presence of exposed limestone, is likely an important habitat characteristic as is slope (NatureServe 2019).</p> <p>Due to the variety of vegetation types used by this species, trends are likely variable. Aquatic and surrounding habitat is currently stable on the forest and riparian and wetland communities receive conservation consideration as ecosystems due to their vulnerability and scarcity. Roughly 98 percent of alpine tundra in Wyoming is publicly owned, and 72 percent is in wilderness areas (WGFD 2017), indicating that anthropogenic</p>

Criteria	Rationale
	effects in mountainous areas may be minimal. Forest activities such as grazing can degrade habitat, particularly riparian and wetland areas, by altering water quality, trampling herbaceous vegetation, increasing bare ground, and facilitating noxious weed expansion. Rangelands form a major component of ecosystems in the Bridger-Teton National Forest, and there are open rangelands throughout the Forest, which possible overlap potential habitat (USFS 2017). While adherence to rangeland management plans will limit the chance of overgrazing, there is potential for impacts to habitat to occur.
Threats to the Species and its Habitat on the Bridger-Teton National Forest	Threats include habitat disturbance, such as logging, forest thinning, grazing, and fire, in association with the limited dispersal ability of land snails (WGFD 2017). The effects of climate change on the distribution of <i>Oreohelix</i> are unknown but may also pose a threat (WGFD 2017). Habitat for <i>O. strigosa</i> is generally unsuitable for development and other economic use, and therefore protected from most anthropogenic activities.
Date: L. Chipman Reviewer: October 7, 2019	

Summary and Recommendations

There is only a single occurrence on the Forest ; thus, there is insufficient information to determine abundance, distribution, or population trends in the plan area. Preferred habitat is likely stable on the Forest, although it may decrease in the future due to climate change effects. Until better information becomes available on abundance, distribution, population trend, habitat trend, threats, or other life history characteristics, there is not a substantial concern for the species capability to persistence on the Forest over the long-term at this time, and it is recommended that the Rocky Mountainsnail is not a Species of Conservation Concern for the Bridger-Teton National Forest.

Summary and Recommendation Provided by: R. Griebel (February 10, 2020).

References

Global Biodiversity Information Facility (GBIF). GBIF Occurrence Download:
<https://www.gbif.org/occurrence/search>.

NatureServe. 2019. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. NatureServe, Arlington, Virginia. Available <http://explorer.natureserve.org>. (Accessed: July 24, 2019).

USFS (United States Forest Service). 2017. Intermountain Region Bridger-Teton National Forest Grazing Allotment Disposition Management Map. Available at:
https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd532173.pdf. Accessed on August 26, 2019.

Wyoming Game and Fish Department (WGFD). 2017. State Wildlife Action Plan-2017. Cheyenne, WY.

WGFD (Wyoming Game and Fish Department). 2017. State Wildlife Action Plan. Mountain Snails.

WYNDD (Wyoming Natural Diversity Database). 2019. Wyoming Natural Diversity Database; Data Explorer. Laramie, WY: University of Wyoming.

