

Mitered Vertigo (*Vertigo concinnula*)**Species Status Statement.**Distribution

This is a land snail native to mountainous areas of the interior western United States. The currently understood distribution of mitered vertigo in Utah is limited to about seven sites, which are very widely scattered across the state (Oliver and Bosworth 1999).

Table 1. Utah counties historically occupied by this species. There are no recent observations to verify the presence of this species in these counties.

Mitered Vertigo
BOX ELDER
SALT LAKE
SAN JUAN
SEVIER

Abundance and Trends

Information in this regard is limited to historical accounts from the 1930-1940's. The authors of these surveys did not provide any indication on the relative abundance of this species. None of these authors indicated whether any of the specimens were alive when collected, or even whether they were fresh (i.e., recently dead) material. No abundance or trend information for this species in Utah exists.

Statement of Habitat Needs and Threats to the Species.Habitat Needs

All known Utah records of mitered vertigo are from montane areas, and many are from canyons. Berry (1931) listed this species among those that he collected in a canyon of which he wrote: "The altitude rises from about 7,500 feet at the mouth to about 11,000 feet at its head, a distance of only seven miles". Roscoe and Roscoe (1955) reported this species to be associated with quaking aspen and conifer litter, morainic and dolomite rock, and rotting logs in the spruce-fir zone at elevations between 8,850 and 8,950 feet.

Threats to the Species

Specific threats to this species in Utah are unknown. Terrestrial mollusks hibernate by burrowing beneath the surface of the soil (Jones 1935). Excavation occurring for new roads, or other purposes within their habitat, could likely result in some loss to the population. Additionally, timber harvest or forest fires could affect mitered vertigo by removing vegetative cover or altering soil conditions where they burrow. The lack of knowledge concerning the range and habitat requirements of this species in Utah is a barrier to management.

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).

Mitered Vertigo
No Identified Threats - Data Gaps Only

Rationale for Designation.

The currently known range of mitered vertigo in Utah is a handful of very small areas, which if correct makes its population susceptible to catastrophic events and human activities. In order to develop an understanding of the distribution and status of this species in Utah, managers need to conduct occasional surveys, and monitor potential threats. These activities will help prevent the possibility of Endangered Species Act listing of this species.

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. An ESA listing of mitered vertigo would have unknown economic impacts for Utah, especially since there are no recent collections of this species. Designated Sensitive Species with no identified threats, only data gaps, will be researched until concerns are allayed, or specific threats are identified for management. In the absence of specific threats to manage, generic measures to protect mountain canyon habitats are recommended.

Literature Cited.

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- Jones, D.T. 1935. Burrowing of snails. *Nautilus* 48:1–3.

Oliver, G.V. and W.R. Bosworth. 1999. Rare, imperiled, and recently extinct or extirpated mollusks of Utah: a literature review. Report to the Utah Division of Wildlife Resources, Publication Number 99- 29. Salt Lake City, Utah, USA.

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