

[A race of the] Yavapai Mountainsnail (*Oreohelix yavapai cummingsi*)

Species Status Statement.

Distribution

The currently understood distribution of this terrestrial snail consists of two localities in San Juan County, Utah. One is on Navajo Mountain, while the other is in the Abajo Mountains near Monticello (Ferriss 1920).

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

<i>Oreohelix yavapai cummingsi</i>
SAN JUAN

Abundance and Trends

Information is very limited in this regard. Ferriss (1920) found this subspecies to be "abundant" at one locality near Monticello, but neither this population nor the Navajo Mountain population, for which Ferriss (1920) provided no indication of population size, have been relocated since their initial discovery. Clarke and Hovingh (1994) searched for this snail at the two Utah locations where Ferriss (1920) had reported it, and were unable to find any evidence of it. They concluded, "*O. y. cummingsi* may be uncommon or rare in both areas."

Statement of Habitat Needs and Threats to the Species.

Habitat Needs

The description of the known sites is "Associated primarily with limestone outcrops and rocky soils. Tree canopy absent to scattered; canopy species where present include scattered Douglas-fir, Rocky Mountain juniper, and Utah juniper. Ground cover scattered but includes sagebrush and bunch grasses."

It is possible this subspecies occurs at undiscovered locations elsewhere in southeastern Utah. Potential habitats there include steep forested slopes with leaf-litter and/or exposed rocks and rock outcrops, steep-walled canyons, and others areas that maintain a cool microclimate and moist soils or interstitial spaces among rocks.

Speaking generally of the genus, Beetle (1987) and Hendricks (2012) stated "Live animals occur mostly under junipers in duff or soil accumulations under rocks; sun-bleached shells may be found on the surface."

Threats to the Species

Due to this subspecies' very limited distribution, its existence is susceptible to catastrophic events and human disturbance. Terrestrial mollusks, especially mountainsnails (*Oreohelix* genus), are known to hibernate by burrowing beneath the surface of the soil (Jones 1935, 1940). Excavation occurring for new roads, or other purposes within their habitat, could likely result in some loss to the population. Additionally, forest fires could impact Yavapai mountainsnail by burning vegetation cover or altering soil conditions where they burrow. The lack of knowledge concerning the range and habitat requirements of Yavapai mountainsnail 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).

<i>Oreohelix yavapai cummingsi</i>
No Identified Threats - Data Gaps Only

Rationale for Designation.

The currently known range of this subspecies is a very small area, which makes its population susceptible to catastrophic events and human activities. In order to improve the understanding of the distribution and status of this subspecies 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 subspecies.

Economic Impacts of Sensitive Species Designation.

Sensitive species designation is intended to facilitate management of this animal, which is required to prevent Endangered Species Act listing and lessen related economic impacts. An ESA listing of this Yavapai mountainsnail subspecies would have unknown economic impacts for Utah, especially since there are no recent collections of this subspecies. 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.

Beetle, D.E. 1987. The genus *Oreohelix* (Pulmonata: Oreohelicidae) in two western canyons of the Big Horn Mountains, Wyoming. *Festivus* 19(7):66-72.

- Clarke, A.H., and P. Hovingh. 1994. Studies on the status of endangerment of terrestrial mollusks in Utah. *Malacology Data Net* 3: 101-138.
- Ferriss, J.H. 1920. The Navajo Nation. *Nautilus* 33:109-111, 34:1-14.
- Hendricks, P. 2012. A Guide to the Land Snails and Slugs of Montana. A report to the U.S. Forest Service - Region 1. Montana Natural Heritage Program, Helena, MT. vii + 187 pp. plus appendices.
- Jones, D.T. 1935. Burrowing of snails. *Nautilus* 48:1-3.
- Jones, D.T. 1940. A study of the Great Basin land snail. *Oreohelix strigosa depressa* (Cockerell). *Bulletin of the University of Utah* 31 (4) Biological Series 6:1-43.
- Salafsky, N., D. Salzer, A.J. Stattersfield, C. Hilton-Taylor, R. Neugarten, S.H.M. Butchart, B. Collen, N. Cox, L.L. Master, S. O'Connor, and D. Wilkie. 2008. A standard lexicon for biodiversity conservation: unified classifications of threats and actions. *Conservation Biology* 22: 897-911.
- Utah Division of Wildlife Resources [UDWR]. 2015. Utah Wildlife Action Plan: A plan for managing native wildlife species and their habitats to help prevent listings under the Endangered Species Act 2015-2025. Publication Number 15-14, 385 pp.