

## Brian Head Mountainsnail (*Oreohelix parawanensis*)

### **Species Status Statement.**

#### Distribution

This land snail is known only from an area of approximately 27 acres near the summit of Brian Head Peak in Iron County, Utah (Oliver and Bosworth 2002). Managers need to conduct further surveys to confirm or refute that this species is truly restricted to this tiny global distribution (Oliver and Bosworth 1999).

Table 1. Utah counties currently occupied by this species.

<b>Brian Head Mountainsnail</b>
IRON

#### Abundance and Trends

Information is very limited in this regard. Oliver and Bosworth (2002) collected the first live individuals of this species. They surveyed 14 sites on Brian Head Peak and found live specimens at four of them. In total, 49 dead shells, five embryos, and 18 live individuals were found from the four sites.

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

#### Habitat Needs

All habitat information for this species results from the surveys conducted by Oliver and Bosworth (2002). Sites where snails were present (live individuals or dead shells) most often had limestone substrates and dense clumps of two species of *Ribes* (wax currant and gooseberry). The snails were found at elevations ranging from 3255 to 3340 meters, and slopes ranging from nearly 0 to 40 degrees. All live snails were collected under surface rocks (Oliver and Bosworth 2002).

#### Threats to the Species

Since this species is endemic to a small area, its population is susceptible to catastrophic events and human disturbance. Oliver and Bosworth (2002) noted that the species' presence above the tree line reduces the risks from timber harvest, but its close proximity to a ski resort may degrade and reduce available habitat if the resort expands into the area where the snail is known to exist.

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).

<b>Brian Head Mountainsnail</b>
<b>Very High</b>
Small Isolated Populations

### **Rationale for Designation.**

The currently known range of Brian Head mountainsnail 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 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. The listing of Brian Head mountainsnail would impact land management and development activities, such as timber harvest and ski resort expansion, near Brian Head Peak in Iron County. There would also be increased costs of regulatory compliance for many land-use decisions and mitigation costs.

### **Literature Cited.**

- 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.
- Oliver, G.V. and W.R. Bosworth. 2002. Oreohelices of Utah, II. Extant status of the Brian Head Mountainsnail, *Oreohelix parawanensis* Gregg, 1941 (Stylommatophora: Oreohelicidae). Western North American Naturalist 62(4):451-457.
- 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.

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