

## Mountain Marshsnail (*Stagnicola montanensis*)

### **Species Status Statement.**

#### Distribution

Mountain marshsnail occurs across much of the western United States in the eastern Columbia drainage and the Great Basin (Taylor et al. 1963). In Utah, most of the currently understood distribution is in the northwestern portion of the state. Managers anticipate the possibility of its wider presence in central Utah, and perhaps the western portions of the Wasatch and Uinta mountain ranges (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.

<b>Mountain Marshsnail</b>
BEAVER
CACHE
SUMMIT

#### Abundance and Trends

Information is lacking in this regard. Most observational records are very old, requiring an inventory of previously documented sites. In addition, managers should perform inventory surveys of likely sites that exhibit suitable habitat characteristics. Taylor et al. (1963) suggested inventorying sites along the eastern edge of the Great Basin.

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

#### Habitat Needs

Information is contradictory in this regard. Some accounts state this species is restricted to the outflow of springs or clear mountain streams that have pristine water quality. However, historical observations may also support it occurring in other situations, including some with lower water quality, e.g., seasonal water bodies, ditches, pastures (Taylor et al. 1963). It occurs in marginally deeper pools of streams or springs, but never in large waters such as rivers, lakes, and reservoirs (Taylor et al. 1963).

#### Threats to the Species

Specific statewide threats remain unknown and unidentified for this species. However, human activities that fragment habitats, alter banks, deposit sediment, or degrade water quality are plausible threats in localized situations (Taylor et al. 1963).

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>Mountain Marshsnail</b>
<b>No Identified Threats - Data Gaps Only</b>

### **Rationale for Designation.**

Mountain marshsnail remains very poorly known in Utah, and the lack of applicable information about the species is an impediment to threat assessment and management. In general, direct human pressures, and climate change, presently threaten many streams, springs, and spring systems in Utah, and managers and scientists expect these issues to intensify. In order to develop adequate 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 mountain marshsnail 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 springs are recommended.

### **Literature Cited.**

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

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.

Taylor, D.W., H.J. Walter, and J.B. Burch. 1963. Freshwater snails of the subgenus *Hinkleyia* (Lymnaeidae: *Stagnicola*) from the western United States. *Malacologia* 1: 237-287.

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.