

Pine Grove Pyrg (*Pyrgulopsis pinetorum*)

Species Status Statement.

Distribution

The currently understood distribution of Pine Grove pyrg is a series of springs feeding into Leeds Creek, in the Pine Valley Mountains of Washington County, Utah (Hershler et al. 2017). The entire known distribution is within Dixie National Forest.

Table 1. Utah counties currently occupied by this species.

Pine Grove Pyrg
WASHINGTON

Abundance and Trends

Taylor (1987) first described Pine Grove pyrg. Subsequently, it was subsumed into the more broadly distributed Toquerville springsnail, only to be returned a few years later (Hershler et al. 2017) as a distinct species. In 2014, scientific collectors obtained 74 snails at one spring site, but managers have not yet evaluated abundance or trends.

Statement of Habitat Needs and Threats to the Species.

Habitat Needs

Springsnails are dependent on persistent springs with high water quality, and they often occur within a limited distance from the springhead (Hershler 1998).

Threats to the Species

The limited distribution of this snail makes the species susceptible to any catastrophic natural events, or human actions, that could destroy or degrade the spring habitat where it lives. Small, isolated seeps, springs, or spring complexes are very susceptible to small-scale habitat destruction or modifications that alter the springhead or flow. Potential threats include factors that decrease flow regionally such as prolonged drought or groundwater pumping. There are also potential local threats to individual springs such as wildfire, nonnative plants and animals, ungulate trampling and grazing, herbicide use, spring outflow alteration, and diversion of spring discharge. Managers have not yet conducted a species-specific threat assessment for Pine Grove pyrg, but they note the spring complex in which it occurs is adjacent to a road, and there is a cap on one of the springs.

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).

Pine Grove Pyrg
No Identified Threats - Data Gaps Only

Rationale for Designation.

Pine Grove pyrg appears to be restricted to a small, isolated spring system. Direct human pressures, and climate change, presently threaten many springs and spring systems in Utah, and managers and scientists expect these issues to intensify. In order to develop a better 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 Pine Grove pyrg would have unknown economic impacts to Dixie National Forest and Washington County. 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.

- Hershler, R. 1998. A systematic review of the hydrobiid snails (Gastropoda: Rissooidea) of the Great Basin, western United States. Part I. Genus *Pyrgulopsis*. *Veliger* 41: 1-132.
- Hershler, R., H.-P. Liu, C. Forsythe, P. Hovingh, and K. Wheeler. 2017. Partial revision of the *Pyrgulopsis kolobensis* complex (Caenogastropoda: Hydrobiidae), with resurrection of *P. pinetorum* and description of three new species from the Virgin River drainage, Utah. *Journal of Molluscan Studies* 83: 161-171.
- 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. 1987. Fresh-water molluscs from New Mexico and vicinity. New Mexico Bureau of Mines and Mineral Resources Bulletin 116: 1–50.

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.