

Carinate Glenwood Pyrg (*Pyrgulopsis inopinata*)

Species Status Statement.

Distribution

The currently understood distribution of carinate Glenwood pyrg is two sites in the Sevier River drainage of Sevier County. One site is a spring system consisting of two springs east of the town of Glenwood, and the other site is a single spring south of the town of Sigurd (Oliver and Bosworth 1999). Both sites are on private land.

Table 1. Utah counties currently occupied by this species.

Carinate Glenwood Pyrg
SEVIER

Abundance and Trends

The population status of this species is currently unclear, as there have been no quantitative assessments of abundance for this species. When he collected specimens at the type locality, Parcell Spring, in 1993, Robert Hershler reported this species as “rare” (Hershler 1995). When Utah Division of Wildlife Resources (UDWR) personnel visited that site in 2013, they categorized the abundance of its springsnails as “high.” For the population near Sigurd, there are no abundance or trend data.

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. When they visited Parcell Spring in 2013, managers observed potential threats

including a nearby road, recreational use, and cattle trampling. Hershler (1998) speculated that the species might be hybridizing with a species of the Toquerville springsnail complex within the population near Sigurd; this possibility needs to be investigated using genetic approaches.

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).

Carinate Glenwood Pyrg
High
Small Isolated Populations
Problematic Animal Species – Native
Medium
Invasive Wildlife Species - Non-native
Recreational Activities

Rationale for Designation.

Carinate Glenwood pyrg appears to be restricted to springs at a pair of small, isolated sites. 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 maintain understanding of the distribution and status of this species in Utah, managers need to conduct occasional surveys, and monitor potential threats. Carinate Glenwood pyrg is included in the Conservation Agreement for Springsnails in Nevada and Utah (2017). 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 carinate Glenwood pyrg would impact management and development of water resources in Sevier County. There would also be increased costs of regulatory compliance for many land-use decisions and mitigation costs.

Literature Cited.

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