Eureka Mountainsnail *(Oreohelix eurekensis*)

Species Status Statement.

Distribution

This terrestrial snail does not occur outside Utah. Its currently understood distribution is limited to six locations across the northern part of the state.

- Three sites are in the East Tintic Mountains (Mammoth Peak, Godiva Mountain, and Lime Peak) on the border of Tooele and Juab counties (Clarke and Hovingh 1994).
- One site is near Hominy Creek on the south slope of the Uinta Mountains near the border of Duchesne and Uintah counties (Oliver and Bosworth 2000).
- One site is in the Deep Creek Mountains near the border of Tooele and Juab counties (Roscoe 1954).
- The final site is on the East Tavaputs Plateau in Grand County (Roscoe and Grosscup 1964).

Table 1. Utah counties currently occupied by this species.

Eureka Mountainsnail
DUCHESNE
GRAND
JUAB
TOOELE
UINTAH

Abundance and Trends

Information is very limited in this regard. Henderson and Daniels (1917) found live individuals on Godiva Mountain, but only three live individuals were later found there (Clarke 1993; Clarke and Hovingh 1994). Clarke and Hovingh (1994) only found dead shells on Mammoth Peak and Lime Peak. In 1998, Oliver and Bosworth (2000) surveyed 13 sites near the Hominy Creek locality and found 3 live individuals and 84 dead shells at one of the sites.

Statement of Habitat Needs and Threats to the Species.

Habitat Needs

Habitat descriptions for Eureka mountainsnail vary, but it appears that surveyors find it most often in areas with sparse plant cover (Roscoe and Grosscup 1964; Oliver and Bosworth 2000). Geologies have included both limestone and yellowish sandstone, at elevations of approximately 7200 to 7900 feet (Roscoe and Grosscup 1964; Clarke 1993).

Threats to the Species

Since this species is endemic to a handful of small areas, its population is susceptible to catastrophic events and human disturbance. Oliver and Bosworth (2000) noted that cattle grazing was present at the Hominy Creek site in 1998, and could threaten the snail population via trampling and destruction of habitat. Clarke (1993) considered mining activities and fire, which could destroy or degrade snail habitat, to be potential threats.

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).

Eureka Mountainsnail
Very High
Small Isolated Populations

Rationale for Designation.

The currently known range of Eureka mountainsnail is only six locations in Utah, 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 Eureka mountainsnail would impact management and development of land resources (such as mining and grazing) in a half-dozen counties across northern Utah. There would also be increased costs of regulatory compliance for many land-use decisions and mitigation costs.

Literature Cited.

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