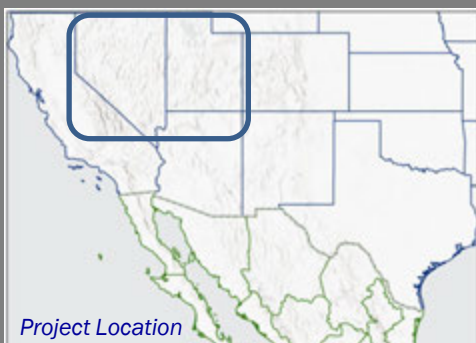


ACTIONABLE SCIENCE

Conservation Agreement for Springsnails in Nevada and Utah



Springsnails constitute many tiny, unique, and often site-specific aquatic gastropods (the taxonomic group of snails and slugs) mainly in the superfamilies Truncatelloidea and Cerithioidea. Springsnails and their habitats are threatened by both local and regional stressors, and several species are thought to have recently gone extinct. In 2017, multiple agencies, stakeholders, and other interested parties completed a Conservation Agreement for springsnails. The objectives and conservation actions described in the agreement and associated strategy are expected to lead to the protection and enhancement of springsnails and their habitats in Nevada and Utah.



— BUREAU OF —
RECLAMATION



Springsnail Habitat in Excellent Condition at Fish Springs National Wildlife Refuge

KEY ISSUES ADDRESSED

Springsnails are a diverse group of tiny aquatic, fresh- or brackish-water snails often closely adapted to individual springs. Several of these species have been listed under provisions of the Endangered Species Act (ESA); others are undergoing review for possible future listing actions. Increasing concern for the viability of springsnail populations and the habitats they occupy in Nevada and Utah (where at least 103 species have been identified) has arisen due to intensive groundwater extraction and use, the widespread use of springs for domestic (e.g., household use) and agricultural purposes, and the limited availability of reliable information on the status of many populations.

PROJECT GOALS

- Develop a Springsnail Conservation Team that will work to ensure the long-term conservation of springsnails and their habitats
- Compile available springsnail data and information into an accessible database
- Identify and work together to reduce threats while maintaining, enhancing, and restoring habitats

COUNTING SNAILS

Surveyors get wet and dirty in spring runs looking for springsnails on rocks, sediment, vegetation, detritus, and in all the nooks and crannies.



Surveying for Springsnails

PROJECT HIGHLIGHTS

Collaboration to Conservation: This collaborative and cooperative effort contributed to increased willingness by partners to engage in the effort. It has made it easier for springsnail conservation activities to be incorporated into on-the-ground projects.

Springsnail Conservation Team: The SCT ensures consistent review and adaptive management of conservation actions and activities for identified springsnail species and habitats. Members of the SCT cooperate and coordinate with multi-state and multi-agency springsnail conservation efforts to facilitate the development of strong partnerships leading to enhanced springs and habitat.

A Centralized Springsnail Database: The database will enable biologists and managers to readily identify information gaps, species descriptions, life history information and habitat conditions, population abundance and status, known locations of occurrence, known threats and the magnitude of those threats, historical information, and other relevant information as it becomes available.

Collaborators: Bureau of Land Management, Nevada Department of Wildlife, Nevada Division of Natural Heritage, National Park Service, Natural Resources Conservation Service, The Nature Conservancy, Utah Division of Wildlife Resources, U.S. Fish and Wildlife Service, U.S. Forest Service

Author: Cheryl Mandich, U.S. Fish and Wildlife Service, January 2022.
Photos courtesy of Kate Holcomb/UDWR
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LESSONS LEARNED

Nevada, the nation's driest state, is recognized as having the highest density of springs in the USA, an estimated 27,000 springs. Utah also supports a high density of springs, an estimated 10,121 springs. Accomplishing a thorough springsnail inventory across the entire region will require an organized and concerted effort over at least the next decade.

Contributing to a centralized springsnail database results in an ability to view and analyze data at a larger scale that leads to informed conservation actions. Collecting data using standardized survey protocols builds confidence that accurate data is being collected. Ensuring the data is secure in the centralized database is critical.

Funding dedicated to the enhancement of springsnail habitat, i.e., springs, would facilitate preemptive, collaborative, voluntary conservation efforts to enhance springsnail habitat which would help to protect a sensitive species and in turn minimize the risk of listing.

NEXT STEPS

- Develop education and outreach tools sharing a common and consistent message with conservation partners including private landowners and the public: Emphasize that by allowing the springhead (the source from which the water in the spring flows) to recover, a more sustainable water source is created
- Update springsnail genetics and morphology for species found in Nevada and Utah
- Develop a risk assessment tool that can assist in prioritizing conservation efforts for springsnails

For more information on this project, contact Kate Holcomb:

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Springsnails (Round) and Red-Rimmed Melania (Pointed)