Sonoran Talusssnail
Sonorella magdalenensis


SPECIES DESCRIPTION: The Sonoran talusssnail is a relatively large pulmonate (contains functional lungs) terrestrial snail with an average shell diameter of 19 millimeters (mm) (0.74 inches (in)). Species of the Sonorella genus typically have a depressed spherical spiraling shell that is lightly colored and normally contains a dark peripheral band. Positive identification of the species depends on examination of soft body parts.

HABITAT: Sonoran talusssnails reside in talus slopes (volcanic rock and limestone) at elevations of about 839 to 1830 meters (2,750 to 6,000 feet). Talus is typically deep, free of excess sedimentation, and exhibits stable moisture conditions. Sonorella tend toward steep rock slides with sufficient interstitial space (space between rocks) that allow for protection from heat.

RANGE: The species is located in the Sierra Magdalena in Sonora, Mexico, as far south as the Sierra Pajaritos (located 39 kilometers (24 miles) east of Ures, Sonora) and has also been documented in seven mountain ranges in Arizona along the edges of the Santa Cruz Valley in Pima and Santa Cruz counties. In Pima County it is known from the Roskruge Mountains, southern end of Tucson Mountains, northern end of Santa Rita Mountains, Cerro Colorado Mountains, and Tumamoc Hill; and in Santa Cruz County it is known from the San Cayetano and Tumacacori mountains.

REASONS FOR DECLINE/VULNERABILITY: Sonoran talusssnail is vulnerable to any disturbance that would remove talus, increase interstitial sedimentation, or change moisture conditions. Invasion of Pennisetum cilare (buffelgrass) into areas inhabited by Sonoran talusssnail may threaten the species due to fire carried by buffelgrass as well as rock disturbance and herbicide application to remove bufflegrass, all of which may degrade talusssnail habitat. Some of the species’ range in Arizona is located near mines or mining claims. Hard rock mining typically involves the blasting of hillsides and the crushing of rock. Such activities may kill talusssnails and render their habitats unsuitable.

LAND MANAGEMENT/OWNERSHIP: Private patented mining claims and lands managed by U.S. Forest Service, U.S. Bureau of Land Management, Pima County, and Arizona State Land Department.

NOTES: None.

Page created: July 2012