California Status Factors

Elcode IMGASC7091

Gname MONADENIA TROGLODYTES TROGLODYTES

Gcomname SHASTA SIDEBAND

Number of Occurrences

B = 6 - 20

Comments As of August 1998, the known range for Monadenia troglodytes troglodytes is defined by 10 sites along the McCloud River Arm of Shasta Lake in Shasta County, California (Burke et al., 1999).

Number of Occurrences with Good Viability

B = Very few (1-3) occurrences with good viability
C = Few (4-12) occurrences with good viability

Comments The species' present and former distribution, and the factors that have controlled distribution, diet, reproductive rates, and dispersal rates need further investigation. Local and range-wide population trends are not known (Burke et al., 1999). Rank unknown, but based on a few sites.

Population Size

U = Unknown

Comments Abundance is unknown at populated sites (Burke et al., 1999).

Range Extent

A = <100 km2 (less than about 40 square miles)

Comments Known only from Shasta County, California, along the McCloud River arm and near the Pit River arm of Shasta Lak (Kelley et al., 1999). The known range for this species is based on limited data and is likely an artifact of collecting that occurred at most sites in the 1970s. This species is a local endemic in Shasta County, California, and is known from 10 sites along the McCloud River Arm of Shasta Lake. One site is located near the Pit River Arm of Shasta Lake. The Type Locality is Samwel Cave. The species is suspected to exist in limestone areas to the west (Burke et al., 1999).

Area of Occupancy

B = 0.4-4 km2 (about 100-1,000 acres)

LB = 4-40 km (about 2.5-25 miles)

Comments This species is a local endemic in Shasta County, California, and is known from 10 sites along the McCloud River Arm of Shasta Lake (Burke et al., 1999).

Long-term Trend in Population Size, Extent of Occurrence, Area of Occupancy, and/or Number or Condition of Occurrences

U = Unknown. Long-term trend in population, range, area occupied, or number or condition of occurrences unknown

Comments Present knowledge of this subspecies is based on limited collecting from known population areas in the 1930s and the 1970s. Due to significant data gaps, the species' biological and

environmental needs are not well known. The species' present and former distribution, and the factors that have controlled distribution, diet, reproductive rates, and dispersal rates need further investigation. Local and range-wide population trends are not known (Burke et al., 1999).

Short-term Trend in Population Size, Extent of Occurrence, Area of Occupancy, and/or Number or Condition of Occurrences

U = Unknown. Short-term trend in population, range, area occupied, and number and condition of occurrences unknown.

Comments: Present knowledge of this subspecies is based on limited collecting from known population areas in the 1930s and the 1970s. Due to significant data gaps, the species' biological and environmental needs are not well known. The species' present and former distribution, and the factors that have controlled distribution, diet, reproductive rates, and dispersal rates need further investigation. Local and range-wide population trends are not known (Burke et al., 1999).

Threats

U = Unknown. The available information is not sufficient to assign degree of threat as above. (Severity, scope, and immediacy are all unknown, or mostly [two of three] unknown or not assessed [null].)

Scope	Unknown	Severity	Unknown	Immediacy	Unknown

Comments: Given that little information is available about the habitat needs of the species, the following statements can be applied: In general, land snails cannot tolerate extremely dry (xeric) conditions, have restricted ranges, and are slow to disperse. Consequently, they are very vulnerable to management activities that increase temperature, decrease moisture, or decrease food supplies available in populated sites. Habitat alteration by either human or natural means (including fire, herbicide use, recreation development), over-collecting, and disturbance during aestivation may constitute major threats to these species. The survival of mollusk species in semi-dry (closer to dry than moist) environments is especially dependent on having adequate refuge during the hot summer and cold winter months. An increase in temperature or decrease in moisture during the hot summer months is much more likely to adversely affect this species than those that live in a moist environment. Road building and road maintenance have been identified as a specific threat (Burke et al., 1999).

Number of Appropriately Protected and Managed Occurrences

A = None. No occurrences appropriately protected and managed

Comments: Monadenia troglodytes troglodytes is known from matrix lands, but not in LSRs (Late Successional Reserves) and is, therefore, not protected by current federal land allocations (Burke et al., 1999).

Intrinsic Vulnerability

U = Unknown

Comments: Data have not been published on the reproductive biology of this species (Burke et al., 1999).

Environmental Specificity

B = Narrow. Specialist or community with key requirements common.

Comments: Found in limestone areas, including caves, talus slopes, and other rocky areas which are open, brush-covered, or associated with pine-oak woodlands. Refuge sites do not need to have vegetative cover (Kelley et al., 1999). Few populated sites are known. The species seems to be restricted to limestone outcrops or related substrates, and are associated with caves, talus, or rocky outcrops in open, brushy, and late seral pine-oak woodland areas. Rocks and large woody debris can serve as refugia during the summer and late winter seasons. Forest litter and coarse woody debris in the semi-dry areas in which this species occurs is considered necessary to provide food (shelter and substrate for fungi) and

temporary cover when foraging. Elevation ranges from 330 meters (1100 feet) to 760 meters (2500 feet) (Burke et al., 1999).

Other Considerations

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Greasons

Range slightly restrictive, but sites scattered and abundance at all sites low. No known protected sites.

BCD Sources

New Sources

Burke, T.E., J.S. Applegarth, and T.R. Weasma. 1999. Management recommendations of survey and manage terrestrial mollusks. Ver. 2.0. Report submitted to USDI Bureau of Land Management, Salem, Oregon, October 1999. Unpaginated.

Kelley, R., S. Dowlan, N. Duncan, and T. Burks. 1999. Field Guide to Survey and Manage Terrestrial Mollusk Species from the Northwest Forest Plan. Bureau of Land Management, Oregon State Office, Portland, Oregon. 114 pp.