

California Status Factors

Elcode IMGASC7038
Gname MONADENIA FIDELIS OCHROMPHALUS
Gcomname YELLOW-BASED SIDEBAND

Number of Occurrences

B = 6 - 20
C = 21 - 80

Comments Known from 39 sites, all historical (Burke et al., 1999). Three definite sites (Pilsbry, 1939; Roth, 1993): in the drainage of Etna Creek, the Marble Mountains and one or more sites in Klamath National Forest (Frest and Johannes, 2000).

Number of Occurrences with Good Viability

A = No (A- or B- ranked) occurrences with good viability

Comments No specimens have been found for many years (Burke et al., 1999).

Population Size

U = Unknown

Comments Local and range-wide population trends are not known (Burke et al., 1999).

Range Extent

D = 1,000-5,000 km² (about 400-2,000 square miles)

Comments Known from Siskiyou and Humboldt Counties, California. Range may extend as far north as Josephine County, Oregon, and possibly east of the Sacramento River Basin (Kelley et al., 1999). *Monadenia fidelis ochromphalus* seems to have been last found in the early 1960s. It is known from 39 sites and over a broader area than *Monadenia fidelis klamathica*. Berry identifies the Type Locality for *Monadenia fidelis ochromphalus* as Etna Creek, about 2½ miles above Etna, Siskiyou County, California. Other populations have been identified in the Marble Mountain Wilderness and down the Klamath River Drainage. *Monadenia fidelis ochromphalus* is suspected to have a similar range to that suspected for *Monadenia fidelis klamathica*, but could range farther to the east in Siskiyou County, where it may overlap with the range of *Monadenia chaceana* (Burke et al., 1999).

Area of Occupancy

C = 4-20 km² (about 1,000-5,000 acres)

LC = 40-200 km (about 25-125 miles)

Comments *Monadenia fidelis ochromphalus* seems to have been last found in the early 1960s. It is known from 39 sites and over a broader area than *Monadenia fidelis klamathica* (Burke et al., 1999). Three definite sites (Pilsbry, 1939; Roth, 1993): in the drainage of Etna Creek, the Marble Mountains and one or more sites in Klamath National Forest (Frest and Johannes, 2000).

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, all of which occurred prior to the early 1960s. The historic known sites need to be reverified (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, all of which occurred prior to the early 1960s. The historic known sites need to be reverified (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. The species' very small known range and close association with riparian zones further suggests that habitat alteration, which would result in a decrease of existing shade, woody debris and leaf litter, increased soil compaction, or major flood events by either human or natural means, might constitute specific threats to the species. Grazing activities that remove vegetative cover and compact the soil are of greatest concern. Disturbance of refuge areas by grazing animals during the aestivation periods is likely to cause mortality (Burke et al., 1999).

Number of Appropriately Protected and Managed Occurrences

B = Few (1-3) occurrences appropriately protected and managed

Comments *Monadenia fidelis ochromphalus* has been found within a Late-Successional Reserve, the Marble Mountains Wilderness area (the only protected area), and on private land (Burke et al., 1999).

Intrinsic Vulnerability

B = Moderately Vulnerable. Species exhibits moderate age of maturity, frequency of reproduction, and/or fecundity such that populations generally tend to recover from decreases in abundance over a period of several years (on the order of 5-20 years or 2-5 generations); or species has moderate dispersal capability such that extirpated populations generally become reestablished through natural recolonization (unaided by humans). Ecological community occurrences may be susceptible to changes in composition and structure but tend to recover through natural processes given reasonable time (10-100 years).

Comments This subspecies lives for at least several years and is probably sexually active in the fall, with the young hatching in the spring. Egg masses are probably white, laid in small hollows in the soil under cover, and may consist of as many as 120 eggs, with more than one clutch in a season (Burke et al, 1999).

Environmental Specificity

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

C = Moderate. Generalist or community with some key requirements scarce.

Comments Found in stable riparian zones within semi-dry mixed deciduous and conifer forests, but not necessarily restricted to riparian zones. Late successional forest with high canopy closure, a mixed conifer and hardwood component, and the presence of large, down woody debris or rock talus is considered optimum habitat. This species has been found under logs, in rocky areas, and on pine needle and oak leaf litter (Kelley et al., 1999). *Monadenia fidelis ochromphalus* has been found on leaves and sticks, on concrete walls of an irrigation ditch, and on mossy boulders and stones. Forest litter in the semi-dry areas inhabited by these species is considered to be an important habitat component. This species is tolerant of drier conditions than most *Monadenia fidelis* subspecies, but not as adapted to dry conditions as *Monadenia chaceana* or *Monadenia troglodytes* (Burke et al., 1999).

Other Considerations

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Reasons

Range slightly restrictive, but sites scattered and abundance at all sites low. Known from 39 sites, all historical (Burke et al., 1999). Somewhat restricted range, though it occupies a broader area than *Monadenia fidelis klamathica*. One to several protected populations (in the Marble Mountains Wilderness).

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.

Frest, J.T. and E.J. Johannes. 2000. A baseline survey of southwestern Oregon, with emphasis on the Rogue and Umpqua River drainages. Year 2000 Report prepared for Oregon Natural Heritage Program, Portland, Oregon. 403 pp.

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.

Pilsbry, H.A. 1939. Land Mollusca of North America (north of Mexico). Academy of Natural Sciences of Philadelphia, Monograph 3, volume 1, part 1: 1-573.

Roth, B. 1993. Polygyrid land snails, *Vespericola* (Gastropoda: Pulmonata). 1. Species and populations formerly referred to *Vespericola columbianus* (Lea) in California. *The Veliger*, 36: 134-144.