

Oregon Status Factors

Elcode IMGASF4270
Gname LYOGYRUS SP 2
Gcomname MASKED OR WASHINGTON DUSKYSNAIL

Number of Occurrences

A = 1 - 5

Comments Most sites are located in Washington; however, Frest and Johannes note this species as occurring sporadically in springs in the central and eastern portions of the Columbia Gorge, on the Oregon side only; Hood River and Wasco counties, Oregon, including sites in the Mount Hood National Forest and sites in Columbia Gorge National Scenic Area (Frest and Johannes, 1999).

Number of Occurrences with Good Viability

U = Unknown what number of occurrences with good viability

Comments Unknown

Population Size

U = Unknown

Comments Unknown

Range Extent

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

Comments Most sites are located in Washington; however, Frest and Johannes note this species as occurring sporadically in springs in the central and eastern portions of the Columbia Gorge, on the Oregon side only; Hood River and Wasco counties, Oregon, including sites in the Mount Hood National Forest and sites in Columbia Gorge National Scenic Area (Frest and Johannes, 1999).

Area of Occupancy

B = 0.4-4 km² (about 100-1,000 acres)

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

Comments Sporadic in springs in the central and eastern portions of the Columbia Gorge, Oregon side only: Hood River and Wasco counties, Oregon, including sites in Mount Hood National Forest and sites in Columbia Gorge National Scenic Area (Frest and Johannes, 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 Trends are unknown in Oregon.

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 Trends are unknown in Oregon.

Threats

A = Substantial, imminent threat. Threat is moderate to severe and imminent for most (> 60%) of the population, occurrences, or area. Ecological community occurrences are directly impacted over a widespread area, either causing irreversible damage or requiring long term recovery

Scope High **Severity** High **Immediacy** High

Comments The major concern for this species is loss of populations due to alteration of the ecological conditions that are apparently important for its survival (e.g., dissolved oxygen, water clarity, cool water temperatures, aquatic macrophyte and algal growth patterns). The major threats are urbanization, resulting in impacts such as water pollution from herbicides, pesticides and petroleum products, and eutrophication related to septic tank leakage and runoff of fertilizers and sediments. A potential threat is application of chemicals to control fish, insects, or aquatic plants. Another potential threat is water diversion for irrigation purposes, although this is unlikely due to the large size of the lakes. Alteration of water temperature regime is also unlikely due to the large size of these lakes (Furnish and Monthey, 1999).

Number of Appropriately Protected and Managed Occurrences

A = None. No occurrences appropriately protected and managed

Comments No known protected occurrences in Oregon.

Intrinsic Vulnerability

U = Unknown

Comments Little is known about this species (Furnish and Monthey, 1999).

Environmental Specificity

A = Very Narrow. Specialist or community with key requirements scarce.

Comments Found in or near kettle lakes. This limnophile species occurs on oxygenated mud substrates in areas with some aquatic macrophytes (Potamogeton crispus, Elodea, Myriophyllum spicatum, Ceratophyllum densum, Chara). Sizable numbers of waterlogged deciduous leaves (Alnus, Populus) are always present. This pelophile species appears to graze periphyton from leaf and other plant fragment surfaces and from other hard objects; but may be a detritivore as well (Frest and Johannes, 1999).

Other Considerations

ORNHIC List 1

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Reasons

No cited occurrences in Oregon, though this species is noted as occurring in Hood and Wasco counties, including sites in the Mount Hood National Forest and sites in Columbia Gorge National Scenic Area (Frest and Johannes, 1999). No known protected occurrences in Oregon.

BCD Sources

New Sources

Frest, T.J. and E.J. Johannes. 1993a. Mollusc species of special concern within the range of the northern spotted owl. Final report for the Forest Ecosystem Management Working Group. Deixis Consultants, Seattle, Washington. 39 pp.

Frest, T.J. and E.J. Johannes. 1999. Field Guide to Survey and Manage Freshwater Mollusk Species. Bureau of Land Management, Oregon State Office, Portland, Oregon. 117 pp.

Furnish, J.L. and R. Monthey. 1999. Management recommendations for aquatic mollusks. Ver. 2.0. Report submitted to USDI Bureau of Land Management, Salem, Oregon, December 1998. Unpaginated.