

Heritage Rank Status Factors

Elcode IMGASF4290
Gname LYOGYRUS SP 1
Gcomname COLUMBIA DUSKYSNAIL

Number of Occurrences

B = 6 - 20

Comments As of August 1996, known from about 15 sites (Furnish et al., 1997). Known from 15 sites in springs and spring outflows in the Columbia Gorge (Furnish and Monthey, 1999).

Number of Occurrences with Good Viability

D = Some (13-40) occurrences with good viability

Comments Sporadic distribution in the central and eastern Columbia Gorge, Washington and Oregon (Furnish et al., 1997). Known from 15 sites in springs and spring outflows in the Columbia Gorge (Furnish and Monthey, 1999).

Population Size

U = Unknown

Comments

Range Extent

C = 250-1,000 km² (about 100-400 square miles)

Comments Sporadic distribution in the central and eastern Columbia Gorge, Washington and Oregon (Furnish et al., 1997). Known from 15 sites in springs and spring outflows in the Columbia Gorge (Furnish and Monthey, 1999).

Area of Occupancy

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

D = 20-100 km² (about 5,000-25,000 acres)

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

LD = 200-1,000 km (about 125-620 miles)

Comments Sporadic distribution in the central and eastern Columbia Gorge, Washington and Oregon (Furnish et al., 1997). Known from 15 sites in springs and spring outflows in the Columbia Gorge (Furnish and Monthey, 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 Unknown

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 Unknown

Threats

B = Moderate and imminent threat. Threat is moderate to severe and imminent for a significant proportion (20-60%) of the population, occurrences, or area. Ecological community occurrences are directly impacted over a moderate area, either causing irreversible damage or requiring a long-term recovery.

Scope Moderate Severity Moderate Immediacy Moderate

Comments Cold springs in the Columbia Gorge are subjected to direct and indirect effects of habitat loss due to human activities, including disturbance to occupied spring sites (water diversions, damming of the Columbia River, road and railroad grade construction) (Furnish and Monthey, 1999).

Number of Appropriately Protected and Managed Occurrences

A = None. No occurrences appropriately protected and managed

Comments No known protected occurrences, although the State Park occurrences may have some possible protection. 12 of 15 sites on private lands; others in Beacon Rock, Benson, and Wahkeena Falls State Parks (Furnish et al., 1997; Furnish and Monthey, 1999).

Intrinsic Vulnerability

U = Unknown

Comments Unknown

Environmental Specificity

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

Comments Occurs in cold, well oxygenated springs and spring outflows on soft substrates in shallow, slow-flowing areas where it feeds on decaying organic particles. It prefers areas with no macrophytes, but may occur with *Rorippa* and *Cicuta* (Furnish et al., 1997; Furnish and Monthey, 1999).

Other Considerations

NRANK: N2

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Grank G2 **Grank Date** 11/27/2002

Reasons

Limited number of occurrences. No known protected occurrences, although the State Park occurrences may have some possible protection.

BCD Sources

New Sources

Furnish, J., R. Monthey, and J. Applegarth. 1997. Survey protocol for terrestrial mollusk species from the

Northwest Forest Plan. Version 2.0. Report to the USDI Bureau of Land Management, Salem, Oregon, October 29, 1997. Unpaginated.

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.