# **Washington 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 (some of which are in Oregon) (Furnish et al., 1997). Known form 15 sites in springs and spring outflows in the Columbia Gorge (some of which are in Oregon) (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 (Furnish et al., 1997). Known form 15 sites in springs and spring outflows in the Columbia Gorge (some of which are in Oregon) (Furnish and Monthey, 1999).

## **Population Size**

U = Unknown

Comments

## Range Extent

C = 250-1,000 km 2 (about 100-400 square miles)

Comments

Sporadic distribution in the central and eastern Columbia Gorge, Washington (Furnish et al., 1997). Known form 15 sites in springs and spring outflows in Columbia Gorge (some of which are in Oregon) (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 (Furnish et al., 1997). Known form 15 sites in springs and spring outflows in Columbia Gorge (some of which are in Oregon) (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 in Washington, although the Beacon Rock State Park occurrence may have some possible protection . All other known sites in Washington are on private lands (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**

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#### Greasons

Limited number of occurrences. No known protected occurrences, although the Beacon Rock State Park occurrence 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.