

## Heritage Rank Status Factors

**Elcode** IMGASK4110  
**Gname** JUGA SP 2  
**Gcomname** BLUE MOUNTAINS JUGA

### Number of Occurrences

B = 6 - 20

**Comments** Several sites in a single large nasmode, Phipps Meadow, source to Middle Fork John Day River, Malheur National Forest, Grant County, Oregon (Frest and Johannes, 1995c).

### Number of Occurrences with Good Viability

C = Few (4-12) occurrences with good viability

**Comments** Several sites in a single large nasmode, Phipps Meadow, source to Middle Fork John Day River, Malheur National Forest, Grant County, Oregon. Searches in the Blue Mountains from 1988-1994 did not find any other sites (Frest and Johannes, 1995c).

### Population Size

U = Unknown

**Comments** Unknown

### Range Extent

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

D = 1,000-5,000 km<sup>2</sup> (about 400-2,000 square miles)

**Comments** Original distribution uncertain. Probably once widespread in the southern Blue Mountains in Oregon (Frest and Johannes, 1995c).

### Area of Occupancy

C = 4-20 km<sup>2</sup> (about 1,000-5,000 acres)

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

**Comments** Several sites in a single large nasmode, Phipps Meadow, source to Middle Fork John Day River, Malheur National Forest, Grant County, Oregon. Searches of numerous other sites in the Blue Mountains of Oregon from 1988-1994 have not found this species (Frest and Johannes, 1995c).

### 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

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 Moderate

Comments The spring complex has been heavily grazed, destroying some springs mapped earlier and restricting the snails to less accessible portions of the largest members of the complex. Smaller nearby streams lack this species (Frest and Johannes, 1995c).

### Number of Appropriately Protected and Managed Occurrences

A = None. No occurrences appropriately protected and managed

Comments There are no known protected occurrences. Sites located in the Columbia Gorge National Scenic Area and Mt. Hood National Forest (Frest and Johannes, 1995c). All sites on Malheur National Forest, Grant County, Oregon (Frest and Johannes, 1995c).

### Intrinsic Vulnerability

U = Unknown

Comments Unknown

### Environmental Specificity

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

Comments Occurs in medium to large-sized cold springs and spring runs, on mixed mud, sand, and gravel substrate. The surrounding vegetation is high elevation, open, grassy, very moist, partly boggy meadow, with common sedges, Saxifraga, and other forbs. This is the only common mollusk in the limited area of its occurrence (Frest and Johannes, 1995c).

### Other Considerations

NRANK: N1. Listed as Juga (Oreobasis) n. sp. 5 in Frest and Johannes (1995c).

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### Reasons

Range slightly restrictive, but sites scattered and abundance at all sites low. There are no known protected occurrences.

### BCD Sources

### New Sources

Frest, T.J. and E.J. Johannes. 1995c. Interior Columbia Basin mollusk species of special concern. Report to Interior Columbia Basin Ecosystem Management Project. 274 pp.