

## Heritage Rank Status Factors

**Elcode** IMGAS87020  
**Gname** DEROCERAS HESPERIUM  
**Gcomname** EVENING FIELDSLUG

### Number of Occurrences

B = 6 - 20

**Comments** This slug has been reported from only 7 locations in three general areas: northwestern Oregon, the northern Olympic Peninsula, and the northeast coast of Vancouver Island (Burke et al., 1999).

### Number of Occurrences with Good Viability

B = Very few (1-3) occurrences with good viability

**Comments** Current information, or lack thereof, indicates that this is truly a rare species. Although the areas in which it should be expected have been surveyed (lightly), *Deroceras hesperium* has been found poorly represented, relative to other gastropods. The status of the 4 known sites that occurred in the Portland area are unknown (Burke et al., 1999).

### Population Size

U = Unknown

**Comments**

### Range Extent

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

E = 5,000-20,000 km<sup>2</sup> (about 2,000-8,000 square miles)

**Comments** Low to mid-elevations between the western Cascade Range and the Pacific Ocean, from northwestern Oregon through western Washington, and on Vancouver Island, British Columbia. Oregon: Clackamas, Multnomah, and Wasco Counties. Washington: Clallam County (Kelley et al., 1999). The historic range of *Deroceras hesperium* is northwestern Oregon through Western Washington, to Vancouver Island, British Columbia, Canada (Burke et al., 1999). Pilsbry (1948) notes that it is to be expected to exist throughout the humid coastal region of the northwest.

### Area of Occupancy

D = 20-100 km<sup>2</sup> (about 5,000-25,000 acres)

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

**Comments** This slug has been reported from only 7 locations in three general areas: northwestern Oregon, the northern Olympic Peninsula, and the northeast coast of Vancouver Island, British Columbia (Burke et al., 1999).

### Long-term Trend in Population Size, Extent of Occurrence, Area of Occupancy, and/or Number or Condition of Occurrences

C = Substantial Decline (decline of 50-75%)

**Comments** Pilsbry (1948) referred to many specimens opened by him, and at least multiple specimens from each locality, but all "collected over 50 years ago...." However, Branson (1977) found only three specimens in his surveys of the Olympic Mountains and none in his surveys of the Washington Cascades (Branson, 1980) or Oregon Cascades and Coast Ranges (Branson and Branson, 1984).

### **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**

### **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 Moderate Severity Unknown Immediacy Unknown

**Comments** A major concern would be loss of occupied habitat from human activities. Exact locations of the known sites are uncertain, so inadvertent destruction of these habitats and any currently unknown populations, before they are discovered and their requirements determined, is a highly potential risk (Burke et al., 1999).

### **Number of Appropriately Protected and Managed Occurrences**

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

**Comments** One of the sites from which *Deroceras hesperium* is known is near a campground in Olympic National Park. Another of the sites is on the Makah Indian Reservation, which may or may not be protected. The seventh location is in Canada (Burke et al., 1999) and it is unknown as to whether that site is protected.

### **Intrinsic Vulnerability**

U = Unknown

**Comments** *Deroceras hesperium* is one of the least known slugs in the western United States (Burke et al., 1999).

### **Environmental Specificity**

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

**Comments** May be associated with a variety of low vegetation, litter, and debris. Rocks also may be used. Little is known about this species and its habitat (Kelley et al., 1999). Branson (1977) found two slugs of this species in hemlock, grand fir, maples, ferns and mosses at 610 meters (2000 feet) elevation, and one among hemlock, black cottonwood, spruce and salmonberry at 8 meters (26 feet) above sea level. In general, gastropods are found under rocks or logs and among talus, litter, debris, and ground vegetation, and these microsites should be considered the places in which to expect this species. *Deroceras hesperium* is apparently also found in quite moist sites and may be associated with riparian habitats, although there is no evidence that it is a riparian obligate (Burke et al., 1999).

### **Other Considerations**

NRANK - N1

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## **Greasons**

Limited number of occurrences with little likelihood of new discoveries.

## **BCD Sources**

### **New Sources**

Branson, B.A. 1977. Freshwater and terrestrial Mollusca of the Olympic Peninsula, Washington. *The Veliger*, 19(3): 310-330.

Branson, B.A. 1980. Collections of gastropods from the Cascade Mountains of Washington. *The Veliger*, 23(2): 171-176.

Branson, B.A. and R.M. Branson. 1984. Distributional records for terrestrial and freshwater Mollusca of the Cascade and Coast ranges, Oregon. *The Veliger*, 26(4): 248-257.

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.

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. 1948. Land Mollusca of North America (north of Mexico). Academy of Natural Sciences of Philadelphia, Monograph number 3, volume 2, part 2: 521-1113.