

# Washington Status Factors

**Elcode** NF000CUMO2

**Gname** CUDONIA MONTICOLA

**Gcomname**

## Number of Occurrences

B = 6 - 20

**Comments** These fruiting bodies resemble small, tough/fibrous, pinkish tan to grayish brown misshapen mushroom buttons; the spores are produced on the surface of the irregularly hemispherical head (not a true cap) and not on gills. This species was described from material collected on the Olympic Peninsula and is known only from western North America. In Washington it has been reported from the Olympic Mountains and the Cascade Mountains including the Olympic National Park and Forest, Mt. Baker-Snoqualmie NF, Okanogan NF, and the Wenatchee NF (Mains 1956, Fogel, n.d., ISMS data). However, only three occurrences are tabulated on the ISMS Buffer sheet. WTU should be searched for specimens of this species as well.

## Number of Occurrences with Good Viability

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

**Comments** This factor can only be evaluated for the collections listed in the ISMS tables and that number comes out to five.

## Population Size

U = Unknown

**Comments** This can not be determined; records reflect only species presence.

## Range Extent

H = > 2,500,000 km<sup>2</sup> (greater than 1,000,000 square miles)

**Comments** The documented range extends from the Olympic Peninsula to the western edge of the Okanogan NV then south on both sides of the Cascades at the higher levels to south of Mt. Rainier NP. I collected it west of the Ozette Ranger station in 1991 and submitted that information and information on a site at Friday Harbor Biological Station and Cape Flattery to the S&M lab. Sigh, it would be nice to have good data set with which to work!

## Area of Occupancy

U = Unknown

LU = Unknown

**Comments** Short of using molecular tools there is no way to evaluate this factor.

## 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

### 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

D = Moderate, non-imminent threat. Threat is moderate to severe but not imminent for a significant portion of the population, occurrences, or area.

Scope	Moderate	Severity	Moderate	Immediacy	Low
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**Comments** Mostly found in mature moist coniferous forests and typically associated with very rotten wood which may be buried. Thus ground-disturbing activities that reduce the amount of rotting wood and interrupt the addition of fresh wood to rot could impact the species. Other threats include logging, thinning, or other activities that would change the humidity, light patterns, and composition of the habitats.

### Number of Appropriately Protected and Managed Occurrences

C = Several (4-12) occurrences appropriately protected and managed

**Comments** In Washington one site is rated G1/2, and one site was in Matrix land. I suspect some of the older collections were made in areas that are now protected.

### Intrinsic Vulnerability

B = Moderately Vulnerable. Species exhibits moderate age of maturity, frequency of reproduction, and/or fecundity such that populations generally tend to recover from decreases in abundance over a period of several years (on the order of 5-20 years or 2-5 generations); or species has moderate dispersal capability such that extirpated populations generally become reestablished through natural recolonization (unaided by humans). Ecological community occurrences may be susceptible to changes in composition and structure but tend to recover through natural processes given reasonable time (10-100 years).

**Comments** This species is a forest-dweller that is especially abundant within the range of the northern spotted owl, an area that has experienced considerable logging with more likely to occur in the future. Logging and other activities that alter the environment of this fungus are likely to result in the fungus dying out in the habitat.

### Environmental Specificity

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

**Comments** Often found in areas with thick duff or moss on the ground and that are shaded much of the day so the humidity remains high at ground level. It has no adaptations for resisting drying out.

### Other Considerations

This species and *C. grisea* were both described from the Olympic Peninsula and are known primarily from the range of the northern spotted owl and some sites in the Rocky Mountains. Both species are patchy in their distribution and fruit irregularly. Relatively few collections of either species are known. DNA studies need to be undertaken to determine if these species are truly distinct or are phases of one species.

<b>Edition</b>	11/22/2002	<b>Edauthor</b>	Nancy S. Weber
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<b>Grank</b>	S2	<b>Grank Date</b>	11/22/2002
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## Greasons

These fruiting bodies resemble small, tough/fibrous, pinkish tan to grayish brown misshapen mushroom buttons; the spores are produced on the surface of the irregularly hemispherical head (not a true cap) and not on gills. *C. monticola* fruits in an irregular manner and fruiting bodies are seldom abundant when it does fruit. The type locality is on the Olympic Peninsula but no ISMS sites appear to be from that area. Historic sites should be revisited at the appropriate time of year to see if the species is still present in those localities. With only three sites in the ISMS data base and only one site protected, further observations are merited. I would have expected this species to be rated at least S3 in Washington. Poor field data has made accurate identification of specimens difficult to impossible in many cases resulting in undercounts of the number of occurrences.

## BCD Sources

### New Sources

Farr, D.F., Rossman, A.Y., Palm, M.E., and McCray, E.B. n.d. Fungal Databases, Systematic Botany & Mycology Laboratory, ARS, USDA. Retrieved 2002.11. from <http://nt.ars-grin.gov/fungaldatabases/DAVFP>

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Mains 1956b Mains, E.B. 1956. North American species of the Geoglossaceae. Tribe Cudonieae. *Mycologia* 48: 694-710.

OSC n.d. Mycological Collections Oregon State University. Retrieved 2002.11. from <http://ocid.nacse.org/research/herbarium/myco/index.html>.