

# Natural Heritage Ranking Form - Oregon State Rank

Oregon Ranking Form    Columbia Gorge oregonian (snail) (*Cryptomastix hendersoni*)    Oregon Biodiversity Information Center

## SPECIES ASSESSED

<b>Scientific Name</b>	<i>Cryptomastix hendersoni</i>	<b>ELCODE</b>	IMGAS93030
<b>Common Name</b>	Columbia Gorge oregonian (snail)	<b>Element ID</b>	7902

### Species Concept Reference Citation

Turgeon, D.D., J.F. Quinn, Jr., A.E. Bogan, E.V. Coan, F.G. Hochberg, W.G. Lyons, P.M. Mikkelsen, R.J. Neves, C.F.E. Roper, G. Rosenberg, B. Roth, A. Scheltema, F.G. Thompson, M. Vecchione, and J.D. Williams. 1998. Common and scientific names of aquatic invertebrates from the United States and Canada: Mollusks. 2nd Edition. American Fisheries Society Special Publication 26, Bethesda, Maryland: 526 pp.

## CONSERVATION STATUS RANK

<b>Assigned Rank</b>	<b>S2</b>		
<b>Rank Assignment Author</b>	Gaines, Eleanor	<b>Rank Review Date</b>	3/22/2019
<b>Rank Factors Author</b>	Gaines, Eleanor	<b>Rank Factors Date</b>	03/22/2019
<b>Calculated Rank</b>	S2	<b>Rank Change Date</b>	06/04/2019
<b>Rank Methodology Used</b>	Rank calculator v.3.1x - 2011-2015 rank factors		

### Assigned Rank Reasons

Limited, patchy distribution. Vulnerable to habitat modification. Relatively few records, though more may exist. Significant gaps in population.

## RANGE/DISTRIBUTION

### Range Extent

**Rating**            20,000-200,000 square km (about 8000-80,000 square miles)  
**Comments**        20720 sq km

### Area of Occupancy

**Grid Cell Size**  
**Rating (as Number of 4 km<sup>2</sup> Grid Cells)**        D = 6-25  
**Comments**        21 4-km sq grid cells. Restricted range with significant gaps between populations.

## ABUNDANCE AND CONDITION

### Number of Occurrences

**Rating**            6 - 20  
**Comments**  
19 EOs; most extant, 4 since 2000.

### Population Size

**Rating**            250 - 10,000 individuals  
**Comments**  
This is a guess, based on the number of known populations and habitat available.

### Good Viability/Ecological Integrity

#### Number of Occurrences with Good Viability/Ecological Integrity

**Rating**            Very few to few (1-12)  
**Comments**  
Estimate, based on number of extant EOs

<b>THREATS</b>
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<u>Threat Category Code</u>	<u>Threat Category</u>	<u>Calculated Impact</u>	<u>Scope</u>	<u>Severity</u>	<u>Timing</u>	<u>Comments</u>
2	Agriculture & aquaculture	B = High				Logging, removal of woody debris road construction and runoff affects water quality at spring sites. soil compaction.
4	Transportation & service corridors	C = Medium				
5	Biological resource use	C = Medium				loss of woody debris, canopy removal could dry site or compact soil.
6	Human intrusions & disturbance	D = Low				habitat degradation from recreational use
7	Natural system modifications	D = Low				loss of perennial flow, siltation, fire
<b>Calculated Overall Threat Impact</b>		C = Medium				
<b>Assigned Overall Threat Impact</b>		B = High				
<b>Overall Threat Impact Comments</b>						

loss of moist microhabitats from recreation, wood removal, water diversion. small, patchy range

<b>TRENDS</b>
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**Short-Term Trend**

**Rating** U = Unknown

**Long-Term Trend**

**Rating** U = Unknown

<b>OTHER FACTORS</b>
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**Intrinsic Vulnerability Rating**

**Comments**

**Environmental Specificity Rating**

Moderate. Generalist or community with some key requirements scarce.

**Comments**

Occurs in two distinct habitat types: Low elevation, semi-arid, east end of Columbia R Gorge in spring fed strams and talus, and in mid-elevation damp areas under closed hemlock/Douglas-fir canopies.

<b>ADDITIONAL SPECIES INFORMATION</b>
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**Oregon Habitat Comments**

Low to middle elevations; riparian associate; generally near seeps and springs, sometimes in leaf litter along streams, under logs, among brush, and in basalt talus. Sometimes seen at the base of taluses, slopes or valleys with persistent moisture in oth

**RANKING REFERENCES**

<u>Short Citation Author</u>	<u>Year</u>	<u>Full Citation</u>
Duncan	2005	Duncan, N. 2005. Conservation Assessment for <i>Cryptomastix hendersoni</i> , Columbia Oregonian. USDA Forest Service Region 6 and USDI Bureau of Land Management, Oregon and Washington.
Jordan and Black	2015	Jordan, S. F. and S. H. Black. 2015. Conservation Assessment for <i>Cryptomastix hendersoni</i> , Columbia Oregonian. USDA Forest Service Region 6 and USDI Bureau of Land Management, Oregon and Washington.
ORBIC	2019	Oregon Biodiversity Information Center. 2019. Point Observation Database (PODs). Unpublished species point observations collated from many sources across Oregon.
Xerces Society	2019	Xerces Society. 2019. Rare invertebrate dataset sent to ORBIC incl. multiple species with collection data.

**RESOURCES**

Oregon Biodiversity Information Center, Institute for Natural Resources  
Portland State University, Mail Stop: INR, PO Box 751, Portland, OR 97207-0751 Phone: 503-725-9950

Additional ORBIC species ranking forms posted at  
<https://inr.oregonstate.edu/orbic/rare-species/ranking-documentation>

Information on Natural Heritage ranking methodology is available at  
<http://www.natureserve.org/biodiversity-science/publications/natureserve-conservation-status-assessments-methodology-assigning>

The Conservation Rank Calculator is developed and maintained by NatureServe and is available from  
<http://www.natureserve.org/conservation-tools/conservation-rank-calculator>

**ASSESSMENT CITATION**

Oregon Biodiversity Information Center. 2019. Oregon state rank assessment for Columbia Gorge oregonian (snail) (*Cryptomastix hendersoni*). Institute for Natural Resources, Portland State University, Portland, OR.