

Natural Heritage Ranking Form - Oregon State Rank

Oregon Ranking Form Clearwater cryptantha (*Cryptantha grandiflora*)

Oregon Biodiversity Information Center

SPECIES ASSESSED

Scientific Name *Cryptantha grandiflora*

ELCODE PDBOR0A3Y0

Common Name Clearwater cryptantha

Element ID 13910

Species Concept Reference Citation

Peck, M.E. 1961. A manual of the higher plants of Oregon. 2nd edition. Binsford & Mort, Portland, Oregon. 936 pp.

CONSERVATION STATUS RANK

Assigned Rank **S1S2**

Rank Assignment Author Sue Vrillakas; Lindsey Wise

Rank Review Date 8/12/2019

Rank Factors Author Lindsey Wise

Rank Factors Date 08/12/2019

Calculated Rank S1S2

Rank Change Date 08/12/2019

Rank Methodology Used Rank calculator v.3.1x - 2011-2015 rank factors

Assigned Rank Reasons

Few sites; purported to be restricted to an atypical geology, threatened by invasive species. Paper regarding *C. grandiflora* is in prep., should review rank after publication.

RANGE/DISTRIBUTION

Range Extent

Rating 5000-20,000 square km (about 2000-8000 square miles)

Comments Estimate based on Oregon, SE Washington, and Idaho sites. Idaho sites may not still be extant. Taxonomic disagreements about this species, with many sources synonymizing with *C. intermedia*. This assessment uses the range as described in the 2nd edition of

Area of Occupancy

Grid Cell Size 4 km² Grid Cells

Rating (as Number of 4 km² Grid Cells) BC = 2-5

Comments Occupies 2 4km² grid squares in Oregon, likely a few in SE Washington, possibly some in Idaho. Possibly more sites.

ABUNDANCE AND CONDITION

Number of Occurrences

Rating 1 - 5

Estimate 2

Comments

2 EOs in Oregon.

Population Size

Rating Unknown

Good Viability/Ecological Integrity

Number of Occurrences with Good Viability/Ecological Integrity

Rating Very few (1-3)

Comments

Of the 2 known Oregon sites, one is noted as being in danger of being overrun by *Ventenata dubia*. The other has invasive annual grasses present but is described as a good population.

THREATS

<u>Threat Category</u>	<u>Threat Category</u>	<u>Calculated Impact</u>	<u>Scope</u>	<u>Severity</u>	<u>Timing</u>	<u>Comments</u>
8	Invasive & other problematic species, genes & diseases	BC = High - medium	Large: Affects most (31-70%) of the total population or occurrences or extent	Serious - moderate		
8.1	Invasive non-native/alien species/diseases	BC = High - medium	Large: Affects most (31-70%) of the total population or occurrences or extent	Serious - moderate		
11	Climate change & severe weather	BC = High - medium	Large: Affects most (31-70%) of the total population or occurrences or extent	Serious - moderate		Calculated as moderately vulnerable using CCVI with low confidence.
Calculated Overall Threat Impact		AC = Very high - medium				
Assigned Overall Threat Impact		AC = Very high - medium				

TRENDS

Short-Term Trend

Rating U = Unknown

Long-Term Trend

Rating U = Unknown

OTHER FACTORS

Intrinsic Vulnerability Rating

Comments

Environmental Specificity Rating Very narrow to narrow.

Comments

According to Darrach, *C. grandiflora* is only found on an atypical Columbia River Basalt that is a gabbro with high metals content.

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 Clearwater cryptantha (*Cryptantha grandiflora*).
Institute for Natural Resources, Portland State University, Portland, OR.