

# Natural Heritage Ranking Form - Oregon State Rank

Oregon Ranking Form    Columbia cress (*Rorippa columbiae*)

Oregon Biodiversity Information Center

## SPECIES ASSESSED

Scientific Name    *Rorippa columbiae*

ELCODE    PDBRA27060

Common Name    Columbia cress

Element ID    8463

### Species Concept Reference Citation

Kartesz, J.T. 1994. A synonymized checklist of the vascular flora of the United States, Canada, and Greenland. 2nd edition. 2 vols. Timber Press, Portland, OR.

## CONSERVATION STATUS RANK

Assigned Rank    **S3**

Rank Assignment Author    Vrilakas, Sue

Rank Review Date    8/18/2010

Rank Factors Author    Vrilakas, Sue

Rank Factors Date    08/18/2010

Calculated Rank    S3

Rank Change Date    04/08/1988

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

### Assigned Rank Reasons

Fairly large range extent but plant numbers and occurrences are rather low. Threats considered moderate.

## RANGE/DISTRIBUTION

### Range Extent

Rating    20,000-200,000 square km (about 8000-80,000 square miles)

Comments    24362 square miles, convex hull

### Area of Occupancy

#### Grid Cell Size

Rating (as Number of 4 km<sup>2</sup> Grid Cells)    E = 26-125

Comments    49 grid cell

## ABUNDANCE AND CONDITION

### Number of Occurrences

Rating    21 - 80

#### Comments

26 occurrences

### Population Size

Rating    2500 - 10,000 individuals

#### Comments

6400-6900 plant numbers

### Good Viability/Ecological Integrity

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

Rating    Few (4-12)

#### Comments

5 occurrences

### Number of Protected and Managed Occurrences

A = None. No occurrences appropriately protected and managed

**THREATS**

<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	CD = Medium - low	Pervasive - restricted	Moderate: Likely to moderately degrade/reduce affected occurrences or habitat, or reduce population 11-30%		
2.3	Livestock farming & ranching	CD = Medium - low	Pervasive - restricted	Moderate: Likely to moderately degrade/reduce affected occurrences or habitat, or reduce population 11-30%		cattle trampling, soil compacting
7	Natural system modifications	BC = High - medium	Pervasive - restricted	Serious: Likely to seriously degrade/reduce affected occurrences or habitat, or reduce population 31-70%		
7.2	Dams & water management/use	BC = High - medium	Pervasive - restricted	Serious: Likely to seriously degrade/reduce affected occurrences or habitat, or reduce population 31-70%		hydrology changes

**Calculated Overall Threat Impact**

**Assigned Overall Threat Impact** C = Medium

**Overall Threat Impact Comments**

Threats include changes in hydrology and cattle grazing

**TRENDS**

**Short-Term Trend**

**Rating** U = Unknown

**Long-Term Trend**

**Rating** D = Decline of 50-70%

**OTHER FACTORS**

**Intrinsic Vulnerability Rating**

**Comments**

**Environmental Specificity Rating**

Narrow. Specialist or community with key requirements common.

**Comments**

seasonally inundated sites

**ADDITIONAL SPECIES INFORMATION****Oregon Habitat Comments**

Inhabits moist areas, may be seasonal, such as river bars, lake margins, irrigation ditches, meadows, near springs, intermittent streams, at lower to mid elevations. Usually found in *Artemisia* sp. community types. Populations along the Columbia River occur

**RANKING REFERENCES**

<u>Short Citation</u>	<u>Author</u>	<u>Year</u>	<u>Full Citation</u>
Camp		1996	Camp, P. 1996. Conservation strategy for RORIPPA COLUMBIAE ( <i>Columbia cress</i> ). USDI Bureau of Land Management, Burns, Lakeview and Spokane Districts; USDA Winema NF, Shasta-Trinity NF, Modoc NF, Lassen NF; USDI Fish & Wildlife Service, Klamath Basin National Wildlife Refuge; California Dept of Fish and Game and Oregon Dept. of Agriculture.
Caplow		2003	Caplow, Florence. 2003. Studies of Hanford rare plants 2002. Washington Natural Heritage Program, Natural Heritage report 2003-2004. 7 pp.

**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. 2010. Oregon state rank assessment for *Columbia cress* (*Rorippa columbiae*). Institute for Natural Resources, Portland State University, Portland, OR.