Northern wormwood (*Artemisia campestris* var. *wormskioldii*)



ENDANGERED



Flowers (left), habit (center), and habitat (right) of northern wormwood. Photos by Melissa Carr (left and right), and Rebecca Currin (center). If downloading images from this website, please credit the photographer.

Family

Asteraceae

Taxonomic notes

Synonyms: Artemisia campestris ssp. borealis var. wormskioldii, Artemisia borealis var. wormskioldii

Plant description

Northern wormwood is a low-growing (to 30 cm), tap-rooted biennial or perennial. The basal leaves are 2.5–10 cm long, 2-3 times divided into mostly linear divisions, and crowded into rosettes. Leaves and stems are covered with fine, silky hairs. The inflorescence is narrow, with relatively large flower heads. The outer flowers are pistillate and fertile, disk flowers are sterile, and the achenes and receptacle are glabrous.

Distinguishing characteristics

Usually reaching less than 30 cm in height, northern wormwood is shorter than the cooccurring *A. campestris* var. *scouleriana*, which generally reaches 30-100 cm. The leaves of northern wormwood are noticeably covered with silvery, silky hairs (when compared to the largely glabrous, greenish-tinged foliage of the latter variety), and the involucres are relatively large (3-4 mm vs. 2-3 mm for *A. c.* var. *scouleriana*). Additionally, northern wormwood blooms in April, while *A. c.* var. *scouleriana* blooms in early summer. *Artemisia lindleyana* and *A. ludoviciana* also occur along the banks of the Columbia, but these two species are shrubby, usually taller (30-190 cm) than northern wormwood, have entire or toothed leaves, and like *A. c.* var. *scouleriana*, begin blooming in early to mid-summer.

When to survey

Surveys for this species should be conducted when the plants are flowering, between mid-April and mid-June.

Habitat

This species is restricted to basalt, compacted cobble, and sand on the banks of the Columbia River. The surrounding countryside is arid, supporting shrub-steppe vegetation. In addition to the *Artemisia* species mentioned above, associated species include *Coreopsis tinctoria* var. *atkinsoniana*, *Cymopterus terebinthinus*, *Eriogonum compositum*, *Lupinus polyphyllus*, *Phacelia hastata*, and *Salix exigua*. *Bromus tectorum* and *Centaurea diffusa* also occur in some sites.

Range

The historic range extends along the Columbia River from the mouth of the John Day River in Sherman County, Oregon westward to Bingen, Washington, with a disjunct historic collection of the species from northwestern Umatilla County, Oregon. An additional disjunct population was discovered in 1983 near Priest Rapids Dam in Washington. The species is now believed to be extirpated in Oregon, with only two known extant populations occurring in Washington, one in Grant County and one in Klickitat County.

Oregon counties

Sherman, Umatilla, Wasco

Federal status

Candidate

Threats

Major threats to this species include habitat loss and altered hydrology due to construction of dams, competition from exotic weeds, and development of riparian habitat.

Did you know?

Northern wormwood is related to several European subspecies and varieties of *Artemisia campestris* that have been used medicinally for centuries. Although Linnaeus recommended an "infusion in pleurisy," all taxa within this group are currently considered to be quite poisonous.

Current/Recent ODA projects

Reintroducing northern wormwood to Oregon

References

Carlson, M.L. 1998. Status report of *Artemisia campestris* L. ssp. *borealis* var. *wormkiolodii* [Bess.] Cronq. Department of Botany and Plant Pathology, Oregon State University, Corvallis, Oregon.

Gamon, J. 1989. Report on the status of *Artemisia campestris* L. var. *wormskioldii* (Bess.) Cronquist. Washington Natural Heritage Program, Olympia, Washington.

Hitchcock, C.L., A. Cronquist, M. Owenby, and J.W. Thompson 1959. Vascular plants of the Pacific Northwest, Part 5: Compositae. University of Washington Press, Seattle, WA.

Kaye, T.N. 1995. Monitoring plan for northern wormwood at Miller Island, Columbia River Gorge National Scenic Area. Oregon Department of Agriculture.

OFP (Oregon Flora Project). 2012. Oregon Plant Atlas.

http://www.oregonflora.org/atlas.php. Accessed January 23, 2012.

ORBIC (Oregon Biodiversity Information Center). 2010. Rare, threatened and endangered species of Oregon. Institute for Natural Resources, Portland State University, Portland, Oregon.

105 pp. Available at <u>http://orbic.pdx.edu/documents/2010-rte-book.pdf</u> (pdf document, 971 kB). Accessed January 23, 2012.