

***Artemisia campestris* L. ssp. *borealis* Hall & Clem.**
var. ***wormskioldii* (Bess.) Cronquist**
northern wormwood
Asteraceae (Aster Family)

Status: State Endangered, USFWS Candidate
Rank: G5T1S1

General Description: A low (generally 6 to 12 inches), unarmed biennial or perennial with a taproot; the basal leaves are in crowded rosettes, mostly 1 to 4 inches long, two or three times divided into mostly linear divisions; the herbage, especially the leaves, conspicuously covered with silky hairs; the inflorescence is narrow, with relatively large heads, with the involucre about 1/8 inch; the outer flowers are pistillate and fertile, but the disk flowers are sterile and the ovaries abort; the achenes and receptacles are glabrous.

Identification Tips: The major characters distinguishing this taxon from other members of the genus within its range are the combination of a short habit, sericeous leaves, and relatively large involucre (1/8 to 3/16 inch vs. 1/16 to 1/8 inch). In addition, this taxon flowers in April, whereas other members of the genus typically do not flower until much later in the season.

Phenology: This species begins flowering in early April, with a majority of individuals flowering by mid-April. Individuals with flowers are occasionally seen throughout the season, however. The length of flowering time for individuals is not known.

Range: Regional endemic; known from two widely disjunct sites along the Columbia River in WA; one each in Klickitat and Grant counties; historically also in adjacent Hood River and Wasco cos., OR. Occurs within the Columbia Basin physiographic province.

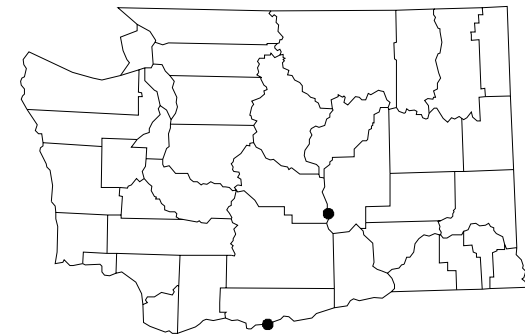
Habitat: The area is arid, generally supporting shrub-steppe vegetation (big sagebrush/bluebunch wheatgrass and bluebunch wheatgrass/Sandberg's bluegrass associations of Daubenmire 1970). The taxon grows on basalt, compacted cobble, and sand on relatively flat terrain. Currently known occurrences have the following associated vegetation: whiteleaf scorpionweed (*Phacelia hastata*), winged dock (*Rumex*

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©1975 Western Washington University specimen #18056, collected by R. & D. Naas (#2945).

Known distribution of
Artemisia campestris
ssp. *borealis* var.
wormskioldii
in Washington



● Current (1980+)
○ Historic (older than 1980)

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Reid Schuller



John Gamon

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Habitat (continued): *venosus*), Pacific sage (*Artemisia campestris* var. *scouleriana*), bigleaf lupine (*Lupinus polyphyllus*), northern buckwheat (*Eriogonum compositum*), tumbled mustard (*Sisymbrium altissimum*), sand beardtongue (*Penstemon acuminatus*), and knapweed (*Centaurea diffusa*).

Ecology: Vegetative cover is sparse at both known sites. *A. campestris* var. *wormskioldii* provides less than 1% cover at both sites. One site is partially within areas of shifting sand. The taxon is within the floodplain of the Columbia River and presumably withstands occasional short periods of inundation. The fact that the taxon flowers in April may help keep it reproductively isolated from other members of the species complex with which it occurs.

State Status Comments: There are only two known populations. Both occur on federal land but are not adequately protected from the threats identified below.

Inventory Needs: Additional inventory work needs to be conducted between the John Day and Priest Rapids dams and between Rock Island and Wanapum dams.

Threats and Management Concerns: Current threats include recreational use (vehicle compaction) of the known sites and weed invasions. Flooding may pose a threat as well due to the limited population size and limited habitat availability. Dam construction along the river is responsible for most of the habitat loss. Recreational use of the sites should be carefully monitored. Weed control should be carried out in a manner compatible with not harming the taxon.

References:

Hitchcock, C. L., A. Cronquist, M. Ownbey, and J.W. Thompson. 1955. *Vascular Plants of the Pacific Northwest, Part 5 Compositae*. University of Washington Press, Seattle. 343 pp.

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