

Cypripedium fasciculatum Kell. Ex S. Wats.

clustered lady's slipper
Orchidaceae (Orchid Family)

Cypripedium fasciculatum

clustered lady's slipper

Status: State Sensitive, USFWS Species of Concern

Rank: G4S3

General Description: Perennial herbaceous plant with a single erect stem 2-8 inches tall and a single pair of broad, parallel-veined, pleated leaves at or above the middle of the stem, which is covered with woolly hairs. Flowers droop in a tight cluster of 2-4 at the tip of the stem and consist of greenish-brown or greenish-purple petals and sepals, usually purple-lined or mottled, and a greenish-yellow pouch with brownish-purple margins, often with a purplish tinge. The stem above the leaves becomes erect and elongates as the capsules develop.

Identification Tips: *Cypripedium fasciculatum* is quite distinctive and is not likely to be confused with any other taxon. Even without flowers, the single pair of broad, parallel-veined leaves and the densely hairy stem are quite diagnostic.

Phenology: Flowers from early May through mid-June.

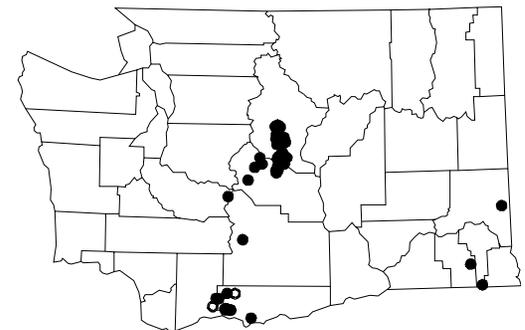
Range: Occurs in coniferous forests along the Cascade-Sierran axis from Washington to central California and at widely scattered locations in the Rocky Mountains in Idaho, Montana, Wyoming, Utah and Colorado. In WA, the species is known from the eastern slopes of the Cascades in the Eastern Cascades physiographic province in Chelan, Kittitas, Klickitat, and Yakima counties, in the Columbia Basin physiographic province in Whitman County, in the Blue Mountains physiographic province in Columbia and Garfield counties, and one occurrence in Pierce County in the Western Cascades physiographic province. There is also a historical record from Skamania County.

Habitat: Mid- to late seral Douglas fir (*Pseudotsuga menziesii*) or ponderosa pine (*Pinus ponderosa*) overstories with a closed herbaceous layer and variable shrub layer, mostly on northerly aspects. Elevations range considerably, from approximately 1200 feet to more than 5000 feet above sea level. Associated species include Oregon boxwood (*Pachistima myrsinites*), oceanspray (*Holodiscus discolor*), spiraea (*Spiraea betulifolia*), Oregon grape (*Berberis nervosa*), pinegrass (*Calamagrostis rubescens*), heart-leaf arnica (*Arnica cordifolia*) and elk sedge



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Known distribution of
Cypripedium fasciculatum
in Washington



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

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Habitat (continued): (*Carex geyeri*). It can also be found in grand fir (*Abies grandis*) forest with Swauk sandstone, thick duff or sandy loam soils.

Ecology: It has been hypothesized that a species of fungus associated with deer or elk feces is required for seed germination. *Cypripedium fasciculatum* occurs in habitats that burn with some regularity (at least historically). The taxon may be able to survive a low intensity underburn, but not high intensity fires in areas where fuel loading is unnaturally high as a result of decades of fire suppression.

State Status Comments: The small size of most populations, their isolated nature, and the presence of conflicting land-uses all contribute to the species' current status.

Inventory Needs: There are likely to be additional populations within the known range of the taxon in WA. There are considerable geographic gaps between populations that should be inventoried.

Threats and Management Concerns: Land management activities that lead to soil disturbance, such as road construction and development, are the greatest threat to the species. Timber harvest may also impact the species through disturbing the soil profile and through change in the soil moisture and temperature regimes.

References:

- Brownell, V.R., and P.M. Catling. 1987. Notes on the distribution and taxonomy of *Cypripedium fasciculatum* Kellogg ex Watson (Orchidaceae). *Lindleyana* 2(1): 53-57.
- Croft, L.K., W.R. Owen and J.S. Shelly. 1997. Interior Columbia Basin Ecosystem Management Project Analysis of Vascular Plants.
- Hitchcock, C. L., A. Cronquist, M. Ownbey, and J.W. Thompson. 1969. *Vascular Plants of the Pacific Northwest, Part 1: Vascular Cryptogams, Gymnosperms, and Monocotyledons*. University of Washington Press, Seattle. 914 pp.