

Peacock larkspur (*Delphinium pavonaceum*)



ENDANGERED



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

Family

Ranunculaceae

Taxonomic notes

The *Flora of North America North of Mexico* treats peacock larkspur as a hybrid between *Delphinium menziesii* ssp. *pallidum* and *D. trolliifolium*. However, based on its unique morphology and fertile, self-sustaining populations, peacock larkspur is treated here as a distinct species (*D. pavonaceum*), following the Oregon Flora Project treatment of the taxon.

Peacock larkspur has been reported to produce viable hybrid seeds when crossed with *Delphinium leucophaeum*, *D. menziesii*, *D. oreganum*, and *D. nuttallii*.

Plant description

Peacock larkspur is a leafy perennial 30-90 cm tall that grows from a cluster of globose tubers. The deeply cleft leaves are mostly cauline, becoming bract-like above, the lowest leaves with petioles up to 22 cm long. Flowers are arranged in a pyramidal raceme, with lower pedicels much longer than the upper ones. The sepals are white to cream, sometimes slightly greenish blue on the back and greenish at the tip, and more or less reflexed to spreading. The lower petals are white or faintly bluish tinged toward the base and glandular-pubescent with a hairy tuft at the base of the blade. The upper petals are bluish to lavender-tipped. The follicles are up to 1.6 cm long and often glandular-pubescent.

Distinguishing characteristics

Peacock larkspur is distinguished from *Delphinium leucophaeum*, the only other white-flowered larkspur west of the Cascades, by its taller habit (30-90 cm versus 20-60 cm in *D. leucophaeum*), its larger flower parts (lateral sepals 12-18 mm long versus 9-14 mm in *D. leucophaeum*, spur 14-20 mm long versus 10-14 mm), its reflexed to spreading sepals (versus cupped forward in *D. leucophaeum*), pyramidal raceme (versus narrow), and lower petals that are usually glandular with a hairy tuft at the base (versus non-glandular and long-hairy over the entire surface). Peacock larkspur is

also very similar to *D. menziesii*, but the white sepals of the former species readily distinguish it from its blue-sepaled congener.

When to survey

Surveys for peacock larkspur should be completed from late April through June when the species is flowering and is distinguishable from other delphiniums.

Habitat

Peacock larkspur inhabits low, nearly flat areas in moist, silty soils of the Willamette River floodplain at elevations ranging from 45-120 m (150-400 ft). It occurs in native wet prairies, on the edges of ash and oak woodlands, and along roadsides and fence rows.

Associated species include *Achillea millefolium*, *Alepocuris pratensis*, *Allium amplexans*, *Camassia quamash*, *Delphinium menziesii*, *Deschampsia caespitosa*, *Fraxinus latifolia*, *Geum macrophyllum*, *Geranium oreganum*, *Holcus lanatus*, *Hypericum perforatum*, *Lomatium bradshawii*, *L. utriculatum*, *Lupinus polyphyllus*, *Phlox gracilis*, *Plectritis congesta*, *Poa pratensis*, *Potentilla gracilis*, *Quercus garryana*, *Rosa* spp., *Sidalcea* spp., *Symphoricarpos albus*, *Toxicodendron diversilobum*, *Vicia* sp., and *Wyethia angustifolia*.

Range

Peacock larkspur is a localized endemic restricted to the middle Willamette Valley of Oregon. The species is found primarily within Benton and Polk counties, its largest occurrences located at William L. Finley National Wildlife Refuge in Benton County.

Oregon counties

Benton, Clackamas, Lane, Marion, Multnomah, Polk

Federal status

Species of Concern

Threats

A major threat to peacock larkspur is habitat loss due to urban expansion and agricultural development. Road maintenance and herbicide application from adjacent agricultural fields pose significant threats, as well. In addition, habitat degradation due to weed invasions and successional encroachment of shrubs negatively impact this species. Herbivory of peacock larkspur by rodents, deer, and slugs has been documented, and hybridization with other *Delphinium* species (especially *D. menziesii*) poses a potential threat to the genetic integrity of peacock larkspur.

Conservation planning

A U.S. Fish and Wildlife Service [Recovery Plan for prairie species of western Oregon and southwestern Washington](#) (pdf document, 9.63 MB) was released in 2010 and addresses conservation needs of peacock larkspur.

Did you know?

Scientists have hypothesized that peacock larkspur evolved in the wake of the Pleistocene epoch floods of the Columbia River (the Bretz Floods) that occurred between 12,800 and 15,000 years ago. These floods scoured the north end of the Willamette Valley and created a temporary lake that extended south to the present-day city of Eugene. The lake repeatedly filled and drained, creating massive habitat disturbance and laying new deposits of silt and gravel in the valley. New forms of *Delphinium* were likely produced through hybridization and/or mutation in these

disturbed areas and evolved into our localized Willamette Valley larkspur endemic species. Peacock larkspur appears to have derived from *D. menziesii*.

Current/Recent ODA projects

Developing population density estimates for nine rare Willamette Valley prairie species

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