

Threats

Remaining populations of Kincaid's lupine are at risk from:

- habitat loss
- invasion by non-native weeds
- tree and shrub encroachment
- elimination of natural disturbance
- inbreeding



Encroachment of non-native shrubs into upland prairie habitat.

Habitat Conservation Plan

In spring of 2006, Benton County received a grant from the US Fish and Wildlife Service to develop a Habitat Conservation Plan (HCP). This project will allow the County to:

- increase conservation and restoration opportunities on County and other lands
- provide long-term protection of sensitive species and habitats
- develop a more economical and ecological approach to species conservation and mitigation

The HCP will cover rare and endangered prairie species including Kincaid's lupine and will describe activities that are likely to harm these species, the steps that will be taken to avoid, minimize and mitigate for such impacts, along with monitoring and adaptive management strategies. The public is encouraged to participate in the planning process which should be completed in 2009.

What to do if you find this species

For more information or to report Kincaid's lupine sightings, contact one of the following:

U.S. Fish and Wildlife Service
Oregon Fish and Wildlife Office
(503) 231-6179

or

Institute for Applied Ecology
563 SW Jefferson Ave.
Corvallis, Oregon 97333
(541) 753-3099

For information about the Benton County Prairie Species Habitat Conservation Plan please visit:

www.co.benton.or.us/parks/hcp

Cover photo of Kincaid's lupine by Tom Kaye.



Benton County:

At Your Service
Every Day

This brochure was developed by Institute for Applied Ecology for Benton County.

Kincaid's lupine

(Lupinus sulphureus ssp. kincaidii)



Kincaid's lupine



Status

Kincaid's lupine was listed as threatened under the federal Endangered Species Act in 2000 and it is also listed as threatened by the state of Oregon.



The palm-shaped leaves have a smooth upper surface.

Description

Kincaid's lupine is a long-lived perennial in the pea family (Fabaceae). This flowering plant has palmately compound leaves clustered at the base of single, unbranched stems, and produces unbranched inflorescences of whitish-purplish to tan flowers. Kincaid's lupine reproduces by seed and by vegetative spread. The flowers are visible in May and June.

Ruffled "banner" of Kincaid's lupine.

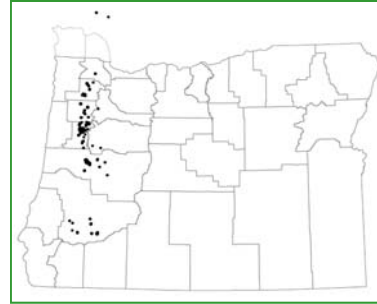
Kincaid's lupine can be distinguished from other Willamette Valley lupines by its characteristic ruffled banner on the flower (see photos above and below).



Floral structures of Lupinus albicaulis, Lupinus polyphyllus, and Lupinus rivularis. Photos: T. Kaye

Range and Habitat

Kincaid's lupine is found in southwestern Washington, the Willamette Valley, and Douglas County, Oregon.



Distribution of Kincaid's lupine.

Within the Willamette Valley Kincaid's lupine typically occurs in upland prairies at fairly low elevations in the valley bottom or surrounding foothills. Upland prairies are dry, open, grasslands with well-drained soils.



Upland prairie habitat in the Willamette valley.

The open structure of prairies will persist only if a regular disturbance prevents the natural encroachment of trees and shrubs. Natural disturbances such as wildfire can maintain prairies, and anthropogenic (human caused) disturbances such as prescribed fire or mowing can have similar effects. If natural disturbance is suppressed, and anthropogenic disturbance is not actively used, prairies will become dominated by woody vegetation.

Fender's blue butterfly

Within the Willamette Valley, Kincaid's lupine is a host plant for the endangered Fender's blue butterfly, making conservation of the lupine important for the lupine as well as the insect.



Kincaid's lupine and Fender's blue.

Adult butterflies lay their eggs on lupine leaves in May and June, and larvae (caterpillars) hatch out a few weeks later. The larvae feed for a few weeks, then go into diapause (similar to dormancy) on the soil near the base of the plant until the following February or March. Emerging larvae then feed on young lupine leaves and inflorescences. The larvae grow and develop quickly, pupate, and emerge as butterflies in early May.



Kincaid's lupine in flower.