

## Threats

Remaining populations of Fender's blue are at risk from:

- habitat loss
- invasion by non-native weeds
- loss of larval host plants and nectar sources
- tree and shrub encroachment
- elimination of natural disturbance



*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) that will allow the County to:

- increase conservation and restoration opportunities
- 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 Fender's blue butterfly 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 Fender's blue butterfly 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](http://www.co.benton.or.us/parks/hcp)

Cover photo of Fender's blue butterfly by Carolyn Menke.

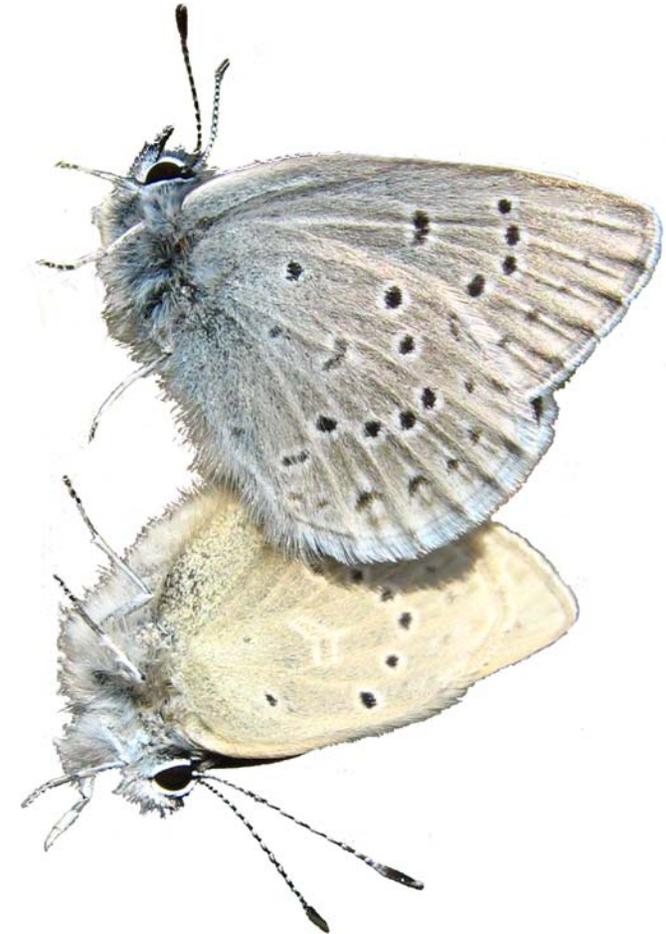


Benton County:

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Every Day

# Fender's blue Butterfly

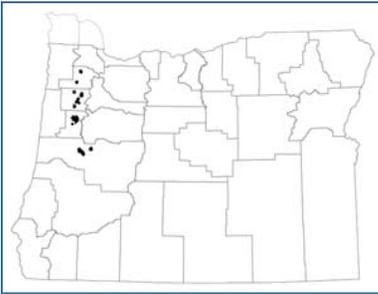
*(Icaricia icarioides fenderi)*



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

## Status and Range

Fender's blue butterfly was listed as an endangered species under the federal Endangered Species Act in 2000. Fender's blue was actually thought to be extinct from about 1940 until the late 1980's, when biologists discovered a few remaining populations on



Distribution of Fender's blue.

prairie remnants in the Willamette Valley.

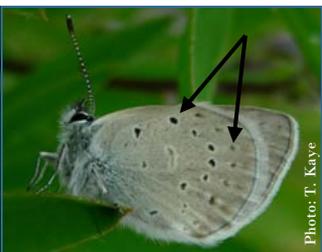
Fender's blue is currently found in four counties in Oregon: Lane, Benton, Yamhill and Polk.

## Description

Fender's blue is a small butterfly with an approximately 1 inch wingspan. The upper wings are blue in males, and brown in females. The underside of both gender's wings are creamy tan with two rows of black spots and a white border. The more common silvery blue butterfly looks very similar, but has only one row of black spots.



Male blue.



Fender's blue with second row of spots (L) and silvery blue with one row of spots (R).



## Habitat

Fender's blue occurs in upland prairie or wet prairie habitats. A prairie is an open grassland that has few, if any, trees or shrubs.

Prairies in the Willamette Valley typically occur at fairly low elevations in the valley bottom or surrounding foothills.



Upland prairie at Fitton Green Natural Area.

The open structure of prairies will persist only if frequent disturbance prevents the natural encroachment of trees and shrubs. If natural disturbance like fire is suppressed, and anthropogenic disturbance such as mowing is not actively used, prairies become dominated by woody vegetation which outcompetes native plants.

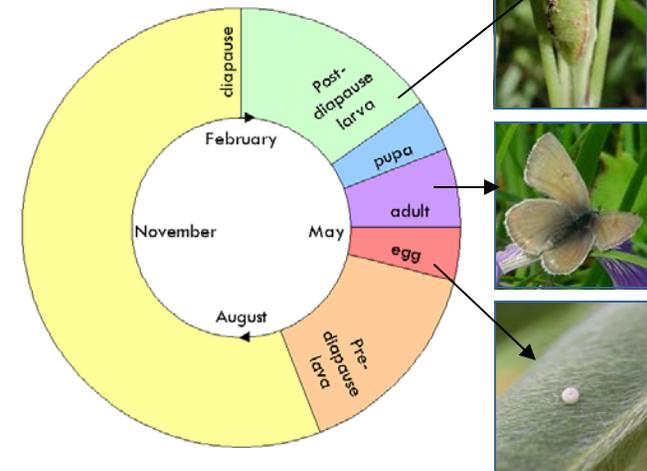
Two critical elements of Fender's blue butterfly habitat are larval host plants and nectar plant species. Kincaid's lupine (*Lupinus sulphureus* ssp. *kincaidii*) is the primary larval host plant for Fender's blue butterfly, and is listed as threatened. Alternate host plants include sickle-keeled lupine (*Lupinus albicaulis*) and spur lupine (*Lupinus arbustus*).



Kincaid's lupine.

## Life history

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 (flowering stems). The larvae grow and develop quickly, pupate, and emerge as butterflies in early May.



Life cycle of Fender's blue butterfly lasts one year. Top: Fender's blue larva feeding on lupine leaves. Middle: female Fender's blue on an iris flower. Bottom: Fender's blue eggs on lupine leaves. Photos: T. Kaye

Adult butterflies feed on nectar produced by certain flower species including: narrowleaf onion (*Allium amplexans*), Tolmie's startulip (*Calochortus tolmiei*), common camas (*Camassia quamash*), dwarf checkermallow (*Sidalcea virgata*), and Oregon sunshine (*Eriophyllum lanatum*).



Tolmie's startulip.