

# Species Fact Sheet

## Oregon silverspot butterfly

### *Speyeria zerene hippolyta*



**STATUS: THREATENED**  
**CRITICAL HABITAT:**  
**DESIGNATED**

Oregon silverspot butterfly potentially occurs in Pacific and Gray Harbor counties, Washington.

*(Map may reflect historical as well as recent sightings)*

---

The Oregon silverspot butterfly, *Speyeria zerene hippolyta*, was listed as a threatened species with critical habitat in October 1980. A revised recovery plan was published in 2001.

### ***Current and Historical Status***

The historic range of this subspecies extends from Westport, Grays Harbor County, Washington, south to Del Norte County, California. Most of these populations are restricted to the immediate coast, centered around salt-spray meadows, or within a few miles of the coastline in similar meadow-type habitat. The exceptions are populations located at Mount Hebo and Fairview Mountain. Within its range, the butterfly is known to have been extirpated from at least

11 colonies (2 in Washington, 8 in Oregon, and 1 in California). At the time of listing, the only viable population known was in the Siuslaw National Forest in Tillamook County, Oregon. Additional populations have since been discovered at Cascade Head, Bray Point, and Clatsop Plains in Oregon, on the Long Beach Peninsula in Washington, and in Del Norte County in California.

Currently, Oregon silverspot butterfly populations occur at six sites, one in California and five in Oregon. In Washington, the population on the Long Beach Peninsula is presumed extirpated, it was last documented in 1991.

## ***Description and Life History***

The Oregon silverspot is a medium-sized, orange and brown butterfly with black veins and spots on the dorsal (upper) wing surface, and a yellowish submarginal band and bright metallic silver spots on the ventral (under-side) wing surface. This subspecies is distinguished from other subspecies of silverspot butterflies by a somewhat smaller size and darker coloration at the base of the wings. These are morphological adaptations for survival in persistently windy and foggy environments.

The life history of the Oregon silverspot revolves around its obligatory host plant, the early blue violet, *Viola adunca*. Females oviposit up to 200+ eggs among salt-spray meadow vegetation near the host plant, usually in late August and early September. After the eggs hatch, approximately 16 days, the larvae wander short distances to find a suitable site for diapause (suspended growth for overwintering). Diapause ends sometime in early spring and the larvae begin to feed on the violet leaves. The larvae pass through five molts before they enter the intermediate stage between larval and adult forms (pupate). Approximately two or more weeks later, the butterflies emerge. Adult emergence starts in July and extends into September. Mating usually takes place in relatively sheltered areas through August and September.

## ***Habitat***

The Oregon silverspot occupies three types of grasslands. One type

consists of marine terrace and coastal headland salt-spray meadows. The second consists of stabilized dunes. Both of these habitats are strongly influenced by proximity to the ocean, mild temperatures, high rainfall, and persistent fog. The two habitats differ in topography, soils, and exposure to winds. The dune habitat has lower relief, highly porous soils, and is more protected from wind. The third habitat type consists of montane grasslands. Conditions at these sites include colder temperatures, significant snow accumulations, less coastal fog, and no salt spray.

The most important habitat feature of the Oregon silverspot is the presence of the early blue violet. This plant is the only species on which the Oregon silverspot can successfully feed and develop as larvae.

## ***Reasons for Decline***

The decline of the Oregon silverspot butterfly is primarily due to habitat destruction and modification by development, agriculture, invasion of nonnative vegetation, and natural succession of grasslands. Additionally, excessive use of salt-spray meadows by grazing animals or off-road vehicles has directly eliminated habitat.

## ***Conservation Efforts***

The coastal prairie habitat on which the Oregon silverspot butterfly is dependent becomes dominated by shrubs, or forests if left unmanaged. Natural processes such as wildfires and wildlife grazing likely functioned to maintain open grasslands in the past. In Washington, seed development, habitat restoration, and active management to maintain grassland structure is ongoing on the Long Beach Peninsula and Tarlat slough on the Willapa Bay National Wildlife Refuge, although no butterflies currently occupy these sites.

In 1999 a captive-rearing program was initiated at the Oregon Zoo in Portland, Oregon and the Woodland Park Zoo in Seattle, Washington. Augmentation and reintroduction appear promising to the recovery of this species.

## ***References and Links***

[Listing Status and Critical Habitat 1980](#)

[Recovery Plan 2001](#)

[USFWS Threatened and Endangered Species Profile](#)

[Critical Habitat Map](#)

[Woodland Park Zoo](#)

[Xerces Society](#)