



FREQUENTLY ASKED QUESTIONS

Oregon Silverspot Butterfly Final Experimental Population

What is the status of the Oregon silverspot butterfly?

The Oregon silverspot butterfly (*Speyeria zerene hippolyta*) has been listed as a threatened species under the Endangered Species Act (ESA) since 1980. Originally documented from at least 20 locations along the Pacific coast from northern California to Washington, the Oregon silverspot butterfly is now found in only five populations, one in northern California and four in Oregon¹.

The greatest threat to the Oregon silverspot butterfly is the loss of suitable habitat. Invasive nonnative plants and the lack of natural disturbance to maintain coastal prairie have contributed to the degradation of habitat quality and quantity. The small size, isolation, and small number of butterfly populations are now also threats to the species.

How is the U. S. Fish and Wildlife Service taking action for the Oregon silverspot butterfly?

The U.S. Fish and Wildlife Service (Service) will be reintroducing the Oregon silverspot butterfly within its historical range at two sites in northwestern Oregon, the Saddle Mountain State Natural Area in Clatsop County, and Nestucca Bay National Wildlife Refuge (NWR) in Tillamook County. The butterflies will be reintroduced as a “nonessential experimental population” (NEP) to address adjacent landowner concerns regarding the impact a federally-listed species might

¹ one near Lake Earl, California, two populations on the central Oregon coast in Lane County, Oregon, and two populations in Tillamook County, Oregon

have on the sale or development of their property.

The likelihood of butterflies moving outside these areas onto adjacent lands is low. Oregon silverspot butterflies might occasionally move through surrounding agricultural and/or forest lands, but because this is not suitable habitat for the subspecies, occurrence is expected to be limited.

The “nonessential experimental population” designation is important, because it provides for allowable legal incidental taking of the Oregon silverspot butterfly within defined areas (4.25 miles around each reintroduction area). Landowners within these areas will not be affected should the butterfly visit their property nor will they be responsible if any butterflies are inadvertently harmed while they are carrying out an activity, such as timber harvest, agricultural activities, or recreational activities.

What is a nonessential experimental population?

The Endangered Species Act includes many useful tools that offer flexibility in implementing protections and recovery actions for listed species. Under section 10(j), the Secretary of Interior can designate reintroduced populations established outside the species’ current range, but within its historical range, as “experimental.” and then classified as either “essential” or “nonessential” to the continued existence of the species. Each of these designations carries with it different regulatory consequences.

One of the exceptions offered for a nonessential experimental population is that there are special provisions for the “take” of the species; most often, take is not prohibited for an NEP if it occurs in the course of an otherwise lawful activity (see below for the legal definition of “take”).

How do you determine if a species is “essential or “non-essential”?

The Service determines whether an experimental population is “essential” or “nonessential” to the continued existence of the species. A “nonessential” designation for an experimental population means the experimental population is not essential for the continued existence of the species. For example, if a reintroduced population may contribute to the recovery of the listed species, but the continued existence of the species as a whole is not dependent upon that population, it is considered “nonessential.”

Regulatory restrictions are considerably reduced under a nonessential experimental population designation, which means that landowners and land managers are generally more receptive to the idea of a listed species being reintroduced in their area. All experimental populations established by the Service to date have been deemed “nonessential.”

How did you determine where to establish the non-essential population?

The first step in determining where to establish a non-essential population was finding appropriate habitat for the species within its historical range. Oregon silverspot butterflies live in coastal prairie habitats with an abundance of early blue violets (*Viola adunca*), which provide food for the caterpillars (larvae), as well as a variety of native flowering plants that serve as nectar sources for the adults. We worked with partners who manage land in the historical range of the butterfly where appropriate habitat components exist or where it was possible to restore this habitat.

Although the Oregon silverspot butterfly was never documented at the Nestucca Bay NWR, it is within the butterfly’s historical range along the coast. A small amount of coastal prairie remained prior to restoration efforts so we expected that the butterfly once inhabited the area.

The Nestucca Bay National Wildlife Refuge has a goal of promoting the recovery of the Oregon silverspot butterfly by establishing a nonessential experimental population on the refuge. The refuge has 25 to 30 ac (10 to 12 ha) of coastal prairie habitat in varying stages of restoration specifically for the benefit of the butterfly. Since 2011, invasive weed abundance has been minimized, and thousands of violet and nectar plants have been planted to enhance and restore the coastal prairie ecosystem.

Saddle Mountain SNA was historically occupied by the Oregon silverspot butterfly, which was last documented at this site in 1973, and approximately 60 ac (24 ha) of butterfly habitat exists on its slopes. Based on recent surveys, the proposed release site contains high-quality butterfly habitat with sufficient densities of the essential species (*Viola adunca* and native nectar plants) to support a population.

Where is the boundary for the experimental populations and why did you choose this boundary?

The boundaries of the nonessential population areas are delineated by the Public Land Survey System sections intersecting with a 4.25-mi (6.8-km) radius around the proposed release locations. You can see this represented on a map at the end of these FAQs.

The 4.25-mi (6.8-km) radius is greater than the longest known flight distance of the Oregon silverspot butterfly (4.1 mi (6.6 km)). We chose a boundary greater than the known movement capability of the butterfly to make sure that all likely movements of Oregon silverspot butterflies away from the release areas will be contained within the designated nonessential population area. In addition, the reintroduced population areas are geographically isolated from existing Oregon silverspot butterfly populations by a sufficient distance to preclude significant contact between them. Keeping the reintroduced populations separate from existing wild population is one of the requirements of a nonessential experimental population (to ensure there is no possibility of confusing the two).

How do you acquire species for the reintroduction program?

Butterflies used to establish an experimental population may come from a donor population, provided their removal will not jeopardize that population, and appropriate permits are issued prior to their removal. In many cases, captive-bred species obtained from a donor population are propagated with the intention of reestablishing a wild population to achieve recovery goals.

Since 2000, larvae of the Oregon silverspot butterfly have been reared in facilities at the Woodland Park Zoo in Seattle, and the Oregon Zoo in Portland, specifically for the purpose of supporting population reintroductions. Population augmentation has been successfully conducted for the Oregon silverspot butterfly in past years using captive-reared larvae and pupae.

What is the process for making a decision on reintroducing species?

Any process to reintroduce a threatened or endangered species as “experimental” will require that we: (1) present this proposal in a rule for publication in the Federal Register and solicit comments from the public; (2) consider and incorporate public input; and (3) finalize the rule designating an experimental

population and identifying the experimental population areas, with accompanying exemptions from take, or alternatively, withdrawing our proposal.

The proposed rule for this experimental population was published in the Federal Register December 23, 2016. We received 8 comments which are included and addressed in the final rule. The final rule establishing these experimental populations will take effect when it publishes in the Federal Register on June 23, 2017.

What are the benefits of reintroducing species?

Reintroductions aid in the recovery of threatened or endangered species. When a species or a significant population has been extirpated, the only remaining recovery option is often reintroduction. We take local concerns into account when proposing reintroduction and the ESA gives us tools for allow flexibility in preparing management strategies, like the 10(j) designation we are discussing here, to avert restrictions on current and future land uses and activities. This flexibility can make a reintroduction process more acceptable to apprehensive stakeholders. We have seen stronger support for conservation efforts when stakeholders are involved and have a voice in the process.

Because Oregon silverspot butterfly populations have been reduced in number and distribution, reintroductions are an important component of the recovery strategy. Reintroductions are needed to make sure we have multiple populations of the subspecies distributed across its historical range, which reduces its vulnerability to extinction and helps to meet recovery criteria for the species. The Oregon silverspot butterfly recovery plan calls for 10 butterfly populations to be established within 6 conservation areas to meet recovery criteria. Establishment of two new populations under a nonessential experimental designation is an important step in the butterfly's recovery.

Where else have you reintroduced species?

In the Pacific Northwest, we have used Section 10(j) to reintroduce Fender's blue butterfly in the Willamette Valley at William L. Finley National Wildlife Refuge and bull trout in the Clackamas River Basin. Among numerous examples of experimental populations across the U.S. are the Colorado pikeminnow, the southern sea otter, the gray wolf, and the black-footed ferret.

How does a nonessential experimental population designation affect Endangered Species Act regulations?

Under the Act, species listed as endangered or threatened are afforded protection primarily through the prohibitions of section 9 and the requirements of section 7. Section 9 of the Act prohibits the take of endangered wildlife. "Take" is defined by the Act as harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in any such conduct. Service regulations generally extend the prohibition of take to threatened wildlife.

Section 9. In the case of NEPs, we generally offer exemptions from take that would otherwise apply to a listed species, which allows landowners to continue with their otherwise lawful activities without fear of violating section 9 of the Act. For the Oregon silverspot butterfly, the establishment of an NEP is accompanied by a special rule designed to broadly exempt any take of the butterfly that is accidental and incidental to otherwise lawful activities. This special rule provides assurances to adjacent landowners that they will not be negatively affected by the reintroduction and recovery efforts for the species.

Section 7. Section 7 of the Act outlines the procedures for Federal interagency cooperation to conserve federally listed species and protect designated critical habitats. It mandates all Federal agencies will, in consultation with the Service, ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat. In the case of the Oregon silverspot butterfly, the population that will be reintroduced onto the Nestucca Bay NWR would still be treated as a threatened species on refuge lands, and consultation requirements will still apply there.

NEP for Oregon silverspot butterfly (*Speyeria zerene hippolyta*)

