

# U.S. Fish & Wildlife Service Sacramento Fish & Wildlife Office Species Account



MYRTLE'S SILVERSPOT BUTTERFLY Speyeria zerene myrtleae

CLASSIFICATION: Endangered Federal Register 57:27848; June 22, 1992

https://ecos.fws.gov/docs/frdocs/1992/92-14227.html

CRITICAL HABITAT: None designated

**RECOVERY PLAN: Final** 

Recovery Plan for Seven Coastal Plants and the Myrtle's Silverspot Butterfly. September 29,

1998

http://ecos.fws.gov/docs/recovery\_plans/1998/980930d.pdf

# **DESCRIPTION**

Myrtle's silverspot is a medium sized butterfly in the brush foot family (Nymphalidae). Wingspan is approximately 2.2 inches. The upper surfaces of the wings are golden brown with numerous black spots and lines. The undersides are brown, orange-brown and tan with black lines and distinctive silver and black spots. Larvae are dark-colored with many sharp branching spines on their backs. Myrtle's silverspot is larger in size and also lighter in color than the closely related Behren's silverspot (*Speyeria zerene behrensii*), which is now found only in the Point Arena area of Mendocino County.

Females are single-brooded and lay their eggs in the debris and dried stems of violets (typically *Viola adunca*), the larval food plants. Upon hatching, the caterpillars wander a short distance and spin a silk pad upon which they pass the winter. The caterpillars immediately seek out the food plant at the end of their diapause in the spring. After 7-10 weeks, the larvae form their pupa within a chamber of leaves drawn together with silk. Adults may emerge in about 2 weeks and can live for 3 weeks. The adult flight season may range from late June to early September. Adults feed on nectar from flowers including gumplant (*Grindelia rubicaulis*), yellow sand verbena (*Abronia latifolia*), mints (*Monardella* spp.), bull thistle (*Cirsium vulgare*) and seaside daisy (*Erigeron glaucus*).

# DISTRIBUTION

Myrtle's silverspot is found in coastal dune or prairie habitat. Populations were formerly found in dunes and bluffs from San Mateo County north to the mouth of the Russian River in Sonoma County. The populations south of the Golden Gate apparently have been extirpated by urban development. Four populations are known to inhabit coastal terrace prairie, coastal bluff scrub, and associated non-native grassland habitats in western Marin and southwestern Sonoma counties, including the <a href="Point Reyes National Seashore">Point Reyes National Seashore</a>. Adult butterflies are typically found in areas that are sheltered from the wind, below 820 feet elevation, and within 3 miles of the coast.

# **THREATS**

Habitat loss due to residential and commercial land development has extirpated these butterflies from parts of their range and may threaten some of the remaining populations. Maintaining larval and nectar plants is critical for conservation of these butterflies. Changes in natural fire patterns, introduction of exotic plants, and successional changes in the plant community have reduced the availability of host plants. Either excessive or inadequate grazing levels can result in plant communities unfavorable to the butterflies.

Measures for habitat improvement may include eradication of invasive exotics such as iceplant (*Mesembryanthemum* spp.) and identifying appropriate grazing and/or burning regimes in grassland and scrub areas.

These butterflies are highly prized by insect collectors, and are vulnerable due to their small population. Silverspot butterfly larvae are also extremely sensitive to pesticides.

#### REFERENCES FOR ADDITIONAL INFORMATION

Launer, A.E., D.D. Murphy, J.M. Hoekstra and H.R. Sparrow. 1992. The endangered Myrtle's silverspot butterfly: present status and initial conservation planning. Journal of Research on the Lepidoptera. 31:132-146.

Thelander, C. ed. 1994. Life on the edge: a guide to California's endangered natural resources. BioSystem Books. Santa Cruz, CA. p 436-437.

U.C. Berkeley, Essig Museum of Entomology. California's Endangered Insects.

U.S. Fish & Wildlife Service. 1988. Recovery Plan for Seven Coastal Plants and the Myrtle's Silverspot Butterfly. Portland, Oregon.

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