



U.S. Fish & Wildlife Service
Sacramento Fish & Wildlife Office
Species Account
SAN BRUNO ELFIN BUTTERFLY
Callophrys mossii bayensis



CLASSIFICATION: Endangered
Federal Register 41:22041; June 1, 1976
http://ecos.fws.gov/docs/federal_register/fr99.pdf

CRITICAL HABITAT: None designated

RECOVERY PLAN: Final
Recovery Plan for San Bruno Elfin and Mission Blue Butterflies. October 10, 1984. This plan is now out of date. Contact us if you need a copy.

DESCRIPTION

The San Bruno elfin is a small brownish butterfly in the Lycaenidae family. The adult flight period is late February to mid-April, with the peak flight period occurring in March and early April. Eggs are laid in small clusters or strings on the upper or lower surface of stonecrop (*Sedum spathulifolium*). Larvae hatch from the eggs within 5-7 days after they are deposited on the plant.

Young larvae start to feed immediately by tunneling into the swollen succulent leaves. The first and second instars feed in this manner until they molt into the larger third instar. Third and fourth instars move up to the flowers of the food plant and feed while they are tended by several species of ants that protect them from predators and, to a lesser extent, parasites. These ants also groom the larvae and feed on a honeydew substance produced by the larvae to attract the ants. Pupation and pupal diapause (a dormant stage) take place in the loose soil and litter at the base of the larval food plant from June until February of the following year. The adults then emerge and mate. They feed on other flowers besides that of the host plant. San Bruno elfins are quite sedentary. The apparently live only about a week.

DISTRIBUTION

The San Bruno elfin is found in coastal mountains near San Francisco Bay, in the fog-belt of steep north facing slopes that receive little direct sunlight. It lives near prolific growths of the larval food plant, stonecrop (*Sedum spathulifolium*), which is a low growing succulent. Stonecrop is associated with rocky outcrops that occur at 900-1075 feet elevation. The adult food plants have not been fully determined. Montara Mountain colonies are suspected to use Montara Mountain manzanita (*Arctostaphylos montaraensis*) and huckleberry (*Vaccinium ovatum*).

First described in 1962 near San Francisco, colonies are known today on San Bruno Mountain, Milagra Ridge and Montara Mountain of San Mateo County; Mount Diablo in Contra Costa County; and near Alpine Lake and at Dillon Beach in Marin County.

THREATS

Threats to the butterfly are increased urbanization in the area, loss of habitat by road construction, rock and sand quarrying and urban developments. Grazing and grassfire have encouraged the growth of exotic plants in the area. In the early 1980s, a habitat conservation plan was developed to allow development on San Bruno Mountain while minimizing the adverse effects on the San Bruno elfin butterfly and other rare species in the area.

REFERENCES FOR ADDITIONAL INFORMATION

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