



U.S. Fish & Wildlife Service
Sacramento Fish & Wildlife Office
Species Account
CALIFORNIA JEWELFLOWER
Caulanthus californicus



CLASSIFICATION: Endangered
Federal Register 55:29361; July 19, 1990
http://ecos.fws.gov/docs/federal_register/fr1729.pdf (3.5 MB)

STATE LISTING STATUS AND CNPS CODE:
This species was listed as endangered by the California Department of Fish and Game in January 1987. The California Native Plant Society has placed it on List 1B (rare or endangered throughout its range).

CRITICAL HABITAT: None designated

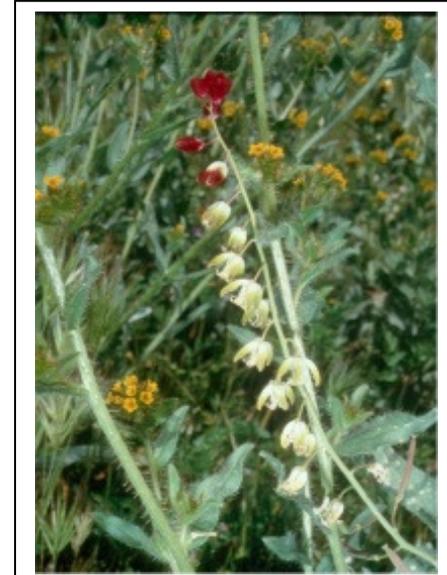
RECOVERY PLAN: Recovery Plan for Upland Species of the San Joaquin Valley, California 1998
http://ecos.fws.gov/docs/recovery_plan/980930a.pdf

5-YEAR REVIEW: Initiated 2006
http://ecos.fws.gov/docs/federal_register/fr5047.pdf

DESCRIPTION:



California Jewelflower Habitat
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Jepson Herbarium



California Jewelflower
Rosalie Faubion
U.S. Bureau of Reclamation

California jewelflower, is an annual herb in the mustard family (Brassicaceae).

Erect, hairless stems, which are usually branching, range from less than 10 centimeters (4 inches) to more than 50 centimeters (20 inches) tall. They produce several flowering branches.

The leaves are wavy-margined and most are in a basal rosette. Upper leaves are egg-shaped and clasp the stem, unlike the leaves at the base of the plant, which are oblong. Maroon buds clustered at the tip of the stem contrast with translucent, white flowers below.

Seeds begin to germinate in the fall, and seedlings may continue to emerge for several months. The seedlings develop into rosettes of leaves during winter months, after which stems elongate and flower buds appear in February or March, blooming as late as May if rainfall and temperatures are favorable.

It is thought that this species forms a persistent seed bank, but seeds appear to germinate only when exposed to conditions simulating prolonged weathering. Seed dispersal agents are unknown, but may include gravity, seed-eating animals such as giant kangaroo rats, wind and water.

Fruits are 1 to 6 centimeters (0.4 to 2.4 inches) long. California jewelflower differs from all other species of *Caulanthus* in that it has flattened, sword-shaped fruits and spherical seeds. Other jewelflowers also have maroon buds and whitish flowers, but those that overlap in range with California jewelflower have narrow, elongated fruits and flattened seeds. See Hickman (1993) in General Information about California Plants, below, for a detailed description of these species.

DISTRIBUTION:

By 1986, all the occurrences on the San Joaquin and Cuyama Valley floors had been eliminated. The naturally-occurring populations of California jewelflower that are known to be extant today are in three centers of concentration: (1) Santa Barbara Canyon, (2) the Carrizo Plain in San Luis Obispo County, and (3) the Kreyenhagen Hills in Fresno County

U.S.G.S. 7.5 Minute Quads: Cuyama (192A) 3411985, Fox Mountain (192D) 3411975, Wells Ranch (217C) 3511916, Elkhorn Hills (217D) 3511915, 3511946, La Panza (244C) 3512032, Lost Hills NE (265A) 3511965, Kreyenhagen Hills (315D) 3612013. (Does not include presumed extirpated populations.)

THREATS:

The primary reason for the decline of California jewelflower was habitat destruction. All the populations on the San Joaquin and Cuyama Valley floors have been eliminated.

Development remains a threat in Santa Barbara Canyon, where more than 90 percent of the California jewelflower metapopulation occurs on private land.

Potential threats to one or more of the remaining populations of California jewelflower include competition from exotic plants, the effects of certain insecticides on pollinators, and small population size.

Upland Plants of the San Joaquin Valley

Loss and degradation of natural communities due to agriculture, urbanization, livestock grazing, water impoundment and diversion, historical predator and pest control, and other human activities have jeopardized nearly all the unique biota of the San Joaquin Valley below the woodland belts, and are the major causes of endangerment of the state and federally listed species.

REFERENCES FOR ADDITIONAL INFORMATION:

[General references about California plants](#)

www.fws.gov/sacramento/es/plant_spp_accts/plant_references.htm

CA Dept. of Pesticide Regulation [identification card](#) (PDF 146 KB)

For more images see CalPhotos <http://calphotos.berkeley.edu/>.

Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825
Phone (916) 414-6600
FAX (916) 414-6713

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