



U.S. Fish & Wildlife Service  
Sacramento Fish & Wildlife Office  
Species Account  
BEACH LAYIA  
*Layia carnosa*



**CLASSIFICATION:** Endangered

Federal Register Notice 57:27848; June 22, 1992

[http://ecos.fws.gov/docs/federal\\_register/fr2073.pdf](http://ecos.fws.gov/docs/federal_register/fr2073.pdf) (224 KB)

**STATE LISTING STATUS AND CNPS CODE:**

This species was listed as endangered by the California Department of Fish and Game in January 1990. The California Native Plant Society has placed it on List 1B (rare or endangered throughout its range).

**CRITICAL HABITAT:** Not designated

**RECOVERY PLAN:** Seven Coastal Plants and the Myrtle's Silverspot Butterfly Recovery Plan, September 29, 1998

[http://ecos.fws.gov/docs/recovery\\_plan/980930d.pdf](http://ecos.fws.gov/docs/recovery_plan/980930d.pdf) (14.5 MB)

**5-YEAR REVIEW:** Initiated February 14, 2007



**DESCRIPTION:**

Beach layia is a 2.5 to 10-cm (1 to 4-inch) tall, prostrate (sometimes ascending), fleshy annual herb in the aster family (Asteraceae). It has lance-shaped to elliptic toothed or lobed leaves arranged alternately on the glandular but non-scented stems. Plants begin as small rosettes after they germinate following winter or fall rains, but soon develop dominant lateral shoots.

Flowering heads (capitula) develop at the end of each shoot beginning in mid-spring, depending on temperatures and soil moisture, and continuing as late as early summer. Small plants in dry, nutrient-poor

dune blowouts or deflation surfaces may support as few as one or two flower heads, but large plants may develop near the drained edges of dune ponds or slacks and support more than one hundred flower heads.

Beach layia tends to occur where dune vegetation cover is sparse within mostly stabilized dunes, and is seldom found among or under continuously dense dune vegetation (e.g., European beachgrass, *Ammophila arenaria*, mature dune scrub, large stands of dune lupines (*Lupinus arboreus*, *L. chamissonis*, *L. variicolor*), or highly active and mobile dunes. It may co-occur with common annual dune herbs such as beach primrose (*Camissonia cheiranthifolia*) and coastal cats-eye (*Cryptantha leiocarpa*) in vegetation gaps and dune blowouts. Beach layia may

have at least a short-lived seed bank, and may occur as dormant seed banks in otherwise unsuitable vegetation. Seed dispersal occurs by wind during summer or whenever fruiting plants get old.

See Hickman (1993) in General Information about California Plants, below, for a detailed description of these species.

#### DISTRIBUTION:

Beach layia is at times locally abundant where it occurs, but its distribution is sparse along the central and northern California coast. It occurs in large, partially active and mobile dune systems in Humboldt, Marin (Point Reyes only), and Monterey counties; it was known historically from Santa Barbara County, and has been reported (questionably) from the city of San Francisco. Several large populations occur in protected dune fields, including ones at Point Reyes in Marin County, Lanphere-Christensen Dune Preserve in Arcata and Humboldt counties, and Manila dunes in Eureka and Humboldt counties.

U.S. Geological Survey 7.5 Minute Quads: Surf (171A) 3412065, Point Arguello (171C)\* 3412056, Monterey (366C) 3612158, San Francisco North (466C)\* 3712274, Tomales (485B) 3812228, Drakes Bay (485C) 3812218, Inverness (485D) 3812217, Petrolia (637D) 4012433, Fields Landing (654B) 4012462, Cannibal Island (655A) 4012463, Arcata North (672A)\* 4012481, Tyee City (672B) 4012482, Eureka (672C) 4012472, Crannell (689D)\* 4112411, Orick (706D) 4112431, Requa (723D) 4112451 (\* Presumed extirpated)

#### THREATS:

Even within preserve areas, populations are prone to local extinction because of rapid changes in dune vegetation and dune stability, and spread of invasive nonnative dune vegetation (especially European beachgrass, *Ammophila arenaria*, and the ice-plant *Carpobrotus edulis* and its hybrids with *C. chilensis*). High turnover of small populations may occur within major populations. Because of the potential for wind-dispersed seeds to establish new pioneer colonies, outlier populations may be expected to occur infrequently outside areas of historic occurrence.

There are large annual fluctuations in the apparent size and distribution of populations of beach layia. The distribution of visible vegetative or reproductive plants in any given year is not a definitive indicator of the extent of the population and habitat in the long term. Surveys for beach layia should be conducted in spring just before or soon after flowering. Surveys from mid-summer to winter are not reliable.

#### REFERENCES FOR ADDITIONAL INFORMATION:

##### [General references about California plants](#)

[www.fws.gov/sacramento/es/plant\\_spp\\_accts/plant\\_references.htm](http://www.fws.gov/sacramento/es/plant_spp_accts/plant_references.htm)

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