



U.S. Fish & Wildlife Service  
Sacramento Fish & Wildlife Office



Species Account  
MARIN DWARF-FLAX  
*Hesperolinon congestum*

CLASSIFICATION: Threatened

Federal Register Notice 60:6671; February 3, 1995

[http://ecos.fws.gov/docs/federal\\_register/fr2779.pdf](http://ecos.fws.gov/docs/federal_register/fr2779.pdf) (125 KB)

This species was listed as endangered by the California Department of Fish and Game in June 1992 under the name Marin western flax. The California Native Plant Society has placed it on List 1B (rare or endangered throughout its range), also under the alternate name.

CRITICAL HABITAT: Not designated

RECOVERY PLAN: Final

Recovery Plan for Serpentine Soil Species of the San Francisco Bay Area; September 30, 1998.

[http://ecos.fws.gov/docs/recovery\\_plan/980930c\\_v2.pdf](http://ecos.fws.gov/docs/recovery_plan/980930c_v2.pdf) (22 MB)

5-YEAR REVIEW: Started March 25, 2009

<http://www.fws.gov/policy/library/E8-4258.html>

## DESCRIPTION

Marin dwarf-flax, (*Hesperolinon congestum*), also known as Marin western flax, is a herbaceous annual of the flax family (Linaceae). It has slender, threadlike stems, 10-40 cm (4-16 inches) tall. The leaves are linear.



Marin Dwarf-Flax  
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Flowers bloom from May to July. They are borne in congested clusters. Pedicels are 1 to 8 mm (0.04 to 3.2 inches) long. Sepals are hairy and the five petals are rose to whitish.

Anthers are deep pink to purple. This helps distinguish Marin dwarf-flax from California dwarf-flax (*H. californicum*), found in the same geographic area, which has white to rose anthers, as well as hairless sepals.

Two other species that are found in the same region are small-flower dwarf-flax (*H. micranthum*) and slender dwarf-flax (*H. spergulinum*).

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



Marin Dwarf-Flax  
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## SERPENTINE SOIL PLANTS:

Serpentine soils are formed from weathered volcanic (ultramafic) rocks such as serpentinite, dunite, and peridotite. These soils provide a harsh environment for plant growth. Several factors contribute to the inhospitability of serpentine soils to plant growth

- 1) Low calcium-magnesium ratio;
- 2) Lack of essential nutrients such as nitrogen, potassium, and phosphorous; and
- 3) High concentrations of heavy metals (mineral toxicity).

However, serpentine plant species have adapted to serpentine soils and require them to survive.

See the [recovery plan](#) (above) for more information about serpentine soil species.

Contact the Coastal Branch of our office (formerly the Coast-Bay-Delta Branch) at 916-414-6625 for consultations concerning serpentine soil species.

The Bay Checkerspot Butterfly [PDF](#) | [RTF](#) is an insect that depends on serpentine soil plants, primarily dwarf plantain (*Plantago erecta*).

## DISTRIBUTION

Marin dwarf-flax is found on serpentine soils from Main County south to San Mateo County, a range of 80 kilometers (50 miles). Known populations occur between approximately 30 and 370 meters (100 to 1,200 feet) altitude.

U.S.G.S. 7 ½ Minute Quads: Palo Alto (428B) 3712242, Woodside (429A) 3712243, San Mateo (448D) 3712253, San Quentin (466B) 3712284, San Francisco North (466C) 3712274, San Rafael (467A) 3712285, Bolinas (467B) 3712286, Petaluma River (484A) 3812225, San Geronimo (484C) 3812216, Novato (484D) 3812215

## THREATS

Marin dwarf-flax is threatened by residential and recreational development, foot traffic, and competition with non-native species

## 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)

Kruckeberg, A.R. 1984a. California serpentines: Flora, vegetation, geology, soils, and management problems. University of California Press, Berkeley, California. 180 pp.

\_\_\_\_\_. 1984b. The flora on California's serpentine. *Fremontia* 11(5): 3-10.

Sharsmith, H.K. 1961. The genus *Hesperolinon* (Linaceae). University of California Publications in Botany. 32:235-314. .

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Last updated September 21, 2009