

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



Species Account HOOVER'S SPURGE

Chamaesyce hooveri

CLASSIFICATION: Threatened

Federal Register Notice 62:14338; March 26, 1997 http://ecos.fws.gov/docs/federal_register/fr3057.pdf (125 KB)

STATE LISTING STATUS AND CNPS CODE:

The California Native Plant Society has placed Hoover's spurge on List 1B (rare or endangered throughout its range). The species has not been listed by the State of California.

CRITICAL HABITAT: Originally designated in Federal Register 68:46683; August 6, 2003.



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The designation was revised in 70:46923; August 11, 2005. Species by unit designations were published in 71:7117, February 10, 2006.

www.fws.gov/policy/library/2006/06-1080.html www.fws.gov/policy/library/2006/06-1080.pdf (6.6 MB)

RECOVERY PLAN: Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon; December 15, 2005.

http://www.fws.gov/sacramento/es/recovery plans/vp recovery plan links.htm

5-YEAR REVIEW: Completed January 2009. No change recommended. http://ecos.fws.gov/docs/five_year_review/doc2387.pdf (455 KB)



Hoover's Spurge © 2003 George W. Hartwell

DESCRIPTION:

Hoover's spurge (Chamaesyce hooveri), also known as Hoover's sanmat, is a prostrate, tap-rooted, annual herb in the spurge family (Euphorbiaceae). It forms mats from a few inches to a few feet across. It is endemic to vernal pools.

The flowering structure is a small, highly simplified cup-like "cyathium," as in all other spurges (Chamaesyce and Euphorbia). The flowering structure in Hoover's spurge has petal-like glands that are red to olive in color. Blooms appear in July.

Hoover's spurge generally grows in relatively large,

deep vernal pools among the rolling hills, remnant alluvial fans and depositional stream terraces at the base of the Sierra Nevada foothills. It tends to occur where competition from other species has been reduced by prolonged seasonal inundation or other factors.

See Jepson Manual, below, for a detailed description of these species.

VERNAL POOLS:

Vernal pools are a unique kind of wetland ecosystem. Central to their distinctive ecology is their ephemeral nature. Vernal pools fill with water temporarily, typically during the winter and spring, and then disappear until the next rainy season.

In California, where extensive areas of vernal pool habitat developed over a long geological timeframe, unique suites of plants and animals have evolved that are specially adapted to the unusual conditions of vernal pools. Fish and other predators are among species that have been excluded evolutionarily byte annual filling and drying cycles of vernal pools.

The prolonged annual dry phase of the vernal pool ecosystem also has prevented the establishment of plant species typical of more permanent wetland ecosystems.

DISTRIBUTION:

There are around 30 known or presumed extant occurrences in six counties: Tehama, Butte, Glenn, Stanislaus, Merced, and Tulare. Some have not been surveyed for many years however. Most of the occurrences are in the Vina Plain area of Tehama and Butte Counties. Another concentration is in the Southern Sierra Foothills, including the Visalia-Yettem area of Tulare County and the Hickman-La Grange area of Stanislaus County. Three other occurrences are on the Sacramento National Wildlife Refuge in Glenn County. See the 5-year review, above, for more information.

U.S. Geological Survey 7.5 Minute Quads: Ivanhoe (333B) 3611942, Monson (334A) 3611943, Turner Ranch (402B) 3712026, Cooperstown (441A) 3712065, Montpelier (441C) 3712056, Turlock Lake (441D) 3712055, Logandale (562B) 3912242, Hamlin Canyon (576B) 3912166, Richardson Springs NW (593B) 3912188, Nord (593C) 3912178, Vina (594A) 3912281

THREATS:

Habitat loss and fragmentation are the largest threats to the survival and recovery of vernal pool species. Loss of habitat generally results from urbanization, agricultural conversion and mining.

Habitat loss also occurs in the form of habitat alteration and degradation as a result of changes to natural hydrology, invasive species, incompatible grazing regimes, infrastructure projects (e.g., roads, water storage and conveyance, utilities), recreational activities (e.g., off-highway vehicles and hiking), erosion, contamination and inadequate management and monitoring. See the 5-year review for more information about threats.

REFERENCES FOR ADDITIONAL INFORMATION:

General references about California plants

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

<u>The Jepson Manual: Higher Plants of California</u>. This is the standard reference about California plants. The Manual is available in an <u>online version</u>. See also the <u>Jepson Online Interchange</u> for updates.

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