



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



Species Account

SOFT BIRD'S-BEAK

Cordylanthus mollis ssp. *mollis*

CLASSIFICATION: Endangered
Federal Register [62:61916](#) (PDF 84KB); November 20, 1997

This species was listed as rare by the California Department of Fish and Game in July 1979. The California Native Plant Society has placed it on List 1B (rare or endangered throughout its range).



Valary Bloom, USFWS

CRITICAL HABITAT: DESIGNATED
Federal Register [72:18517](#) (PDF 1.4MB); April 12, 2007

RECOVERY PLAN: NONE

DESCRIPTION

Soft bird's-beak (*Cordylanthus mollis* ssp. *mollis*) is an annual herb of the snapdragon family (Scrophulariaceae). It grows 10 to 16 inches tall, branching sparingly from the middle and above. The oblong to lance-shaped leaves are 0.4 to 1.0 inch long, the lower ones entire and the upper ones with one to three pairs of leaf lobes. Foliage is grayish-green (often tinged a deep red) and hairy.

The inflorescence consists of spikes, 2 to 6 inches long. A floral bract (modified leaf) with two to three pairs of lobes occurs immediately below each inconspicuous white or yellowish-white flower. Flowers appear between July and September. The plant is distinguished by its two functional stamens and by its bracts with two or three pairs of lateral lobes.

Like other members of *Cordylanthus* and related genera, soft bird's-beak is partially parasitic on the roots of other plants. See Hickman(1993) in General Information about California Plants, below, for a detailed description of the species. Other endangered bird's beaks of Northern California include the palmate-bracted bird's-beak and the Pennell's bird's-beak.

Soft bird's-beak is found predominantly in the upper reaches of salt grass/pickleweed marshes at or near the limits of tidal action. It is associated with pickleweed or Virginia glasswort (*Salicornia virginica*), saltgrass (*Distichlis spicata*), fleshy or marsh jaumea (*Jaumea carnosa*), alkali seaheath (*Frankenia salina*) and seaside arrowgrass (*Triglochin maritima*).

DISTRIBUTION

Soft bird's-beak is endemic to the San Pablo Bay and Suisun Bay area. The subspecies was historically found in high tidal marshes along the Petaluma River and Napa River through the Carquinez Strait to Suisun Bay and the San Joaquin-Sacramento River Delta in Marin, Sonoma,

Napa, Solano, Contra Costa, and Sacramento Counties. It is currently found in widely scattered populations from Point Pinole and Fagan Slough marsh through the Carquinez Strait to Suisun Bay in Napa, Solano and Contra Costa Counties.

THREATS

Habitat conversion, water pollution, increases in salinity of tidal marshes due to upstream withdrawals of fresh water, habitat fragmentation, indirect effects of urbanization, competition with nonnative vegetation, insect predation, projects that alter natural tidal regime, mosquito abatement activities (including off-road vehicle use), erosion, and naturally occurring events variously threaten the remaining occurrences of soft bird's-beak.

Tidal marshes in the San Francisco Bay Estuary have been significantly affected by habitat loss, fragmentation, and degradation over the last 200 years. San Pablo Bay and Suisun Bay have seen 70 and 79 percent reductions in tidal marshes, respectively. A large portion of historic tidal marshes in San Pablo Bay are diked and managed for agricultural production and livestock grazing. In Suisun Bay, most historic tidal marshes are diked and managed for wildlife, especially waterfowl. Suisun Marsh, the largest managed marsh in the estuary, is primarily used to provide wintering feeding habitat for migrating waterfowl. These historic reductions in turn have affected the extent and composition of tidal marsh plant communities. As a result, many native halophytic (salt-tolerant) plants are exceedingly rare in tidal marshes within the estuary.

REFERENCES FOR ADDITIONAL INFORMATION

There is a special [soft bird's beak species account](#) for 4th, 5th and 6th grade students.

U.S. Fish & Wildlife Service. 1997. Endangered and Threatened Wildlife and Plants; Determination of Endangered Status for Two Tidal Marsh Plants—*Cirsium hydrophilum* var. *hydrophilum* (Suisun Thistle) and *Cordylanthus mollis* ssp. *mollis* (Soft Bird's-Beak) From the San Francisco Bay Area of California. Portland, Oregon.

Photo credit: Soft Bird's-Beak by Valary Bloom, U.S. Fish & Wildlife Service

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

Last updated September 18, 2008