



Darlingtonia

Newsletter of the North Coast Chapter of the California Native Plant Society
Dedicated to the Preservation of California Native Flora

CRESCENT CITY MARSH A BOTANICAL WONDERLAND IN PERIL

“This marsh is arguably the most botanically-unique wetland complex in northwest California and perhaps the entire State.”

--U.S. Fish & Wildlife Service

The Crescent City Marsh and environs are home to more than 230 plant species, at least a dozen of which are considered rare, threatened, or endangered. Many of these species are absent or rare elsewhere along California's coast. Some are plants of montane habitats or more northern latitudes, including vanilla grass (*Hierochloa odorata*), stream orchid (*Epipactis gigantea*), great burnet (*Sanguisorba officinalis*), buckbean (*Menyanthes trifoliata*), Sitka alder (*Alnus viridus*), Arctic starflower (*Trientalis arctica*), white-stemmed gooseberry (*Ribes inerme* var. *inerme*), and slender bog-orchid (*Platanthera stricta*).

The Crescent City Marsh consists of 335 acres of coastal freshwater wetlands, open water, brackish marsh, beach and dunes, prairie, coastal scrub, and spruce forest. Nearly 200 acres are located within the Crescent City Marsh Wildlife Area, which is owned and managed by the Department of Fish & Game. The area also contains suitable habitat for several threatened and endangered animals, including marbled murrelet, northern spotted owl, bald eagle, Oregon silverspot butterfly, and tidewater goby.

Several plant communities occur in the Marsh that are rare in northwestern California: buckbean marsh, Pacific reed grass marsh, and Labrador tea marsh. All three marsh types are home to the endangered western lily.

The Endangered Western Lily

The Marsh's unique soils and hydrology make it home to the world's largest population of the western lily, an endangered plant on the brink of extinction.

The western lily—*Lilium occidentale*—is a federally and state listed endangered species. It was listed as endangered without critical habitat in 1994. More than half of all known flowering individuals occur at the Crescent City Marsh, which harbors the only recovery-level population as defined by the federal recovery plan for the species. The western lily can be downlisted to threatened or rare when at least 20 viable populations distributed among 6 recovery areas are protected and managed to assure their continued existence. Approximately one-third of historical populations are thought to have been extirpated. Only one-quarter of extant occurrences consist of more than 100 individuals.

The western lily's range extends from Coos Bay, Oregon to Table Bluff, just south of Humboldt Bay, in a narrow strip within 4 miles of the Pacific Ocean. The western lily occurs in early successional fens or coastal scrub on poorly drained soils. Generally associated with Sitka spruce stands with an understory of Pacific reed grass (*Calamagrostis nutkaensis*), the western lily often occurs with western azalea (*Rhododendron occidentale*) and Labrador tea (*Ledum glandulosum*).

Development and soil cultivation has destroyed much of the western lily's habitat. Cultivation of these soils appears to per-



The rare western lily. Photo by David K Imper



California buckbean. Photo by David K Imper

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North Coast Chapter

Membership in the California Native Plant Society, a statewide nonprofit organization, is open to all. The task and mission of CNPS is to increase awareness, understanding, and appreciation of California native plants. The challenge is to preserve their natural habitat through scientific, educational, and conservation activities. Membership includes subscriptions to the informative quarterly journal *Fremontia*, the statewide newsletter *Bulletin*, and our local chapter newsletter *Darlingtonia*.

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manently alter the species composition in favor of non-native pasture grasses. Water table levels are also permanently altered by development, soil cultivation, irrigation, and logging.

Originally known from many sites around Humboldt Bay, the western lily is now confined to Table Bluff, where cattle grazing is used to benefit the lily by allowing small numbers of livestock to graze on shrubs in winter, when the lilies are dormant underground bulbs. The Department of Fish and Games's Table Bluff Ecological Reserve harbors the second largest western lily population, and several smaller populations are distributed on nearby ranchlands.

Threats to the Crescent City Marsh and Western Lily

More than two-thirds of this 1500-acre watershed is already developed for residential and commercial uses. A proposal to build a golf course, casino, and resort complex would destroy an estimated 50% of the remaining undeveloped watershed.

The proposal, put forth by the Elk Valley Rancheria, would include an 18-hole golf course, a 3-story hotel with 156 rooms and 9 bungalow-style duplexes, a conference center, restaurant, casino, and associated parking areas. The development proposes to discharge 60,000 cubic yards of fill into 10 acres of coastal wetland adjacent to the Crescent City Marsh Wildlife Area.

Other impacts to the Marsh from the proposed development include altered hydrology related to stormwater runoff and irrigation, pesticide and fertilizer contamination from the proposed golf course and landscaped areas, and other water quality issues. Long-term maintenance of the water source—both quantity and quality—is crucial to

maintaining the integrity of these wetlands.

General threats to the Marsh include illegal filling and dumping in wetlands, altered hydrology caused by further development in the watershed, and the spread of invasive non-natives from adjacent land.

What can you do?

- Submit letters to CNPS* in support of conserving the Crescent City Marsh wetlands and biodiversity. Letters will be forwarded during critical comment periods.
- Urge Del Norte County officials to rigorously enforce their Local Coastal Program and protect these important wetlands.
- Write letters to the editor (tripnews@triplicate.com, letters@times-standard.com, ncjour@northcoast.com).
- Be on the lookout for illegal filling or other activities in the area.

*Send letters to CNPS--North Coast Chapter, Conservation Chair, P.O. Box 1067, Arcata, CA 95518, or to jkalt@asis.com.

For more information, visit the North Coast Chapter's website at <http://www.northcoast.com/~cnps/>.

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