

Rare Plant Status Review: *Calochortus uniflorus*
Proposed New Add to List 4.2

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Background

Calochortus uniflorus is an herbaceous, bulb-forming perennial in the Liliaceae. It was included in *The Jepson Manual* (1993) and *The Flora of North America* (Vol. 26). *C. uniflorus* is distinguished from other species of *Calochortus* based on flower and leaf characteristics, the lack of branching in stems, and the presence of bulblets. *C. uniflorus* typically flowers between April and June (may flower in late March in some years).

In California, *C. uniflorus* grows in seasonally moist meadows, sometimes within coastal scrub, coastal coniferous forest, and mixed evergreen forest habitats from approximately 10 to 1070 meters in elevation. It is most commonly found at low elevations along the coast.

C. uniflorus is known from approximately 86 occurrences in 13 counties along the North Coast, the North Coast Ranges, the San Francisco Bay Area, and the Central Coast. One herbarium specimen (SD103951) documents the presence of *C. uniflorus* in Placer County, but this is likely a misidentified specimen, since no other known records are known from the Sierra Nevada. The book, *Calochortus* (Gerritsen and Parson 2007), indicates that *C. uniflorus* occurs in San Benito County, but there are no records available to confirm its presence in that county. In California, *C. uniflorus* is found as far north as Trinity County and as far south as San Luis Obispo County. *C. uniflorus* is also known from the Klamath Ranges in Oregon in Jackson, Josephine, Douglas, and Lane counties. It is ranked as a G4 taxon by NatureServe and it is currently unranked (SNR) in Oregon and California.

According to Grey Hayes (pers. comm. 2009), *C. uniflorus* "...appears to be grazing dependent, and much of its habitat has been removed from any management at all in recent years." Many of the known occurrences are found adjacent to developed areas and in wetlands or mesic meadows, which may be threatened by agricultural conversion or urban development. The population size, population trends, area of occupancy, and land ownership at occurrences of *C. uniflorus* are not well known.

C. uniflorus occurs over a relatively large geographic area (it is known from 49 quads in 13 counties), but it is usually confined to seasonally moist meadows at low elevations near the coast. Of the 86 known occurrences, only 30 have been documented in the past 20 years (occurrences that have not been "seen" in the past 20 years are considered historic by the CNDDDB), and 36 are only represented by historical herbarium specimens that were collected more than 50 years ago.

C. uniflorus was included on List 4 (Plants rare in California, common elsewhere) in the Second Edition (1980) of the CNPS Inventory. In the Third Edition (1984) *C. uniflorus* was considered “too common”, and is included in Appendix I (Plants considered, but not included). It was included on the Considered, but rejected (CBR) list in the Fourth Edition (1988) on the basis that it was “too common”, and it has remained on this list ever since.

List 4 typically contains plants with more than 50 viable occurrences that have a limited distribution. Based on the available information, CNPS and CNDDDB recommend that *C. uniflorus* be added to List 4.2.

Recommended Actions

CNPS: Add to CNPS List 4.2

CNDDDB: Add to CNDDDB as G4 / S3

Please review the draft CNPS Inventory record below, respond Yes or No on the proposal to add this species to the Inventory and CNDDDB, and provide any edits/comments. If responding No, please provide supporting information.

Draft CNPS Inventory Record

Calochortus uniflorus Hook & Arn.

large-flowered mariposa lily

Liliaceae

List 4.2

Colusa, Contra Costa, Lake, Marin, Mendocino, Monterey, Napa, San Luis

Obispo, San Mateo, Santa Cruz, Sonoma, Tehama, Trinity; Oregon

Acoastal scrub, coastal coniferous forest and mixed evergreen forest. 10-1070 meters

Herbaceous bulb. Blooms April-June.

Possibly threatened by agriculture and development.