Element Code: PMLIL0D150

Changed from California Rare Plant Rank 1B.2 to 4.2 on September 24, 2012

Rare Plant Status Review: Calochortus plummerae
Proposed Rank Change from 1B.2, G3 / S3 to 4.2, G4 / S4
Danny Slakey (CNPS), Aaron Sims (CNPS) and Roxanne Bittman (CNDDB)
August 20, 2012

Calochortus plummerae was added to the CNPS Inventory (5th Edition) in 1994. It is a California endemic, and is distributed fairly broadly throughout the Transverse Ranges. In 1999, it was proposed to be deleted from the Inventory because it was too common; at the time it was known from 58 occurrences. The proposal to delete *C. plummerae* from the Inventory was not successful, and it was retained on Rank 1B. Reviewers commented that many historical populations had been extirpated, and that many extant populations were threatened and/or very small, and it should therefore be retained (e.g. D. Bramlet and R. Reifner pers. comms. 1999).

Subsequent surveys have shown that *Calochortus plummerae* is more common than previously known. There are currently 232 occurrences of *Calochortus plummerae* in the CNDDB, and 195 of those are recent. Many occurrences may have gone unnoticed in the past because this plant grows in chaparral, which can be very difficult to hike through, and because it may not flower in unfavorable years (S. White and R. Burgess pers comm. 1999). Of the 232 occurrences, 224 are presumed to be extant, although more may have been extirpated due to development (S. White pers. comm. 1992). The majority of occurrences (146) do not include an occurrence rank, but 41 occurrences have a rank of either "good" or "excellent" (A or B) in the CNDDB. Reviewers had previously noted that populations were generally small (e.g. D. Bramlet pers. comm. 1999), but nearly 20% of the known recent occurrences have over 100 individuals, with about 12% being known from over 200 to 100's, or even over 1,000 individuals. Based on the available data, the total number of known individuals of *C. plummerae* is estimated to be well over 18,500 individuals (population count/estimate data is available in the "Populations" worksheet in the "Locations_CalochortusPlummerae" spreadsheet).

Development may threaten *Calochortus plummerae* throughout a significant part of its range. Several occurrences (EO# 218-228) were discovered during surveys for the Tehachapi Renewable Energy Project, which may threaten their persistence. About 16% of occurrences are found on privately-owned land, while 7% of occurrences are on city or county land, many with unknown threats. However, nearly half (49%) of occurrences of *C. plummerae* are found on park or National Forest lands, and many of those should be considered at least partially protected. With 41 occurrences ranked as "excellent" or "good" in the CNDDB, *C. plummerae* is close to, but has not met, the level of generally meriting downranking from California Rare Plant Rank 1B to 4 based on occurrence numbers alone (in general, California Rare Plant Rank 1B contains plants that are known from fewer than 50 occurrences ranked as "excellent" or "good" by CNDDB). However, at this time *C. plummerae* does not appear to be of high conservation concern given the following: its widespread distribution, high number of

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occurrences, the presence of some large populations, and given that nearly half of its occurrences are on protected lands.

Based on the available information, CNPS and CNDDB recommend that *Calochortus* plummerae be moved from Rank 1B.2 to Rank 4.2. If populations of *Calochortus* plummerae decline and/or if threats to the extant occurrences increase in the future, CNPS and CNDDB will re-evaluate its status at that time.

Recommended Actions

CNPS: Re-rank *Calochortus plummerae* from California Rare Plant Rank 1B.2 to 4.2 CNDDB: Re-rank *Calochortus plummerae* from G3 / S3 to G4 / S4

Revised CNPS Inventory Record

Calochortus plummerae Greene Plummer's mariposa lily Liliaceae

Rank 4.2 Los Angeles, Orange, Riverside, San Bernardino, Ventura Idyllwild (066B) 33116F6, Blackburn Canyon (067A) 33116F7, Bachelor Mtn. (068D) 33117E1, Lake Elsinore (069A) 33117F3, Sitton Peak (069C) 33117E4, Santiago Peak (070A) 33117F5, Cabazon (084A) 33116H7, Beaumont (084B) 33116H8, San Jacinto (084C) 33116G8, Lake Fulmor (084D) 33116G7, El Casco (085A) 33117H1, Sunnymead (085B) 33117H2, Riverside East (086A) 33117H3, Riverside West (086B) 33117H4, Black Star Canyon (087C) 33117G6, Corona South (087D) 33117G5, La Habra (088B) 33117H8, Orange (088D) 33117G7, Whittier (089A) 33118H1, Moonridge (105A) 34116B7, Big Bear Lake (105B) 34116B8, Forest Falls (105C) 34116A8, San Gorgonio Mtn. (105D) 34116A7, Keller Peak (106A) 34117B1, Harrison Mtn. (106B) 34117B2, Redlands (106C) 34117A2, Yucaipa (106D) 34117A1, San Bernardino North (107A) 34117B3, Devore (107B) 34117B4, Fontana (107C) 34117A4, Cucamonga Peak (108A) 34117B5, Mt. Baldy (108B) 34117B6, Ontario (108C) 34117A6, Glendora (109A) 34117B7, Azusa (109B) 34117B8, Baldwin Park (109C) 34117A8, San Dimas (109D) 34117A7, Mt. Wilson (110A) 34118B1, Pasadena (110B) 34118B2, Los Angeles (110C) 34118A2, El Monte (110D) 34118A1, Burbank (111A) 34118B3, Van Nuys (111B) 34118B4, Beverly Hills (111C) 34118A4, Hollywood (111D) 34118A3, Canoga Park (112A) 34118B5, Calabasas (112B) 34118B6, Malibu Beach (112C) 34118A6, Topanga (112D) 34118A5, Thousand Oaks (113A) 34118B7, Newbury Park (113B) 34118B8, Triunfo Pass (113C) 34118A8, Point Dume (113D) 34118A7, Camarillo (114A) 34119B1, Big Bear City (131D) 34116C7. Fifteenmile Valley (132A) 34117D1, Cajon (133C) 34117C4, Silverwood Lake (133D) 34117C3, Mount San Antonio (134C) 34117C6, Telegraph Peak (134D) 34117C5, Crystal Lake (135D) 34117C7, Condor Peak (136C) 34118C2, Chilao Flat (136D) 34118C1, Agua Dulce (137A) 34118D3, San Fernando (137C) 34118C4, Sunland (137D) 34118C3, Newhall (138A) 34118D5, Santa Susana (138C) 34118C6. Oat Mountain (138D) 34118C5. Moorpark (139C) 34118C8. Simi (139D) 34118C7, Ojai (140B) 34119D2

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Chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, valley and foothill grassland / granitic, rocky; elevation 100 to 1700 meters.

Perennial bulbiferous herb; blooms May – July.

Previously on List 1B.2; more common than originally thought. Threatened by development, fire suppression, foot traffic, mining, powerline construction, and recreational activities. Possibly threatened by vegetation clearing, collecting, road maintenance, and non-native plants. Less common at higher elevations. Hybridizes with *C. weedii* var. *intermedius*. See *Pittonia* 2:70 (1890) for original description, and *Annals of the Missouri Botanical Garden* 27:515 (1940) for taxonomic treatment.

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