

**Rare Plant Status Review: *Calyptridium pygmaeum*
New Add to List 1B.2**

Nicholas Jensen (CNPS) and Roxanne Bittman (CNDDDB)
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Background

Calyptridium pygmaeum is an herbaceous annual in the Portulacaceae. It is included in *The Jepson Manual* (1993) and will be included in the new *Jepson Manual* (2nd edition). *C. pygmaeum* is somewhat difficult to identify, but can be distinguished from closely-related taxa (*Calyptridium parryi* vars.) based on pedicel length, the number of seeds per capsule, and seed size. Matt Guilliams states that *C. pygmaeum* is “readily identifiable,” and that “molecular work suggests that it is a valid taxon quite distinct from the *C. parryi* complex” (Guilliams and Simpson, *in prep*). *C. pygmaeum* flowers from June to August.

C. pygmaeum occurs on sandy or gravelly soils in upper montane and subalpine coniferous forest habitats from 1980 to 3110 meters in elevation.

C. pygmaeum is a California endemic known from approximately 7 occurrences in Inyo, San Bernardino, and Tulare counties. It is known from two disjunct geographic locations; in the southern Sierra Nevada, and near Bear Valley in the San Bernardino Mountains. The Consortium of California Herbaria lists two collections (RSA45944, UCR24222) of *C. pygmaeum* from the summit of Mt. San Gorgonio in the San Bernardino Mountains. According to Matt Guilliams (pers. comm. 2008), these collections are not correctly identified and should be considered to be *C. parryi* var. *parryi*.

All of the occurrences of *C. pygmaeum* can be considered historical as they have not been documented from between 29 to 123 years. The plant was last seen at the type locality, “Bear Valley, San Bernardino Mountains” in 1885, and *C. pygmaeum* may be extirpated from this location. In 2007, Matt Guilliams (pers. comm. 2008) searched for individuals of *C. pygmaeum* in the Rock Creek Basin of the Sierra Nevada and Arrastre Flat in the San Bernardino Mountains, and failed to find a single individual. *C. pygmaeum* is quite small and may be absent in some locations during years with below average rainfall. Attempts should be made to re-locate historical occurrences. Also, suitable habitat within and beyond the known range of *C. pygmaeum* should be searched for new occurrences. Botanical surveys must be timed correctly and conducted in years with sufficient moisture to increase the chances of finding *C. pygmaeum*.

The occurrences of *C. pygmaeum* in the Sierra Nevada occur on land managed by the Inyo and Sequoia National Forests. The ownership of the occurrences in the San Bernardino Mountains is unknown, but may be largely private land. Possible threats to *C. pygmaeum* and its habitat include development and recreational activities

Based on the available information CNPS and CNDDDB recommend that *Calyptridium pygmaeum* be added to List 1B.2.

Recommended Actions

CNPS: Add to CNPS List 1B.2

CNDDDB: Add to CNDDDB as G2 / S2

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

Calyptridium pygmaeum Rydb.

pygmy pussypaws

Portulacaceae

List 1B.2

Inyo, San Bernardino, Tulare

Cirque Peak (329B) 3611842, Mt. Abbot (415A) 3711847, Big Bear City (131D)

3411637, Big Bear Lake (105B) 3411628, Chagoopa Falls (330B) 3611844,

Siretta Peak (284A) 3511883

Upper montane coniferous forest, subalpine coniferous forest / sandy or gravelly.

Elevation 1980-3110 meters.

Annual herb. Blooms June-August

Known in California from fewer than 10 occurrences. Possibly threatened by development and recreational activities.