

Changed from rank 4.3 to 1B.2 on June 29, 2011

Rare Plant Status Review: *Pediomelum castoreum*
List change from List 4.3 to List 1B.2
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 May 16, 2011

Changes made to the original document appear in blue text.

Pediomelum castoreum is a perennial herb in the Fabaceae known from Inyo and San Bernardino County of California to Arizona and Nevada. It is included in *The Jepson Manual* (1993) and will be included in *The Jepson Manual, Second Edition* (available online at: http://ucjeps.berkeley.edu/tjm2/review/treatments/fabaceae_all.html#36636). *Pediomelum castoreum* occurs in sandy washes and roadcuts of Joshua tree woodland and Mojavean desert scrub at an approximate elevation of 610 to 1524 meters. It flowers from April to May.

Pediomelum castoreum is currently included on List 4.3 (plants of limited distribution, not very threatened in California) of the CNPS Inventory (available online at: <http://www.rareplants.cnps.org/detail/1994.html>), and is included on the Nevada Native Plant Society's (NNPS) Watch List. It is ranked S1 by NatureServe in Arizona, S3 in California, and S3 in Nevada, where it is also included on the Bureau of Land Management Sensitive Species List. Furthermore, during the Nevada Rare Plant Workshop held in Reno (NNPS Rare Plant Committee, April 2011), *P. castoreum* was proposed to undergo a Nevada Heritage rank change from S3 to S2 and was also noted as a possible candidate for state listing in Nevada, where it is threatened by solar energy projects in Clark County.

Pediomelum castoreum is known from approximately 24 occurrences in the Mojave Desert of California (see attached "Locations_PediomelumCastoreum.xls"). **Four** ~~Two~~ records of *P. castoreum* from Emigrant Pass in the Panamint Range, **from May 1937 (H. and M. Dearing 951 - SBBG3769, 957 – SBBG3767), and May 1935 (Gilian, M. French – DEVA31244, DEVA31243) would** represent the only known occurrence of this taxon from Inyo County, **however they are likely actually *Pediomelum mephiticum*, which would be the first known occurrence of this taxon in California (A. Howald, D. Wilken, and D. York pers. comm. 2011). This population should be surveyed for and the records should be annotated by a specialist.** Of the 24 known occurrences of *P. castoreum*, only **7** ~~6~~ 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 **15** ~~46~~ are only represented by herbarium specimens that are over 50 years old.

Pediomelum castoreum is threatened by solar energy development and possibly threatened by OHV activity and road widening.

Based on the available information, CNPS and CNDDDB recommend that *Pediomelum castoreum* be re-ranked from List 4.3 to List 1B.2.

Recommended Actions

CNPS: Re-rank from CNPS List 4.3 to List 1B.2

CNDDDB: Re-rank from G3 / S3.3 to G3 / S2

Please review the revised CNPS Inventory record below, respond Yes or No on the proposal to change the rank of this species in the Inventory and CNDDDB, and provide any edits/comments on the proposed change.

Revised CNPS *Inventory* record:

Pediomelum castoreum (Wats.) Rydb.

Beaver Dam breadroot

Fabaceae

List 1B.2

Inyo, San Bernardino; Arizona, Nevada

Astley Rancho (183C) 3411774, Barstow SE (182D) 3411771, Daggett (181C) 3411678, Doyle (~~602D~~) 4012011, Emigrant Pass (~~325C~~) 3611732, Lake Arrowhead (132C) 3411732, Minneola (181D) 3411677, Nebo (181B) 3411688, Silurian Lake (251C) 3511652, Victorville (158D) 3411753, Victorville NW (158B) 3411764, Yermo (181A) 3411687

Joshua tree "woodland", Mojavean desert scrub/sandy washes and roadcuts; elevation 610-1525 meters.

Perennial herb; blooms Apr-May.

Threatened by solar energy development. Possibly threatened by vehicles and road widening. On watch list in NV. See *Proceedings of the American Academy of Arts and Sciences* 14:291 (1879) for original description, *North American Flora* 24(1):22 (1919) for revised nomenclature, and *Memoirs of the New York Botanical Garden* 61:84-85 (1990) for taxonomic treatment.