

Added to CNPS Inventory on March 13, 2012

**Rare Plant Status Review: *Allium abramsii*
Proposed New Add to Rank ~~1B.3~~ **1B.2, G2G3 / S2S3****

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Changes made to the original document appear in blue text.

Background

Allium abramsii is a perennial bulb-forming herb in the Alliaceae family. Its distribution is limited to the western slopes of the central Sierra Nevada from Madera to Tulare County. It is included in the *Flora of North America* (available online at http://www.efloras.org/florataxon.aspx?flora_id=1&taxon_id=242101328, *The Jepson Manual* (*TJM 2*; available online at http://ucjeps.berkeley.edu/cgi-bin/get_IJM.pl?tid=76525), and *The Jepson Manual* (1993). It was first described as *Allium fimbriatum* var. *abramsii* by Traub (1972), but later recognized as its own species by McNeal (1992). *Allium abramsii* is a member of the *Allium sanbornii* complex; *Allium parryi* is the only other member of the complex that occurs in roughly the same geographic area, with the northern extent of *A. parryi* nearly reaching the southern extent of *A. abramsii* in Tulare County (McNeal 1992, Consortium of California Herbaria – CCH – 2012). *Allium abramsii* is a very distinct species owing to its brown to gray outer bulb coats, white to light pink inner coats, its reflexed perianth segments that are sometimes crisped, and ovarian crest processes that are often entire (McNeal 1992). The perianth parts of *A. abramsii* are dentate to jagged, compared to the entire perianth parts of *A. fimbriatum* (*TJM 2*). Some confusion may exist around the morphology of the bulb coat: the first publication of this taxon by Munz and Keck (1959; which is invalid due to its lack of a Latin description) used the specimen *M. Baker 4406a* (UC421135), which included bulbs collected from a different species (*Allium obtusum* var. *obtusum*) on the voucher sheet (McNeal 1999). *Allium abramsii* flowers from May to July.

Allium abramsii occurs in lower and upper montane coniferous forest in the central Sierra Nevada. It only grows on sandy soils derived from disintegrated granite (*TJM 2*, *FNA*, McNeal 1992). It is found between 885 and 3050 meters in elevation.

Allium abramsii is known from about 19 occurrences. Two additional accounts of the species (*Frost 7610* and a Calflora observation from the Sierra National Forest) are too vague to be located. Eleven of the 19 occurrences have not been documented in the last 20 years, and six occurrences have not been documented in the last 50 years (occurrences not documented in the last 20 years are considered historical by the CNDDDB). Most occurrences are at mid- to high-elevation sites managed by the U.S. Forest Service, so it should be considered fairly well-protected. A few occurrences are on private property near Shaver Lake.

Occurrences of *Allium abramsii* along trails near Boyden Cave are threatened by foot traffic. Other occurrences near Highway 180 at Horseshoe Bend are potentially

threatened by road work as well as mining from an adjacent rock quarry on Convict Flat, which is currently temporarily closed (D. York pers. comm. 2012). ~~Threats to *Allium abramsii* are not currently known. However,~~ Given its limited range, threats, and number of occurrences, as well as the presence of a few occurrences on private property, it should be considered of conservation concern. Based on the available information, CNPS and CNDDDB recommend that *Allium abramsii* be added to California Rare Plant Rank ~~4B.3~~ 1B.2. If current records are later found to be an under representation of its actual distribution and frequency, it will be re-evaluated at that time.

Recommended Actions

CNPS: Add to CNPS ~~4B.3~~ 1B.2

CNDDDB: Add to CNDDDB G2G3 / S2S3

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

Allium abramsii (Ownbey & Aase ex Traub) McNeal

Abrams' onion

Alliaceae

Rank ~~4B.3~~ 1B.2

Fresno, Madera, Tulare

Auberry (397C) 3711914, Bass Lake (418C) 3711935, Hockett Peak (307B) 3611824, Mammoth Pool Dam (417D) 3711933, Mineral King (331A) 3611845, Mt. Givens (416D) 3711931, Musick Mtn. (397A) 3711923, Shaver Lake (397D) 3711913, Shuteye Peak (417C) 3711934, Triple Divide Peak (353D) 3611855, Wren Peak (375D) 3611877

Lower montane coniferous forest, upper montane coniferous forest / granitic sand; elevation 885 – 3050 meters.

Perennial bulbiferous herb. Blooms May to July.

Plants from the Kings River Canyon area are threatened by foot traffic, and potentially threatened by road maintenance and mining. See *Plant Life* 28:63-64 (1972) for original description, and *Aliso* 13(3):411-426 (1992) for taxonomic treatment.