Element Code: PDPGN085J1

Added to California Rare Plant Rank 4.3 on December 27, 2011

Rare Plant Status Review: *Eriogonum spergulinum* var. *pratense* Proposed New Add to Rank 4.3, G4T3 / S3

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Changes made to the original document appear in blue text.

Background

Eriogonum spergulinum var. pratense is an annual herb in the Polygonaceae family that is endemic to the high southern Sierra Nevadas of California. It is included in Flora of North America, Vol. 5 (FNA; available online at:

http://www.efloras.org/florataxon.aspx?flora_id=1&taxon_id=250060500), The Jepson Manual, Second Edition (TJM 2; available online at: http://ucjeps.berkeley.edu/cgibin/get IJM.pl?tid=58719), and The Jepson Manual (1993). It was originally treated as a unique species (*Eriogonum pratense*); though similarity to *Eriogonum spergulinum* was noted in the original description, E. pratense is "quite distinct [from Eriogonum spergulinum] in floral character and short internodes" (Stokes 1943). However, extensive field work and review of herbarium specimens led J. T. Howell (1950) to recognize intergradation between E. spergulinum and E. pratense, especially in Tulare County plants, and treat *E. pratense* as a variety of the former. *Eriogonum spergulinum* var. pratense differs most notably from the typical variety and var. reddingianum in that it has a more prostrate habit and non-glandular internodes (FNA). Some populations with intermediate characters are discussed later in this document. Both var. spergulinum and var. reddingianum are distributed widely across the Sierras (including the localized region with var. pratense) and can occur at the same high elevations as var. pratense (TJM 2). Eriogonum spergulinum var. pratense blooms from July to August (TJM 2, Consortium of California Herbaria (CCH) 2011).

Eriogonum spergulinum var. pratense is found at high elevation sites, both above and below the timberline. It is most often found along the edges of meadows and creeks, usually with sandy or gravelly substrates (CCH 2011, *TJM 2*). Eriogonum spergulinum var. pratense is apparently restricted to Inyo and Tulare counties, although some intermediate specimens have come from Mono County (Howell 1950). It grows at elevations between approximately 1830 and 3445 meters (CCH 2011).

There are 20 known occurrences of *E. spergulinum* var. *pratense*. Of these occurrences, 18 are only known from historical documentation (occurrences not documented in the last 20 years are considered historical by the CNDDB). Most occurrences are from the Inyo National Forest. A collection from Volcano Creek (*Hall and Babcock 5320*) is intermediate in some characters between var. *spergulinum* and var. *pratense* (Howell 1950), but is currently identified to var. *reddingianum* in the Consortium (CCH 2011) and is not included in the total element occurrence count. A collection from Whitney Creek (*Dudley 2500a*) is also intermediate in some characters (Howell 1950), but is currently assigned to var. *pratense* (CCH 2011). An additional

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fifteen specimens of *E. spergulinum* (not identified to variety) are listed in the CCH from Inyo and Tulare Counties. Twelve of these specimens are housed at the herbarium of Rancho Santa Ana Botanic Garden (RSA); all were determined to be var. *spergulinum*, either by examining the specimens, or because they were from a locality known to have var. *spergulinum* (D. Bell pers. comm. 2011, CCH 2011). One other specimen is from a locality known to have var. *spergulinum* (*Wheeler 8537*). Given that *E. spergulinum* var. *pratense* is somewhat inconspicuous and parts of the eastern Sierras are not well explored botanically, it may be under-collected (S. Weis pers. comm. 2011). Some voucher specimen labels note that the taxon is locally common (*Twisselman 16974*, 18131; *Munz 14034*). This plant should be searched for in more high-elevation meadows and creeks.

There are no known threats to *E. spergulinum* var. *pratense*; most of the occurrences are on protected lands, including high-elevation U.S. Forest Service and National Park Service lands. As it is restricted to high-elevation sites, global climate change could potentially threaten some populations, especially those at the lower end of its range.

Based on the available information, CNPS and CNDDB recommend that *Eriogonum* spergulinum var. pratense be added to California Rare Plant Rank 4.3. If no additional populations are found in subsequent years, or if current records are later found to be an under-representation of its actual distribution and frequency, it will be re-evaluated by CNPS at that time.

Recommended Actions

CNPS: Add to CNPS 4.3

CNDDB: Add to CNDDB G4T3 / S3

Draft CNPS Inventory Record

Eriogonum spergulinum A. Gray var. *pratense* (S. Stokes) J.T. Howell mountain meadow wild buckwheat

Polygonaceae

Rank 4.3

Inyo, Tulare

Camp Nelson (308A) 3611825, Casa Vieja Meadows (307A) 3611823, Cirque Peak (329B) 3611842, Johnson Peak (330A) 3611843, Kern Peak (330D) 3611833, Mount Whitney (352D) 3611853, Olancha (329D) 3611831, Templeton Mtn. (329C) 3611832 Meadows and seeps, alpine boulder and rock fields (meadows and creeks) / often edges, usually sandy or gravelly; 1830-3445 meters.

Annual herb. Blooms July - August.

Known only from the high Sierra Nevadas; field surveys needed. Occurrences from Kern Plateau are threatened by trampling and grazing. Many collections of *E. spergulinum* from FRE Co. need to be examined to confirm their varietal identification. See *Leaflets of Western Botany* 3(9):201-202 (1943) for original description and 6(4):75-80 (1950) for taxonomic treatment.