Element Code: PDPGN084FF

Added to California Rare Plant Rank 2.1 on August 23, 2012

Rare Plant Status Review: *Eriogonum ovalifolium* var. *depressum* Proposed New Add to Rank 2.1, G5T4T5 / S1

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Background

Eriogonum ovalifolium var. *depressum* is a mat-forming herbaceous perennial in the Polygonaceae family. It is broadly distributed across western North America from western Canada south to California and Nevada. It is included in both the *Flora of North America, Vol 5 (FNA;* available online at

http://www.efloras.org/florataxon.aspx?flora_id=1&taxon_id=250060439) and *The Jepson Manual, Second Edition (TJM 2;* available online at

http://ucjeps.berkeley.edu/cgi-bin/get_IJM.pl?tid=58676), but was not included in The Jepson Manual (1993). It is a moderate- to high-elevation expression of the species, most similar in morphology to another high-elevation variety, *Eriogonum ovalifolium* var. nivale. The two varieties are mainly distinguished by their hairs, with var. depressum having greenish leaves that are thinly tomentose at least adaxially, and var. nivale having leaves that are densely lanate to white-tomentose on both surfaces. Also, var. nivale tends to have more erect scapes that are lanate to tomentose, compared to the suberect to decumbent, floccose scapes seen in var. depressum (FNA). In his original description of the variety, Blanksinship (1905) notes that var. depressum is "doubtfully more than an alpine variety of the species, as connecting forms seem frequent in collections and the characters are alike except in size." Hitchcock and Cronquist (1973) note that vars. depressum and nivale are freely intergradient with each other. However. the Flora of North America treatment claims that the two varieties are rather easy to distinguish, except in the Steens Mountains of Southeastern Oregon, where plants are cautiously assigned to var. depressum. Eriogonum ovalifolium var. depressum has only been observed flowering in California in September (Consortium of California Herbaria: CCH 2011), but may bloom as early as June (TJM 2).

The only known occurrence of *Eriogonum ovalifolium* var. *depressum* from California is found on low mounds in dry playas of the Modoc Plateau. It occurs at an approximate elevation of 1740 meters (CCH 2011).

The only confirmed California occurrence of *E. ovalifolium* var. *depressum* is in the Lassen National Forest (*Oswald 9627*), and has not been documented since it was collected in 1998 (CCH 2011). It was originally identified as *Eriogonum ovalifolium* var. *purpureum* (Oswald 2002), but was annotated to var. *depressum* by J.L. Reveal in 2005 (A. Sanger pers. comm. 2011, CCH 2011). Another voucher specimen was taken from a high-elevation site in California's White Mountains (*Maguire 26093*). This voucher collection, at the New York Botanical Garden Herbarium (NY282019), is identified to *E. ovalifolium* var. *depressum*, but a duplicate at the University Herbarium (UC701620) was annotated to var. *nivale* by J.L. Reveal in 1978 (CCH 2011, K. Agnew pers. comm. 2011), so we discount it. Also, review by the first author of a high-resolution image of

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the UC collection showed that the leaf hair characters were consistent with var. *nivale*. Surveys should be conducted in playas of the Modoc Plateau to search for potential additional occurrences of this taxon in California.

Outside of California, *E. ovalifolium* var. *depressum* occurs in six western states, including Idaho, Montana, Nevada, Oregon, Utah, and Wyoming, as well as the Canadian provinces Alberta and British Columbia. Of these, it is only ranked in Nevada, where it is critically imperiled (S1; 1-5 occurrences; NatureServe 2011). It is ranked by the Nevada Natural Heritage Program (NNHP) as "Marginal", meaning that the plant is "potentially vulnerable in the Nevada portion of its range, but much more widespread and secure outside Nevada" (NNHP 2011).

Threats to the California occurrence of *Eriogonum ovalifolium* var. *depressum* are not known. However, given its extreme rarity within the state, it should be considered of conservation concern.

Based on the available information, CNPS and CNDDB recommend that *Eriogonum ovalifolium* var. *depressum* be added to California Rare Plant Rank 2.1.

Recommended Actions

CNPS: Add to CNPS 2.1

CNDDB: Add to CNDDB G5T4T5 / S1

Please review the draft CNPS Inventory record below, respond Yes or No on the proposal to add this species to the Inventory and CNDDB, and provide any edits/comments. If responding No, please provide supporting information.

Draft CNPS Inventory Record

Eriogonum ovalifolium Nutt. var. depressum Blank.

depressed wild buckwheat

Polygonaceae

Rank 2.1

Lassen

Idaho, Montana, Nevada, Oregon, Utah, Wyoming

Pine Creek Valley (642D) 4012151

Playas / low mounds; elevation 1740 meters.

Perennial herb. Blooms (June) September.

Discovered in CA by Vernon Oswald in 1998; known in CA only from Lassen NF. Rare in NV. Originally identified as var. *purpureum*; a similar taxon. Also similar to var. *nivale*. Not in *TJM* (1993). See *Montana Agricultural College Science Studies, Botany* 1(2):33-109 (1905) for original description.