Element Code: PDCAR0U1MC

Added to California Rare Plant Rank 2B.2 of the CNPS Inventory on December 13, 2017

Rare Plant Status Review: Silene scouleri subsp. scouleri Proposed Addition to California Rare Plant Rank 2B.23, G5T5 / S2S3 Kaitlyn Green (CNPS), Aaron E. Sims (CNPS), and Roxanne Bittman (CNDDB) October 10, 2017

Changes made to the original document are in blue text.

Background

Silene scouleri Hook. subsp. scouleri is a perennial herb in the Caryophyllaceae known in California from the north and central coast, extending north to British Columbia. It is not included in *The Jepson Manual* (Wilken 1993), but is included in *The Jepson Manual, Second Edition* (Hartman et al. 2012) and *Flora of North America* (Morton 2005). Silene scouleri subsp. scouleri is perhaps most similar to *S. nuda*, but differs in having cauline leaves that gradually reduce upward (vs. basal cauline leaves), greater than four cauline leaf pairs (vs. less cauline leaf pairs), 3-6 mm fruit stalks (vs. 1-2 mm fruit stalks), puberulent to woolly habit (vs. glabrous or sparsely puberulent), and calyx lobe veins that are more or less as wide as the tube veins (vs. calyx lobe veins wider than tube veins in *S. nuda*) (Hartman et al. 2017). The specific epithet "scouleri" comes from Dr. John Scouler, known for his work of exploring and collecting along the Columbia River.

Silene scouleri subsp. scouleri occurs in coastal bluff scrub, coastal prairie, valley and foothill grassland, and rocky, grassy slopes at an approximate elevation of 0 to 600 meters. It is mostly known to bloom from June to August (CCH 2017; Calflora 2017; CalPhotos 2017), but has been documented to bloom as early as March (Calflora 2017) to as late as September (CalPhotos 2017; CCH 2017). Based on one collection (Thomas 9705, DS577994; CCH 2017), one or more of the following taxa may potentially be associated with S. scouleri subsp. scouleri: Baccharis pilularis, Erigeron glaucus, Scrophularia californica, Sidalcea malviflora, Salvia spathacea, Acaena californica, Artemisia californica, Toxicodendron diversilobum, Pteridium aquilinum, Senecio glomeratus, S. sylvaticus, S. aronicoides, Castilleja franciscana, C. latifolia, Ceanothus thyrsiflorus, Rhamnus californicus, Potentilla glandulosa, Iris douglasiana, Achillea millefolium, Plantago erecta, Eriogonum spp., and Sedum spathulifolium.

Silene scouleri subsp. scouleri is currently known from an estimated 21 occurrences along the north and central coast of California, including Point Reyes in Marin County, San Francisco in San Francisco County, and the San Bruno Mountains in San Mateo County. Of the 21 occurrences, 14 are considered historical (occurrences not seen in over 20 years are considered historical by CNDDB). Roughly half (11) of the occurrences are located on public land, including Point Reyes National Seashore (five occurrences), and San Bruno Mountain Park (one occurrence). The remaining ten occurrences have an unknown landownership.

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Silene scouleri subsp. scouleri is unranked in Washington, Oregon, Idaho, and Montana in the United States, and is also unranked in Alberta, Canada. It is considered critically imperiled in British Columbia, Canada (NatureServe 2015).

On San Bruno Mountain, *S. scouleri* subsp. *scouleri* is generally in good shape (D. Allshouse pers. comm. 2017), but is potentially threatened by habitat loss, as seen with the gradual loss of the grasslands it occurs in on the mountain (D. Nelson pers. comm. 2017). Peter Warner (pers. comm. 2017) identified an additional occurrence near Bodega Harbor that is potentially threatened by foot traffic and recreational activities due to plans to turn the surrounding area into publicly accessible open space.

Based on the available information, CNPS and CNDDB recommend adding *Silene scouleri* subsp. *scouleri* to California Rare Plant Rank 2B.2 of the CNPS Inventory. If knowledge on the distribution, threats, and rarity status of *S. scouleri* subsp. *scouleri* changes in the future, we will re-evaluate its status at that time.

Recommended Actions

CNPS: Add Silene scouleri subsp. scouleri to CRPR 2B.23 CNDDB: Add Silene scouleri subsp. scouleri to G5T5 / S2S3

Draft CNPS Inventory Record

Silene scouleri Hook. subsp. scouleri Scouler's catchfly Caryophyllaceae CRPR 2B.23

Oregon, Idaho, Montana, Washington

Del Norte, Humboldt, Marin, San Francisco, San Mateo, Sonoma

San Gregorio (429C) 3712234, La Honda (429D) 3712233, San Francisco South (448B) 3712264, Montara Mountain (448C) 3712254, Point Bonita (467D) 3712275, Drakes Bay (485C) 3812218, Bodega Head (503D) 3812331, Eureka (672C) 4012472, Rodgers Peak (689A) 4112421, Requa (723D) 4112451, Crescent City (740C) 4112472 Coastal bluff scrub, coastal prairie, valley and foothill grassland; elevation 0-600 meters. Perennial herb. Blooms in (March) (May) June to August (September).

Potentially threatened by habitat loss, foot traffic, and recreational activities. Possibly threatened by herbivory. See *Flora Boreali-Americana* 1(2):88-89 (1830) for original description, and *Revision of the North American Silene* 26 (1947) for taxonomic treatment.

Literature Cited

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CalPhotos. 2017. CalPhotos: Plants. Regents of the University of California, Berkeley. Website http://calphotos.berkeley.edu/flora/ [accessed 5 August 2017].

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[CCH] Consortium of California Herbaria. 2017. Data provided by the participants of the Consortium of California Herbaria. Regents of the University of California, Berkeley. Website http://ucjeps.berkeley.edu/consortium/ [accessed 5 August 2017]

Hartman R. L., R. K. Rabeler, and D. H. Wilken. 2012. *Silene.* Pp. 616-622 *in* Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, and D.H. Wilken (eds.), The Jepson manual: vascular plants of California, second edition. University of California Press, Berkeley, CA.

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Hitchcock, C. L. and B. Maguire. 1974. Revision of the North American *Silene* 26. (Taxonomic treatment; not seen.)

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