Element Code: PDCAR0U162

Added to List 4.3 on 3/4/10

Rare Plant Status Review: Silene occidentalis ssp. occidentalis Proposed New Add to List 1B.3 or 4.3

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Background

Silene occidentalis ssp. occidentalis is an herbaceous perennial in the Caryophyllaceae endemic to California. *S. occidentalis* ssp. occidentalis is included in the Jepson Manual (1993) and a number of local and regional floras. Currently, however, it is treated as synonym (no infraspecific taxa are recognized) of *S. occidentalis* in the *Jepson Manual* (2nd Edition, available online at

http://ucjeps.berkeley.edu/tjm2/review/treatments/caryophyllaceae.html#44548) and the *Flora of North America* (Vol. 5). In his treatment of *S. occidentalis* in the *Flora of North America*, Dr. John Morton stated that:

"The long, tubular calyx and the proportionally long carpophore of *Silene occidentalis* are remarkable. Plants with the longest calyx tubes (more than 30 mm) have been referred to subsp. *longistipitata* and appear to be confined to Butte County. Calyx length varies greatly, however, and it is doubtful whether it is a justifiable basis for taxonomic recognition."

Based on this information and the current taxonomic treatments we conducted a status review of *S. occidentalis* ssp. *longistipitata* in the spring of 2009. During that status review, comments indicated that even though subspecies of *S. occidentalis* are no longer being recognized in current floras, we should continue to include *S. occidentalis* ssp. *longistipitata* on CNPS List 1B.2. During the course of the status review a number of individuals indicated that *S. occidentalis* ssp. *occidentalis* should also be considered for inclusion in the CNPS Inventory. *S. occidentalis* ssp. *occidentalis* is differentiated from *S. occidentalis* ssp. *longistipitata* based on the size of its floral parts (calyx length, petal blade length, and carpophore length are shorter in ssp. *occidentalis*). *S. occidentalis* ssp. *occidentalis* flowers between June and August.

S. occidentalis ssp. occidentalis is known from approximately 38 occurrences from 9 counties in the northern Sierra Nevada, Cascade Range, and the Modoc Plateau. It is known from El Dorado County in the south to Modoc County in the north. Several floras indicate that S. occidentalis ssp. occidentalis occurs in Alpine County, but no records are available to confirm its presence in that county. Of the 38 known occurrences only 10 have been documented in the past 20 years (occurrences that have not been "seen" in the past 20 years are considered historic by the CNDDB). Many of the occurrences are only represented by historical herbarium specimens, a number of which have not been documented in more than 50 years. Suitable habitat within and beyond the known range of S. occidentalis ssp. occidentalis should be searched for additional occurrences.

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S. occidentalis ssp. *occidentalis* occurs in dry, open areas in lower montane coniferous forest, upper montane forest, and chaparral habitats from 1460 to 2090 meters in elevation.

There are no reported threats to *S. occidentalis* ssp. occidentalis. The ownership of most occurrences is unknown.

List 1B typically contains plants known from 50 or fewer viable occurrences that are ranked as either good or excellent by CNDDB. List 4 typically includes plants with greater than 50 viable occurrences. The available data seems to indicate that *S. occidentalis* ssp. *occidentalis* should be placed on List 1B. However, it is known from a relatively wide range (20 quads in 9 counties), and occurs over a wide range of habitats and elevations. This would suggest that there are more occurrences (not yet reported) of *S. occidentalis* ssp. *occidentalis* and that it is too common for List 1B. Therefore, List 4 may be a more appropriate place for this taxon.

Please indicate in your comments whether you think *S. occidentalis* ssp. occidentalis should be added to List 1B or List 4.

Recommended Actions

CNPS: Add to CNPS List 1B.3 or 4.3 CNDDB: Add to CNDDB as G4T3 / S3

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

Draft CNPS Inventory Record

Silene occidentalis S. Watson ssp. occidentalis The Cedars buckwheat Western campion

Caryophyllaceae

List 1B.3 or 4.3

Butte, El Dorado, Lassen, Modoc, Nevada, Placer, Plumas, Shasta, Tehama Pyramid Peak (523C) 38120G2, Antelope Mtn. (641C) 40120E8, Red Cinder (624B) 40121D2, State Line Peak 40119A8, Warren Peak (690B) 41120D2, Soda Springs (555C) 39120C4, Westville (540B) 39120B6, Cisco Grove (556D) 39120C5, Blue Canyon (556C) 39120C6, Bucks Lake (590B) 39121H2, Haskins Valley (590C) 39121G2, Onion Valley (589C) 39120G8, American House (574A) 39121F1, Dogwood Peak (590D) 39121G1, Caribou (606C) 40121A2, Blue Nose Mtn. (589D) 39120G7, Almanor (606B) 40121B2, Reading Peak (625B) 40121D4, West Prospect Peak (643C) 40121E4, Lassen Peak (626A) 40121D5, Swains Hole (643A) 40121F3, Mineral (626D) 40121C5

LCFrs, UCFrs, Chprl; elevation 1490-2090 meters.

Herbaceous perennial. Blooms Jun-Aug.

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A synonym of *S. occidentalis* in the *Jepson Manual*, 2nd Edition.