Deleted from California Rare Plant Rank 4.3 of the CNPS Inventory on 21 July 2020

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Rare Plant Status Review: *Thermopsis californica* var. *argentata* Proposed Deletion from California Rare Plant Rank 4.3, G4T4 / S4

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Background and Taxonomy

Thermopsis californica Wats. var. argentata (Greene) Chen & Turner is a perennial rhizomatous herb in the Fabaceae that has been included in the CNPS Inventory as a California Rare Plant Rank (CRPR) 4.3 taxon since the 2nd edition (Smith et al. 1980). It is distributed in northern California (from Lassen, Modoc, Shasta, and Siskiyou counties) with a disjunct range in southern California (from Kern, Los Angeles, Santa Barbara, and Ventura counties). More information about *T. californica* var. argentata can be found in the CNPS Online Inventory at http://www.rareplants.cnps.org/detail/668.html.

Distribution and Abundance

As a list 4 species *Thermopsis californica* var. *argentata* has not been formally mapped by the CNDDB, making an actual occurrence count difficult to obtain. By examining the specimens and other recorded instances of *T. californica* var. *argentata* there are an estimated 81 occurrences (see location spreadsheet). While there is an expectation of inaccuracy in the coordinates provided for these specimens as well as an expectation of duplicates, it is likely that this occurrence count is less than the current estimated count. Within the location table there are 16 additional specimens and observations that are unaccounted for in the occurrence count due to a lack of coordinates. Additionally, CNDDB has 241 unprocessed field survey forms that were not mapped due to its watchlist status. With this unaccounted data the occurrence count could range from the 81 we have estimated to potentially exceeding 150 occurrences.

It is also probable that *T. californica* var. *argentata* is under reported, adding additional uncertainty to the total occurrence estimate. This has been substantiated by the experts who have worked with it in the field: Martin Lenz (pers. comm. 2020) noted *T. californica* var. *argentata* to be "quite plentiful east of the Cascade crest in southern Siskiyou". With help from Julie Kierstead several additional botanists were contacted on their opinions on the status and distribution of *T. californica* var. *argentata*: Allison Sanger, Samantha Hillaire, Heidi Guenther, and Steven Serkanic all agreed in it being abundant and having a positive response to moderate disturbance (pers. comms. 2020). Correspondence with southern California botanists that may be familiar with this taxon has not transpired, and we hope that all knowledgeable botanists with opinions about the status of this taxon chime in on the Rare Plant Status Review Forum.

Another CRPR 4.3 *Thermopsis*, *T. gracilis*, is concurrently being reviewed for deletion from the CNPS Inventory for similar reasons: abundant and thriving from disturbance. It is now apparent that these formerly considered watchlist false lupines are faring well from disturbance.

Status and Threats

Thermopsis californica var. argentata is indicated to possibly be threatened by trampling, road maintenance, and vehicles (CNPS 2020), but more recently it has become clear that it thrives in

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disturbance, often being found in many places where large amounts of disturbance have occurred.

Summary

Based on the available information, CNPS and CNDDB recommend deleting *Thermopsis* californica var. argentata from California Rare Plant Rank 4.3 of the CNPS Inventory and placing it on the Considered But Rejected list. *Thermopsis californica* var. argentata is abundant and has a positive response to disturbance, and no longer meets the criteria for limited distribution / watchlist status. If knowledge on the distribution, threats, and rarity status of *T. californica* var. argentata changes in the future, we will re-evaluate its status at that time.

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Recommended Actions

CNPS: Delete Thermopsis californica var. argentata from CRPR 4.3

CNDDB: Delete *Thermopsis californica* var. argentata to G4T4 / S4 (change to G5T5 / S5)

Current CNPS Inventory Record

Thermopsis californica Wats. var. argentata (Greene) Chen & Turner silvery false lupine

Fabaceae

Synonyms: *Thermopsis argentata*, *Thermopsis macrophylla* var. *argentata* CRPR 4.3

Kern, Lassen, Los Angeles, Modoc, Santa Barbara, Shasta, Siskiyou, Ventura La Liebre Ranch (188C) 3411876, Lebec (189D) 3411877, Old Station (643B) 4012164, Whitmore (645B) 4012168, Murken Bench (661C) 4012174, Jellico (661D) 4012173, Cassel (662A) 4012185, Burney (662B) 4012186, Burney Mtn. West (662C) 4012176, Roaring Creek (663B) 4012188, Montgomery Creek (663C) 4012178, Lookout (677B) 4112122, Bieber (677C) 4112112, Burney Falls (679C) 4112116, Dana (679D) 4112115, Crank Mountain (694B) 4112142, Hollenbeck (695A) 4112143, Whitehorse (695C) 4112134, Egg Lake (695D) 4112133, Double Head Mtn. (728C) 4112172

Cismontane woodland, lower montane coniferous forest, pinyon and juniper woodland; elevation 665-2335 meters.

Perennial rhizomatous herb. Blooms April to October.

Possibly threatened by trampling, road maintenance, and vehicles. See *T. macrophylla* var. argentata in *TJM* (1993). See *Erythea* 3:18 (1895) for original description and *Annals of the Missouri Botanical Garden* 81(4):719 (1994) for revised nomenclature.

Revised CNPS Inventory Record

Thermopsis californica Wats. var. *argentata* (Greene) Chen & Turner Changed from 4.3 to CBR on 2020/MM/DD

Considered But Rejected: More common than originally known. Responds well to disturbance.

Literature Cited

[CNPS] California Native Plant Society, Rare Plant Program. 2020. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website http://www.rareplants.cnps.org [accessed 28 May 2020].

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Smith, J. P., Jr., R. J. Cole, and J. O. Sawyer, Jr. 1980. Inventory of Rare and Endangered Vascular Plants of California. Special Publication No. 1 (2nd Edition). California Native Plant Society, Berkeley. 115 pp.

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Personal Communications

Guenther, Heidi. 2020. Botanist, Modoc National Forest. Email correspondence regarding conservation status of *Thermopsis californica* var. *argentata*.

Hillaire, Samantha. 2020. GANDA / Garcia and Associates. Email correspondence regarding conservation status of *Thermopsis californica* var. *argentata*.

Kierstead, Julie. 2020. Botanist, Shasta-Trinity National Forest (retired). Email correspondence regarding conservation status of *Thermopsis californica* var. *argentata*.

Lenz, Martin. 2020. Botanist, Shasta-Trinity National Forest. Email correspondence regarding conservation status of *Thermopsis californica* var. *argentata*.

Sanger, Allison. 2020. Botanist, Lassen National Forest. Email correspondence regarding conservation status of *Thermopsis californica* var. *argentata*.

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