Rare Plant Status Review: *Boechera tularensis*
Proposed New Add to Rank 1B.2 3, G2 / S2
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Changes made to original document appear in blue text.

Background

*Boechera tularensis* is a perennial herb in the Brassicaceae known from the high southern Sierra’s. It is included in the *Flora of North America* (Volume 7), and will be included in *The Jepson Manual, Second Edition* (available online at: http://ucjeps.berkeley.edu/tjm2/review/treatments/brassicaceae_all.html#85439). *Boechera tularensis* was previously identified as *Arabis holboellii* var. *retrofracta* (*Boechera retrofracta*) or var. *pinetorum* (*Boechera pinetorum*). Windham and Al-Shehbaz (2007) propose that *B. tularensis* is an apomictic triploid species that clearly shares *retrofracta* and *rectissima* genomes with *B. pinetorum*, along with a third genome derived from *B. stricta*. *Boechera tularensis* differs from the sexual diploid *B. retrofracta* and apomictic triploid *B. pinetorum* by having proximally pubescent stems with subsessile, 2-rayed trichomes and longer, subbiseriate seeds. It also differs from *B. retrofracta* by having pubescent basal leaves with larger, less-branched trichomes and descending to reflexed fruits that are not appressed at maturity; and differs from *B. pinetorum* in having pubescent leaves with subsessile trichomes, glabrous fruiting pedicels, and wider fruits. *Boechera tularensis* is known to flower from June to July.

*Boechera tularensis* occurs along rocky slopes of upper montane and subalpine coniferous forest. It grows at an approximate elevation of 1,825 to 3,350 meters.

*Boechera tularensis* is known from approximately 28 occurrences in the southeastern Sierra Nevada’s; mostly within Fresno and Tulare counties. It was last documented in July of 1996 in the Kings River Basin, Fresno County (*Dana York 1157 CAS1031754*), and all other known records are historic (occurrences that have not been “seen” in the past 20 years are considered historic by the CNDDB). One collection near Emerald Bay, Lake Tahoe, from 1930 (*Wiggins 5077 DS191872*) represents a disjunct northern occurrence, however, the area has intact habitat in State Parks that is underlain by granitic rocks, and the occurrence should not be considered extirpated (D. Taylor pers. comm. 2011) that may be extirpated. Future surveys throughout the known range of *B. tularensis* should be conducted in attempts to update historic records, in addition to potentially discovering new populations.

Threats to *Boechera tularensis* are unknown.
Recommended Actions
CNPS: Add to CNPS 1B.2 3
CNDDDB: Add to CNDDDB G2 / S2

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

Draft CNPS Inventory Record

*Boechera tularensis* Windham & Al-Shehbaz
Tulare rockcress
Brassicaceae
Rank 1B.2 3
El Dorado(?), Fresno, Inyo, Madera, Mariposa, Mono, Tulare
Courtright Reservoir (395C) 3711818, Dogtooth Peak (396A) 3711921, El Capitan (437B) 3711966, Emerald Bay (523A) 3812081(?), Half Dome (437A) 3711965, Kern Peak (330D) 3611833, Lundy (470C) 3811912, Mineral King (331A) 3611845, Monache Mountain (306B) 3611822, Mt. Abbot (415A) 3711847, Mt. Darwin (394B) 3711826, Slide Bluffs (374B) 3611886, Templeton Mtn. (329C) 3611832
Subalpine coniferous forest, Upper montane coniferous forest/Rocky slopes; elevation 1825 to 3350 meters.