

**Kept as 1B.2 (var. *asterophora*) and 1B.1 (var. *macrocarpa*) in the CNPS Inventory on March 7, 2013**

**Rare Plant Status Review:**

***Draba asterophora* var. *asterophora* and var. *macrocarpa***

**Proposal to keep at 1B.2, G2T2 / S2 and 1B.1, G2T1 / S1, respectively**

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**Background**

*Draba asterophora* vars. *asterophora* and *macrocarpa* were both added to the CNPS *Inventory*, 1<sup>st</sup> Edition in 1974. They are currently included on California Rare Plant Rank 1B.2 and 1B.1 of the *Inventory*, respectively. The species was divided into varieties based on differences in style and silicle morphology. *Draba asterophora* var. *asterophora* has styles that are slightly shorter (0.5-1mm vs. 1-2 mm) and silicles that are slightly shorter (5-10 mm vs. 10-15 mm) than *D. asterophora* var. *macrocarpa* (Hitchcock 1941, *The Jepson Manual* 1993). The new treatments in *The Jepson Manual*, Second Edition (*TJM 2*; available online at [http://ucjeps.berkeley.edu/cgi-bin/get\\_IJM.pl?tid=23307](http://ucjeps.berkeley.edu/cgi-bin/get_IJM.pl?tid=23307)) and the *Flora of North America Vol. 7 (FNA)*; available online at [http://www.efloras.org/florataxon.aspx?flora\\_id=1&taxon\\_id=250094714](http://www.efloras.org/florataxon.aspx?flora_id=1&taxon_id=250094714)) both do not recognize the varieties within the species. The reason behind the lumping is that the minor morphological differences “do not appear to define genetically discrete taxa” (*FNA*). More recent work by Dr. L. Allphin and her graduate student, however, supports the recognition of three taxa, based on genetic, chromosome, and ecological data. The new circumscription will place the typical variety only at Mt. Rose (Nevada), var. *macrocarpa* only in the Ralston Peak Area (El Dorado County), and another variety (currently undescribed, but treated as var. *asterophora* in the CNPS *Inventory*) in the vicinity of Heavenly Ski Resort and in several disjunct locations to the south (L. Allphin pers. comm. 2012).

The taxonomic work done by Dr. Allphin and her graduate student has not yet been published, so this taxonomy cannot yet be adopted by CNPS and CNDDDB. However, until it is published, CNPS and CNDDDB, and L. Allphin (pers. comm. 2012) recommend continuing to recognize both var. *asterophora* and var. *macrocarpa* separately. When more work on the taxonomy of this group becomes available, CNPS and CNDDDB will evaluate their status at that time.

**Recommended actions:**

*Draba asterophora* var. *asterophora*

CNPS: Keep at 1B.2

CNDDDB: Keep at G2T2 / S2

*Draba asterophora* var. *macrocarpa*

CNPS: Keep at 1B.1

CNDDDB: Keep at G2T1 / S1

### Revised CNPS Inventory Records

*Draba asterophora* var. *asterophora*

Brassicaceae

Tahoe draba

Rank 1B.2

Alpine, El Dorado, Mono, Tuolumne

Nevada

Mount Dana (453B) 37119H2, Lost Cannon Peak (489A) 38119D5, Disaster Peak (489B) 38119D6, South Lake Tahoe (522B) 38119H8, Freel Peak (522C) 38119G8, Woodfords (522D) 38119G7

Alpine boulder and rock field, Subalpine coniferous forest; Elevation 2500 – 3505 meters.

Perennial herb. Blooms July to September.

Threatened by development and recreational activities. On watch list in NV. Possibly distinct from NV plants; needs further study. A synonym of *D. asterophora* in *TJM 2*.

See *American Journal of Botany* 4:263 (1917) for original description.

(Available online at [www.rareplants.cnps.org/detail/574.html](http://www.rareplants.cnps.org/detail/574.html))

*Draba asterophora* var. *macrocarpa*

Brassicaceae

Cup Lake draba

Rank 1B.1

El Dorado

Echo Lake (523D) 38120G1

Subalpine coniferous forest / rocky; Elevation 2500-2815 meters

Perennial herb. Blooms July to September.

Known from only near Cup Lake and Saucer Lake below Ralston Pk. Potentially threatened by foot traffic. A synonym of *D. asterophora* in *TJM 2*. See *Proceedings of the Biological Society of Washington* 11:64 (1941) for original description.

(Available online at <http://www.rareplants.cnps.org/detail/575.html>)

### Literature Cited

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Sent to SN, T. Stoughton, J. Whittall, S. Richardson, R. O'Dell, I. Al-Shehbaz, L. Allphin on 01/23/2013