

Added to California Rare Plant Rank 2B.1 on October 10, 2014

**Rare Plant Status Review: *Pohlia flexuosa*
Addition to California Rare Plant Rank 2B.1, G5 / S1**

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Background

Pohlia flexuosa is one of 29 bryophytes that are being proposed for addition to the CNPS Inventory and CNDDDB based on decisions made at one to three California Bryophyte Working Group (CBWG) meetings held on January 18, 2010, January 28, 2013, and January 30, 2014. The CBWG is a committee of bryology experts that are familiar with the taxonomic, rarity, and/or conservation status of bryophytes in California. If you are interested in joining and/or learning more about this group, please contact the first author at asims@cnps.org or (916) 324-3816.

Pohlia flexuosa is a gemmiferous moss in the Mielichhoferiaceae that is common to central and eastern Asia, as well as western Europe, and only recently known from North America. It was first discovered in California by David Toren in September of 2006, and is currently only known from a single occurrence in the state, from Yuba County. There are five other gemmiferous *Pohlia* species in California, and they are readily distinguishable by gametophore characteristics, axillary gemmae taxonomy, and distinct ecological ranges. Among other characteristics, *Pohlia flexuosa* differs from *P. drummondii* in having gemmae born in clusters in the upper leaf axis (versus singly); from *P. tundrae* and *P. prolifera* in having dull (versus shiny) leaves when dry; and from *P. annotina* and *P. camptotrachela* in having gemmae of two types (Shaw and Toren 2009).

In California, *P. flexuosa* occurs along a shaded roadbank in intermittently seepy to damp soil and in soil over rock. Based on the locality and review of aerial images (Google Earth 2014), it is presumably located within lower montane coniferous forest. *Pohlia flexuosa* is known from an approximate elevation of 950 to 1025 meters in California. (An elevation of 950 meters was given on collection labels, and an elevation of approximately 1027 meters was given on Google Earth 2014 based on the UTM coordinates on labels. Therefore, the following range of 950 to 1025 meters in elevation is given.)

Although it has been eight years since *Pohlia flexuosa* was first discovered in California, it is still only known from a single occurrence in the state; located “about 2 miles east of Strawberry Valley along Forest Road 35 at the east side of Slate Creek Bridge” in Yuba County (Toren 9496, 9544A; CAS, DUKE, NY). The current status of its occurrence in California is unknown, however, since it was last seen in 2007 the occurrence is not considered historical by the CNDDDB (occurrences not seen in the past 20 years are considered historical by the CNDDDB). The population lies near the border of Plumas National Forest.

Threats to *P. flexuosa* are unknown. Due to its location on an old roadcut, road maintenance and/or widening could pose a threat if it were to occur. Furthermore, since

it is only known from a single occurrence, stochastic events potentially threaten this population.

Based on the available information, CNPS and CNDDDB recommend adding *Pohlia flexuosa* to California Rare Plant Rank (CRPR) 2B.1 of the CNPS Inventory. If additional information becomes available on the distribution, threats, and/or rarity status of this species, CNPS and CNDDDB will re-evaluate its status at that time.

Actions

CNPS: Added to 2B.1

CNDDDB: Added to G5 / S1

CNPS Inventory Record

Pohlia flexuosa Hook.

flexuose threadmoss

Mielichhoferiaceae

CRPR 2B.1

Yuba

Strawberry Valley (574D) 3912151

lower montane coniferous forest; roadsides, rocky seeps; elevation 950 to 1025 meters
moss

Discovered in CA in 2006 by D. Toren. See *Icones Plantarum* 1(1): pl.19, f.5 (1837) for original description, and *The Bryologist* 112(1):178-183 (2009) for information on discovery in California.

Literature Cited

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NatureServe. 2014. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. NatureServe, Arlington, Virginia. Website <http://www.natureserve.org/explorer> [accessed 28 January 2014].

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