Added to California Rare Plant Rank 4.2 in the CNPS Inventory on May 13, 2014

Rare Plant Status Review: Coscinodon arctolimnius subsp. higuchi Addition to California Rare Plant Rank 4.2, GNR / S1S3

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Background

Coscinodon arctolimnius subsp. higuchi is one of 29 bryophytes that are being added to the CNPS Inventory and CNDDB 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.

Coscinodon arctolimnius subsp. higuchi is a dark, black-green moss in the Grimmiaceae that was previously only known from Pakistan and Mongolia. It was recently discovered in California from a single occurrence in the Emigrant Wilderness of Stanislaus National Forest, Tuolumne County (Hutten 15719, CAS). "Coscinodon arctolimnius is separated from other North American Coscinodon by its green-black color, cucullate leaf apex (incurved if awned), and by the absence of a peristome" (Hastings 2007).

In California it was found in mostly exposed rocky habitat above the timberline, with a few individuals in moist and sheltered habitats. The rock type it occurs on is metamorphic, including limestone and heavy metals. It occurs at an approximate elevation of 2,935 meters in California.

Based on the recent discovery of *C. arctolimnius* subsp. *higuchi* in California there is a high potential for additional occurrences to be discovered, and we are therefore tentatively giving it a California Rare Plant Rank of 4 until additional information can be obtained. Although current threats are unknown, we are providing a threat rank of .2 due to its single known occurrence.

Actions

CNPS: Added to 4.2

CNDDB: Added to GNR / S1S3

CNPS Inventory Record

Coscinodon arctolimnius (Steere) Steere subsp. higuchi Hastings & Deguchi Higuchi's sieve-tooth moss Grimmiaceae CRPR 4.2 Tuolumne

Tower Peak (472A) 3811925

Alpine boulder and rock field / rocky, usually dry and exposed; elevation 2,935 meters. Moss

Discovered in California by M. Hutten in 2011; known only from near Snow Lake in the Emigrant Wilderness. See *The Bryologist* 100(1):50-55 (1997) for original description.

Literature Cited

Hastings, R.I. 2007. *Coscinodon arctolimnius*. Pp. (online) in Flora of North America North Editorial Committee (eds.), Flora of North America North of Mexico, Vol. 27: Bryophytes: Mosses, Part 1. Oxford University Press.

Hastings, R.I. and H. Deguchi. 1997. Taxonomy of *Coscinodon arctolimnius* (Bryopsida, Grimmiaceae) including a new subspecies from Asia. The Bryologist 100(1): 50-55. (original description)