Changed to California Rare Plant Rank 2.2 on February 25, 2013

Rare Plant Status Review: *Moneses uniflora* Proposed Rank Change from 4.3, G5 / S3.3 to 2.2, G5 / S2 Danny Slakey (CNPS), Aaron Sims (CNPS) and Roxanne Bittman (CNDDB) January 10, 2013

Changes made to the original document appear in blue text.

Background

Moneses uniflora is a perennial herb in the Ericaceae that is currently on California Rare Plant Rank (CRPR) 4.3. It has been included in the CNPS Inventory since 2001 (6th Edition), and is recognized in *The Jepson Manual* (*TJM* 1993), *The Jepson Manual*, *Second Edition* (*TJM* 2; available online at http://ucjeps.berkeley.edu/cgibin/get_IJM.pl?tid=33957), and the *Flora of North America*, Vol. 8 (*FNA*; available online at http://www.efloras.org/florataxon.aspx?flora_id=1&taxon_id=200016134). Globally, it is a common plant of circumboreal distribution, but it reaches its southern limit on the Pacific Coast in California. When it was considered for inclusion in the 6th Edition of the CNPS Inventory only a few botanists were consulted, likely due to time constraints. Leppig (pers. comm. 1999) noted that he was aware of two occurrences (one herbarium specimen and one personal observation), and suggested that it may warrant inclusion on CRPR 4 of the Inventory. Several other botanists noted that they were not aware of occurrences in their respective regions. The decision to include *M. uniflora* on CRPR 4 appears to have been made on the basis of limited information.

Records and personal observations of *M. uniflora* in California indicate that it is far more restricted within the state than is indicated by its CRPR 4 status. There are currently approximately nine known occurrences of *M. uniflora*, from Humboldt, Del Norte and Siskiyou counties. No specimens of this plant are known to have been collected in California since 1973 (Consortium of California Herbaria, CCH 2012). Extensive surveys by several botanists from the north coast region have only resulted in two additional occurrences in Humboldt County (observed on unknown dates, but presumably within the past 20 years) (T. LaBanca, C. Sanville, C. Golec pers. comms. 2012; J. Barret pers. comm. 2013). Surveys to relocate several historical occurrences were conducted by J. Barrett (pers. comm. 2013) in 2011 and 2012, but were unsuccessful, so those occurrences may have been extirpated (EO #4 and 5; see attached "Locations_MonesesUniflora" spreadsheet). Leppig (pers. comm. 1999) has also observed an occurrence at an unknown location in Siskiyou County. Given the somewhat vague location data of the historical occurrences, it is possible that a few collections may have been taken from the same occurrence (which would result in a total of seven or eight occurrences). Current surveys are needed, as at least seven of the nine occurrences are historical (not documented in the past 20 years). Six of the nine occurrences may be protected due to their inclusion in parks of Humboldt County (Humboldt Lagoons State Park, Prairie Creek Redwoods State Park, and Redwoods National Park), but the paucity of recent sightings could be evidence that some

populations have declined. The showy nature of this plant would not suggest that it is highly under-collected or under-surveyed relative to its abundance.

In addition to records from the north coast and Siskiyou County, *TJM* 1993 and *TJM* 2 note that *M. uniflora* occurs in Fresno County. Treatment author E. Haber (pers. comm. 1990) also noted the occurrence in Fresno County in 1990, but no details were provided. Now, E. Haber (pers. comm. 2012) no longer has records of the information used for his *TJM* 1993 treatment. Weeden (1996) also noted *M. uniflora* from Fresno County (below 3,500 feet in elevation), possibly based on the *TJM* 1993 account. We consulted with many botanists who are experienced in the flora of the central to southern Sierra Nevada (J. Clines, F. Linton, A. Colwell, S. Haultain, D.W. Taylor, D. York, J. Shevock pers. comms. 2012), and none had ever seen the plant in that region. Several botanists (A. Colwell, J. Clines, J. Shevock pers. comms. 2012) suggested that the Fresno County record may have been based on a misidentification of a similar-looking plant, such as *Chimaphila menziesii* or *Orthilia secunda*. Unless the occurrence of *M. uniflora* in Fresno County is substantiated with better documentation, CNPS and CNDDB recommend not recognizing it.

Based on the available information, CNPS and CNDDB recommend re-ranking *Moneses uniflora* from CRPR 4.3 to 2.2. If current records in California are later found to be an under-representation of its actual distribution and frequency, CNPS and CNDDB will re-evaluate it at that time.

Recommended Actions

CNPS: Re-rank from 4.3 to 2.2 CNDDB: Re-rank from G5 / S3.3 to G5 / S2

Revised CNPS Inventory Record

Moneses uniflora (L.) Gray woodnymph Ericaceae **CRPR 2.2** Del Norte, Humboldt, Siskiyou Alaska, Arizona, Colorado, Connecticut, Idaho, Maine, Michigan, Minnesota, Montana, Nevada, New Hampshire, New Mexico, New York, Ohio, Oregon, Pennsylvania, Rhode Island, South Dakota, Utah, Vermont, Washington, Wisconsin, Wyoming Rodgers Peak (689A) 4112421, City of Mount Shasta (699D) 4112233, Fern Canyon (706A) 4112441, Orick (706D) 4112431, Crescent City (740C) 4112472, Shelly Creek (739A) 4112387, Hurdygurdy Butte (739D) 4112377 Broadleaf upland forest, North Coast coniferous forest; elevation 100-1100 meters. Perennial rhizomatous herb. Blooms May – August. Previously on List 4.3; rarer than previously thought. Many occurrences historical; need field surveys. Potentially threatened by trail maintenance and logging. See Species Plantarum 1:397 (1753) for original description and A Manual of the Botany of the Northern United States, p. 273 (1848) for taxonomic treatment.

Literature Cited

Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, D.H. Wilken. 2012. *The Jepson Manual: Vascular Plants of California, Second Edition (TJM 2)*. University of California Press, Berkeley, CA.

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Linnaeus, C. 1753. Species Plantarum 1: 397. (original description)

Weeden, N.E. 1996. A Sierra Nevada Flora (4th Ed.). Wilderness Press, Berkeley, CA.