## Element Code: PMORC1X050 Added to CNPS List 1B.2 on 10/1/07

## Rare Plant Status Review: *Piperia candida* Kristi Lazar (CNPS) and Roxanne Bittman (CNDDB) August 14, 2007 Information in blue text has been added since the first status review was sent out.

*Piperia candida* is a perennial herb in the Orchidaceae that is currently on CNPS List 4. *P. candida* was first described by Randy Morgan and Jim Ackerman in 1990 and the species was subsequently placed on CNPS List 4 in the 5<sup>th</sup> edition CNPS Inventory (1994). The Consortium of CA Herbaria has 11 specimens of *P. candida* listed with the most recent specimen from 1966. However, CNPS received a list of herbarium specimens and observations of this plant by Randy Morgan in 1996 which significantly increased the number of occurrences this plant was known from. Many field survey forms have also been submitted for *P. candida* in the 13 years since it was first placed on a CNPS list. Currently, CNPS and CNDDB know of approximately 50 occurrences of this plant from Santa Cruz, San Mateo, Sonoma, Mendocino, Humboldt, Trinity, Del Norte, and Siskiyou Counties. This plant also occurs in Oregon; however, documented occurrences north of Oregon have (so far) all turned out to be light-flowered forms of *P. unalascensis* (pers comm. Bob Lauri).

*P. candida* was nominated for an upgrade in status by Clare Golec, who is concerned that this species is being heavily impacted by logging. She has frequently surveyed commercial timberlands and has seen *P. candida* very rarely and not in large numbers. Jim Ackerman and Randy Morgan are the authors for the *Piperia* treatment in the *Flora of North America* and in the new edition of *The Jepson Manual*. Jim Ackerman mentions that List 4 seems appropriate for *P. candida*. Randy Morgan mentions that while he has not done much orchid work in California since 1994, he was "in Trinity County in 2006 and *P. candida* was as well represented as ever." Randy Morgan also mentions that he does "know that, like many orchids, its numbers can vary greatly from year to year even in the same area, and also it is probably impacted by droughts such as we have been experiencing the last ten years or so. [His] feelings are that maintaining it as uncommon is appropriate."

Bob Lauri is studying *Pipera* for his PhD at Rancho Santa Ana and thinks that *P. candida* should be upgraded from uncommon to rare. He mentions that "in the south, the *P. candida* populations have not been seen at the type locality in Santa Cruz County and also in Big Basin in over 7 years." He also mentions that he has "not been able to document *P. candida* from Del Norte County. This year was a bad orchid year and the limited spring rainfall didn't allow any of the *P. candida* populations that [he] visited previously to bloom." While he notes that it has not been seen in Big Basin in over 7 years, there is an observation of this plant from Big Basin on the CalPhotos website from 2002.

Due to the discrepancies in expert opinions, CNPS and CNDDB are not currently making a recommendation and would like you to state whether you think *P. candida* should remain on List 4 or be upgraded in status to List 1B. *P. candida* is known from 50 occurrences in 8 counties and requires review for an upgrade in status in the CNPS Inventory and CNDDB.

## **Recommended Actions**

CNPS: Change from CNPS List 4.3 to CNPS List 1B.2.

**CNDDB:** Keep on CNDDB G3G4 S3.3. Change threat rank to 0.2.

## Revised CNPS *Inventory* record:

*Piperia candida* Morgan and Ackerman "white-flowered rein orchid" Orchidaceae List 1B.2

Del Norte, Humboldt, Mendocino, San Mateo, Santa Cruz, Sonoma, Trinity; Oregon

408A? [Castle Rock Ridge/3712221], 408B [Big Basin/3712222], 428C [Mindego Hill/3712232], 514C [Philo/3912314], 519D [Cazadero/3812351], 568D [Comptche/3912335], 583B [Laytonville/3912364], 584D [Sherwood Peak/3912355], 598C [Covelo East/3912372], 600B [Noble Butte/3912386], 601A [Piercy/3912387], 618A [Honeydew/4012421], 633A [Naufus Creek/4012343], 633D [Forest Glen/4012333], 635C [Weott/4012338], 651C [Hyampom/4012354], 667B? [Siligo Peak/4012288], 668B [Thurston Peaks/4012382], 670A [Salyer/4012385], 671A [Lord-Ellis Summit/4012387], 687B [Weitchpec/4112326], 688A [French Camp Ridge/4112327], 688D (\*?) [Hupa Mtn/4112317], 689C [Trinidad/4112412], 689D [Crannell/4112411], 702C [Sawyers Bar/4112332], 703B [Somes Bar/4112372], 738B [Broken Rib Mtn./4112386], 739A [Shelly Creek Ridge/4112387], 739B [High Plateau Mtn./4112388], 739D [Hurdygurdy Butte/4112377]

Lower montane coniferous forest, North Coast coniferous forest, broadleafed upland forest (sometimes serpentinite); elevation 0-1200 meters.

Herb (perennial), blooms May-August (September).

Threatened by logging. Difficult to identify from herbarium material. See *Lindleyana* 5(4):205-211 (1990) for original description, and *The Wild Orchids of California*, p. 109-110 (1995) by R. Coleman for species account.