Element Code: PDPLM02090 Added to CNPS List 1B.2 on 2009-04-30

Rare Plant Status Review: *Juncus Iuciensis*Proposed New Add to 4.2 (or List 1B.2)

Nicholas Jensen (CNPS) and Roxanne Bittman (CNDDB) March 16, 2009

Changes made since the original status review appear in blue.

Background

Juncus luciensis is an endemic, herbaceous annual in the Juncaceae. It was included in *The Jepson Manual* (1993), *The Flora of North America* (Vol.22), and will be included in *The Jepson Manual*, 2nd Edition. It is distinguished from other annual species of *Juncus* based on its overall size, and fruit and floral characteristics. *J. luciensis* flowers between April and July.

In California, *J. luciensis* grows in vernal pool, ephemeral drainage, meadow, and streamside habitats within a number of broader habitat types including lower montane coniferous forest, Great Basin scrub, and chaparral from approximately 300 to 2040 meters in elevation. It is frequently found on sandy soils.

J. luciensis is known approximately 26 29 occurrences in 10 counties ranging from San Diego County in the south to Shasta County in the north. Counties where J. luciensis has been documented include Lassen, Modoc, Monterey, Nevada, Plumas, Riverside, San Benito, San Diego, Santa Barbara, and Shasta Counties. Suitable habitat with and beyond the known range of J. luciensis should be searched for additional occurrences.

There are no known threats to occurrences of *J. luciensis*. The population size, population trends, area of occupancy, and land ownership at occurrences of *J. luciensis* is not well known.

J. luciensis occurs over a relatively large range (19 quads in 10 counties spanning nearly the entire length of the state). According to Dean Taylor (pers. comm. 2008), "rarity is a synthetic function, and the CNPS list should seek to encapsulate two factors: probability of encounter, and vulnerability...Of the two factors: probability of encounter, I take the number of recent collections to indicate that the probability of encounter for J. luciensis is extremely low, even though most known vouchers are new. Of vulnerability, no doubt most documented sites are single small and isolated vernally saturated wetland(s) and hence are just a few bulldozer-minutes away from potential extirpation." Furthermore, Barbara Ertter (pers. comm. 2008) states that J. luciensis "is an odd case. It is not common, but keeps popping up in surprising new localities. Of course, that whole complex (of annual Juncus) is easily overlooked, but I don't think that is the only factor behind the sparse but widespread known distribution."

Based on the available information, we conclude that it is appropriate to add *J. luciensis* in the CNPS Inventory. On one hand, if we are to look solely at the number of known occurrences, placement on List 1B.2 may seem appropriate.

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On the other hand the sparse but widespread distribution of *J. luciensis*, the lack of documented threats, and the apparent availability of abundant suitable habitat makes a case for placement on List 4.2.

Recommended Actions

CNPS: Add to CNPS List 1B.2 CNDDB: Add to CNDDB as G3 / S3

Please review the draft CNPS Inventory record below, respond Yes or No on the proposal to add this species to the Inventory and CNDDB, and provide any edits/comments. If responding No, please provide supporting information.

Draft CNPS Inventory Record

Juncus luciensis Ertter Santa Lucia dwarf rush Juncaceae List 1B.2

Lassen, Modoc, Monterey, Nevada, Plumas, Riverside, San Benito, San Diego, Santa Barbara, Shasta

Janesville 622D (4012035), Egg Lake 695D (4112133), Cone Peak 319C (3612114), Martis Peak 554D (3912031), Norden 555D (3912033), Crocker Mtn 587B (3912074), Grizzly Valley 588A (3912075), Murrieta 068C (3311752), Wildomar 069D (3311753), Mount Johnson 364D (3612153), Cuyamaca Peak 020A (3211675), Adelaida 270A (3512067), Creston 269D (3512055), San Marcos Pass 168D (3411957), Jacks Backbone 644B (4012166), Big Pine Mth 167B (3411966), Frenchman Lake 586B (3912082), Dixie Mountain 587A (3912083), Johnsville 588C (3912076), Jolon 295B (3512182)

Vernal pools, meadows, lower montane coniferous forest, chaparral, Great Basin scrub. 300-2040 meters

Annual herb. Blooms April-July.