Rare Plant Status Review: *Juncus nevadensis* var. *inventus* Proposed New Add to List 2.2

Nicholas Jensen (CNPS) and Roxanne Bittman (CNDDB) March 18, 2009 Changes made since the original status review are in blue.

Background

Juncus nevadensis var. *inventus* is an herbaceous, rhizomatous perennial in the Juncaceae. *J. nevadensis* var. *inventus* is not recognized in *The Flora of North America* (the treatment does not recognize infraspecific taxa for *J. nevadensis*), but will be included as native to California in *The Jepson Manual*, 2nd Edition (Peter Zika, pers. comm. 2009). According to Peter Zika (pers. comm. 2009), "the coastal plants (of *J. nevadensis*), from Washington to California, always have anthers about equal to the filaments, or shorter. This is a character state I cannot find on interior plants. So I am confident this is a valid variety, with unique morphological character and allopatric range...Other authors should not have lumped var. *inventus*. They did because the Hitchcock floras...emphasized a more ambiguous character to separate the coastal plants, the number of flowering heads." *J. nevadensis* is separated from similar species, including *J. mertensianus* and *J. duranii*, based on inflorescence, fruit, and floral characteristics. *J. nevadensis* var. *inventus* flowers between July and November.

In California, *J.* nevadensis var. *inventus* is found in a "sea-level peatland" habitat at approximately 2-6 meters in elevation (Peter Zika, pers. comm. 2009). Associated taxa are reported to include *Carex echinata*, *C. leptalea*, *C. viridula* var. *viridula* (CNPS List 2.3), *Lycopodiella inundata* (CNPS List 2.2), *Spiraea douglasii*, *Potentilla palustris*, and *Sphagnum* sp.

J. nevadensis var. *inventus* is known from a single occurrence in the southwest corner of Big Lagoon near Trinidad in Humboldt County. According to Peter Zika (pers. comm. 2009) *J. nevadensis* var. *inventus*, "is common in interdunal swales and other coastal wetlands in Oregon, including adjacent Curry County, so it is not an unexpected species in northern California." It also occurs along the coast in southern Washington. *J. nevadensis* var. *inventus* is ranked as a G5T3T4 taxon by NatureServe. Suitable habitat along the northern California coast should be searched for additional occurrences of *J. nevadensis* var. *inventus*. The population size at the California location is not well known, but *J. nevadensis* var. *inventus* was reported to be uncommon at the site in 2007.

The California occurrence of *J. nevadensis* var. *inventus* is located in Big Lagoon State County Park. Threats to other CNPS-listed plants growing in similar habitats at Big Lagoon (as reported in CNDDB) include altered hydrology, sealevel changes, and invasive plants.

Based on this information CNPS and CNDDB recommend that *J. nevadensis* var. *inventus* be added to CNPS List 2.2.

Sent to NW, P. Zika, B. Ertter on 3/18/09

Recommended Actions

CNPS: Add to CNPS List 2.2 CNDDB: Add to CNDDB as G5T3T4 / S1

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 nevadensis S. Watson var. *inventus* (L.F. Henderson) C.F. Hitchcock Juncaceae List 2.2 Humboldt; Oregon, Washington Trinidad (689C) 4112412 Bogs and fens (BgFns). 0-10 meters. Perennial herb (rhizomatous), blooms July-November. Possibly threatened by alteration of hydrology and non-native plants.