Rare Plant Status Review: *Juncus sp. nov. "finger rush" Juncus digitatus* New Add to List 1B.1

Nicholas Jensen (CNPS) and Roxanne Bittman (CNDDB) August 26, 2008 Changes made since the original status review appear in blue.

Background

Juncus sp. nov. "finger rush" Juncus digitatus is an herbaceous annual in the Juncaceae endemic to northern California. Juncus sp. nov. "finger rush" Juncus digitatus was discovered by Carol Witham in Shasta County in May of 1992. This taxon is not in The Jepson Manual (1993). Juncus sp. nov. "finger rush" has been accepted for publication in the November/December 2008 issue of the Journal of the Botanical Research Institute of Texas (JBRIT 2(2)):775-781, 2008, and will be included in *The Jepson Manual* (2nd edition) (C. Witham, pers. comm. 2008). The specific epithet for this taxon will be provided following publication. Since it is CNPS policy not to officially list taxa until they are formally published, Juncus sp. nov. "finger rush" cannot be added to the Inventory at this time. If, however, reviewers decide that Juncus sp. nov. "finger rush" warrants inclusion in the CNPS Inventory, it will be added as soon as it is published (likely in November 2008). J. digitatus has now been officially published in J. Bot. Res. Inst. Texas 2(2): 775-781. 2008. Please see http://www.brit.org/fileadmin/Publications/JBotResInstTexas 2 2/775-781_Witham_Zika_Juncus_JBRIT2_2__03.pdf for the published description.

According to Carol Witham (pers. comm. 2008), *Juncus sp. nov. "finger rush" Juncus digitatus* "is unique in its genus with its *Lotus*-like clusters of capsules 11-17 mm long, and 3-4 times as long as the tepals. (It is) most closely related to Juncus triformis, which has capsules 1-3 mm long, generally not exceeding the tepals." *Juncus sp. nov. "finger rush" Juncus digitatus*" flowers between late May and early June.

Carol Witham (pers. comm. 2008) states that the habitat of *Juncus sp. nov. "finger rush" Juncus digitatus* is, "full sun, in the vernally damp ground of seeps, vernal pools and swales on gentle slopes over volcanic bedrock, at elevations of 660-790 m." Suitable habitat occurs within openings in lower montane coniferous forest (dominated by *Pinus ponderosa*) and cismontane woodland (dominated by *Quercus douglasii*) habitats. Associated species found growing with *Juncus sp. nov. "finger rush"* include *Allium amplectens, Centaurium venustum, Cyperus squarrosus, Deschampsia danthonioides, Epilobium pallidum, Eryngium articulatum, Isoetes nuttallii, Juncus bufonius, Juncus acuminatus, Mimulus guttatus, Muhlenbergia richardsonis, Navarretia intertexta, Odontostomum hartwegii, Polygonum bolanderi, and Trichostema laxum.*

Juncus sp. nov. "finger rush" Juncus digitatus is known from only two occurrences in Shasta County in the foothills of the Cascade Range at the northern edge of the Sacramento Valley.

Both occurrences of *Juncus sp. nov. "finger rush" Juncus digitatus* are found on private property and are threatened by habitat modification. One occurrence is threatened by ornamental rock mining, and the other is threatened by water diversion.

Based on our understanding of the rarity and threats to *Juncus sp. nov. "finger rush" Juncus digitatus* CNPS and CNDDB recommend that it be added to List 1B.1. As stated above, if reviewers decide that *Juncus sp. nov. "finger rush*"should be included in the CNPS Inventory, it will be added as soon as its name is officially published later this year.

Recommended Actions

CNPS: Add to CNPS List 1B.1 CNDDB: Add to CNDDB as G1 / 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 sp. nov. "finger rush" Juncus digitatus C. Witham & Zika finger rush List 1B.1 Shasta 627B, 646D Cismontane woodland (openings) lower montane coniferous forests (openings), vernal pools (xeric) / volcanic, rocky; elevations 600-800 meters. Annual herb, blooms May-June. Known from only two locations in Shasta County. Threatened by ornamental rock mining and water diversion. See J. Botanical Research Institute of Texas 2(2):775-781 (2008) for original description.