Rare Plant Status Review: *Cryptantha schoolcraftii*Proposed New Add to List 1B.2 or 2.2

Nicholas Jensen (CNPS) and Roxanne Bittman (CNDDB) November 10, 2009

Changes made since the original status review appear in blue.

Background

Cryptantha schoolcraftii is an herbaceous biennial (sometimes perennial) in the Boraginaceae. It was considered a synonym of *C. scoparia sobolifera* in the 1993 Jepson Manual even though it had not been documented in California at the time of publication. *C. schoolcraftii* was discovered in California near the Nevada border by Gary Schoolcraft in 1999. *C. schoolcraftii* will be treated as native to California in the 2nd Edition of the Jepson Manual (Ron Kelley, pers. comm. 2009). It is distinguished from similar species of *Cryptantha* based on growth habit, and leaf, inflorescence, and nutlet characteristics. *C. schoolcraftii* typically flowers between June and July (flowers may appear in late May), and nutlets are mature approximately 4-6 weeks after flowering (Jim Morefield, Conservation Status Report for *Cryptantha Schoolcraftii*, updated 2003)

In California, *C. schoolcraftii* grows in Great Basin scrub habitat from approximately 1615 to 1705 meters in elevation. Gary Schoolcraft (Field Survey Form submitted to the CNDDB in 1999) indicates that *C. schoolcraftii* is found on a, "steep, loose shale/ash slope with *Galium*, purple sage, *Senecio multilobatus*, and squirreltail."

In California, *C. schoolcraftii* is known from a single occurrence in Tuledad Canyon near the Nevada state line in eastern Lassen County. In Nevada, C. schoolcraftii is known from 85 occurrences in the northeastern part of the state (most occurrences are in Washoe County). According to Morefield (2003), "the most distant two extant occurrences are separated by about 49 miles (79 km), and the number of extant occurrences is reduced to 39 if a 1 km minimum separation distance is imposed. The total population size in Nevada is estimated at 20,200 individuals over 380 acres of habitat. In 1999, approximately 500 individuals were observed at the California occurrence.

C. schoolcraftii is raked as G3, S3 in Nevada, and it is included on the Nevada Native Plant Society's watch list (March 2008). It was designated a category-2 candidate for listing as endangered or threatened in 1988 and it a US Fish and Wildlife Service "species of concern."

There are no known threats to *C. schoolcraftii* in California. A primary concern in Nevada is that, "the open habitat of C. schoolcraftii is attractive to off road vehicle users." All known occurrences of *C. schoolcraftii* occur on federal lands, most of which are managed by the Bureau of Land Management.

C. schoolcraftii is a globally rare plant restricted to northwestern Nevada and adjacent northeastern California. The relatively high number of total occurrences (86) indicates that C. schoolcraftii may be too common for List 1B. However, its narrow geographic range and the level of threat from off-road vehicles indicate that List 1B may be appropriate. At this point in time we choose not to make a recommendation on a list designation for this taxon. Please indicate in your comments whether you favor adding C. schoolcraftii to List 1B.2 or List 2.2.

Recommended Actions

CNPS: Add to CNPS List 1B.2 or 2.2 CNDDB: Add to CNDDB as G3 / 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

Cryptantha schoolcraftii Tiehm
Schoolcraft's cryptantha
Boraginaceae
List 1B.2 or 2.2
Lassen; Nevada
Little Hat Mtn. (673D) 4112011
Great Basin scrub. 1615-1705 meters
Biennial (perennial) herb. Blooms June-July.
Known in California from only one occurrence. See Brittonia 38(2): 104-106 (1986) for original description.