## Rare Plant Status Review: *Eriastrum harwoodii*Nicholas Jensen (CNPS) and Roxanne Bittman (CNDDB) June 25, 2008

Text in blue constitutes changes made since the original status review.

## Background

Eriastrum harwoodii is an annual, herbaceous species in the Polemoniaceae. *E. harwoodii* is a new combination proposed by David Gowen in *Madroño* 55(1): 82-87 (2008). Although not included in the current Jepson Manual (1993), this taxon will be included in the upcoming 2nd edition. In the past, *E. harwoodii* was treated as an infraspecific taxon under *Gilia filifolia*, *E. diffusum*, and *E. sparsiflorum*. In *The Jepson Manual* (1993), *E. sparsiflorum* ssp. *harwoodii* was treated as a synonym of *E. sparsiflorum*. David Gowen (2008) states that *E. harwoodii*, "is elevated to species level because it is morphologically, ecologically, and geographically distinct," and will be included in *The Jepson Manual* (2<sup>nd</sup> edition). *E. harwoodii* is distinguished from closely related species based on its conspicuous wooliness, and straw yellow or whitish flowers with apiculate corolla lobes. *E. harwoodii* typically blooms from March to June May.

Jim Andre (pers. comm. 2008), has observed *E. harwoodii* in sparsely-vegetated areas, "on sand ramps, sandy flats, or semi-stable dunes, but not in shifting sand dunes, nor on sandy, alluvial soils." Associated species include *Pleuraphis rigida*, *Croton californica*, *Abronia villosa* var. *villosa*, *Phacelia ivesiana*, *Hesperocallis undulata*, *Cryptantha costata* (List 4.3), *Baileya pauciradiata*, and *Astragalus lentiginosus* var. *borreganus* (List 4.3). *E. harwoodii* grows from 200-915 meters in elevation.

*E. harwoodii* is known from a total of fewer than 40 20 occurrences worldwide. In California, *E. harwoodii* is known from approximately 6 10 locations in Riverside, San Bernardino, and San Diego counties. There is one known site of this species in Nevada. Since herbarium specimens are the main source for most of the known locations, many of the sites are vague. More detailed location information for most occurrences is needed to correctly map *E. harwoodii*. The population numbers at each of the *E. harwoodii* occurrences are not currently known.

At least one two occurrences in the Kelso Dunes/Devils Playground area is of *E. harwoodii* are located in the Mojave National Preserve, on land managed by the National Park Service. Another occurrence ("Blythe Junction") is on land managed by the Bureau of Land Management. The ownership of the other occurrences of *E. harwoodii* is not currently known. Attempts should be made to locate and accurately map historical occurrences of *E. harwoodii*. Areas of suitable habitat within, and beyond, the known range of this species should be searched for additional occurrences. Occurrences of *E. harwoodii* and its habitat are threatened non-native plants and off road vehicles, and possibly threatened by mining.

Based on the current information, CNPS and CNDDB recommend that *E. harwoodii* be added to List 1B.<del>3</del> 2.

## **Recommended Actions**

CNPS: Add to CNPS List 1B.<del>3</del> 2 CNDDB: Add to CNDDB as G2 / S2

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**

Eriastrum harwoodii (T.T. Craig) D. Gowen Polemoniaceae List 1B.<del>3</del> 2

Riverside, San Bernardino, San Diego; Nevada

Rice (097D) 3411417, Kelso Dunes (176B) 3411586, East of Granite Pass (098D) 3411511, Danby Lake (098A) 3411521, Cadiz Lake (125C) 3411534, Clarks Pass (100D) 3411515, New Dale (100C) 3411516, Dale Lake (100B) 3411526, Soda Lake North (203A) 3511621, Cadiz Lake NW (125B) 3411544, Clark Lake (047D) 3311633, Desert Hot Springs (083A) 3311685 Desert Dunes (DeDns)

Annual herb, blooms March-May (June); 200-915 meters Known from fewer than 40 20 occurrences. Threatened non-native plants and vehicles. Possibly threatened by mining. Not in The Jepson Manual (1993). See Madroño 55(1): 82-87 (2008) for original description. Bulletin of the Torrey Botanical Club 61: 345-409 (1934) for original description, and Madrono 55 (1):82-87 (2008) for revised taxonomic treatment.