Element Code: PDONA03020 Changed from List 4.3 to 2.2 on 2008-09-30

Rare Plant Status Review:

Camissonia arenaria

List change from List 4.3 to 2.3 2.2

Nicholas Jensen (CNPS) and Roxanne Bittman (CNDDB)

August 27, 2008

Changes made since the original status review appear in blue.

Camissonia arenaria is an annual, or occasionally perennial, herb in the Onagraceae. In California, *C. arenaria* occurs in sandy washes or rocky slopes in Sonoran desert scrub habitat from -70 to 915 meters in elevation. *C. arenaria* is distinguished from the similar *C. cardiophylla* based on hypanthium and sepal size (*C. arenaria* is generally larger), and inflorescence architecture. *C. arenaria* flowers between November and April. *C. arenaria* is included in *The Jepson Manual* (1993) and *The Jepson Desert Manual* (2002), and will be included in *The Jepson Manual* (2nd Edition).

In California, *C. arenaria* is known from approximately 9 occurrences (8 in Imperial County and 1 in Riverside County) (please see attached spreadsheet for location information). The report in the CNPS Inventory of this species from San Bernardino County is unsubstantiated, and likely an error (J. Andre, pers. comm. 2008). *C. arenaria* was last collected in California in 1976. Since historical herbarium specimen labels are the primary source of location information, additional field work is needed to accurately map this species.

Outside of California, *C. arenaria* is known from southwestern Arizona, and the state of Sonora in Mexico. NatureServe ranks *C. arenaria* as a G4 (Apparently Secure) taxon.

In California, there are no known threats to *C. arenaria*. Occurrences of *C. arenaria* are threatened by off road vehicles, and possibly by military activities proposed solar energy development projects. Suitable habitat within and beyond the known range *C. arenaria* should be searched for additional occurrences.

C. arenaria was a new addition to List 4.3 in the 6th (2001) Edition of the CNPS Inventory. Based on our current understanding of the distribution of *C. arenaria*, and its rarity in California, CNPS and CNDDB recommend that it be re-ranked from List 4.3 to List 2.3 2.2.

Recommended Action

CNPS: Re-rank from CNPS List 4.3 to List 2.3 2.2 CNDDB: Re-rank from CNDDB G4? S3.3 to G4?, S2

Sent to ES/D, W. Wagner on 8/27/08

Element Code: PDONA03020 Changed from List 4.3 to 2.2 on 2008-09-30

Revised CNPS *Inventory* record:

Camissonia arenaria (A. Nels.) Raven sand evening-primrose Onagraceae

List 2.3 2.2

Imperial, Riverside

Cibola (040C) 3311436, Palo Verde Peak (041D) 3311437, Lion Head Mtn. (043D) 3311533, Mt. Barrow (026B) 3311428, Pichaco SW (025C) 3311416, Chuckwalla Spring (042B) 3311542, Red Canyon (062C) 3311556 Sonoran desert scrub / rocky or sandy; elevation -70-915 meters. Herb (annual), blooms November-April.

Threatened by vehicles. Possibly threatened by military activities and solar energy development. Similar to *C. cardiophylla*. See *American Journal of Botany* 21(9):575 (1934) for original description, *Brittonia* 16(3):281 (1964) for revised nomenclature, and *Contributions from the U.S. National Herbarium* 37(5):236-237 (1969) for taxonomic treatment.