Rare Plant Status Review: *Eriogonum nudum var. psychicola*
Proposed New Add to List 1B.2 1, G5T1 S1
Nicholas Jensen (CNPS) and Roxanne Bittman (CNDDB)
April 21, 2010

Changes are in blue.

**Background**

*Eriogonum nudum var. psychicola* is an herbaceous perennial in the Polygonaceae endemic to a small area of Contra Costa County. It is described as a new taxon by James Reveal in *Phytologia* 89:287 (2007) (see http://www.phytologia.org/Phytologia%20PDFs/89%283%29pdfFiles/Reveal89%283%292987-289Eriogonum.pdf), and is included in *The Jepson Manual*, 2nd Edition (available online at http://ucjeps.berkeley.edu/tjm2/review/treatments/polygonaceae-fp-reveal.html#80051). According to Reveal (2007), *E. nudum var. psychicola* is “allied to those varieties of *Eriogonum nudum* in California that have leaves with rather strongly crisped leaf margins that sheath up a glabrous flowering stem,” and “may be recognized by its densely pubescent flowers.” *E. nudum var. psychicola* flowers between July and October.

*E. nudum var. psychicola* is only known from a single occurrence from the “Antioch sand dunes area east of Antioch and just south of the San Joaquin River in northern Contra Costa Co” (Reveal 2007). Suitable habitat within and beyond the known range of *E. nudum var. psychicola* should be searched for additional occurrences.

*E. nudum var. psychicola* is known from inland dune habitat within coastal grassland plant communities from approximately 3 to 20 meters in elevation. According to Reveal (2007) it grows in “association with an atypical form of *Lupinus albifrons* Benth., *Gutierrezia californica* (DC.) Torr. & A. Gray, *Quercus agrifolia* Née, several introduced invasive species (*Bromus diandrus* Roth, *Centaurea solstitialis* L., *Lactuca serriola* L.), and two federally protected plants, *Oenothera deltoides* Torr. & Frém. var. *howellii* Munz (Antioch Dunes evening primrose) and *Erysimum asperum* (Nutt.) DC. var. *angustatum* (Rydb.) B. Boivin (Contra Costa wallflower).” *E. nudum var. psychicola* is the primary host plant for the endangered Lange’s metalmark butterfly.

Historically, much of the habitat in the Antioch Dunes was impacted by industrial development and sand mining. The remaining habitat is located in the Antioch Dunes National Wildlife Area, managed by the U.S. Fish and Wildlife Service. *E. nudum var. psychicola* is possibly threatened by non-native plants.

Based on this information CNPS and CNDDB recommend that *E. nudum var. psychicola* be added to CNPS List 1B.1, G5T1 S1.

**Recommended Actions**

CNPS: Add to CNPS List 1B.1
CNDDB: Add to CNDDB as G5T1 / S1

Sent to CW, GV, J. Reveal on 4/21/10
Please review the draft CNPS Inventory record below, respond Yes or No on the proposal to add this species to the Inventory and CNDDDB, and provide any edits/comments. If responding No, please provide supporting information.

**Draft CNPS Inventory Record**

*Eriogonum nudum* Douglas ex Benth. var. *psychicola* Reveal  
“Antioch Dunes buckwheat”  
Polygonaceae  
List 1B.1  
Contra Costa  
Antioch North (481D) 3812121  
InDns; elevation 3-20 meters.  