

Adobe Navarretia (*Navarretia nigelliformis* ssp. *nigelliformis*)

Status

Federal: None
State: None
CNPS: List 1B

Population Trend

Global: Unknown
State: Unknown
Within Inventory Area: Unknown

Data Characterization

Location databases include 12 data records for adobe navarretia from 1898 to 2003 (CalFlora 2005; Lake 2004; California State University Chico 2002). Four of these occurrences were documented in the previous 10 years. All of the occurrences are of general precision and may not be accurately located.

Very little information is available for adobe navarretia. The literature on the species pertains primarily to its taxonomy. The main sources of general information on this species are the Jepson Manual (Hickman 1993) and the location data records.

Range

Adobe navarretia is reported to occur in the Sierra Nevada foothills, the Central Valley, and the inner South Coast Ranges, between 325 and 3,300 feet elevation (Hickman 1993).

Occurrences within the ECCC HCP/NCCP Inventory Area

Five occurrences of adobe navarretia have been documented in the inventory area since 1987. These occurrences are located in Cowell Ranch, Horse Valley, Sand Creek, Byron Hot Springs, and the Los Vaqueros watershed. Two of these occurrences (Cowell Ranch and Los Vaqueros Watershed) are on public lands (Contra Costa Water District and East Bay Regional Park District).

Biology

Physical Description

Adobe navarretia is an annual herb that blooms in April and May (Munz 1959). The small flowers are yellow with brown spots below the petal lobes (Hickman 1993).

Habitat

Adobe navarretia occurs in heavy clay soils of vernal pools and other low, seasonally moist areas in grasslands (Hickman 1993). Adobe navarretia appears to be restricted to areas with a vernal moist, summer-dry hydrologic regime.

Species Associated with Adobe Navarretia

<i>Achyraea mollis</i>	blow-wives
<i>Bromus hordeaceus</i>	soft chess
<i>Deschampsia danthonioides</i>	Annual hairgrass
<i>Epilobium pygmaeum</i>	smooth spike-primrose
<i>Eryngium</i> sp.	coyote-thistle
<i>Gastridium ventricosum</i>	Nitgrass
<i>Hordeum marinum</i> ssp. <i>gussoneanum</i>	Mediterranean barley
<i>Juncus bufonius</i>	toad rush
<i>Plagiobothrys acanthocarpus</i>	adobe popcorn-flower
<i>Vulpia bromoides</i>	foxtail fescue

Threats

Specific threats to adobe navarretia are not known, although general threats to the species would be similar to those for other vernal pool species, including habitat conversion.

Species Distribution Model

No species distribution model could be developed for adobe navarretia because of a lack of data on the species' habitat requirements.

Literature Cited

- CalFlora: Information on California plants for education, research, and conservation. [Web application]. 2005. Berkeley, California: The CalFlora Database [a non-profit organization]. Available: <http://www.calflora.org/>.
- California State University, Chico, Biological Science Herbarium. 2002. Database. Available: <http://www.csuchico.edu/biol/Herb/database.html>.
- Ertter, B. 1997. *Annotated checklist of the East Bay Flora: Native and naturalized vascular plants of Alameda and Contra Costa Counties, California*. California Native Plant Society, East Bay Chapter, Special Publication No. 3. Berkeley, CA.
- Hickman, J. C. (ed.). 1993. *The Jepson Manual*. University of California Press, Berkeley, CA.
- Lake, D. 2004. *Rare, unusual and significant plants of Alameda and Contra Costa Counties*, Seventh Edition. California Native Plant Society, East Bay Chapter.
- Munz, P. A. 1959. *A California Flora*. University of California Press, Berkeley and Los Angeles.