Element Code: PDAST4R0N0 Kept on CNPS List 4.2; status review closed on 8/21/07

Rare Plant Status Review: Deinandra paniculata

Kristi Lazar (CNPS) and Roxanne Bittman (CNDDB) June 22, 2007

Information in blue text has been added since the original status review was sent out.

Deinandra paniculata is an annual herb in the Asteraceae that has been included on CNPS List 4.2 since the sixth edition of the CNPS *Inventory* (2001). *D. paniculata* is known from approximately 120 occurrences in California from Kern, Los Angeles, Monterey, Orange, Riverside, San Bernardino, San Diego, San Luis Obispo and Santa Barbara Counties. However, specimens reported from Kern, Los Angeles, Monterey, San Luis Obispo and Santa Barbara Counties are likely erroneous. Two specimens previously identified as *D. paniculata* from Kern and Monterey Counties were annotated by Lawrence Janeway to *D. pallida* and *D. corymbosa* ssp. *corymbosa*, respectively. Other specimens identified to *D. paniculata* from these counties should be looked at carefully as they are very likely mis-identifications.

If *D. paniculata* is only known from Orange, Riverside, San Bernardino, and San Diego Counties, then this means there are approximately 115 110-occurrences. *D. paniculata* is most common in western Riverside County with few occurrences in the other counties in which it occurs. It is also known from Baja California. While there are quite a few occurrences documented, many of these occurrences occur in heavily urbanized areas and many others are threatened by further development. However, there are also several occurrences that are on lands with varying levels of protection, such as Aliso-Woods Regional Park, Lake Skinner Park, Harford Springs County Park, Agua Tibia Wilderness Area, and Hidden Valley Wildlife Reserve.

Craig Reiser notes in his 2001 "Rare Plants of San Diego County" that some herbarium specimens that he examined were collected and identified prior to the taxonomic description of *D. conjugens*, which was first described in 1958. Reiser mentions that many specimens that were originally identified to *D. paniculata* at the San Diego Natural History Museum actually key to *D. conjugens*.

It should also be noted that plants from the South Coast Ranges and Baja California may warrant recognition as a distinct taxon; however, until further confirmation of this arises, CNPS and CNDDB will continue to recognize these plants as *D. paniculata*.

D. paniculata occurs most commonly in coastal scrub and grasslands; however it has also been known to occur in and around vernal pools. *D. paniculata* can be easily confused with *D. conjugens* and *D. fasciculata*. The main distinguishing character between *D. paniculata* and these other two species are the presence of phyllaries that are stipitate-glandular all over.

D. paniculata was first nominated for a status review in 2003 by Scott White, who mentions that this species is too common to be included in the CNPS Inventory. In 2004, Andrew Sanders nominated this species for an upgrade from CNPS List 4.2 to List 1B because it has become more and more rare and is under significant development threats. Both Scott and Andy continue to hold the opinions expressed in 2003 and 2004 and their most recent e-mails regarding this species are provided below.

E-mail from Andy Sanders (3/29/07):

Element Code: PDAST4R0N0

Kept on CNPS List 4.2; status review closed on 8/21/07

This plant is nearly endemic to western Riverside Co., though fairly common there. It occurs almost entirely on flat to rolling or sloping loam soils (often on alluvial slopes below the rocky hills), and those are the very sites that are being most rapidly developed here. Riverside Co. is the fastest growing county in California. Much (most?) of that growth is taking place in top of Hemizonia/Deinandra paniculata populations.

We've been working hard to document its range and several of us have been collecting it whenever we see it -- hence a good many recent collections. Don't let that mislead you. Many records, even recent ones, are of populations that have since been paved.

As I always like to point out -- this plant has roughly the same range and habitat as Stephen's Kangaroo Rat -- that animal is listed as federally threatened. The treatment of plants and animals is a bit unequal.

Yes, I'd like for it to at least stay on list 4. It should probably be on 1B.

E-mail from Scott White (3/28/07):

It is still my opinion that Deinandra paniculata is too common even for CNPS List 4, though I agree w/ others that the vast majority of its geographic and elevational range is in the valleys and foothills of Western Riverside Co., southern Orange Co., and northern San Diego Co. on private lands either already proposed for development, or likely to be proposed for such in the coming decades. If development pattern progresses as it has been, D. paniculata will probably become restricted to various set-aside areas such as the HCP reserves, Stephens kangaroo rat reserves, etc.

Deinandra paniculata seems to have several different habitat types, including vernal pool margins, upland clays and loams. Some of these habitats are badly threatened, but others are much more common. It seems to persist OK at disturbed sites including roadsides and abandoned agricultural lands. It can tolerate competition w/ non-native grasses better than a lot of other native species.

In my view, virtually every native coastal sage scrub species may eventually become threatened as the present development pattern continues. I see no particular reason to single out this one. But I understand that others see it differently.

Bruce Baldwin has been studying *Deinandra increscens* as part of a USFWS contract. His preliminary findings suggest that the circumscription of *D. paniculata* should be expanded to include some of the interior Central Coast populations previously treated in *D. increscens*. However, studies to resolve various problems in this group of plants are still ongoing.

Based on the current information available, as well as the various comments received in the past, it seems that the best course of action at this time is to keep *D. paniculata* on List 4.2. Please submit your comments as to whether you agree or disagree with this recommendation.

Recommended Actions

CNPS: Keep on List 4.2 CNDDB: Keep G3G4 / S3.2

Revised CNPS *Inventory* record:

Deinandra paniculata (Gray) Davidson & Moxley "paniculate tarplant"

Asteraceae Element Code: PDAST4R0N0 Kept on CNPS List 4.2; status review closed on 8/21/07

List 4.2

Kern, Los Angeles ?, Monterey, Orange, Riverside, San Bernardino, San Diego, San Luis Obispo ?, Santa Barbara ?; Baja California

Coastal scrub, valley and foothill grassland / usually vernally mesic; elevation 25 -940 meters.

Annual herb, blooms April-November.

Threatened by development. Recent studies suggest that circumscription of *D. paniculata* should be expanded to include some plants previously treated in *D. increscens*; further study needed. See *Hemizonia paniculata* in *The Jepson Manual* (1993). Confused with *D. conjugens* and *D. fasciculata*. See *Proceedings of the American Academy of Arts and Sciences* 19: 17 (1883) for original description.