

**ARIZONA GAME AND FISH DEPARTMENT
HERITAGE DATA MANAGEMENT SYSTEM**

Plant Abstract

Element Code: PDSCR1L1L0

Data Sensitivity: No

CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: *Penstemon confusus*
COMMON NAME: OwensValley Beardtongue, Mistaken Penstemon
SYNONYMS:
FAMILY: Scrophulariaceae

AUTHOR, PLACE OF PUBLICATION: Jones, Marcus Eugene. Zoe 4(3): 280. 1893.

TYPE LOCALITY: Utah: Detroit [Mountains?]

TYPE SPECIMEN: GH91226 (isotype). M.E. Jones #s.n. May 26, 1891.

TAXONOMIC UNIQUENESS: With over 250 recognized species, *Penstemon* is the third largest genus of flowering plants found in the interior west, following *Astragalus* and *Eriogonum*. Except for one minor species, the genus *Penstemon* does not occur naturally outside of North America. There are at least 47 species found in Arizona, with additional varieties and subspecies, and two hybrids.

DESCRIPTION: Perennial herb 0.8-5 (8.5) dm tall; herbage glabrous and glaucous; stems erect, single or few from a thick crown; leaves thick and leathery, rounded to obtuse apically, the basal ones 2-7 cm long, 4-11 mm wide, (ob)lanceolate (sometimes narrowly so) or rarely spatulate, the cauline ones 0.8-6.5 cm long 1.5-15 mm wide, narrowly (ob)lanceolate to oblong, sessile, few, more or less reduced above; inflorescence glabrous, often lax and wandlike, of 3-10(16) verticillasters, the cymes 1- to 3(5) -flowered, not congested; calyx 3.5-6mm long, glabrous, the lobes ovate to lanceolate, obtuse to acute or shortly-acuminate,, broadly scarious-margined; corolla 15-20(22) mm long, tubular-funnelform to moderately ampliate, the lobes about equally spreading, glandular to glabrous externally, densely glandular within near the orifice, the limb lavender pink, violet or magenta, the throat and tube lighter, usually marked with reddish guidelines, drying lavender to blue violet or rarely reddish pink; stemens included or reaching the orifice, the anthers glabrous, pale or (often) cyaneus, dehiscing fully and across the connective, the sacs ca 1 mm long, more or less explanate but scarcely peltately so; staminode included, slightly dilated apically, glabrous or papillate (Welsh et al 1993).

AIDS TO IDENTIFICATION: The most recent taxonomic key to the *Penstemon* genus is by Holmgren, and is found in Cronquist et al 1984.

ILLUSTRATIONS:

Herbarium Mounts: <http://swbiodiversity.org/seinet/taxa/index.php?taxon=Penstemon%20confusus>.

Photos: <http://eol.org/pages/578355/media>.

TOTAL RANGE: SW Utah and adjacent SE Nevada, extreme NW Arizona.

RANGE WITHIN ARIZONA: NW Arizona, The Arizona Strip, Mohave County, from the Virgin Mountains to Seegmiller Mountain and south to Mud Mountain.

SPECIES BIOLOGY AND POPULATION TRENDS

GROWTH FORM: Perennial herb.

PHENOLOGY: Not specified; no data from Arizona collections.

BIOLOGY:

HABITAT: Sandy or gravelly, often sparsely vegetated place or in clay, in shadscale-grass-horse brush- blackbrush, ephedra, yerba santa, sagebrush, juniper-blacksage, cliff rose, sagebrush-oak, and juniper-mountain mahogany communities (Welsh et al 1993).

ELEVATION: 2900 – 7900 feet (885-2410m), Welsh et al 1993. Collections in Arizona range from 4320 – 5200 feet (1320-1585m).

EXPOSURE: Not specified.

SUBSTRATE: Sandy or gravelly, often sparsely vegetated place or in clay. Collections in Arizona also noted sandy loam and clay loam.

PLANT COMMUNITY: Shadscale-grass-horse brush-blackbrush, ephedra, yerba santa, sagebrush, juniper-blacksage, cliffrose, sagebrush-oak, and juniper-mountain mahogany communities (Welsh et al 1993). Most Arizona collections are from pinyon-juniper sagebrush or pinyon-juniper-oak communities. Other associated plants notated include: *Bromus tectorum*, *Artemisia tridentata*, *Gutierrezia sarothrae*, *Pinus edulis*, *Juniperus osteosperma*, *Elymus elymoides*, *Achnatherum hymenoides*, *Eriogonum deflexum*, *Gilia*, *Chamaesyce albomarginata*, *Sphaeralcea*, *Argemone munita*, *Coleogyne*, *Thamnosma*, *Opuntia*, *Quercus*, *Haplopappus*.

POPULATION HISTORY AND TRENDS: Unknown for Arizona. Previously considered a species of Utah and eastern Nevada, there are now 6-7 collections known from the extreme NE corner of Arizona. The earliest collections are 1978 and 1994, but the remainder are after 2000. In Utah, the species is considered “fairly common in a good sized

part” of the state (NatureServe 2015). One collection in Arizona was judged to have good to fair viability; there are no data for the others.

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS: None.
STATE STATUS: None.
OTHER STATUS: None.

MANAGEMENT FACTORS: Not specified.

PROTECTIVE MEASURES TAKEN: None specified.

SUGGESTED PROJECTS: None.

LAND MANAGEMENT/OWNERSHIP: USDI Bureau of Land Management, Arizona Strip Field Office.

SOURCES OF FURTHER INFORMATION

REFERENCES:

- Holmgren, N.H. 1984. In: Cronquist, A. et al. Intermountain Flora. Vol. 4. New York Botanical Garden, N.Y. pp. 370-455.
JStor|Global Plants, accessed 8/7/2015, <http://plants.jstor.org/stable/10.5555/al.ap.specimen.gh00091226>.
NatureServe Explorer, an online Encyclopedia of Life, accessed 8/06/2015, <http://explorer.natureserve.org/>.
Tropicos, accessed 8/7/2015, <http://www.tropicos.org/Name/29201297>.
Welsh, Stanley L., N. Duane Atwood, Sherel Goodrich and Larry C. Higgins, eds. 1993. A Utah Flora. 2nd ed., revised. Brigham Young University, Provo, UT.

MAJOR KNOWLEDGEABLE INDIVIDUALS:

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ADDITIONAL INFORMATION:

Revised: 2015-08-10 (BDT)

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