

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

Plant Abstract

Element Code: PDSCR1L6W0

Data Sensitivity: No

CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: *Penstemon distans*
COMMON NAME: Mt. Trumbull Beardtongue
SYNONYMS:
FAMILY: Scrophulariaceae

AUTHOR, PLACE OF PUBLICATION: Holmgren, N.H. 1980. Brittonia 32:326-329.

TYPE LOCALITY: Whitmore Canyon, south of Mount Trumbull, Mohave County, Arizona.

TYPE SPECIMEN: NY. N.H. and P.K. Holmgren and R.C. Barneby (9173) 25 May 1979.

TAXONOMIC UNIQUENESS: Approximately 250 species of *Penstemon*. The genus is restricted to North America and is most abundant in Utah. Distinguished from all other members of Section *Cristati* by the elongated inflorescence, the widely separated few-flowered flower clusters, and the anther sacs which remain parallel to each other after splitting open. *P. distans* is most similar to *P. breviculus* of Utah.

DESCRIPTION: Perennial herb from woody base. Stems erect to ascending, 30.0-60.0 cm (12.0-24.0 in.) tall. Leaves of two types: toothed or smooth-edged. Lower leaves 5.5-14.0 cm (2.2-5.6 in.) long, 3.0-14.0 mm (0.12-0.56 in.) wide; middle and upper leaves narrower, clasp the stem, 2.5-4.0 cm (1.0-1.6 in.) long, 1.0-3.0 mm (0.04-0.12 in.) wide. Inflorescence tubular, in spaced clusters (whorl) of 1-3 flowers scattered along the upper 10.0-30.0 cm (4.0-12.0 in.) of the stem. **Corolla blue or violet**, 16.0-20.0 mm (0.64-0.8 in.) long, with **glandular hairs on exterior, yellow to whitish hairs in the throat of the flower**. Calyx 4.0-7.0 mm (0.16-0.28 in.) long, the lobes lance-shaped, the margins green, not scarious. Capsules beaked, about 10.0 mm (0.4 in.) long, ovoid.

AIDS TO IDENTIFICATION: *Penstemon distans* has a narrower floral tube and is taller with less clustered flowers than the blue flowered *P. ophianthus* which grows on the Kaibab Plateau.

ILLUSTRATIONS: Line drawing (Holmgren 1980:327)

TOTAL RANGE: Southeastern edge of the Shivwits Plateau, Mohave County, northwestern Arizona. In Whitmore, Parashaunt and Andrus canyons.

RANGE WITHIN ARIZONA: See "Total Range."

SPECIES BIOLOGY AND POPULATION TRENDS

GROWTH FORM: Herbaceous Perennial

PHENOLOGY: Flowers April - May; fruits May - June.

BIOLOGY: Fire is evident at some sites, but its role is unknown.

HABITAT: Typically in gravelly Kaibab limestone on mesa tops in pinyon-juniper woodlands, but also known from steep north facing canyon slopes of Supai Formation in Mohave desertscrub. Found in relatively cool micro-sites often next to juniper stumps, downed logs and large branches; on north- and east-facing slopes and canyons with sandy or gravelly soils.

ELEVATION: About 3,900 - 5,200 feet (1190 - 1586 m)

EXPOSURE: North (and to a lesser degree, east) facing.

SUBSTRATE: Gravelly soils derived from Kaibab limestone or sandy soils derived from Hermit shale.

PLANT COMMUNITY: Great Basin Conifer Woodland; Great Basin Desertscrub; and Mohave Desertscrub. Associated species: big sagebrush (*Artemisia tridentata*), Utah juniper (*Juniperus osteosperma*), rabbitbush (*Chrysothamnus*) and blackbrush (*Coleogyne ramosissima*).

POPULATION TRENDS: Plants locally common to frequent, but highly restricted. Trends unknown but apparently stable.

In 1992, the BLM Whitmore Canyon monitoring plot had 47 plants with 392 stems and 4,981 flowers. This was a very wet year.

BLM monitoring 1987-1998 indicates mostly stable to upward trends (Hughes 1999).

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS: None (USDI, FWS 1996)

[Category 2 USDI, FWS 1983]

STATE STATUS: Salvage Restricted (ARS 1993)

OTHER STATUS: Forest Service Sensitive (USDA, FS Region 3 1990, 1999)
Bureau of Land Management Sensitive (USDI, BLM AZ 2000)

MANAGEMENT FACTORS: Potential threats from mineral development. One population burned by wildfire appeared healthy (Reichenbacher 1986). Deer and rabbits will clip plant stems.

CONSERVATION MEASURES TAKEN: Arizona Strip District, BLM has established monitoring plots at Parashaunt and Whitmore canyons.

SUGGESTED PROJECTS: Additional surveys. Potential habitat on the Kaibab National Forest in the vicinity of Kanab Canyon.

LAND MANAGEMENT/OWNERSHIP: BLM - Arizona Strip Field Office; NPS - Grand Canyon National Park and Lake Mead National Recreation Area. Possibly Arizona State Land Department.

SOURCES OF FURTHER INFORMATION

LITERATURE CITATIONS:

Arizona Revised Statutes, Chapter 7. 1993. Arizona Native Plant Law. Appendix A:11.

Holmgren, N.H. 1980. A new *Penstemon* (Scrophulariaceae) from northwestern Arizona. Brittonia 32(3): 326-329.

- Hughes, L.E. 1999. *Penstemon distans* N. Holmgren (Mt. Trumbull Beardtongue), Scrophulariaceae. Draft abstract from Arizona Rare Plant Book, in prep.
- Reichenbacher, F.W. 1986. N. Holmgren *Penstemon distans* status report. Submitted to U.S. Fish and Wildlife Service, Albuquerque, New Mexico.
- USDA, Forest Service Region 3. 1990. Regional Forester's Sensitive Species List.
- USDI, Bureau of Land Management. 2000. Arizona BLM Sensitive Species List. Instruction Memorandum No. AZ-2000-018.
- USDI, Fish and Wildlife Service. 1983. Endangered and Threatened Wildlife and Plants; Supplement to Review of Plant Taxa for Listing; Proposed Rule. Federal Register 48(229):53656.
- USDI, Fish and Wildlife Service. 1996. Endangered and Threatened Wildlife and Plants; Review of Plant and Animal Taxa that are Candidates for Listing as Endangered or Threatened Species, Notice of Review, Proposed Rule. Federal Register 61(40):7596-7613.

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ADDITIONAL INFORMATION:

Revised: 1990-08-30 (SSS)
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