

-State Species Abstract-
-Wyoming Natural Diversity Database-

PENSTEMON CARYI
CARY BEARDTONGUE
Family: Scrophulariaceae

Status:

US Fish & Wildlife Service: None (Former
Category 2 candidate for listing under the
Endangered Species Act)

Agency Status: USFS Region 2 Sensitive;
WY BLM Sensitive.

Heritage Rank:

Global: G3 State: S3

WYNDD Plant List: Regional Endemic
(Medium Conservation Priority)

Description: Cary beardtongue is a glabrous perennial herb with flowering stems 10-40 cm tall. Leaf blades are narrowly linear to lance-shaped, entire, opposite, and 2-12 cm long (with the longest leaves at the base of the stem). Flowers have long-tipped sepals 6-11 mm long and a blue, tubular corolla 20-38 mm long. Anthers are straw-colored with numerous long, tangled white hairs on the back (Clark and Dorn 1979, Pennell 1920; Fertig et al. 1994; Dorn 1992; Marriott and Jones 1989).

Similar Species: *Penstemon aridus* and *P. attenuatus* have glandular flowers and inflorescences. *P. rydbergii* has smaller, more densely clustered flowers and glabrous anthers (Fertig et al. 1994).

Flowering/Fruiting Period: Flowers May-July, fruits produced June-July.

Distribution: Regional endemic of the Bighorn and Pryor mountains of north-central Wyoming (Big Horn, Sheridan, and Washakie counties) and south-central Montana.

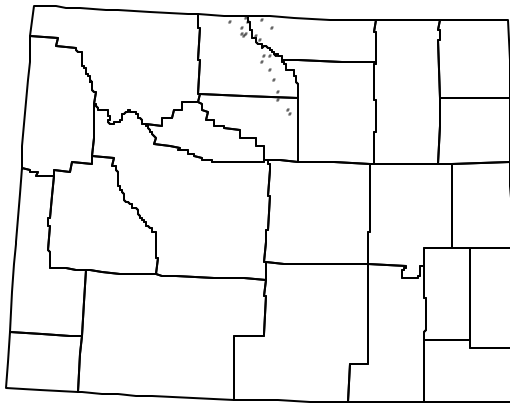


Above: *Penstemon caryi* by Jennifer Whipple.

Below: *P. caryi* by Linda Shoemaker from Fertig et al. (1994).



Habitat: Sparsely-vegetated calcareous rock outcrops and rocky soil within sagebrush, juniper, Douglas-fir, and limber pine communities. Populations on the Tensleep Preserve are found mostly on upland sites with thin soils. Elevation 5200-8500 feet. Steve Shelly has noted that Montana populations may prefer habitats that receive light disturbance. Observations in Wyoming suggest that the species does not favor areas of dense grass or shrub cover.



Wyoming distribution of *Penstemon caryi*.

Occurrences in Wyoming: Known from 15 extant and 2 historical occurrences in Wyoming, 9 of which have been discovered or relocated since 1989 (most recently in 1999).

Abundance: Populations are typically small and localized in specialized microhabitats. Of the few populations that have been censused, most contain 50-100 individuals per colony. One of the larger populations on TNC's Tensleep Preserve contains over 2500 plants.

Trends: Trend data are lacking for most occurrences, but the species is thought to be relatively stable at present.

Protection status: Two occurrences are protected within the Nature Conservancy's

Tensleep Preserve. Two populations are also found within the Spanish Karst and Little Mountain ACECs and potentially within the Shell Canyon RNA. At least 4 populations occur in the Medicine Lodge and Trapper Canyon Wilderness Study Areas. Populations may also occur within the potential Elephant Head and Mann Creek RNAs. All other known occurrences are on public or private lands managed for multiple use.

Threats: May be threatened by livestock grazing and trampling, road construction, quarrying, and loss of habitat to development.

Managed Areas: Occurs on lands managed by Bighorn National Forest and the BLM Cody and Worland Field Offices.

References:

Beauvais, G.P., W. Fertig, and G.P. Jones. 2000. Rare species and the vegetation of Washakie County, Wyoming. Report prepared for the Washakie County planner by the Wyoming Natural Diversity Database, Laramie, WY.

Fertig, W. 1999. The status of rare plants in the Bighorn Landscape. Report prepared for The Nature Conservancy Wyoming Field Office by the Wyoming Natural Diversity Database, Laramie, Wyoming.

Fertig, W. 2000. Rare vascular plant species in the Wyoming portion of the Utah-Wyoming Rocky Mountains Ecoregion. Prepared for the Wyoming Nature Conservancy by the Wyoming Natural Diversity Database, Laramie, WY.

Fertig, W., C. Refsdal, and J. Whipple. 1994. Wyoming Rare Plant Field Guide. Wyoming Rare Plant Technical Committee, Cheyenne Wyoming.

Humphrey, A. and P. Shephard. 1994. Status report: longterm monitoring of *Penstemon caryi* on The Nature Conservancy's Tensleep Preserve, Ten Sleep, Wyoming. Unpublished report prepared for the TNC Wyoming State Office.

Lesica, P. & J. S. Shelly. 1991. Sensitive, Threatened and Endangered Vascular Plants of Montana. Montana Natural Heritage Program, Occ. Publ. No. 1. Helena, MT.

Payson, E.B. 1924. The Species of *Penstemon* native of Wyoming. Univ. of Wyoming Publ. Science 4:88-103.

Pennell, F. W. 1920. Scrophulariaceae of the central Rocky Mountain states. Contributions from the United States National Herbarium 20(9): 313-381.

Welp, L., W. Fertig, and G. Jones. 1998. Ecological Evaluation of the Potential Elephant Head Research Natural Area Within the Bighorn National Forest, Big Horn County, Wyoming. Unpublished report prepared by the Wyoming Natural Diversity Database, Laramie, WY.

Welp, L., W.F. Fertig, G.P. Jones, G.P. Beauvais, and S.M. Ogle. 2000. Fine filter analysis of the Bighorn, Medicine Bow, and Shoshone National Forests in Wyoming. Wyoming Natural Diversity Database, Laramie, WY.

Author: Walter Fertig

Updated: 00-06-16