

GENTIANA AFFINIS VAR. *BIGELOVII*

BIGELOW'S PRAIRIE GENTIAN
GENTIANACEAE

Status:

US Fish & Wildlife Service: None.

Agency Status: None.

Heritage Rank:

Global: G5T4 State: S1

WYNDD Plant List: Peripheral (Low
conservation priority)

Description: Bigelow's prairie gentian is a perennial herb with stems to 25 cm tall. The leaves are oblong near the base and linear to lance-shaped near the tip of the stem. Green, leaf-like, linear bracts are present in the inflorescence and are as long to longer than the flowers. Flowers have a deep blue to purple funnel-shaped corolla 20-25 mm long and a calyx tube 4-9 mm long. Anthers are 1.5-3 mm long. The fruit is a capsule with parietal placentation (Dorn 1992; Harrington 1954).

Synonyms: *Pneumonanthe bigelovii*.

Identification Comments: Flowers needed for positive identification.

Similar Species: *Gentiana affinis* var. *affinis* has floral bracts that are shorter than the flowers and calyx teeth that are less than 3 mm long. *Gentiana parryi* has a calyx tube that is 10-18 mm long, ovate floral bracts, and anthers that are 3.5-5 mm long (Dorn 1992).

Flowering/Fruiting Period: August-September.



Above: *Gentiana affinis* var. *bigelovii* on banks of South Branch Crow Creek in the Laramie Range by Walter Fertig, September 1995.

Distribution: Ranges from Southeast Wyoming to New Mexico and Arizona. In Wyoming, known only from the Laramie Range in Albany and Laramie counties.

Habitat: In Wyoming, this taxon is found primarily in *Artemisia tridentata* var. *vaseyana* or *A. tripartita* grasslands (usually with *Koeleria macrantha*, *Poa secunda*, *Stipa comata*, or *Muhlenbergia filiculmis*) or moist meadows along streams on sandy loamy to gravelly soils derived from Sherman Granite at elevations of 6500-8400 feet.

Occurrences in Wyoming: Known from 3 extant occurrences (all observed since 1995) and 2 additional historical occurrences (dating from the 1930s).

Abundance: Colonies often relatively small, numbering 12-500 plants. Much additional

unsurveyed habitat exists in the southern Laramie Range.

Trends: Apparently stable, although long-term trend data are lacking.

Protection status: All known occurrences are on public or private lands managed for multiple use.

Threats: Threats appear to be low. Cattle grazing and recreation are the main uses of its habitat in Medicine Bow NF.

Managed Areas: Medicine Bow National Forest.

References:

Burke, M. 2000. Survey of selected rare plant species in the Pole Mountain area of Medicine Bow National Forest. Report prepared for University of Wyoming Botany Department.

Crawford, C., B. Jennings, and W.A. Weber. 1994. A tale of two gentians. *Aquilegia* 18:4.

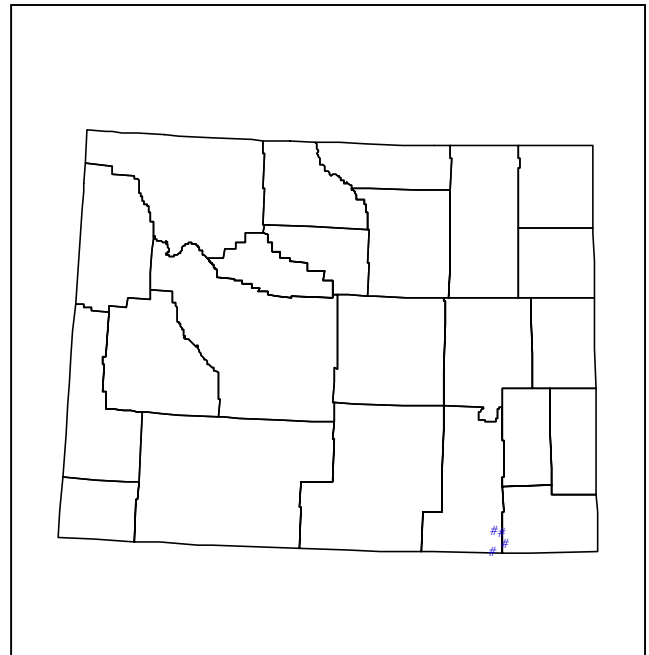
Dorn, R.D. 1992. Vascular Plants of Wyoming, second edition. Mountain West Publishing, Cheyenne, WY.

Harrington, H. D. 1954. Manual of the Plants of Colorado. Sage Books, Chicago, IL.

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. Report prepared for the US Forest Service Region 2 by the Wyoming Natural Diversity Database, Laramie, WY.

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Wyoming distribution of *Gentiana affinis* var. *bigelovii*.