# **BWSR FEATURED PLANT**

#### LARGE-FLOWERED PENSTEMON

Penstemon grandiflorus

**Publication Date: 7-15-13** 





The Large-flowered Penstemon is a short lived perennial plant that most commonly grows in the sandy soils of the open prairie. It is one of the showiest of the penstemons, the name "grandiflorus" meaning "grand flowering." This penstemon features purple veins running into the throat of its trumpet like flower, creating a nectar guide for pollinators. It is also known by the common name "Large Beardtongue." There are over 250 species of penstemon in North America.

### Identification



Range based on University of Minnesota Herbarium data

Large-flowered Penstemons are typically 1-3 ½ feet tall. Their succulent textured basal leaves range from 2-5 inches long and 1-3 inches across, and are a bluish green color, opposite, ovate to oblong, and smooth. As you move up the stem the leaf size decreases. The stem leaves range from 2-4 inches long and 1-2 ½ inches across, and are ovate to heart shaped, opposite, smooth, with the lower leaves being stalkless and the upper often clasping. The flowers are a pale pinkish lavender color, five lobed, and short lived. Flowers extend from the leaf axels,

reaching up to 2 inches in length. *Penstemon grandiflorus* blooms late spring to early summer, lasting around three weeks. The root system, which consists of a taproot and secondary roots is considered shallow for a prairie plant.



Penstemon blooming in mid-June

Penstemons feature one sterile stamen with hairs on its tip, referred to as beard, thus the name "beardtongue."

# Range

Large-flowered Penstemon (*Penstemon grandiflorus*) is found in dry sand prairies, dolomite prairies, restored prairies and gravelly hill prairies of the Midwest to Southwest. It ranges from Montana (W.) to Ohio (E.), and from Minnesota (N.) to Texas (S.), but is most common west of the Mississippi River. There are several cultivars that have been developed, including the white flowering "Prairie Snow" variety. This snowy white cultivar was bred in conjunction with the Nebraska Statewide Arboretum in 1988 from the <1% of naturally occurring white *Penstemon grandiflorus*. Mixed color varieties have also been developed, with mauve, purple, pink, blue and white flowers.



A bumble bee gathering nectar from the tubular flowers

#### **Uses**

Large-flowered Penstemon is a major attractor for bees and humming birds. Pollinators include Bumble Bees, such as the Brown Belted (*Bombus griseocollis*) and the declining Rusty Patched (*Bombus affinis*), as well as solitary bees such as the metallic green colored Halictid Bee (*Agapostemon virescens*) and several species of Mason Bee (genus *Osmia*). Syrphid flies, the Pecks Skipper Butterfly (*Polites peckius*) and the Ruby-throated Hummingbird (*Archilochus colubris*) are also pollinators.

Native Americans used several parts of the plant to treat various maladies. Its root pulp was chewed as a remedy for tooth ache and the leaves were made into a tea to treat chills and fever. The Navajo would pound the leaves and use them as a wet dressing for rattlesnake bites.



Bluish green leaves clasping on upper part of stem

## **Planting Recommendations**

Penstemons are slow to germinate, so patience is needed. Seeds are 2 to 4 millimeters long, dark brown, angular and irregularly shaped. *Penstemon grandiflorus* seeds are included in Minnesota state seed mix 35-221 "Dry Prairie General" and 35-621 "Dry Prairie Southeast." As the seed requires cold stratification, it is most common to spread the seed in the fall to allow it to stratify over winter and germinate when conditions are favorable in the spring. Plants can also be started in greenhouses after pre-stratifying seed. A thin layer of course sand or potting soil is placed over seeds in trays. Penstemon seedlings can be transplanted to permanent locations by mid to late spring but may need periodic watering and weeding to ensure establishment. The abundance of the species can vary in sites from year to year depending on climatic conditions and maintenance. Grazing and dry conditions can sometimes give a competitive advantage over other forbs.



This penstemon was found on a restored prairie site in Chisago County, Minnesota

### **Additional References**

http://www.minnesotawildflowers.info/flower/large-beardtongue

http://wisplants.uwsp.edu/scripts/detail.asp?SpCode=PENGRA1

http://www.missouribotanical garden.org/gardens-gardening/your-garden/plant-finder/plant-details/kc/a127/penstemon-grandiflorus.aspx

http://hortsci.ashspublications.org/content/25/4/489.full.pdf