



# BWSR Featured Plant

**Plant Name: Purple Prairie Clover (*Dalea purpurea*)**

**Plant Family: Legume**



*Thimble shaped clusters of flowers on the end of stems*

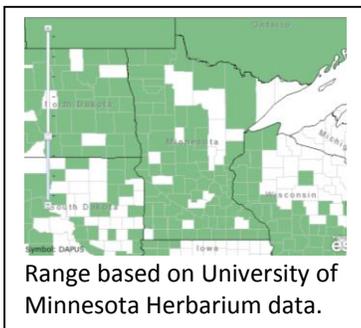
Though relatively small in stature, purple prairie clover has historically been a workhorse for prairie restoration projects. The species adds nitrogen to loam, clay, sand, and gravel soils, stabilizes degraded, erodible lands with a deep taproot, and providing a rich source of nectar and pollen to honey bees and a variety of native pollinators. The species has been included in conservation mixes since early planting efforts, as the seeds can be collected efficiently and the species can establish successfully on a wide range of soils. The species is also used on the upper edge of raingarden and biofiltration plantings, pollinator gardens, and in mine reclamation projects.

## Identification

The flowers of purple prairie clover are clustered on thimble-shaped flower spikes at the ends of unbranched, stiff stems that are up to around 30 inches tall. The individual flowers are purple in color and have five petals. They start blooming in a ring around the base of the inflorescence and gradually move upward between early and mid-summer. The compound leaves that are 1.5 to 3-inches long have three to seven narrow leaflets and alternate up the stem. The seeds develop in the inflorescence and form a legume pod containing one or two seeds.



*Each leaf is made up of three to seven narrow leaflets*



## Range

Acting as both a pioneer species in planted sites and as an indicator of remnant, intact prairies, purple prairie clover is relatively widespread across Minnesota as well as the rest of the Upper Midwest. It is found in from central Canada and covers most of the United States with the exception of the west and east coasts. It is common to savannas, dry and mesic prairies, oak woodlands, old fields, roadsides, and riverbanks. The species is commonly found with a variety of prairie grasses including little bluestem, big bluestem, junegrass, prairie dropseed, blue grama, hairy grama, and side-oats grama.

## Uses

### Primary Uses:

- Pollinator Habitat
- Erosion Control
- Nitrogen Fixation
- Aesthetics

With a taproot that can reach six feet deep, purple prairie clover is effective at soil stabilization, particularly on drought prone soils and disturbed soils such as mining sites. Its ability to fix nitrogen also adds enriches nutrient poor soils, providing improved conditions for the growth of other plant species. Honey bees that are often attracted to non-native clovers also heavy use purple prairie clover as a food source. The species is important to a wide range of native pollinators including long and short-tongued bees, native flies, butterflies, beetles, and wasps. The species is palatable and high in protein, so it is also used as a food source for a wide variety of grazers, but can decrease with overgrazing.

## Planting Recommendations

### Planting Methods

- Containerized plants
- Broadcast Seeding

The species is not conducive to transplanting due to its deep taproot that is sensitive to disturbance, so preferred planting methods involve seeding or planting containerized plants. Seed can be collected in early fall as the seedheads become dry. Around 300 seeds can be collected per plant. After collection the seed should be spread on a table or screen to ensure that it is thoroughly dry before storage. After drying it is often recommended to scarify the seeds by rubbing them several times with a piece of sandpaper to help break the seedcoat. As close to planting as possible the seeds should be dampened and with genus specific legume inoculum to aid in nitrogen fixation and improve plant health.



The seeds should be broadcast on the soil surface followed by light raking or rolling to ensure good seed to soil contact and to cover the seeds with around 1/8 inch of soil. Seedlings can be relatively slow to establish as they develop their taproot, so it is important to ensure that they are not outcompeted. It is beneficial to mow prairie plantings to around 5-8 inches as needed to allow for sufficient sunlight for the seedlings. Containerized plants should be planted when there is sufficient soil moisture and watered periodically as needed until they reach maturity when they are more drought resistant. Spring fires can aid the long-term vigor and persistence of the species.

## References

Minnesota Wildflowers: [http://www.minnesotawildflowers.info/flower/purple-prairie-](http://www.minnesotawildflowers.info/flower/purple-prairie-ladybird-johnson-wildflower-center)

Lady Bird Johnson Wildflower Center: [http://www.wildflower.org/plants/result.php?id\\_plant=DAPU5](http://www.wildflower.org/plants/result.php?id_plant=DAPU5)

## Similar Species



White prairie clover looks similar to purple prairie clover but has leaflets that are wider and lighter in color, as well as a bright white inflorescence.

