
BWSR FEATURED PLANT

Wetland Indicator Status:
Upland



LARGE-FLOWERED TRILLIUM *Trillium grandiflorum*
Family: Melanthiaceae

Publication Date: 2-22-14

Large-flowered trilliums are highly valued by Minnesota landowners for the beauty they add to forests and woodland gardens in early spring. They are sensitive to changes in their environment, so they can be good indicators of healthy and well-cared for forests. Populations have been declining in many areas, primarily from soil disturbance, the loss of soil organic matter from non-native earthworms, buckthorn invasion and overgrazing by deer. Minnesota and many other states have laws to restrict the collection of trilliums, as picking even the stems can damage plants by removing their energy reserves. In Minnesota it is illegal to remove trilliums from public land or another person's property without the owner's consent.



Identification

Individual plants grow 10-14 inches tall and have three petals, three sepals (supporting the petals), and three leaves on individual plants. These characteristics contribute to the plant's scientific name trillix, which means "triple" in Latin. The species name "grandiflorum" refers to the large flowers that have undulating edges and are bright white to pink. It is common for the flowers to turn a purplish color later in the season. The dark green leaves (actually leaf-like bracts) have deep veins, are oval in shape and come to a point. The fruit is a pale green berry that eventually opens to release the seeds. There are three other species of trillium in Minnesota including Drooping trillium (*T. flexipes*), Snow trillium (*T. nivale*), and Nodding trillium (*T. cernuum*).



Trillium have three leaves and three petals growing from a single stem



Drooping trillium
Photo by Katy Chayka, Minnesota Wildflowers

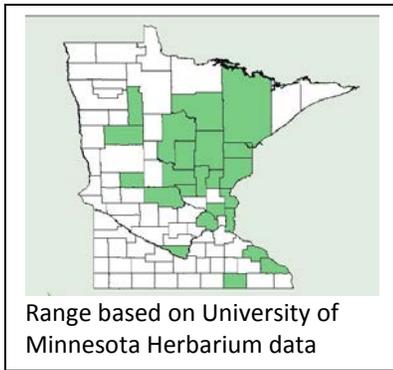


Snow trillium
Photo by Dave Hanson



Nodding trillium
Photo by Katy Chayka, Minnesota Wildflowers

Range



Large-flowered trillium is mainly found in the eastern portions of Minnesota and is common in many northeast counties. It prefers rich woods such as mesic oak forests, maple-basswood forests, and shaded riparian areas. Across North America the species is generally found east of the Mississippi River, covering the eastern United States and Canada. It is found as far south as Georgia and as far west as Minnesota.



Hillside covered in trillium and other spring ephemerals

Uses

The species adds to the health of woodland ecosystems by supporting pollinator and ant populations that in turn support many birds and other wildlife. The plants also produce dense rhizomes, as well as fibrous roots that in combination with other woodland flowers play an important role in stabilizing woodland soils and preventing erosion. The species is also popular for woodland gardens. The plants were used by Native Americans to treat a variety of ailments including asthma, hematuria, diarrhea, ulcers, and insect stings. It has also been used as a birth stimulant contributing to another common name, “birthwort”.

Primary Uses:

- Pollinator Habitat
- Slope Stabilization in Forests
- Woodland Gardens



Planting Recommendations

Trillium seeds are mainly spread by ants that carry the fruit to their nests where it can often germinate after the fruit is eaten and the seeds are discarded. Plants are very slow to establish from seed with roots being produced the first year, an embryonic leaf (cotyledon) forming the second year and true leaves forming the third season. As the plant establishes, the rhizomes continue to develop to a point where they can support a mature, flowering plant. When seeds are used for establishment they require repeated cycles of warm and cold temperatures, so it is recommended to sow the seed in the summer on a rich, loamy soil shortly after it is ripe to allow natural conditions to break dormancy. Covering the seeds with a thin layer of soil and leaves will help maintain moisture for germination. The species is available from some nurseries but tend to be expensive due to the challenges involved in propagation. Deer are attracted to trillium, so they may need some protection from grazing. Trillium conservation efforts commonly focus on protecting intact forests, limiting disturbance and controlling invasive species. The species can form clonal colonies from a single rootstock, so if conditions are favorable the species can spread, adding to the beauty of our forested landscapes.

Planting Methods:

- Broadcast Seeding
- Containerized or Bare-root Plants
- Promoting Spread by Rhizomes

Additional References

Illinois Wildflowers: http://www.illinoiswildflowers.info/woodland/plants/lf_trillium.htm

UW-Steven’s Point Freckman Herbarium: <http://wisplants.uwsp.edu/scripts/SearchResults.asp?Genus=Trillium>

Minnesota Wildflowers: <http://www.minnesotawildflowers.info/flower/large-flowered-trillium>