

BWSR Featured Plant

Name: Spotted Joe Pye Weed (*Eutrochium maculatum*)



Large flower groupings at the end of upright stems

Often an indicator of wetlands that are in good condition, Spotted Joe Pye Weed may be found with a diversity of sedges, rushes, and other forbs such as boneset, red-stem aster, bugleweed, and giant goldenrod. Due to its attractive flowers and groupings of whorled leaves the species is also popular for pollinator gardens, stormwater plantings and lakeshores. It is a larval host plant for two moth species and is also used by Monarch butterflies and the endangered rusty-patch bumble bee. Its relatively shallow, fibrous roots can promote biological activity within the root zone, aiding the breakdown of nutrients and contaminants.

Statewide Wetland
Indicator Status:

- OBL - Obligate



Whorled leaves and purple spots on stem

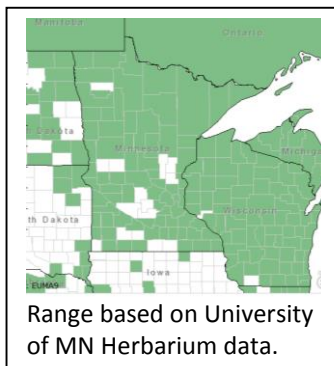
Identification

Growing in clumps with flower heads in a large, rose-purple colored inflorescence, the species can be easy to spot in wetlands when it is in bloom. It has a relatively long bloom period from July through September. Individual flower heads are about 1/3 inch wide and have up to twenty pink disk flowers and no ray flowers. The leaves are around nine inches long and two inches wide with large serrations, and are whorled in groupings of four or five. The leaves also narrow at both ends and have short stalks that attach to the stem. Spotted Joe Pye Weed commonly has purple spots along its stem that are absent on Sweet Joe Pye Weed, a similar species that typically grows in more shaded habitats.



Individual flower heads with disk flowers but no ray flowers

Range



Being found in a wide range of plant communities with full or partial sun, Joe Pye Weed is widespread across Minnesota. It is common in wet meadows, sedge meadows, wet prairies, shrubs wetlands, coniferous wetlands, calcareous fens and shorelines. Across the United States it has a wide range but is not found in far southern or southwestern states. It is also found in all southern provinces of Canada. The species was in the genus *Eupatorium* along with the bonesets, but was recently moved to the genus *Eutrochium*. There are three varieties of Spotted Joe Pye Weed in Minnesota including *Var. maculatum*, *Var. bruneri* (densely hairy) and *Var. foliosum* (in Cook County and with some long leaves near the flowers clusters).

Uses

As a rich source of nectar, Joe Pye Weed plants are used by a wide range of pollinators including honey bees, bumble bees (including the threatened Rusty Patched Bumble Bee), Cuckoo bees, digger bees, leaf-cutter bees, bee flies, butterflies, and moths. The species is used by monarch, azure, skipper, white admiral and swallowtail butterflies. A variety of beetles, aphids and caterpillars also use the species as a food source. It is also a larval host plant for the Three-lined Flower Moth and the Ruby Tiger Moth. The species is not a common food source for most grazers such as deer and rabbits (Illinois Wildflowers). It has fibrous roots as well as rhizomes that allow for the establishment of clonal colonies. Its extensive fibrous roots can effectively filter and help treat stormwater. It was used for a wide range of medicinal purposes including kidney stones and other kidney disorders, urinary diseases, the treatment of fevers, asthmas, and headaches.

Primary Uses:

- Pollinator Habitat
- Songbird Habitat
- Stormwater Treatment

Planting Recommendations

The species can be planted by seed, containerized plants or by transplanting. Its small, fluffy seeds should be collected a few weeks after the plants are done flowering and when the seed heads dry and become fluffy. A period of cold-moist stratification is needed to break dormancy. When seeding into restoration projects it is recommended to seed in the fall, to allow winter conditions to naturally break dormancy and allow for germination when the conditions are suitable in the spring. The soil surface should be loosened prior to seeding and the tiny seeds (95,000 seeds per ounce) broadcast near the soil surface, followed by harrowing or rolling to improve seed to soil contact. When installed from containers the plants should be planted in moist soil and watered as needed until they develop sufficient root systems. The species can also be transplanted early in the spring or late in the fall after the plants go dormant.

Planting Methods

- Seed
- Containerized plants
- Transplanting



Similar Species



Ironweed
(*Vernonia fasciculata*)



Marsh
Milkweed
(*Asclepias incarnata*)



Sweet Joe Pye Weed is similar to spotted Joe Pye Weed but has a more rounded inflorescence, lacks purple dots on the stem and commonly grows in partial shade. Image by Katy Chayka of Minnesota Wildflowers

References

Minnesota Wildflowers: <http://www.minnesotawildflowers.info/flower/spotted-joe-pye-wee>

Illinois Wildflowers: http://www.illinoiswildflowers.info/wetland/plants/sp_joepye.htm