Wetland Indicator **BWSR FEATURED PLANT** Status: FACU

FROST ASTER Symphyotrichum pilosum

Family: Aster



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Frost aster is one of many Minnesota asters that bloom late in the fall, providing important food sources for pollinators, and adding color to restorations, rain gardens, and lakeshores. Frost aster has a relatively limited range in Minnesota, but its seeds are wind dispersed and can aggressively colonized disturbed areas. As a result, it is likely to expand its range to the north with climate change and other disturbances.



Native beetle gathering nectar from frost aster

Identification

Multiple stems grow from rhizomes to around three feet tall and give the plants a bushy appearance. Densely hairy leaves and stems (often in lines) help distinguish the species from other white asters and give it the common name of "Frost Aster". The leaves are linear or lance shaped and the lower leaves fall off with age. There are many white ray florets (usually over 20) per flower head. Disk flowers (center of flower head) are yellow but turn reddish late in the season. The plant blooms in the fall from September through October. The species looks similar to heath aster (Symphyotricum ericoides)but heath aster has less than twenty ray florets and is pubescent but less hairy on the leaves and stem.

widespread than documented and will expand its range with



White hairs on leaves

Range



The species grows in full sun and mesic to dry conditions and can handle a wide range of soil types including sand, loam, clay, and gravel. The plant is most commonly found in disturbed dry prairies, roadsides, field edges, outcrops, pastures, and old fields. It has a relatively limited documented range in Minnesota (southeast corner,) but it is likely more



Bushy appearance of frost aster

warming climate. The species is one of the most common asters in the United states, with a range covering the eastern half of the United States and Canada. The species is also found in British Columbia.

Uses

Asters are important late blooming species for a wide range of pollinators (bumblebees, honeybees, native bees, wasps, native flies, and butterflies)

allowing them to build up energy reserves before winter. Frost aster establishes aggressively in disturbed areas, so it is effective at adding habitat structure in areas that may otherwise establish with weeds and invasive species. With a rhizomatous root system the species is also effective at stabilizing soils and providing bank stability. Its narrow,

downy leaves are also adapted to dry conditions and the plant requires little water. Asters are an important component of many raingardens and native plantings as they provide color into late fall when other plants are going dormant.

Planting Recommendations

Frost aster has a small seed (140,000 seeds per ounce) that must be planted near the soil surface. In greenhouse conditions, seeds are sprinkled onto flats and covered with a thin layer of soil. Seeds tend to germinate in 14-20 days. If using a native seed drill fluff is often burned off of the seeds to provide for even distribution on the soil surface. This is less important when broadcast seeding. Seed can

also be wild collected and spread afterward; however, the wild collected seed may have a lower germination rate than nursery grown seed, so a relatively high volume of seed may be needed. Planting can also occur from nursery grown containers or from transplanting within project sites. The plants have multiple stems coming from rhizomes, so several plants can be separated

from one clump. Planting with containers and transplanting should be conducted when there is good soil moisture, preferably in early spring or late fall after the plants are dormant.

Additional References

UW-Steven's Point Freckman Herbarium http://wisplants.uwsp.edu/scripts/detail.asp?SpCode=ASTPIL Illinois Wildflowers: http://www.illinoiswildflowers.info/weeds/plants/fr_aster.htm

Primary Uses:

- Pollinator Habitat
 - Bank Stabilization
 - Invasive Species Competition



More than twenty ray florets per seedhead



Planting Methods:

- Broadcast seeding
- Containers
- Transplanting

With multiple stems growing from rhizomes, clumps can be separated for transplanting.