

BWSR Featured Plant

Name: Nodding Bur-Marigold (Bidens cernua)

Plant Family: Aster



A bumble bee collecting pollen and nectar of B. ceruna

This beautiful wildflower is a nice touch of color to our states wetlands and lake edges. The distinct notched petals are yellow and orange. They attract many pollinators like bees, wasps, butterflies, and moths. The barbed seeds stick to clothing and fur, and can travel long distances. The Nodding Bur-Marigolds roots are shallow and spread, making it a good plant for the edges of lakes, wetlands and drainage canals. Statewide Wetland Indicator Status: • Obligate (OBL)



The species can be found in dense patches



The Nodding Bur-Marigold is an annual plant that can grow from one foot to three feet tall. The stem is hairless or slightly hairy. They can be green or reddish-purple in color and occasionally angular. The leaves are lance shaped, narrow and up to six inches long. They are arranged oppositely on the stem and the margins are sharply serrated. The leaves can be sessile or clasping. The flowers are one to two inches across. Petals (ray flowers) are usually 8 in count, yellow, and almond shaped. They have a notch or point at the tip which is quite distinctive. The center of the flower is a dull orange that turns purple-brown as the seed ripen. Two sets of bracts are present below the petals. The inner set is yellow and the outer set is green and curls backwards. Blooming period is usually August to November. The flower heads begin to droop with age, which gives rise to the name "nodding." The seeds are brown achene with four barbed awns that can catch on clothing and animal fur.





Range based on University of MN Herbarium data.

Common habitats include swamps, bogs, seeps, marshes, riparian areas, and wet floodplains. The Nodding Bur-Marigold also likes disturbed soils. Full or partial sun, wet conditions, and mucky soils are preferred. It is commonly found in degraded wetlands, but can also be present in higher quality wetlands.

Leaves are either sessile or slightly clasping around the stem.

Nodding Bur-Marigold is less tolerant of dry conditions than its relatives. It can be found throughout the state of Minnesota. Mostly in the north and northwest areas of the state. It is native to Minnesota. Its range includes most of the United States and Canada.

Uses

Because of the plants affinity for wet soils and disturbance it can be effective for vegetating the base of drainage ditches, and the edge of ponds, lakes and wetlands. With its abundant flowers the species attracts an array of insects including bees, wasps, butterflies, moths, skippers, and many others. Bees that like to visit the plant are honey bees, bumble bees, long-horned bees, leaf-cutting bees, and plasterer bees. The caterpillars of the butterfly *Nathalis iole* feed on the foliage. Some birds also eat the seeds such as finches, sparrows and mallard ducks.

Primary Uses:

- Pollinator Habitat
- Moist Soil Plantings

Planting Recommendations

Planting Methods

Seed

As an annual species Nodding Bur-Marigold relies on producing a large number of seeds to re-establish each season. Its seeds travel long distances as they stick to fur and clothing. A

large number of seeds can also be collected from one seedhead in October or November. The seeds need a period of cold-moist stratification so it is best to spread them in the fall on saturated, bare soils to allow them to naturally stratify over winter. The species establishes reliably from seed and may form large masses where it is seeded. It can outcompete other native species, so it is often best to seed it into specific areas of a project.



Nodding Bur-Marigold growing on the bank of a lake.

Similar Species

Like *Bidens cernua*, *Bidens connata* and *Bidens tripartita*, shown below, have simple leaves. Other Bidens such as *B. frondosa*, *B. trichosperma*, and *B. vulgate* have compound leaves.



Purple-stem Beggarticks (Bidens connata) has a flower head up to 2 cm wide, leaves that are stalkless or tapering at the base, and come to a sharp point at the tip. Stems are commonly purple. Photo by Katy Chayka, Minnesota Wildflowers



Three lobed Beggarticks (Bidens tripartita) has flower heads up to 2.5 cm wide, leaves may taper to a short winged petiole, and stems are green but may be reddish at the base. Photo by Katy Chayka, Minnesota Wildflowers

References

Minnesota Wildflowers <u>https://www.minnesotawildflowers.info/flower/nodding-bur-marigold</u> USDA Pants Database: <u>http://plants.usda.gov/core/profile?symbol=BICE</u>