

BWSR Featured Plant

Name: Broadleaf arrowhead (*Sagittaria latifolia*)

Plant family: Water plantain (Alismataceae)

Broadleaf arrowhead is common throughout the United States and Canada in wet habitats, thriving in water 6 to 12 inches deep. One exception is Illinois, where it is a state endangered species. Arrow-shaped leaves give this plant its name.

Courtesy Photos



Broadleaf or common arrowhead is widespread in Minnesota’s wetlands, ditches, shorelands and other wet habitats. It has arrow-shaped leaves and white, three-petaled flowers that bloom in summer. Also called duck potato, arrowhead produces tubers that are eaten by a variety of waterfowl and other wildlife.

It can also buffer shorelines and banks against wave energy and absorb nutrients and metals from water and sediments.

Plant Stats

STATEWIDE WETLAND INDICATOR STATUS:OBL

PRIMARY USES: Food and cover for aquatic animals; wetland and shoreline restoration

Identification

Broadleaf arrowhead has basal, arrow-shaped leaves with two lower lobes that are about the same length as the upper lobe. Although leaves are typically broad (*latifolia* means “wide leaf”), their width is variable.

Emerald leaves may have narrower blades than emergent leaves. Leaves are 1 to 6 inches wide and 4 to 12 inches long. The plant grows up to 4 feet tall.

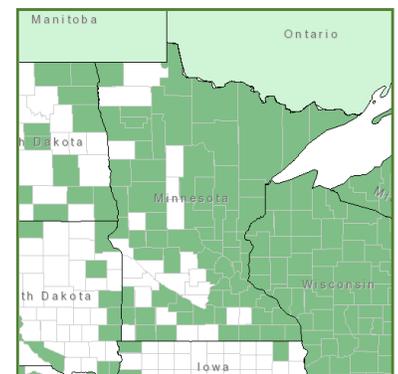
Flowering begins in July.

White, three-petaled flowers up to 1 inch across are produced in whorls of three on scapes that rise above the leaves.

Spherical clusters of tiny winged fruits are produced into October. Each fruit is tipped with a pointed, horizontally projecting beak. The plant reproduces vegetatively by rhizomes (horizontal, underground stems) and by the production of golf-ball-sized tubers.

Range

Broadleaf arrowhead is found in wet habitats throughout the United States and Canada. This obligate wetland species thrives in water 6 to 12 inches deep, but will tolerate other conditions. It is common throughout its range except in Illinois, where it is a state endangered species.



Range map source: U.S. Department of Agriculture's Natural Resources Conservation Service plants database

Uses

Both the seeds and tubers of broadleaf arrowhead are a food source for many kinds of wildlife, but the tubers are said to be the most valuable. Mallards, blue-winged teal, black ducks, swans and geese are among the waterfowl that eat them. The tubers may be too deep for some ducks to loosen them from sediment. Muskrats, beavers and porcupines are also known to eat the tubers. Native

Americans and early European settlers harvested the tubers and baked, boiled or roasted them to eat or for medicinal purposes. More recently, broadleaf arrowhead has been used in wetland and shoreline restorations. It's important not only for its wildlife value but also for its ability to dissipate wave energy and take up metals and nutrients — especially phosphorus.

Planting Recommendations



Broadleaf arrowhead blooms from July into September. **Courtesy Photo**

Choose a location with full sun and a water depth of 6 to 12 inches. Broadleaf arrowhead can be established using live plants, bare-root stock or tubers. Live plants or tubers are best for planting in moving water. Broadleaf arrowhead also can be propagated from seeds, but they require two years to germinate. For faster establishment, choose plants or tubers. This plant is available at many native plant nurseries.

Similar Species

Several *Sagittaria* species in Minnesota have arrow-shaped leaves. Northern arrowhead (*S. cuneata*)

is widespread in the state, whereas long-lobed arrowhead (*S. calycina*) and Midwestern arrowhead

(*S. brevirostra*) are known from scattered locations in southern and western Minnesota. All have leaves

and fruits that differ from those of broadleaf arrowhead.



From left: Broadleaf arrowhead (*S. latifolia*) **Courtesy Photo**; Northern arrowhead (*S. cuneata*) **Photo Credit:** Peter Dzuik of Minnesota Wildflowers; long-lobed arrowhead (*S. calycina*; *S. montevidensis* subsp. *calycina*) **Photo Credit:** Katy Chayka of Minnesota Wildflowers; Midwestern arrowhead (*S. brevirostra*) **Line Drawings:** Line drawings: USDA-NRCS PLANTS Database / Britton, N.L., and A. Brown. 1913. *An Illustrated Flora of the Northern United States, Canada and the British Possessions*. 3 vols. Charles Scribner's Sons, New York. Vol. 1: 99. Photos and drawings are not to scale. Typically, fruits are 1 to 3 millimeters long.

References

USDA Plants Database: <https://plants.usda.gov/core/profile?symbol=SALA2>
Wetland Plants of Minnesota, by Steve W. Chadde. 2012. Second edition (revised).
Article 99: Broad-leaf Arrowhead: A Workhorse of the Wetland. <https://owl.cwp.org/?mdocs-file=4813>
Minnesota Wildflowers. <https://www.minnesotawildflowers.info/>

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