

Invasive plants in Bass Lake

Eurasian millfoil, Curly leaf pondweed and Water Hemlock

Eurasian Millfoil- An emergent, herbaceous aquatic plant, Eurasian watermilfoil, usually extends 3 to 10 feet but can reach as much as 33 feet in length. The stems are reddish-brown to whitish-pink. It forms dense mats on the surface of water bodies, and new plants may emerge from each node on a stem root in contact with mud. Regenerates mostly from rhizomes, fragmented stems and axillary buds that develop throughout the year. Eurasian watermilfoil can be found in nearly 400 Wisconsin lakes.



Ecological threat:

- It invades lakes, rivers, and other water bodies ranging from fresh to brackish; thrives in areas that have been subjected to various kinds of natural and manmade disturbance.
- It can form large, floating mats of vegetation on the surface of water bodies, preventing light penetration for native aquatic plants and impeding water traffic.
- Winter-hardy, able to overwinter in frozen lakes and ponds in northern states and Canada; also able to grow in shallow over-heated areas.

Treatment:

Biological: The native milfoil weevil can be stocked in lakes. The weevils feed on the plants, and the larvae burrow into the stems. They do not eat other types of plants and reduce the vigor of the milfoil population.

Chemical: Herbicides used to control milfoil include 2,4-D, triclopyr, fluridone, endothall or diquat. Although middle to late summer is when plants tend to reach the surface and create a nuisance, most chemical applications for milfoil are done in the spring during the early stages of active growth. This reduces the effects on native plants. An aquatic applicator license is needed to apply chemicals in most aquatic treatments. Diquat can affect certain fish such as Walleye.

Manual: Hand-pulling by snorkelers or divers can be an effective removal strategy for small populations of plants. It can be used as a follow-up to chemical control to remove surviving plants. Care must be taken to remove all pieces of the plant because even small fragments can survive and re-root.

Curly leaf pondweed- A perennial, submerged aquatic herb that is native to Eurasia. Tolerates fresh or slightly brackish water and can grow in shallow, deep, still or flowing water.



Ecological threat:

- It invades freshwater lakes, ponds, rivers, streams, and in slightly brackish waters. It can become dominant and invasive due to its tolerance for low light and low water temperatures.
- May outcompete other underwater plants and become dominant, which causes problems due to the formation of dense mats that interfere with recreational activities.
- It also causes an increase in phosphorus concentrations, causing an increase in algae blooms and a pile-up of dying *P. crispus* along the shore

Treatment:

Mechanical: Due to the early growth period, management should happen in spring or early summer. Raking, cutting or harvesting reduces biomass and possibly reduces the production of turions.

Chemical: Diquat, endothall and fluridone can be effective.

Water Hemlock- A biennial herb. The three to 10-foot tall stems are hollow, hairless and ridged with reddish-purple mottling on the lower stem and branched extensively.





Ecological threat

- It invades a range of habitats from roadsides, fields, stream and lake banks, disturbed areas, riparian woodlands and floodplains.
- An individual plant can produce over 30,000 seeds.
- All parts of the plant are toxic to animals and humans.
- Can cause severe rash and is not to be burned. Can cause breathing problems.

Treatment:

Mechanical: Hand pulling, wear gloves when handling this plant and do not burn the plant. Burning can cause respiratory problems.

Chemical: Foliar spray of 2, 4-D plus dicamba before buds are produced.