

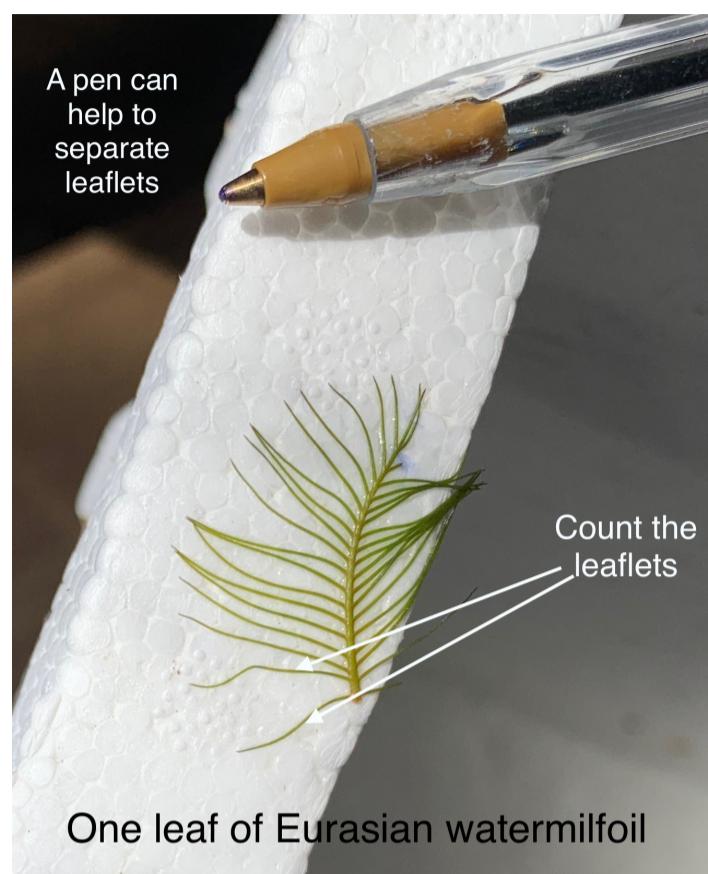
2022 Fact Sheet - Pearl Lake

Minimize Eurasian and hybrid watermilfoils (EWM)



Identification

One leaf of Eurasian watermilfoil



A pen can help to separate leaflets

Count the leaflets

- Plants that have leaves with more than 12 leaflet pairs are Eurasian watermilfoil
- Plants that have leaves with fewer than 12 leaflet pairs may be northern or hybrid watermilfoil.

History

Eurasian watermilfoil was first detected in Pearl Lake around 1995. Initially, it was easy to tell it apart from the native northern watermilfoil species, but 28 years later, Eurasian and northern have combined to produce a great variety of hybrids. Currently, the vast majority of milfoil plants in Pearl Lake are hybrid watermilfoils. Like Eurasian, hybrid watermilfoils are classified by the DNR as restricted plants. Therefore, both are abbreviated here as EWM.

Herbicides

From 1998 - 2018 Pearl Lake was treated annually with 2,4d (Navigate) with mixed results. The top 3+ feet of watermilfoil stems were killed, substantially slowing the growth of both EWM and native watermilfoils. However, Navigate tends to kill native plants like pondweed and coontail outright, leaving space for more EWM. Chemicals like 2,4d all have side effects that range from killing 35-50% of young fish (2,4d) to birth defects in people (Fluridone). The entire lifecycle of the weevil takes place in the upper 2-3 ft of the EWM plant and recent research showed that all chemical applications kill 80% of the milfoil weevil population in the lake.

Success stories

In a WI-wide study of 432 lakes, researchers found that lakes with low numbers of EWM plants share the following traits:

- All have sustainable populations of the milfoil weevil,
- All have not applied herbicides for at least 10 years,
- All have adequate leaf litter for the milfoil weevil to overwinter.

To reduce EWM on Pearl Lake

- Add dry leaf litter to sandy and mowed areas up to 30 feet from the shoreline to help weevils overwinter,
- Stop mowing and raking within 30 feet of the shoreline after Labor Day until Memorial Day,
- Stop application of herbicides; over time, they increase the density and spread of EWM plants.
- Do NOT SPOT TREAT with herbicides; even in calmest weather, chemicals disperse unevenly, rarely work.
- Pull plants to create your own swim area but leave remaining plants to help weevil populations grow.
- Remove floating fragments of watermilfoil plants and dispose of them on dry land.