

Invasive Plants in Pennsylvania

Eurasian Water-milfoil

Myriophyllum spicatum L.



Photo: Richard Old, XID Services,
www.invasive.org

Background:

Eurasian watermilfoil is native to Europe, Asia and northern Africa. It was accidentally introduced into the U.S. sometime between the late 1800s and 1940s, either from the aquarium trade or attached to boats.

Range:

This aquatic invader can now be found throughout most of the continental U.S., with concentrations around the Great Lakes, New England and Pacific Northwest.

Description:

This submerged aquatic invasive has stems that grow up to the water's surface, usually 10 feet in length but potentially as much as 30 feet. The delicate leaflets give the plant a feathery appearance.

Habitat:

Found in lakes, ponds and other aquatic environments where stagnant to slow moving water is found. It prefers fresh water but can tolerate brackish conditions. This plant thrives in disturbed areas.



Photo: Alison Fox, U. of Florida,
www.invasive.org

Biology and Spread:

Most regeneration of this plant is from its rhizomes, but new plants may emerge from each joint on the stem and root upon contact with mud. The plants produce seeds (*see image below*) but they are not considered an important means of dispersal.

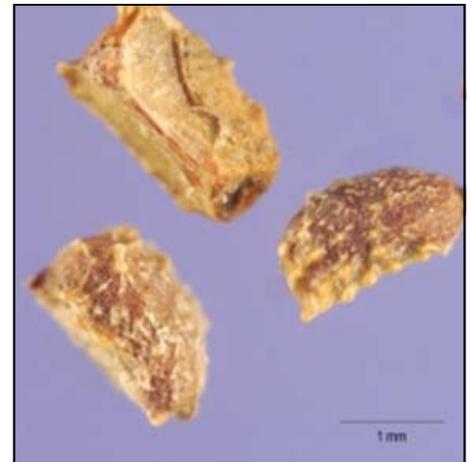


Photo: Steve Hurst, USDA NRCS,
www.invasive.org

Ecological Threat:

Once this plant becomes established the dense mats of leaves block light, leading to a decline in the abundance of native plants. It can also reduce habitat for fish spawning and breeding and impact recreational uses.

How to Control this Species:

Prevention

Monitoring and prevention are the most important steps to keep milfoil under control, since it can be difficult to treat once it's present. Check all equipment and boats for plant fragments before leaving the area. Remove all debris, bag and dispose of.

Limiting disturbance to lake bottoms and the native vegetation growing there will help minimize the chances of Eurasian water milfoil colonizing the area.

Look-A-Likes:

There is a native version of watermilfoil – Northern watermilfoil (*Myriophyllum sibiricum*) that looks very similar to the Eurasian species, so extreme care must be taken when treating a waterbody. It also resembles our native coontail (*Ceratophyllum* spp.) and the invasive parrotfeather (*Myriophyllum aquaticum*).



Photo: Graves Lovell, AL DCN,
www.invasive.org

Manual and Mechanical

Large harvesting equipment can be used to mechanically remove large infestations of milfoil. A rake can be used for smaller infestations.

Harvesting should take place before most native plants emerge, usually early summer. Substantial regrowth may occur if harvesting takes place too early in the season. Multiple harvests in the same growing season work best. All plant fragments must be removed for adequate control.

References:

Center for Invasive Species and Ecosystem Health:
<http://www.invasive.org/browse/subinfo.cfm?sub=3055>

Invasive Exotic Plant Pest Tutorial for Natural Lands Managers:
http://www.dcnr.state.pa.us/forestry/invasivetutorial/Eurasian_water.htm

A Field Guide to Common Aquatic Plants of Pennsylvania:
<http://pubs.cas.psu.edu/FreePubs/pdfs/agrs110.pdf>

For More Information:

To learn more about invasive plants in Pennsylvania and the northeast, here are some useful resources:

Pennsylvania SeaGrant:
<http://seagrant.psu.edu/publications/ais.htm>

DCNR Invasive Species Site: <http://www.dcnr.state.pa.us/conservationscience/invasivespecies/index.htm>

Lowering or raising the water level can be effective in reducing the plants' growth. Shade barriers may also be used to reduce overall growth rates.

Chemical

Fluridone is a selective herbicide that can be used to treat milfoil and several other invasive aquatic weeds, although it can also harm native aquatic plants, so its use should be limited. Application should be made before or during the early stages of plant growth.