



# INVASIVE PLANTS OF OHIO

## Fact Sheet 12

## Eurasian Water-milfoil

*Myriophyllum spicatum*



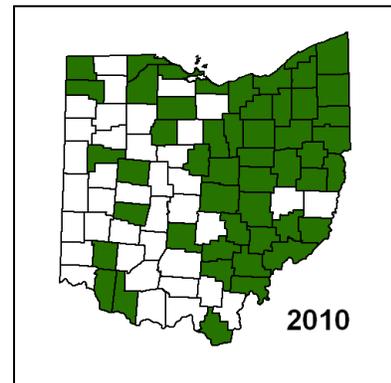
### DESCRIPTION:

Eurasian water-milfoil is a submersed aquatic plant with long stems that branch near the water's surface creating a canopy of floating foliage. The plants are rooted and stems usually reach 3 to 10 feet in length, however they can grow as much as 30 feet long. Eurasian water-milfoil forms dense mats of bright green, finely dissected, whorled leaves. Each leaf has 12 to 21 segments giving it a feathery appearance. In contrast, the native water-milfoil (*M. sibiricum*) leaves have only 5 to 10 (13) segments. Eurasian water-milfoil flower spikes emerge above the water in mid-summer, then fall horizontally when in fruit.

Eurasian water-milfoil is native to Europe, Asia, and northern Africa and was discovered in the United States in the 1940s. Its introduction was accidental.

### HABITAT:

Eurasian water-milfoil grows in fertile, fine-textured, inorganic sediments of lakes, ponds, streams, reservoirs, and estuaries. It is an opportunistic species invading highly-disturbed lake beds, lakes receiving nitrogen and phosphorus-laden runoff, and heavily-used lakes. Once established, the dense mats of leaves restrict light availability, leading to a decline in diversity. It displaces aquatic native vegetation and reduces habitat for fish spawning and feeding. High water temperatures promote multiple periods of flowering and fragmentation.



Map based on records as of 2010.

### INVASIVE CHARACTERISTICS:

Dense canopies of Eurasian water-milfoil shade out native vegetation. The plant starts growing early in the spring and is capable of rapid dispersal through fragmentation. Spread among water bodies is mostly attributed to boating activities.

## **CONTROL:**

### Mechanical:

Aquatic invasive plants can be removed mechanically, but it is very labor-intensive. Hand-pulling can be done, although all fragments of the plant should be removed. Water level control can also be effective depending on the time of year. Mechanical cutters and harvesters are probably the most common mechanical control used in many lakes and ponds in Ohio when there are heavy infestations impacting boating and fishing.



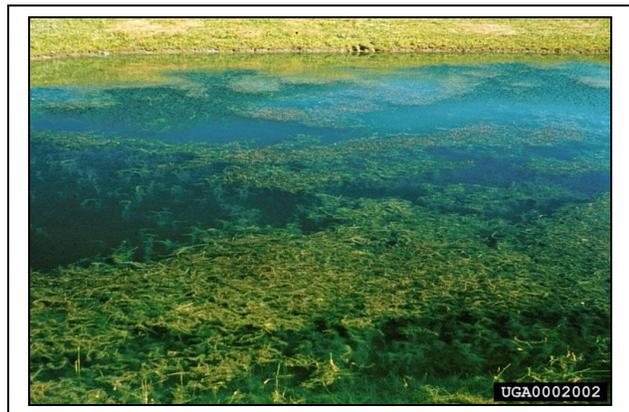
### Chemical:

Herbicide application may be used for heavy infestations of aquatic invasive plants, but is only recommended when all aquatic plants can be eliminated. Aquatic herbicides tend to kill all aquatic vegetation, so it is difficult to reduce impacts on native aquatic plants. Selective herbicides used for aquatic vegetation control include Renovate, AM 40-Weedestroy, Diquat EProZ, and Reward. It is important to survey

the aquatic habitat before using herbicide and apply herbicides in sites where Eurasian water-milfoil is a monoculture in high densities.

### Biological:

The most promising biological agent is a native weevil species (*Eurhynchopsis lecontei*). It has been found to feed and reproduce on Eurasian water-milfoil and prefers the Eurasian water-milfoil over native species. Other insects as biological controls include the North American midge, *Cricotopus myriophylli*, and a naturalized moth, *Acentria ephemerella*. The fungus, *Mycocleptidiscus terrestris*, has shown promising results as a biological control as well (Nelson and Shearer 2005).



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### **Credits and additional information:**

Plant Conservation Alliance-Alien Plant Working Group  
Ohio Department of Natural Resources, [www.ohiodnr.gov](http://www.ohiodnr.gov)  
The Nature Conservancy, Ohio Chapter  
University of Minnesota, [www.fwcb.cfans.umn.edu](http://www.fwcb.cfans.umn.edu)  
Cornell University, [www.invasiveplants.net](http://www.invasiveplants.net)  
OIPC website, [www.oipc.info](http://www.oipc.info)