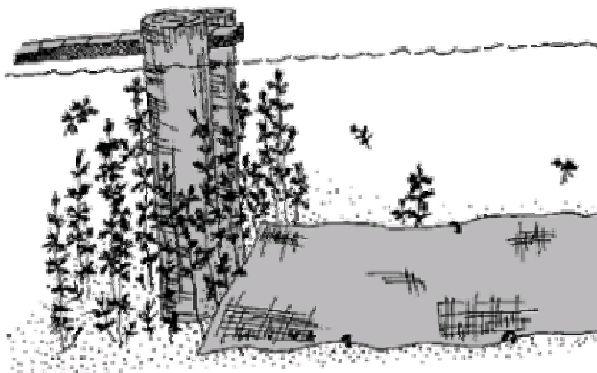




# Managing Milfoil with Bottom Barriers

**Eurasian Water Milfoil** (*Myriophyllum spicatum*) is a long, slender aquatic plant that is native to Europe, Asia, and northern Africa. Since its introduction into North American waterways, it has gained a notorious reputation for its invasive, aggressive growth habits and its ability to crowd out native plant types. The plant's dense stands often reach the water's surface and create floating mats of vegetation that hinder swimming and boating. Once established, there is no known way to completely eradicate this plant from a lake. The best management strategy is to control existing stands and limit spreading to other areas and waterways.



## Benthic ("Bottom") Barriers

Watermilfoil plants over-winter by storing nutrients in extensive root systems. In the spring, milfoil growth begins much earlier than native plants—because of its ability to tolerate a wide range of temperatures. Benthic barriers are mats that are installed early in the growing season to inhibit this "head start" by blocking the sunlight the plants need to grow. However barriers shade out the native/beneficial plants, as well as the unwanted invasives, and also smother lake bottom that is used by fish for spawning habitat. For these reasons, a *permit from the NYS Department of Conservation is required.*

**Benthic barriers are most appropriate for control of Eurasian watermilfoil in small, localized areas-**

- Swimming Areas
- Boat Launches
- Around Docks
- Along Boat Lanes

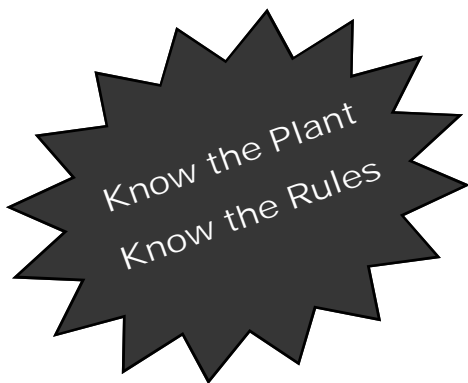
## Thinking About Using A Benthic Barrier?

*Controlling milfoil with a benthic barrier requires planning and a good understanding of the regulations involved. This fact sheet is designed to help you learn the basics.*

To install a benthic barrier next spring—there are a number of steps you need to take this summer:

- Review the basic rules and guidelines (on the back side of this page) regarding the construction and installation of a benthic barrier.
- Make a map of the area where you would like to install a benthic barrier. In the sketch, make reference to landmarks such as streets, houses, docks, shorelines, etc and be sure to include dimensions.
- Take a photograph of the site. ( You will need this for the permit application)
- During mid to late summer, take note of where Eurasian watermilfoil beds are located at your site, and make a record of it.
- Confirm the identification of the plant by using the guide on the back of this sheet. For assistance or verification, take a sample of the plant and place it in a zip lock bag with a damp paper towel. Contact Cornell Cooperative Extension of Onondaga County to arrange an I.D. check (315-424-9485).
- Mark your calendar to remind yourself to submit the permit application early. (No later than February 28 ) Contact the New York State Department of Environmental Conservation Region 7 Permitting Section for a permit application: (315) 426-7438





Before You Can  
Control It—  
You Need to  
Identify It!

Is it  
Eurasian  
Watermilfoil???

### Overview of Rules

**The use and installation of benthic barriers requires a permit from the NYS DEC—**

**DO NOT start a project without a permit.**

**Benthic barriers must be constructed from clean, gas-permeable material that will not influence water quality.** Landscaping fabrics or geotextiles are suitable for blocking sunlight and allowing air bubbles to escape.

**Installation must occur in the spring, before May 1st. Removal must occur approximately 10 weeks later, but no later than July 1st.**

**Benthic barriers must be weighted down securely with native lake cobbles.** Any additional anchors needed should be clean & must be removed at time of mat removal.

**Benthic barriers shall not be installed within 50 feet of any public or private water intakes.**

**Barriers must be inspected and maintained regularly to ensure that the material stays intact and does not become a navigational hazard.**

**Barriers installed in water less than 6 feet deep should be marked with buoys.**

**No chemically treated timbers, pilings, sheathing or other wooden components shall be used in a way where contact with the water could occur.**

**To avoid damage, warning signs may be appropriate if there is the potential for boaters to anchor over the benthic barrier.**

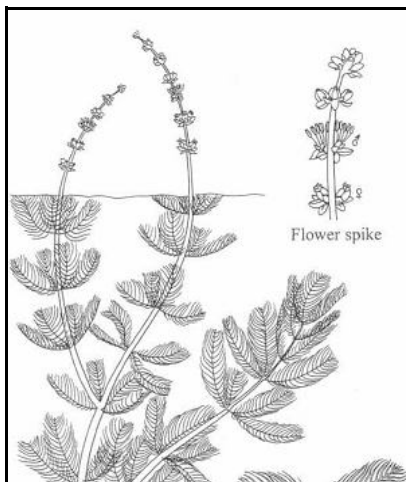
**Any piece of the barrier that becomes separated shall be removed immediately, and arrangements made to remove the remainder of the barrier.**

**NYS Department of Environmental Conservation  
Region 7  
Division of Environmental Permits  
(315) 426-7438**

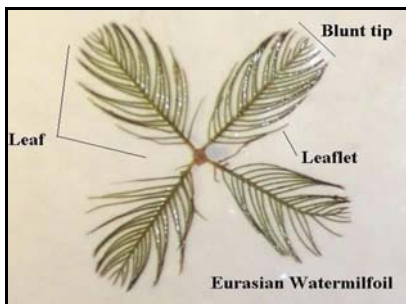
## Identifying Eurasian Watermilfoil



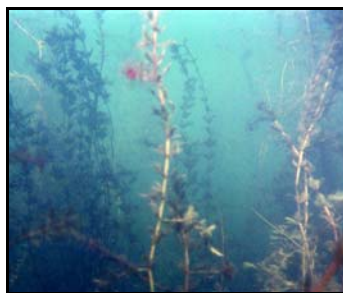
Long, spaghetti-like stems, sometimes 2 or more meters in length. Stems branch repeatedly at the water's surface, creating a canopy of foliage.



The flowering structure is a spike that sticks up out of the water, usually in late summer, with whorls of small red flowers.



Leaves are divided like a feather, with a short stalk and about 14-20 pairs of threadlike leaflets. The tip of the leaf is blunt, as though cut with scissors.



Stems can range from pale pink to reddish-brown. The growing tip of the plant is often bright red.



When out of water, the leaves lose their rigidity and often collapse around the stem.

