Plan Ahead To Control Invasive Lake Weeds

By Kelly Somerlot, Watershed Educator, Cornell Cooperative Extension of Onondaga County

Although summer days of swimming and boating seem very far off this time of year, now is the time to plan ahead for the control of Eurasian Watermilfoil. Eurasian Watermilfoil is an aquatic plant that exemplifies the term "weed." Since first introduced into the United States it has spread from lake to lake, invading aquatic communities, clogging water bodies, and over-taking native plants. Eurasian Watermilfoil, like many invasive, non-native species, gives aquatic plants a bad name. The fact is that most aquatic plants are beneficial to us and are critical to healthy lakes. Native varieties of aquatic plants release oxygen into the water, provide needed habitat and food to fish populations, and stabilize lake bottom sediments to reduce water turbidity. Non-native plants, on the other hand, are often so unfamiliar to the varieties of fish and other aquatic animals that we have in New York, that our fish are unable to use the foreign plants as food or habitat. At the same time, the populations of native plants that our fish and aquatic animals do use, may decrease because of the added competition with the invasive plant!

Just as humans inherit immunity to local germs or conditions (consider the diseases that Europeans introduced to Native American populations, the effect of "thin-air" on visitors of high mountain elevations, or the inability of tourists to drink foreign water), plants and animals that come from the same location and have lived together over many generations have adapted to life with each other. When an unfamiliar plant or animal is introduced to a new location, that co-adaptation relationship does not exist. Some introduced species become what is considered "invasive" because they have an advantage over the native plants or animals; they may lack predators or disease in their new surroundings, they may be able to grow larger, reproduce faster, or out-compete native species, or they may introduce a disease that the native population has not built a tolerance for.

In the case of Eurasian Watermilfoil, it is able to grow quickly early in the season –it produces dense foliage near the surface of the water that shade out slower-growing native plants. Eurasian Watermilfoil not only changes the aquatic communities of local lakes in terms of plants and fish, but it also becomes a nuisance to people who like to swim and boat. The thick weed beds are able to spread by root stolons and plant fragments, as well as by seed. Plant fragmentation is a big concern in controlling the spread of the milfoil, because any piece of plant that is broken off (whether it be chopped by a passing motorboat, left behind by a homeowner pulling plants out around their dock, shredded by a mechanical harvester, or broken by the swimming action of a person or duck) has the potential to grow into a new plant.

One method of control is a light-blocking bottom barrier, known as a benthic mat, which is secured to the bottom of the lake early in the season. The mat blocks out sunlight from reaching the plants underneath, and therefore restrict the growth of Eurasian Watermilfoil. Unfortunately, it also blocks the growth of any native plants that may provide benefits, such as fish habitat. The use of bottom barriers to reduce milfoil is most appropriate in swimming areas or around docks, and installation requires a permit from the NYS Department of Environmental Conservation (For more information on permit requirements contact Joanne March 315-426-7438). Anyone interested in learning more about receiving a permit to install a mat should consider the need for correct identification of the plant and plan ahead accordingly. All mats are required to be installed no later than May 15th, must remain in place for a minimum of 30 days, and be removed no later than July 15th. And, since an ounce of prevention is worth a pound of cure, there are also a number of ways that concerned lake users can participate in preventing other invasive species from taking root in the future. "Weeds Watch Out!" is an upcoming program that will train groups of volunteers to track invasive species populations and to look out for future invaders. If you are interested in learning more about invasive or native aquatic plants, controlling Eurasian Watermilfoil, or becoming a Weeds Watch Out! volunteer contact Cornell Cooperative Extension of Onondaga County (315-424-9485 x230) or visit www.cce.cornell.edu/onondaga/Skaneateles/weed%20management.html.