Vermont Invasive Exotic Plant Fact Sheet

Description: Eurasian watermilfoil is a submersed, perennial aquatic plant with leaves arranged in whorls of four around the stem. Each leaf is finely divided into many paired leaflets, giving the plant a delicate, feathery appearance. The plants are rooted in the bottom and usually branch heavily as they reach the water surface, forming a dense mat. The tops of Eurasian watermilfoil plants frequently have a reddish color. Erect flower spikes rise above the water surface. Flowers are small and are reddish in color. The spread of Eurasian watermilfoil can occur through seeds but is most frequently a result of vegetative fragmentation. Eurasian watermilfoil is similar in appearance to several species of native watermilfoils, but can be distinguished by having 11 or more leaflets on each side of the leaf midrib (natives have fewer leaflets).

Habitat: Eurasian watermilfoil can be found in lakes, ponds, reservoirs, rivers, canals, and drainage ditches. Eurasian watermilfoil grows along shallow shoreline areas as well as in deeper water, 25 feet (7.5 meters) deep or more. It is tolerant of a wide range of environmental conditions.

Threats: Eurasian watermilfoil is highly invasive and competes aggressively with native aquatic plant species, thereby reducing biodiversity. Dense milfoil infestations can severely impair swimming, boating, and fishing activities. When the plant grows in dense mats, water quality and fish abundance and distribution can also be affected.

Distribution: Eurasian watermilfoil is native to Europe and Asia. It was first introduced into North America in the mid 1940s. The first sighting of the plant was in a pond in Washington, D.C. Since then it has spread to at least 45 states and three Canadian provinces. The quick spread of Eurasian watermilfoil

Eurasian Watermilfoil

Myriophyllum spicatum L. Watermilfoil Family Vermont Class B Noxious Weed



(Aquatic plant line drawing is the copyright property of the University of Florida Center for Aquatic Plants (Gainesville). Used with permission.)

Distribution continued: across the country has been attributed mainly to boat traffic, where plant fragments have been transported accidentally from one site to another on motorboat propellers and trailers. The dumping of aquaria has also been the suspected source of some new populations. Eurasian watermilfoil infests over 57 lakes and several rivers throughout Vermont, including the Connecticut River.

This fact sheet is one in a series on invasive exotic plants in Vermont and is a cooperative project between the Departments of Environmental Conservation, Fish and Wildlife, and Forests, Parks and Recreation of the Vermont Agency of Natural Resources, and The Nature Conservancy of Vermont. Winter 2003

Control: Eurasian watermilfoil is controlled through various mechanical, chemical, biological, and physical methods. Mechanical methods include harvesting, hydro-raking, diver-operated suction harvesting, and dredging. Some aquatic herbicides, such as fluridone, triclopyr, and 2,4-D can be effective. Biological methods include the use of the herbivorous Asian fish known as the grass carp and a milfoil-eating weevil (*Euhrychiopsis lecontei*) native to North America. (Introduction of grass carp in Vermont is illegal because of the negative effects they could have on natural fish and wildlife populations, the possibility of their establishment or spread to other waters, and the possible transmission of diseases to resident fish populations.) The use of the weevil is experimental at this time but it has shown promise. Other techniques used for milfoil control are overwinter drawdowns (lowering lake water levels to expose milfoil to drying and freezing), bottom barriers (mats anchored to the bottom that kill plants by blocking out sunlight), and hand-pulling.

* No person may use pesticides, biological controls, bottom barriers, structural controls or powered mechanical devices in waters of the state to control nuisance aquatic vegetation, insects or other aquatic life including lamprey unless that person has been issued a permit by the secretary of the Agency of Natural Resources.

References:

- Couch, Richard, and E. Nelson. 1985. *Myriophyllum spicatum in North America*. In: Proceedings of the First International Symposium on Watermilfoil and Related Haloragaceae Species. Vancouver, British Columbia, Canada.
- Crow, G.E. and C.B. Hellquist. 1983. Aquatic Vascular Plants of New England: Part 6. Trapaceae, Haloragaceae, Hippuridaceae. New Hampshire Agricultural Experiment Station, University of New Hampshire, Durham, New Hampshire. Station Bulletin 524.

