Golden Sands
Resource Conservation
& Development Council, Inc.

Aquatic Invasive Species Quick Guide

Eurasian Watermilfoil (*Myriophyllum spicatum* L.)

Description: Eurasian watermilfoil is a non-native, perennial, submersed aquatic plant in the family Haloragaceae. Feather-shaped leaves are divided into 12 or more pairs of slender leaflets. Leaves are arranged in whorls of 4-6 around the stem. Stems and leaves tend to be limp, often with some pinkish color. 2-4" flower spikes are pink and yellow, held above the water, with many whorls of pink flowers (female) on the lower half, and whorls of yellow flowers (male) on the upper half. Eurasian watermilfoil can survive on wet shorelines during the growing season if water levels recede.

Eurasian watermilfoil has whorls of feather-shaped leaves with 12 or more pairs of leaflets.

North American Distribution: Eurasian watermilfoil occurs in British Columbia, Ontario, Quebec, and at least 47 U.S. states.

Fragments of Eurasian watermilfoil can produce roots and continue growing.

Dispersal Vectors: Eurasian watermilfoil was introduced from Europe and Asia in ballast water of trans-oceanic ships, and probably also as a result of aquarium dumping. Stem fragments disperse the plant short distances, but they can easily catch on boat trailers and other equipment and be moved between water bodies. Seeds are thought to have very low viability.

Ecological Impacts: Populations can spread quickly by fragmentation, and can create dense stands that exclude native vegetation. These stands also create floating mats of tangled vegetation, which increase water temperatures, reduce water movement, and impede recreational activities.

Control Options: Small patches of Eurasian watermilfoil can be removed manually. The base of the plant and roots must be removed, and all parts of the plant should be disposed of away from any water body. Use of large rakes is not recommended because of the risk of fragmentation. A free, helpful tutorial on manual removal of Eurasian watermilfoil is available on YouTube at http://www.youtube.com/watch?v=CfsEDyAwQP4

Chemical herbicides can be used to control large stands of Eurasian watermilfoil. These herbicides must be applied by a licensed applicator, and when water temperatures are 50-60°F. These herbicides may have negative impacts on native aquatic plant species, so proper timing and dosage is crucial. Most states require chemical use permits for any herbicide treatments in standing water or wetland situations.

Eurasian watermilfoil (left) has 12+ pairs of leaflets per leaf, while native watermilfoils (right) tend to have <12 pairs.

An aquatic insect native to much of North America, *Euhrychiopsis lecontei*, has been associated with declines of Eurasian watermilfoil. The weevil damages Eurasian watermilfoil through its feeding activity. In order to be effective, these weevils require abundant natural shoreline vegetation for overwintering.

Additional Information:

Aiken, S. G., Newroth, P. R. and I. Wile. 1979. The biology of Canadian weeds. 34. *Myriophyllum spicatum* L. Can. J. Plant Sci. 59: 201-215.

Photo credit: Paul Skawinski

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