

Variable-leaved Watermilfoil

...Vermont's newest aquatic invasive species

In October 2008, aquatic biologists at the Agency of Natural Resources confirmed the arrival of a new invasive aquatic plant in Vermont, *Myriophyllum heterophyllum* (variable-leaved watermilfoil). The plant was found in Halls Lake in Newbury located on the eastern side of the state. In September 2009, a second population was confirmed in Lake Champlain in the southern end of Missisquoi Bay.

Variable-leaved watermilfoil is a freshwater rooted perennial plant not native to Vermont.

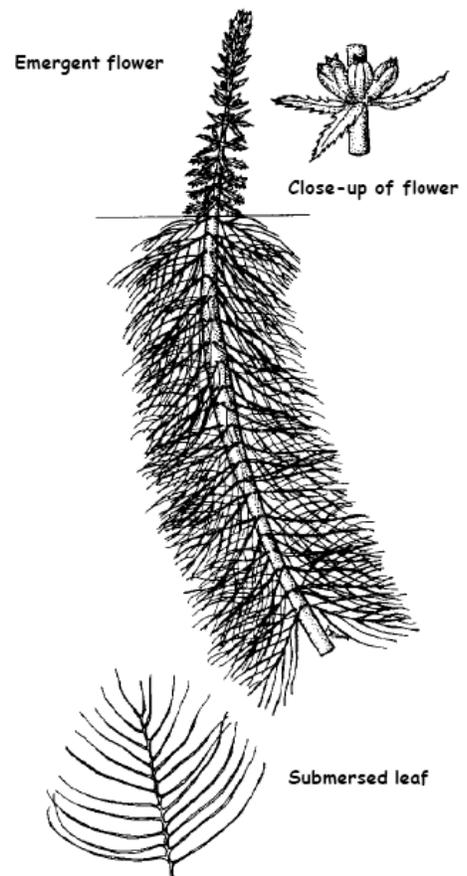
What is the status of variable-leaved watermilfoil in Vermont?

Halls Lake: Variable-leaved watermilfoil appears contained in Halls Lake for now. Future surveillance and spread prevention measures are critical to prevent further spread of this aggressive plant in Halls Lake and to other waters in Vermont.

Missisquoi Bay, Lake Champlain: Based on preliminary searching completed in Missisquoi Bay by Lakes and Ponds Management and Prevention Section staff, variable-leaved watermilfoil appears to be widespread in a large wetland complex of the southern portion of the bay. More extensive searches are planned for the fall.

Why is variable-leaved watermilfoil a problem?

Variable-leaved watermilfoil can be difficult to control once a population is established in a waterbody. Like Eurasian watermilfoil which was confirmed in Vermont in 1962, variable-leaved watermilfoil is able to grow in a wide variety of environmental conditions, is aggressive and grows rapidly. Dense growth of variable-leaved watermilfoil can outcompete native aquatic vegetation, resulting in nearly monotypic growth producing an area with a reduced habitat value for other species. Thick stands of the plant can impair recreational uses including boating, fishing, and swimming. Variable-leaved watermilfoil is difficult to control once fully



established. Mechanical removal, physical habitat manipulation methods, and herbicides have been employed with varying degrees of eradication success

How is variable-leaved watermilfoil spread?

Spread of variable-leaved watermilfoil occurs via stem fragments, winter buds, roots, and to a lesser extent by seeds. Plant parts can easily hitchhike on recreational equipment if not removed. It is also a popular aquarium trade species, therefore disposal of unwanted aquarium plants and animals should be in the trash.



Eurasian Watermilfoil (left) compared to Variable-leaved Watermilfoil (right). (VTDEC)

How to identify variable-leaved watermilfoil

Variable-leaved watermilfoil is a rooted, submersed, perennial aquatic plant. Underwater leaves are finely divided into segments giving them a feather-like appearance. To identify variable-leaved watermilfoil, look for:

- Densely packed whorls of four to six underwater leaves around the stem
- Underwater leaves with 7 to 11 pairs of leaf segments per leaf
- On more mature plants, blade-like leaves with serrated edges appearing above the water's surface. Flowers develop at the base of these above-water leaves, forming an erect, stiff spike.

All leafy watermilfoil plants should be suspect until a positive identification can be made. If you find a suspicious aquatic plant, contact Ann Bove, Vermont Aquatic Invasive Species Program at 802-241-3777 immediately.

How can I help?

- Don't allow aquatic invasive plants or animals to hitchhike on your recreational equipment. Inspect, clean, and dry all of your equipment. Remove any plant and animal material and discard removed material in a trash receptacle or on high, dry ground where there is no danger of them washing into any water body.
- Become a VIP (Vermont Invasive Patroller) and monitor local waterbodies for possible new introductions of invasive species. Attend a training session and learn how to identify and search for invasive aquatic plant and animals as well as learning about native aquatic plants and animals and their habitat.
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