

Demystifying Milfoil

By

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Almost everyone has now heard of milfoil, that nasty invasive plant that threatens to ruin Maine's lakes, but there seems to be some confusion. How many types of milfoil are there? Is milfoil native to Maine? If not, how long has it been here? If so, why are we so worried about it? Is milfoil the only aquatic plant that threatens Maine's lakes? Much of the confusion may come from the way the term "milfoil" has been used in recent years.

"Milfoil" has been used as a catchword to get the message out about the threat of invasive aquatic plants in Maine. There are the "Maine Milfoil Summits," the "Milfoil Bill," and the formation of the "Maine Milfoil Coalition", etc. Having a word that people can easily identify with has been helpful in raising awareness. *But the practice of reducing a complex problem to a single generic term always has its down side. It fails to provide an accurate and complete picture. The term "milfoil," when used to describe the current threat of invasive aquatic plants to Maine's lakes, is limited and potentially misleading for a number of reasons.*

First, several milfoil species are native to Maine lakes. These plants are not harmful or threatening. In fact, like all of our native aquatic plants, they provide many benefits to the lake ecosystem. Native plants provide essential habitat for wildlife and protect water quality by taking up nutrients and protecting the shoreline from wave and wake action. Native aquatic plants are good for our lakes and ponds. *It would be most unfortunate if the public were to think that all members of the milfoil family were undesirable, and that they should be removed.*

Secondly, there are several non-milfoil plants that are just as likely to invade Maine's lakes in the coming years as the invasive milfoils. The current list of "Maine's most unwanted aquatic plants" (determined by the Maine Department of Environmental Protection (DEP), and included in the laws passed by the Maine Legislature in 2000 and 2001) includes the following eleven: Brazilian elodea, Curly leaf pondweed, European naiad, Fanwort, Frogbit, Hydrilla, Water chestnut, Yellow floating heart, Parrot feather, Variable-leaf milfoil and Eurasian watermilfoil. *Only the last three of these are actually milfoils. But all of these plants have been identified as imminent threats to Maine lakes. Indeed, hydrilla, considered by many experts to be one of the most aggressive and persistent invaders on the list, has now been found in two waterbodies in Maine.*

Here is an example of how generic language can be confusing. A Sebago Lake website posts the following Sebago Lake "fact."

"Water plants native to the lake include pipewort, bur reed, water lobelia, spikerush, pondweeds, water celery, coontail, water milfoil."

Though the statement above is very likely accurate, in light of the recent attention focused on non-native invasive milfoils, the listing of "water milfoil," without further explanation, has caused some confusion, to say the least. Some have taken the statement to mean that the milfoil that has appeared in the tributaries and coves of Sebago Lake over the last forty years, Variable watermilfoil (*M. heterophyllum*), is native to Sebago Lake and therefore nothing to worry about.

Variable watermilfoil is *not* native to Sebago, to Maine, or even to New England. According to biologist C. Barre Hellquist, coauthor of *Aquatic and Wetland Plants for Northeastern North America*, the plant migrated, by way of human activity, to New England from the south and west (e.g., Michigan and Oklahoma) some time in the 1940s.

According to Biologist David Cortemanch, former manager of the Environmental Assessment Division at the Maine DEP, variable watermilfoil (*M. heterophyllum*) was first identified in Sebago Lake in the late 70s, and it was likely present in the lake for a few decades before it was identified.

There are many species of watermilfoil (genus *Myriophyllum*) worldwide. The *National List of Plants Species that Occur in Wetlands* lists six milfoils that are native to Maine. This is why the website fact is likely accurate. It would not be surprising to find one or more of these native milfoils in Sebago Lake. Indeed, over the last few years, the Lake Stewards of Maine (LSM-VLMP), Portland Water District (PWD), and the DEP have received requests to identify many aquatic plant specimens that have turned out to be native milfoils.

So variable milfoil is not native to Maine. Yet, it has been here for years, and it *hasn't* taken over Sebago Lake. What's the fuss?

Here's the fuss: Variable watermilfoil, which grows to a maximum depth of ~12 feet, will never overtake a lake like Sebago that is dominated by deep water habitat (often exceeding 100 feet), but it can become a significant nuisance in coves and near shore areas, interfering with boating and swimming and causing property values to decline. Variable milfoil can take over shoreline areas previously inhabited by native plants and negatively impact an important habitat. This is, of course, true for other Maine lakes that are infested with Variable watermilfoil.

Having no baseline data to work with, it is impossible to know how fast the plant is spreading in the lake and how many new colonies are forming each year. The Portland Water District began mapping milfoil sightings on the lake in 2000 and is currently working to organize a comprehensive screening of the lake's shoreline. The LSM-VLMP "Invasive Plant Patrol" screening project, a volunteer training program that is open to the general public, will be implemented through public workshops on lakes throughout Maine during the next several years. Having baseline data is essential to determining an appropriate action plan for Sebago Lake, and an effective prevention and identification plan for other lakes throughout the state.

Sebago Lake is one of the most popular boating lakes in Maine and in New England. Given that boats are the primary ways these plants get from lake to lake, the invasive milfoil found in Sebago is a potential threat to every other lake in the region.

Make no mistake – the three species of milfoil listed as "unwanted" in Maine lakes are aggressive and invasive. Every effort should be taken to keep them out of Maine lakes. But other invasive species are also present in Maine and more are on the horizon.

A great slogan for this issue has been: "Spread the Word, Not the Plant." *We should make sure that the words we are "spreading" are clear and accurate.* Perhaps it is time to adopt more accurate terminology. When speaking about the issue (and not about a specific plant), the term "invasive aquatic plants" or "lake invaders" works better than "milfoil" in almost all cases. It may not form a nice alliteration with the name of our state and lend itself to such catchy headlines as "Milfoil Makes Mess of Maine Lakes!" but give it time. It may grow on you.

For more information on invasive plants in Maine please visit the following websites:

Lake Stewards of Maine - Volunteer Lake Monitoring Program

www.lakestewardsme.org

Maine Department of Environmental Protection

<http://www.maine.gov/dep/water/invasives/index.html>

Portland Water District

www.pwd.org

Lakes Environmental Association

www.mainelakes.org