

Conservation Matters

A monthly column focused on conservation education, as the result of collaboration among several area conservation commissions and organizations. If your town's commission or conservation organization would like to contribute articles, please contact Jessica Tabolt Halm jess_tabolt@hotmail.com

Title: Battling Variable Milfoil on Squam Lake

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Invasive species have long been a problem world-wide. From toads and rabbits in Australia, aquatic invasives such as variable milfoil in NH lakes, to even our own grey squirrel from Great Britain. Now more than ever, species are able to travel the globe with the aid of humans, and settle into new locations where they pose a threat to native populations.

According to one study, there are approximately 50,000 introduced species in the United States. An introduced, exotic, or non-native species is an organism that has successfully colonized a habitat or location where it was not historically found. New Hampshire's own state flower, the purple lilac is an example of this. While the purple lilac is native to Europe, it was introduced here as an ornamental species.

Of the many alien species, another study estimates that 4,300 are invasive. Invasive species are non-native species that alter the ecosystem to which they are introduced. Here in central New Hampshire, we observe a number of invasive species that alter the local ecology of our forests, fields, and waterways. Most often invasive species have no natural predators, reproduce rapidly, and quickly out-compete native flora and fauna for resources such as water, habitat, and nutrients.

Variable milfoil, an aquatic invasive plant found in many lakes and ponds in New Hampshire, offers a classic example of an invasive species in our area. Milfoil was first identified in the Squam Lakes in 2000. Since that time, the management strategies used to combat milfoil on Squam have become an example of success in dealing with invasives and have produced a number of working partnerships between town and lake residents, the Squam Lakes Association, and the New Hampshire Department of Environmental Services.

Variable milfoil grows rapidly in Squam's waters. In fact, the tallest milfoil in NH, at 23 feet, was found in Squam. It reproduces mostly through fragmentation. The plant becomes increasingly brittle during July and August. Boaters, swimmers, aquatic animals and wind action can cause fragments to break, and fragments as small as one inch can sprout roots and grow. Milfoil has no native predators, and quickly takes over aquatic areas, causing a decrease in biodiversity, and can lower oxygen levels in a body of water. Milfoil can have economic impacts as well, by reducing tourism and lessening property values.

The story of milfoil on Squam is one of growing success. The Squam Lakes Association, along with its partners and volunteers have effectively removed milfoil in many of the upstream areas of Big Squam. These areas require regular attention, but they are no longer harboring the imposing infestations of several years ago. Management activities can now be focused downstream in Little Squam and in the Squam River.

A battle to restore habitat from an invasive species infestation, whether underwater or terrestrial, is long-term. Quick fixes and sporadic attention will be ineffective. The current success of the milfoil reduction on the Squam Lakes would not be possible without long-range thinking and consistent dedication. This work requires constant vigilance, as we are under regular threat of new and different invasives.

Photo Caption: Invasive species, such as the aquatic plant variable milfoil, are a growing threat to native habitats, biodiversity, and local economies. Managing and removing invasive species infestation requires hard work, strong partnerships, and long-term investment.