

The Milfoil Connection - - Coming to a pond or lake near you?

What is variable water-milfoil? It is called an exotic aquatic plant because it is not native to our area and it is also invasive. It will dominate all plant life and threaten the existence of natural aquatic plants that are critical to aquatic life in our lakes and streams of NH. Because it can grow at a peak rate of about 6 inches per week it can increase its coverage and area density by 5 to 10 times each year. In three years, variable milfoil went from about 1% coverage in Lower Suncook Lake to 100% coverage of areas that contained silt and sediment. This amounted to almost half the lake area. In 2004, the Suncook Lake Association (SLA) started an eradication plan called STOP Milfoil. It has restored the lake and it is now completely free of variable milfoil. Because variable milfoil is easily transported by boats and trailers, we rely on the Lake Host program to help prevent segments from being brought back into the lake. In three years, one small fragment can lead to a major infestation in any water body.

Critical to the continued success is the eradication of the infestation in neighboring water bodies like the Suncook River and all of the other water bodies in NH and New England. This past summer, we now think the few plants found in the lake in 2006 were brought in by large birds, particularly geese that move freely between the lake and the variable milfoil infested Suncook River. The Town of Barnstead is treating the river between Center Barnstead and Barnstead Parade Dam this summer as part of a unique program designed to rid the Suncook River watershed of variable milfoil in the next four years. We need other towns and lake associations to join in the fight. Any lake or water body that has silt and sediment at depths less than 15-20 feet will always be faced with the potential of getting variable milfoil until it is eradicated from our region.

Why should we care? Because all of us value clean water, healthy lakes to look at and having the ability to spend some recreation time on and in them. However, our human race must constantly fight the forces of nature to preserve things we value and need. We have road departments to plow and maintain our roads, we paint our houses and weed our gardens and keep our agriculture fields clean of tree seedlings and weeds. It takes effort, time and money to keep the things we value. If we don't do this, then the forces of nature are very swift in their destruction. And once lost, it is difficult and very expensive to recover.

Variable milfoil begins the cycle of habitat and diversity loss in water bodies. Twenty years ago, the Merrymeeting River was beautiful and had many fishermen on it every day. Now it is mostly a swamp after many years of neglect. Google Alton and look at the 'Earth View' to see the large area that has been lost. Where the ice is now is where the water cover was then. The Riverview Motel on the Alton circle would be more appropriately named Marshview Motel. Alton Bay is under attack. The river leading into it is so infested with variable milfoil that water bikes can't be used anymore. The Alton selectmen may get the message of how serious it is when people can't swim at the Alton Bay beach this summer. Downing Pond in New Durham now has variable milfoil. Since it is a shallow pond, it will quickly succumb unless immediate planning is begun now!

Prior to the SLA program, NH was continually using herbicide each year with the concept that variable milfoil could never be eradicated, but only contained and managed. The STOP Milfoil program has changed that concept while now making it possible to eliminate the need for continual use of herbicides. However, a critical part of the program is to do a complete and properly designed assessment and treatment of the infestation. It does not mean throwing some herbicide out on the water and expecting it to kill all of the variable milfoil. This requires man power provided by the towns or lake associations to help manage and assemble information to help DES complete a 5 year management plan before any treatment can begin. Even though

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the State of NH owns the water bodies, it does not have the man power to undertake programs for 67 water bodies in NH that have exotic aquatic plants (of which, 58 are infested with variable milfoil).

Critical to any program's success is 100% complete cooperation by all who share and live on or use that water body. Most objections are against the use of herbicides, particularly 2, 4-D, which is most effective against variable water-milfoil. If indole acetic acid (which is a natural plant growth hormone) is used instead of the chemical name 2, 4 -D, then I think there would be less concern.

We have seen in the past 30 years a significant advance in our ability to understand chemicals and their relationship to cells and DNA details far beyond what most thought possible. We can sequence the DNA genome, make chemical cocktails that are designed to kill cancer cells in a particular individual with minimum side effects, and study and reduce chemical side effects in our drugs we take for many of our ailments.

All of our medicines are chemicals; most will cause serious damage or worse if the dose is not correct or followed carefully. People can die if they drink too much water in a short time, but it is critical to sustaining life. It is the dose and not the chemical that is critical to maintain our confidence in the chemicals we use and to maximize their benefit while minimizing the potential to do harm. This also applies to the synthetic version of indole acidic acid, namely 2, 4-D. It is one of the most benign chemicals. It has no effect on animals when used properly, and generally biodegrades in 3-10 days. It just happens to act as an herbicide on variable milfoil because variable milfoil is one of the fastest growing weeds we know. It is applied to the water as a pellet that sinks to the sediments and dissolves near the plant roots. It remains mostly concentrated on the bottom but can reach levels in the lake water column that are just above the safe drinking limit. This is 100 times less than the OSHA (Occupational Safety and Health Administration) permissible exposure limit (PEL) of 10 ppm. In comparison, one glass of wine exceeds by 120 times the PEL of 1000 ppm.

Can 2, 4-D affect other plants? It can, particularly if they are a broad-leaf type of plant. In this case, it is again important to remember that dosing matters. Concentrations of herbicides that work on one species of plant, will not work, or will have little effect on another species of plant. Let us not make the mistake of stopping a variable milfoil treatment if we find some rare plants that could be affected. To do so is to doom forever our proper care of our water ways, prevent or undermine the possible eradication of this insidious weed, and promote the continued misuse of herbicides that have little impact on the long term elimination of milfoil. The best approach is to work out methods for protecting these plants even if it means transporting them to a safe location during the 2 week treatment period.

We are fortunate that NH-DES through Amy Smagula and Jody Connor are promoting a new program that will support the training of divers for pulling variable milfoil. Divers and their underwater post-treatment surveys are critical to the success of any program. The State Legislature did enact several new bills to support variable milfoil removal. One of these provides a \$5 tax on boat registrations. They earmarked this money to help DES provide supporting monies to towns and lake associations for their variable milfoil programs. \$65,000 was not enough to provide any meaningful help.

Many towns like Barnstead, Sunapee, Sutton, Wakefield, and Merrimack do recognize the risks to property value and recreation and have earmarked funds for these projects. However, many cities and towns are against losing this local revenue provided by this tax. The NH City

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and Town Clerk's Association has taken issue with the State trying to get people to register their boats with the State instead of at their town. Isn't this counter productive? I think so. Property values around water bodies provide much more income to the town than it costs to treat and maintain it. Laconia had to devalue property values in Pickerel Cove from 10 to 50% due to the large infestation there. If it will take 10 years to remove all of the variable milfoil in NH, each town will need the funds to hire divers and survey their water body each year, once a plan for its removal is put into place. A variable milfoil fund will provide that source of funds and assist in the initial treatment.

So what can we all do? At your town meetings, ask your Selectmen to set up a variable milfoil control committee. Request that a variable milfoil fund be set up to accept the boat registration fees and prepare for paying the town's portion for variable milfoil treatment after a plan is in place. If your town won't or hasn't set up such a fund and is not willing to prepare for battling variable milfoil, then please consider sending your boat registration to the State of NH. And then help raise the level of discussion to get this passed in your town. We all need to participate if we value our water ways.

If you are a Selectmen of a town, become informed and help by appointing a variable milfoil control committee to begin the program for ridding your lakes and ponds of variable milfoil. Responsibility for good stewardship of our water ways must have your support. Please contact Ms. Amy Smagula at DES at 603-271-2248 or asmagula@des.state.nh.us for any assistance.

To the numerous Departments and Bureaus of the State of NH; aggressively and proactively look for ways to help and assist towns and lake associations in their battle against variable milfoil. Yes, the State owns the waterways, so shouldn't we expect more support than resistance? Surprisingly, the folks in Pickerel Cove had to sue NH Fish and Game when they were denied a treatment permit. It was very disappointing that the State Attorney General's office came to the defense of the F&G Department and not the abutters that live on the lake. This issue needs to be changed.

To the State Legislature; we need your continued support to help foster state wide cooperation and awareness for a muster against water milfoil. We thank you for all of your support, especially Rep. Dick Drisko and other members of the Milfoil Legislative Committee who have championed many of the concepts used to fight variable milfoil. We cannot permit this plant, and other exotic aquatic plants, to develop immunity to the most benign form of herbicide we have available today. We must act and rid our water bodies of these insidious plants as soon as possible.

To the Governor's office, please continue to support our battle. We need your support in choosing departmental commissioners and executive directors who rely on science and technical reports to better inform them when making environmental decisions. They should not make emotional decisions with an inherent and unfounded bias against any chemical treatment, regardless of how safe or effective it may be.

If we join together as citizens, leaders in town, city and state government, we can beat this exotic weed that threatens a very beautiful and critical part of our State.

Ed Neister
Chairman
Suncook Lake Association - milfoil control committee
Town of Barnstead - milfoil control committee