Milfoil Update 2008

Fall

Above, a key part of the response to the discovery of Eurasian milfoil at Salmon Lake was to restrict boat traffic in the infested area.

Right, milfoil plants have been found in all four dives.

Update:

Counterattack at Salmon Lake

The news that Eurasian milfoil had gained a foothold in Salmon Lake was certainly discouraging, but the real issue now is the response. And on that subject there is some cautious optimism.

Peter Kalin

"We're hoping we found it early enough and that we've taken the right action," said Peter Kallin, executive director of the Belgrade Regional Conservation Alliance (BRCA). "On the face of it, so far, it seems to be working."

Four dives were conducted, on August 8 and 19, and September 4 and 23, to remove Eurasian milfoil plants. Perhaps 100 stems in all have been taken out, including 25 on September 23. There isn't one big patch, but plants scattered here and there, said John McPhedran of the Department of Environmental Protection.

Continued on Page 4

There is hope in the battle against invasives

As the battle against Eurasian milfoil begins in Salmon Lake and continues against invasive aquatic plants in other waters, it's important to know that there is hope.

In 2005, when LEA began its work on the upper Songo River in Naples, the odds of making a dent in the three-acre infestation seemed daunting. But this August, we received the following words of encouragement from Dr. Daniel Buckley, professor of Biology and chair of the Department of Natural Sciences at the University of Maine at Farmington.

Peter Lowell,
LEA Executive Director

"Last week my interns and myself spent a day on the Songo River above the locks to resurvey the Milfoil infestation," Dr. Buckley wrote in an email. "We had last surveyed the river in 2006 and had provided you and the Portland Water District with a map of the infestation at that time.

"On Tuesday I was happily surprised to find that over 99% of the infestation that

Continued on Page 3

Last issue of the newsletter for 2008.
See you at the 2009 Milfoil Summit on Friday, February 27 (*Mark your calendar!)*

Reflections on the 2008 Season

More signs needed at Sebago Lake

I had the chance to work with my daughter Mary Cloutier at the launch ramp at the Sebago Lake State Park. I couldn't believe the amount of milfoil that kept floating in around the ramp all day. The wind was strong and out of the northwest that day and it keep small fragments in the area. We inspected over 60 boats and fortunately 99% of the boaters where well aware of the milfoil situation. Many wanted to see what all the fuss was about. Many of the boaters on that day where regulars at this ramp.

However, several of them asked us if there was anyone at the launch sites in the big campground around the corner. It seems there are places to launch a boat at the campground and many of these people are from out of state and may be unaware of the milfoil situation.

Also, I was struck by the lack of milfoil warning signage entering the park roads. They are visible only at the launch site, however, this is a very busy spot and I'm not sure that everyone notices them while launching and retrieving their boat. I would think major signage would be very noticeable on the access roads where they may get more attention. Without the participation of LEA at this site, literally dozens of boats could pick up this floating milfoil and transport it to lakes throughout the state.

— Mike Cloutier, Past President, Sabbathday Lake Association

Training should include more role-playing

Cyndi Broyer

The majority of folks on the water have a genuine interest in keeping our lakes free from invasive plans. It was a pleasure teaching people, and getting to know the "regulars."

I would have benefitted from some role play at the training session. What do you do when you find an invasive and the person still wants to enter the lake? What do you do when the warden can't come?

The waterproof book with color photographs (of invasive plants) was an awesome resource.

— Cyndi Broyer, CBI, Lovewell Pond, Fryeburg

What's the story on milfoil weevils?

The discovery of Eurasian milfoil in Salmon Lake has sparked questions about the weevils sometimes used to fight them. The Lakes Environmental Association (LEA) in Bridgton looked into this subject last fall, after a story about milfoil-eating weevils appeared in the Portland Press Herald. LEA received calls, emails and copies of the newspaper clipping from members and others. Alas, the hope that this weevil would resolve the variable milfoil threat was quickly dashed by the words "very, very host specific." This particular weevil is not known to eat variable milfoil.

The Associated Press story told how a Middlebury College biol-

Jesse Dubin of Sand Pond conducted a July training course on aquatic plants for residents of Hancock and Sand ponds in Denmark. Nine persons attended and volunteered to be "Pond Monitors."

ogy professor added nearly 40,000 native weevils (*Euhrychiopsis lecontei*) to Fairfield Pond in Vermont to battle Eurasian milfoil. Since then the weeds have thinned and the weevils are hollowing out the plants stems.

The weevils only like Eurasian milfoil, not variable, according to Ann Bove, Vermont's invasive species coordinator. Even against Eurasian milfoil, the weevils only do so much, because nature is always trying to reach a balance. When the weevils eat enough Eurasian milfoil, their population drops. When the milfoil rebounds, their numbers increase.

Research confirmed weevils caused a decline in Eurasian milfoil in only one Vermont water (Brownington Pond), Bove said, but declines in 17 other lakes also have been attributed to weevils. Yet in some waters weevils haven't worked, she said

There's no way to know for sure how many weevils are needed to make a dent in a population. According to Marty Hilovsky, president of EnviroScience of Stow, Ohio, the only company, that sells the weevils, variables that affect the number used include:

- How large the lake is;
- How many acres of EWM are present;
- How dense the milfoil is;
- When the weevils are put in (early summer is best because they produce several generations);
- How quickly control is desired; the more weevils used, the faster they will effect lake-wide control.

But weevils don't come cheap: $1,200 for 1,000 weevils. Groups spend from $10,000 for small infestations to $150,000 for large ones. You can't install less than 2,000 to 3,000 in any one area of the lake.

Euhrychiopsis lecontei

TLEA's Hippobottomus removes 22 tons of milfoil

That's correct – you read it right. During the summer of 2008, divers attached to the Hippobottomus removed 22 tons of milfoil from the bottom of Thompson Lake. That's 44,000 pounds hand-pulled, brought up, bagged, trucked off and turned into compost.

The operation wasn't done on the cheap. It took more than $51,000 to purchase and refurbish a pontoon boat, and to hire professional divers and crew to operate the boat for 43 days. Nevertheless, the directors of the Thompson Lake Environmental Association (TLEA) consider it money well spent. As one put it, "If TLEA doesn't tackle the milfoil problem in Thompson, who will?"

Generous contributions from several individuals, the Town of Poland, and the Camp Fernwood Foundation helped offset this major outlay of funds.

The summer operation of the Hippobottomus took a great deal of planning. There were also the kind of problems expected with starting up a new venture. First Karen Hahnel of the Department of Environmental Protection had to approve the system and inspect the four major harvesting sites – Pine Point, Otisfield Cove, Hancock Cove, and Edwards Cove. Rob McVety, who TLEA contracted to run the operation, had to be trained in hand-pulling milfoil. The Bridgton-based Lakes Environmental Association, which operated a similar system last year, served as a model and provided Rob with training on LEA's Libra boat.

Meantime the TLEA directors had trouble obtaining an appropriate pontoon boat and there were delays in modifying the boat's superstructure. Once in the water, the Hippo's vacuum pump proved too powerful for the sluice box connections. The pump delivered so much water to the sluice box that the boat almost sank. Drilling large holes in the floor solved this problem. In addition, the divers' air hoses developed leaks and torn lines.

Once all these problems were solved, the summer's work progressed smoothly. The Hippo was stationed in Otisfield Cove for 10 days, Hancock Cove for five, and Edwards Cove for two. For 26 days the Hippo operated in the Pine Point area, near the Greeley Brook causeway in Oxford, which has the most extensive milfoil concentration in Thompson.

The Hippobottomus crew consisted of Rob McVety, Chris McVety and Chris Wight.

The last step in the milfoil extraction process was to truck the milfoil away from the lake to become rich compost, most of it being deposited on a community farm in Harrison.

At summer's end, the Hogan-Whitney Pond Association rented TLEA's Hippobottomus for several days and contracted separately with McVety. In three days' work on Hogan Pond the McVety crew finished clearing a milfoil infestation that others had worked on for weeks using more traditional methods.

Finally, the Hippo was pulled from the lake and a full day was spent cleaning and winterizing the boat, preparing it for hibernation in the Hankins barn in Otisfield.

Twenty-two tons later, everyone agrees the Hippobottomus got off to a great start, eliminating far more milfoil than expected. TLEA is optimistic that it will be able to raise the funds for a repeat performance next summer.

— Scott Bernardy and Jean Hankins

Don't be afraid to hope

Continued from Page 1

that we had seen in 2006 was gone. We did find one stem . . . Your efforts and those of your abatement crew have worked wonders."

Buckley's comments showed that as long as one is willing to persist and adapt, real progress is possible. But LEA faced smaller odds than lakes like Little Sebago, Arrowhead and others. We also benefited from the generosity of the Libra Foundation, which helped fund our suction harvester.

Yet the good news is that local organizations are fired up to clean up their lakes and each year new ideas and techniques help make the fight more effective.

It was disappointing when the Thompson Lake Environmental Association ran out of funds late this summer and had to dock their new suction harvester. But it also was heartening that the Hogan-Whitney Pond Association rented TLEA's Hippobottomus for several days. Everybody gains when we share knowledge, expertise and equipment.

At its October 30 meeting, the Task Force charged with overseeing Maine's Invasives Program will be asked to consider funding priorities. More and more groups are spending enormous amounts of their own time and money to clean up a resource owned by the State of Maine and enjoyed by all residents and visitors. That's reason enough to review the priorities of how milfoil sticker money is spent.

Maine's milfoil community also will be marking an anniversary, which will provide a good opportunity for evaluation. On February 27, LEA will sponsor the 10th Milfoil Summit. The theme will be how far we have come, what we have learned and what is next.

A lot has changed in 10 years and this is the perfect time to develop a new perspective that can be shared. So please plan to join us.

There's cautious optimism about Salmon lake

Continued from Page 1

Some might be regrowth of plants where the whole root wasn't removed in earlier efforts, new sprouts from framents created this season or simply plants not detected in prior surveys due to poor visibility in the cove, which makes finding plants difficult.

"Every time we go we're finding stems," McPhedran said. "So this is not over. It's not going to be over anytime soon. It may be difficult to ever say it's gone from that cove."

But there also is good news. The Eurasian milfoil doesn't appear to have spread. DEP staff and volunteers have conducted surveys on Salmon Lake and DEP and VLMP on McGrath Pond, which is connected. Both the Salmon Lake outlet stream and Hatch Cove on Great Pond, where it empties, have also been checked. Plant fragments were found in the stream, but no plants.

"We've yet to find anything outside the infested cove," Kallin said.

Kurt Lakin, a Tennessee fisheries biologist who was vacationing in the area, discovered the infestation August 1 in the shallow cove between a public boat ramp off Route 8 and the outlet stream leading to Great Pond. McPhedran estimates the cove is roughly seven acres, with some spots 5-6 feet deep, but much shallower in other areas.

"It's a place where native plants are doing really well," McPhedran said. "And a really good place to look for invasive plants is where native plants are doing well."

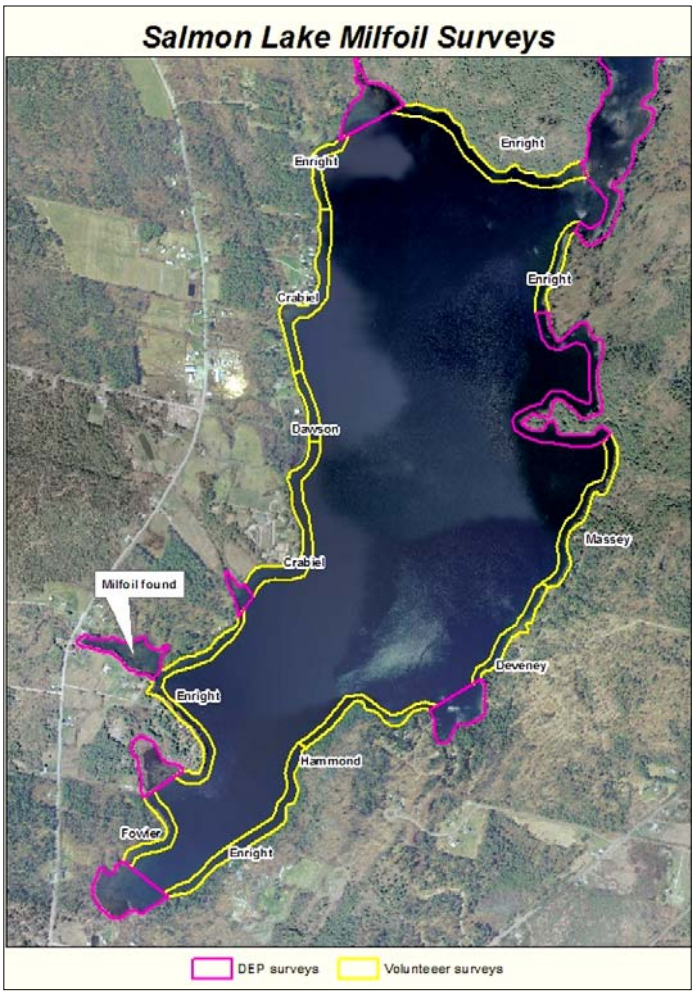
It appears the plants have been in the lake for at least a year. No one can say for sure, of course, how Eurasian milfoil arrived, but a great "catch" on nearby Great Pond provides a likely scenario. In late August courtesy boat inspector, Katie Jacobs, removed a 6-inch piece of Eurasian milfoil from a boat that had last been used in Lake Cochituate in central Massachusetts, which is infested with *Myriophallum spicatum.*

So one avenue of response has been to increase boat inspections. From the first week of August through Labor Day weekend, inspectors were on hand at the Spalding Point public boat launch 12 hours a day, seven days a week. A total of 467 inspections occurred there this year, 50 percent more than the 312 last year.

Another key part of the response was to restrict boat traffic in the infested area. On August 11, surface water restrictions were placed on the cove, McPhedran said, and the restrictions were renewed for 30 more days, lasting until late October. The next step, McPhedran said, will be for DEP's staff to make recommendations about future surface water restrictions, which will then be discussed and decided by the commissioners of DEP and the Inland Fisheries and Wildlife Department. This was the first use of the process to impose surface water restrictions since it was set out in the state's Rapid Response Plan (http://www.maine.gov/dep/blwq/topic/invasives/rrp_part1final.pdf.

"I think it went well, all things considered," McPhedran said. "We've had good cooperation with IFW."

But it's clear there is a lot of work ahead. The tenacity of Eurasian milfoil has been demonstrated at Pleasant Hill Pond in Scarborough, the only other Maine water infested with it. Despite an application of herbicide in 2006, a survey in July revealed that the plant was growing again in at least two locations in the Scarborough pond. So DEP again applied herbicide on July 30.



"We were discouraged to see Eurasian milfoil back," McPhedran said. "We'll have to wait until next year to see how the treatment worked."

Not only Salmon Lake, but all the lakes nearby will have to be watched carefully.

"Clearly, the original infestation will need continual scrutiny and maintenance in order to prevent Eurasian water milfoil's spread upstream and down," said Maggie Shannon, executive director of the Maine Congress of Lake Associations.

However there is a "flip side to this bad situation," Kallin said. It's spurred a lot of interest, especially among lake residents at Salmon Lake. There's been a surge in volunteers and membership at lake associations. More people have patrolled shorelines.

"It's revitalized interest in the program because it really shows there is a threat out there," Kalin said.