

OUR MISSION:

To protect and improve the watershed of Great Pond and Long Pond through Preservation, Education and Action.

BELGRADE LAKES ASSOCIATION

www.belgradelakesassociation.org

MILFOIL SPECIAL EDITION 2013

LOOK INSIDE FOR ...

- 2012 STOP MILFOIL Progress Report, page 2
- Our Vulnerability, page 3
- Three New Milfoil Outbreaks Discovered, page 3
- 2013 STOP MILFOIL Action Plan, page 4
- Great Meadow Stream Closed for 2013, page 5
- Variable Milfoil: The Facts, page 5
- How Do We Define Success? page 6
- Prevention is Still The Key, page 7
- "Adopt A Shoreline" to Fight Milfoil, page 8
- Milfoil Public Meeting Dates Set, page 8
- Chemicals: The Magic Bullet? page 9
- What To Do If You Find Milfoil In Our Lakes, page 9
- Milfoil Harvesting The Picture of Failure, page 10
- Belgrade Gives \$20,000; Rome \$10,000, page 10
- Housing and Equipment Needed, page 12
- Here's How You Can Help, Page 12

STOP MILFOIL AWARDED \$150,000 GRANT

The Belgrade Lakes Association has been awarded a \$150,000 matching gift grant to fight the invasive milfoil infestation in Great Meadow Stream and North Bay of Great Pond. This extremely generous grant is from a foundation that wishes to remain anonymous.

The foundation will match all gifts that are given to the STOP MILFOIL Capital Campaign by October 31, 2013. It will match dollar for dollar all donations received from donors who have given to the STOP MILFOIL fund in the past. Donations from new donors will be matched on a 2 to 1 basis. That means for every dollar given by new donors, the foundation will contribute two dollars.

"We are very fortunate to have been awarded this matching gift grant," said Lynn Matson, STOP MILFOIL Task Force Co-Chair. "It will not only help us bolster the whole fund raising effort, but the 2 to 1 matching gift for new donors will really help us expand our donor pool," he added.

Getting more people involved in the STOP MILFOIL program is critical to its long-term success. The invasive milfoil is a threat to the whole Belgrade Lakes community and it's going to take the whole community to beat it. There are lots of ways to help.

Everyone needs to check their boats and trailers when taking them out and before putting them back into our lakes, as well as fishing lures, anchors and other gear.

It's also important for all of us to be able to indentify milfoil and be on the lookout for it when on or around the water. Take samples of any suspect plants to the Maine Lakes Resource Center in Belgrade Lakes for identification.

And everyone needs to contribute to the cost of fighting this outbreak, especially now when we have this large matching gift grant.

Please make a donation to the STOP MILFOIL Capital Campaign. And urge your family members, friends and lake neighbors to contribute.

Every dollar donated goes directly to fighting the invasive milfoil infestation in Great Pond and stopping it from spreading into Long Pond. And every dollar will be matched by the foundation gift grant ... with new donations matched 2 to 1.

Please make your tax deductable donation on the Belgrade Lakes Association website (www.belgradelakesassociation.org) or mail a check made out to "BLA – STOP MILFOIL" to:

Belgrade Lakes Association PO Box 551 Belgrade Lakes, Maine 04918

Thank you very much for your vigilance and financial support.

More information at the BLA website: www.belgradelakesassociation.org

Photo courtesy of Dr. Alex Wall



137 Main Street P.O. Box 551 Belgrade Lakes, ME 04918

Phone: **207 512-5150**

Email: info@blamaine.org

Website: belgradelakesassociation.org

Board of Directors

Gail Rizzo President

Lynn Matson Vice President

John Atkinson Treasurer

Stephanie Yeaton Secretary

Polly Beatie Pat Donahue Jane Eberle Scott Finlay Liz Fontaine Adam Gardner John Gibbs Dick Greenan Charles Grover Dave Hallett Mark Heuberger Susan Littlefield Maureen Maslak Phil Mulville Jack Schultz Maggie Shannon Bill Witkin

2012 STOP MILFOIL PROGRESS REPORT

By all assessments, the STOP MILFOIL action plan that was put into place last year to remove the invasive milfoil from Great Meadow Stream and North Bay of Great Pond was very successful. Maine Department of Environmental Protection (DEP) officials publicly called the program the strongest and most comprehensive they have ever seen in our state.

SO WHAT WAS ACTUALLY ACCOMPLISHED LAST YEAR?

48,648 Gallons of Milfoil Removed – First, an awful lot of invasive milfoil was removed from the stream and North Bay. Two teams worked side-by-side pulling the milfoil. One was New England Mil-

foil, a professional dive company from Brownfield, Maine. They had four divers and their specialized DASH boat (Diver Assisted Suction Harvester) in our waters for 12 weeks.

The second team was a six person Belgrade Regional Conservation Alliance (BRCA) milfoil crew. They worked for 16 weeks last summer.

Together these two teams removed 48,648 gallons of milfoil plants. That's about 100 pick-up truckloads and 15 times more than was removed in 2010 and 2011 combined. Impressive numbers but also an indication of just how fast the milfoil infestation has grown in the past 3 years.

In addition to pulling the plants, the BRCA crew also repeatedly surveyed North Bay and other high-risk areas on both Great and Long Ponds for new outbreaks

Infestation Area Closed – Second, the milfoil-infested areas of Great Meadow Stream and North Bay were closed to all watercraft. This provided the divers with a safer work environment and significantly helped reduce fragmentation of the plants and the risk of spreading the milfoil to other parts of the lake.

Public Engaged – Third, public awareness and knowledge of the invasive milfoil problem were significantly increased. The milfoil threat was addressed at 31 different events last year, including public meetings, road association gatherings

and fundraisers, with the STOP MILFOIL message reaching over 1,000 people.

Information was also disseminated through a poster and milfoil fact sheet, a weekly column in "Summertime in the Belgrades" and a STOP MILFOIL float in the 4th of July parade.

And you responded. Many more plant samples were brought into the Maine Lakes Resource Center for identification as a result of this public awareness campaign. Keep it up in 2013.

\$285,000 Raised – Fourth, over 250 individuals and local businesses, as well as the towns of Belgrade and Rome, con-



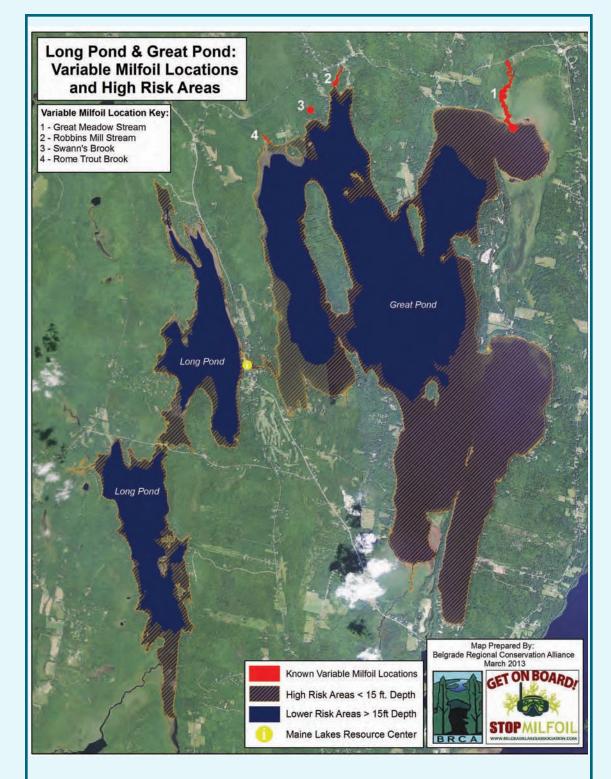
New England Milfoil workers clearing invasive milfoil from Great Meadow Stream last July.

tributed a total of \$285,000 in donations and pledges to the STOP MILFOIL Capital Campaign. What a terrific response! Thank you very much for your generous support.

Strong Cooperation Achieved – Fifth, all the local conservation organizations, including the Belgrade Lakes Association, the Belgrade Regional Conservation Alliance, the Maine Congress of Lake Associations and the Maine Lakes Resource Center, as well as Colby College and the Belgrade Lakes Region Business Group pulled together to develop and implement the STOP MILFOIL action plan. Right from the start they worked hand in hand, along with state and local officials, to get the job done.

The Belgrade community also responded. Local citizens and non-resident property owners raised questions, scrutinized practices, offered solutions, volunteered

continued on page 8



OUR VULVERABILITY

Variable milfoil can thrive in water up to 20' deep. Many large areas of Great Pond, including almost the entire south end of the lake, are less than 20' and vulnerable to massive infestations. Invasive milfoil could drastically change Great Pond and could grow around virtually the entire shoreline of both Great Pond and Long Pond. Note the location of Robbins Mill Stream, Swann's Brook and Rome Trout Brook in the northwest part of Great Pond. Invasive variable milfoil was discovered in all three of these tributaries last fall.

THREE NEW MILFOIL OUTBREAKS DISCOVERED

Invasive variable milfoil was discovered last fall in three additional locations in Great Pond. All three outbreaks are in streams flowing into the north end of the lake

While finding additional milfoil in these streams is disheartening, the good news is that these outbreaks are very small and much more manageable than the infestation in Great Meadow Stream and North Bay.

Here are the three new locations and the steps that have been taken to deal with the milfoil in each case:

Robbins Mill Stream — Milfoil was spotted in Robbins Mill Stream last fall by a watchful nearby resident. Upon being notified of the discovery, Toni Pied, the Milfoil Program Director for the Belgrade Regional Conservation Alliance (BRCA), surveyed the area and found 4 clumps and 1 small patch (about 5'x5') of milfoil growing in the stream.

Toni collected samples of the plants and had them submitted to the state for DNA analysis for verification that they were invasive variable milfoil. She also pulled one clump and covered all the clumps and the patch with benthic barriers, geotextile mats weighted down with rebar that block out sunlight and apply pressure to kill the plants. That infestation area will be resurveyed in the spring and checked regularly in the future.

Swann's Book – A few single plants were discovered growing in this stream by the BRCA survey team. The plants were all removed and the area covered with a benthic barrier. This area will also be closely monitored in the future for evidence of further plant growth.

Rome Trout Brook – Late last fall the BRCA survey team found invasive milfoil growing in patches of native milfoil in Rome Trout Brook, which is located in the very northwest cor-

continued on page 10

WAR ON MILFOIL: 2013 STOP MILFOIL ACTION PLAN

The action plan for 2013 is to repeat the very successful STOP MILFOIL program that was implemented last year with some improvements and a couple of important additional elements. The overall goal of the plan is very straightforward ... keep the invasive milfoil from further spreading and taking over our lakes.

It is believed that aggressive action is needed again this year based on an assessment that was done last October. It showed that while 90% of the invasive milfoil was removed from Great Meadow Stream and North Bay, some plants are still growing in about half of the infestation area.

The objective for 2013 is to remove 90% of the remaining variable milfoil plants. If this can be accomplished and the infestation really pushed back, it will be easier and less costly to manage the milfoil in future years.

Here are the action steps that are in place for 2013:

- The **STOP MILFOIL** Task Force is meeting and setting direction for this year's activities and work schedule.
- The Belgrade Lakes Association, whose mission is "to protect and improve the watershed of Great Pond and Long Pond through preservation, education and action," is providing oversight and conducting the fundraising.
- The Belgrade Regional Conservation Alliance (BRCA) is doing the actual fieldwork. Toni Pied, the BRCA Milfoil Program Director, is the point person. Her office is in the Maine Lakes Resource Center, the STOP MILFOIL headquarters.
- New England Milfoil, the professional milfoil mitigation company from Brownfield, Maine, will be back this summer to pull milfoil from Great Meadow Stream and North Bay.
- The BRCA will hire a team to also pull milfoil and install benthic barriers. They will work in the shallower waters while New England Milfoil will deploy its divers in the deeper

sections of the stream and bay.

- The BRCA will also hire a Field Survey Team to look for additional outbreaks in the high-risk areas of both Great Pond and Long Pond.
- Colby College will provide a student intern to join the BRCA field team.
- A Maine DEP diver will remove the invasive milfoil from the Rome Trout Brook early this spring.

■ The **BRCA** field team will pull any remaining invasive milfoil from Robbins Mill Stream and Swann's Brook, reinstall benthic barriers and keep a close watch on these areas.



Members of the Belgrade Regional Conservation Alliance milfoil team on a break from their job of removing the invasive plants in North Bay of Great Pond.

- Great Meadow Stream and the infested area in North Bay are closed to all watercraft for all of 2013.
- Maine Game Wardens will patrol Great Pond beginning with opening of the fishing season to enforce the closure and help educate boaters and sportsmen about invasive milfoil.
- The STOP MILFOIL public awareness and education campaign will be expanded to help everyone understand the milfoil threat, identify the milfoil plant and take appropriate action to help with the problem.
- STOP MILFOIL public information meetings are scheduled for July 11th and August 8th at the Maine Lakes Resource Center.
- The second year of the STOP MIL-FOIL Capital Campaign is set to raise a minimum of \$150,000, expand the donor pool and secure the full \$150,000 matching grant.
- A year-end assessment will be conducted by the Maine DEP to determine the success of this year's plan.
- The Adopt A Shoreline program will

be greatly expanded and a Dock To Dock outreach program will be started on Great Pond.

The **STOP MILFOIL** Task Force wants to thank the Belgrade Lakes community and everyone who uses the lakes for their tremendous support. Without your full backing and financial donations we may have already lost our lakes to invasive milfoil.

STOP MILFOIL Task Force Members:

Charlie Baeder, Executive Director, Belgrade Regional Conservation Alliance

Polly Beatie, Immediate Past President, Belgrade Lakes Association

Mel Croft, President, Belgrade Regional Conservation Alliance

Pat Donahue, Belgrade Lakes Association

Adam Gardner, Belgrade Lakes Association

Mark Heuberger, STOP MILFOIL Task Force Co-Chair, Belgrade Lakes Association

Meghan Loubier, President, Belgrade Lakes Region Business Group

Maureen Maslak, Belgrade Lakes Association

Lynn Matson, STOP MILFOIL Task Force Co-Chair, Belgrade Lakes Association

Phil Mulville, Belgrade Lakes Association

Dr. Phillip Nyhus, Colby College

Toni Pied, Milfoil Program Director, Belgrade Regional Conservation Alliance

Dr. Bruce Rueger, Colby College

Maggie Shannon, Executive Director, Maine Congress of Lake Associations

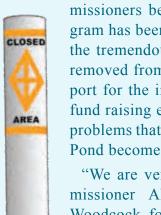
Kathi Wall, Executive Director, Maine Lakes Resource Center

GREAT MEADOW STREAM CLOSED FOR 2013

Great Meadow Stream and the mouth of the stream where it enters North Bay have been closed to all watercraft for all of 2013. This means that paddle craft like canoes and kayaks, as well as all motorized boats, are banned from these waterways for the entire calendar year.

The closure was requested by the STOP MIFLOIL task force as part of the milfoil mitigation program and granted by the commissioners of Maine's Departments of Environmental Protection and Inland Fish and Wildlife this past January. Both of these state departments must be in agreement to close a public waterway in Maine.

The Surface Use Restriction was granted by the com-



missioners because the STOP MILFOIL program has been so successful to date, including the tremendous amount of milfoil that's been removed from the lake, the strong public support for the initiative and the very successful fund raising effort. The state also realizes the problems that will be created if Great and Long Pond become overrun with milfoil.

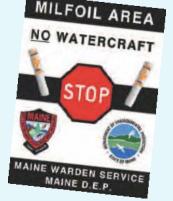
"We are very grateful to Maine DEP Commissioner Aho and IF&W Commissioner Woodcock for agreeing to close this waterway," said Mark Heuberger, Co-Chair of the STOP MILFOIL task force. "Their action will

not only provide a safer more secure area for our divers and workers but it will greatly help reduce the fragmentation which can spread the milfoil throughout the lake system," he added.

The closed area is from the Route 225 bridge where it crosses over Great Meadow Stream to the line of large buoys in North Bay. The buoys are white with an orange diamond and words "CLOSED AREA." One of the buoys has a large "STOP -- MILFOIL AREA -- NO WATERCRAFT" sign alerting boaters to the closure..

The Maine Game Warden Service will be patrolling North Bay right from the opening of fishing season. Wardens will be enforcing the closure and passing out literature to help inform boaters and fisherman about the milfoil problem. They will also be encouraging everyone on the lake to carefully check their boats, motors, trailers, anchors, anchor and mooring lines and fishing gear for milfoil fragments.

THE AREA CLOSED TO ALL BOATING IN 2013 IS CLEARLY MARKED WITH LARGE BUOYS AND SIGNAGE



VARIABLE MILFOIL: THE FACTS



Variable milfoil growing in Great Meadow Stream, July 2012.

- Variable milfoil is a non-native invasive aquatic plant that threatens the quality of our lakes and the well-being of our community.
- Variable milfoil was first recorded in Maine in 1970 in Sebago Lake and found growing in Great Meadow Stream in 2010.
- By September 2011, the Great Meadow Stream milfoil infestation had spread into North Bay of Great Pond.
- Last fall variable milfoil was discovered in three other streams that flow into the northwest part of Great Pond.
- Variable milfoil has no natural enemies. It can grow an inch a day and thrives in very shallow areas to water 15 to 20 feet deep.
- Variable milfoil forms thick mats on the surface that greatly reduce the recreational value of a lake, make swimming impossible and boating very difficult.
- Milfoil spreads by fragmentation. Pieces of the plant can be easily broken off by a boat motor, kayak paddle or fishing lure, float around the lake and root to start a new infestation.
- Milfoil moves from lake to lake on boat propellers, trailers, anchors, fishing gear and duck decoys.
- Left unchecked, variable milfoil could grow around virtually the entire shoreline of Great and Long Ponds.
- Invasive milfoil can drive down property values and have a negative impact on summer tourism and the local economy.
- The invasive milfoil in Great Pond is still in very small areas and, with proper action, can be contained so it will not spread throughout our lakes.
- Steps were taken in 2010 and 2011 to control the milfoil.
- A much more aggressive plan was implemented in 2012 and will be repeated this year.
- Invasive milfoil is a community problem and the whole community needs to work together to solve it.
- Help is needed spotting new outbreaks of milfoil and funding the work that is being done to remove it.
- This is a fight we can win. With your ongoing vigilance and support, this is a fight we will win.

HOW DO WE DEFINE SUCCESS?

In our battle against invasive variable milfoil in Great Meadow Stream and North Bay of Great Pond, how do we define success? After spending so much money and investing so many hours of labor, how do we know what success even looks like?

The truth is that there aren't many good examples of success in this war on milfoil. The milfoil usually wins. Most lake communities respond too slowly and find their waterways overrun with the weed.

Fortunately Maine is one of the last states to have encountered this invader. That's because variable milfoil has primarily spread by hitching a ride on boats and boat trailers from the U.S. gulf coast, where it's native, to the rest of the country, where it's not. And Maine is at the end of the highway. Today variable milfoil is present in only 27 of Maine's 6,000 lakes.

Maine has also picked up a few lessons along the way. All of them are being employed right here in the Belgrades.

The first is **prevention**. We've had Courtesy Boat Inspectors at the public landings on all seven lakes in our watershed for 16 years. They have found

invasive plants on several boats preparing to launch and removed it many times on boats pulling out of Lake Messalonskee.

The second lesson is **early detection**. Like many ills, invasive milfoil is much easier to control if it's caught very early. That's why our 2013 STOP MILFOIL action plan includes a team dedicated to surveying high-risk areas on Great and Long Pond and why it's so important for everyone to be on the look out for milfoil when they're on the water.

The final step is **fast response**. When milfoil was discovered in Great Meadow Stream in 2010, the BRCA jumped right on it and immediately began pulling the plants. When it became apparent that we needed to ramp up our effort, the much more aggressive STOP MILFOIL action plan and fund raising drive were quickly implemented.

Successes In Maine

Maine also offers some good examples of success in the fight against variable milfoil. One is the milfoil battle for Brandy Pond and the Songo River, which is being waged by the Lakes Environmental Association (LEA), head-

quartered in Bridgton, Maine.

The Songo River and Brandy Pond are among Maine's busiest waterways, acting as a corridor between Sebago Lake and Long Lake. Variable milfoil was discovered in the Songo River in 2003 and in Brandy Pond a year later.

Over the next five years the LEA employed the same basic tactics that we are using in Great Meadow Stream and North Bay. They put down benthic barriers to block out sunlight and kill the plants. They also began pulling the milfoil, first by hiring a commercial company and then by using their own DASH boat (Diver Assisted Suction Harvester).

They made remarkable progress and by the end of the 2009 season declared the infestation under control. What does that mean? It means that when the LEA surveys Brandy Pond and the Songo in the early summer there are only few dozen plants, which are quickly pulled. No, they did not achieve total eradication, as some plants always re-generate, but the control task is now much easier and less costly.

The Little Sebago Lake Association achieved the same kind of success in their fight against variable milfoil.

continued on page 7



Several years of aggressive hand pulling have stopped the spread on their lake and now allow them to control the milfoil as part of their normal summer operations.

The work done on Little Sebago, Brandy Pond and the Songo River is a great benchmark for our own efforts. Success will not mean total eradication. That seems very unrealistic when our variable milfoil is intermingled with native plants along a mile and a half stretch of Great Meadow Stream and covers several acres of North Bay.

What is realistic is removing +90% of the milfoil so our future spring surveys reveal just dozens of plants that can be removed much more easily and at a greatly reduced cost. What is realistic is stopping the milfoil from spreading to other parts of Great Pond and into Long Pond. What is realistic is catching any further outbreaks very early so they can be managed quickly and easily. What is realistic is saving Great Pond and Long Pond from being overrun with invasive milfoil. What is realistic is protecting and preserving our lakes for many generations to come.

That's how we'll define success. That's what success will look like.

PREVENTION IS STILL THE KEY

Now that we have invasive milfoil in Great Pond you may think that prevention is no longer important. Nothing could be further from the truth.

The variable milfoil infestation in Great Pond is confined to a very small area of the lake, just a few acres. What's critical now is stopping it from spreading to other locations in the lake and into Long Pond.

Prevention is still the best way to keep new infestations from getting started. Here's how you can help:

- Everyone ... Learn to identify milfoil and be on the look out for any plant fragments or new growth when you are on or near the water.
- Boaters ... Carefully inspect all watercraft and trailers both before putting them in and after taking them out of the water. Properly dispose of all plant materials.
- Fishermen ... Check all boating gear and fishing equipment for plant fragments, including anchors, anchor and mooring lines, fishing lures, oars and paddles.
- Paddlers ... Check both the inside and the outside of your canoe or kayak as well as paddles and any lines and gear for plant fragments

- Boaters and Paddlers ... Stay out of Great Meadow Stream and the closed area in North Bay. Fragmentation caused by boats, motors, paddles, anchors and fishing lures is the fastest way to spread milfoil to other parts of the lake.
- Waterfowl Hunters ... Check all your gear and equipment for milfoil fragments, especially decoys, decoy lines and weights, blind material, watercraft and waders.
- Waterfront Property Owners ... Inspect in front of your camp for invasive plants. Borrow an aquascope from the Maine Lakes Resource Center to help you see underwater.
- Sign up for Adopt A Shoreline. Call Toni Pied, BRCA Milfoil Program Director, at 207 512-5554, to become a participant.
- Support your Courtesy Boat Inspectors. They're making a real difference



"ADOPT A SHORELINE" TO FIGHT MILFOIL

Adopt A Highway program on our nation's roadways. Now this successful concept has come to the Belgrades to help fight milfoil. But instead of picking up trash, Adopt A Shoreline participants will patrol the shoreline for invasive plants.

The idea was first suggested by Paul Berkner, president of the Jamaica Point Association, during a STOP MILFOIL presentation at the group's annual meeting last July. Paul said that members of the association could regularly check their shoreline for invasive milfoil.

Since that initial suggestion the idea has been met with great enthusiasm wherever it's been presented. In fact,

Almost everyone is aware of the it was identified as one of the reasons the Belgrade Lakes Association was awarded the \$150,000 matching grant for the STOP MILFOIL Capital Cam-

> "One of the real keys to our longterm success fighting invasive milfoil is to get the public looking for these plants," said Toni Pied, Milfoil Program Director for the Belgrade Regional Conservation Alliance. "This Adopt A Shoreline program is a great way to get that started," she added.

> Program participants will receive training in identifying invasive aquatic plants and be assigned a section of shoreline in front of their properties to patrol. They will then be asked to check their waterfront on a regular ba

sis throughout the summer and report their findings to Toni at the BRCA. Aquascopes, a periscope type device for seeing underwater, are available to program participants.

Adopt A Shoreline is open individuals, families, road associations or any group or organization that wants to help protect our lakes. If you are interested please email Toni Pied at brcamf@belgradelakes.org or call her at 207-512-5554.



"Sign up today and enjoy a great paddle while you help protect our lakes."

2012 STOP MILFOIL continued from page 8

time, challenged state and local officials, held information and fund raising events and gave generously to the STOP MILFOIL fund. Thank you very much. We are all in this together.



New England Milfoil diver in Great Meadow Stream.

Finally we had the benefit of some very dedicated workers. The STOP MILFOIL Task Force and BRCA leadership and field teams did a tremendous job. The New England Milfoil divers worked 10-hour days in very difficult conditions. Maine DEP biologists and divers were right out there with us. And volunteers have played a key role right from the initial milfoil removal in 2010. You can be proud of all of their efforts.

WHERE DO WE STAND RIGHT NOW?

Last year almost 6,000 hours of labor was invested pulling milfoil and surveying for new outbreaks. So after all that effort, where do we stand right

On Wednesday, October 24, 2012, Maine DEP biologists surveyed the

> infestation area to get an answer to this question. Here is their assessment.

> First, 90% of all the invasive milfoil in Great Meadow Stream and North Bay was removed through the work done last summer. Those are excellent results.

However, some plants were missed and others grew back. As a result,

there was evidence of some invasive milfoil plants still growing in about 50% of the total infestation area. The other half of the infestation area showed no signs of any invasive milfoil at the time of the survey.

While this report is very positive it also gives us strong evidence that another very aggressive action plan is needed in 2013. The invasive milfoil may never be fully eradicated but we believe it can be managed and controlled so it does not overrun our lakes.

This is a fight that we can win. With your ongoing support, it's a fight we will win.

MILFOIL PUBLIC **MEETING DATES SET**

There will be two STOP MILFOIL public meetings this summer. The first will be on Thursday, July 11th and the second on Thursday, August 8th. Both meetings will be held at the Maine Lakes Resource Center in Belgrade Lakes Village and start at 6:30 PM.

The purpose of the meetings is to report on the progress being made with the milfoil mitigation work in Great Meadow Stream/North Bay and the three additional streams where milfoil was discovered last fall. There will also be a panel of experts to answer questions.

The meetings are open to the public and everyone is urged to attend. Being informed and vigilant is the best weapon we have to prevent milfoil from spreading throughout our lakes.

CHEMICALS: THE MAGIC BULLET?

By John McPhedran

festation in Great Meadow Stream and North Bay of Great Pond is ... "Why don't you use chemicals to kill it?"

We all want to kill the milfoil ... to totally eradicate it ... to wipe it out. Some people believe the best way to do that is with chemicals. Others strongly disagree. But the truth is there is no silver bullet for getting rid of this invasive plant.

The Maine Department of Environmental Protec-

tion makes all decisions about the use of chemicals in Maine's lakes. The DEP is a strong backer of our milfoil mitigation work. DEP officials and biologists have been extremely generous with their time and support, providing direct funding, expertise, equipment and divers. They've also made numerous site visits and attended many milfoil planning sessions and public meetings.

To help us all better understand the role that chemicals can play in fighting invasive aquatic plant infestations in Maine, John McPhedran, head of the DEP Invasive Aquatic Species Program, provided answers to these questions:

Question: Are chemicals effective against variable milfoil (the species that is growing in Great Meadow Stream and North Bay)?

Answer: It's for good reason that invasive species are considered one of the leading environmental threats of our day. Unfortunately, invasive species are more tenacious growers and more resourceful reproducers than ANY herbicide can completely reverse. Our most realistic response to these invaders are what farmers have done with pesticides since the green revolution—to manage or control the presence of pests to the most acceptable degree possible.

The potential effectiveness of any control technique, be it herbicide use, manual removal by hand or deployment of lake-bottom (benthic) barriers, depends on the achievable objective that has been set. If the objective is to eradicate

One of the most frequently asked variable milfoil from Great Meadow questions about the invasive milfoil in- Stream and North Bay of Great Pond, I



can guarantee disappointment because I am not aware of a precedent of true eradication of variable milfoil with use of herbicides. However, if the objective is to substantially diminish growth of variable milfoil, an herbicide may be effective. The degree of effectiveness depends on the herbicide used, the water flow through the treatment area and the ability to disperse the herbicide to all areas with growth of variable milfoil.

Question: Have chemicals ever been used successfully for infestations of invasive milfoil?

Answer: It depends on how you define "successfully." Herbicides are an effective tool when used in concert with other control options for managing plant growth but, as a stand-alone option, they are not a silver bullet.

Question: Were chemicals used to treat the milfoil that was growing in Salmon Lake and was it successful?

Answer: The Department of Environmental Protection (DEP) applied the herbicide 2,4-D in 2009 to treat Eurasian water milfoil – a different species from what's growing the Great Meadow Stream/Great Pond – found in Salmon Lake in Belgrade. DEP embarked on this treatment only after attempting to control the infestation with removal by hand and bottom barriers.

DEP's objective in applying herbicide in Salmon Lake was to significantly reduce the growth of Eurasian water milfoil and therefore prevent spread within Salmon Lake/McGrath Pond and

continued on page 11

WHAT TO DO IF YOU FIND MILFOIL IN OUR LAKES

Your help is needed. If you see milfoil growing in our lakes or any of the many streams flowing into our lakes ... or a milfoil plant fragment floating in the water, here's what you need to do:

- 1. Mark the location -- Get the GPS coordinates, put out a buoy or some kind of float or visually mark the spot so you can return to the same area.
- 2. Take a sample -- Pick up the fragment or carefully remove a small piece of the plant. Put it in a zip lock bag with water. Don't try to remove the entire rooted plant.
- 3. Report your findings -- Take your plant sample to the Belgrade Lakes Resource Center in Belgrade Lakes Village or call Toni Pied, BRCA Milfoil Program Director at 207 512-5554.

Thanks for your help. Catching new milfoil outbreaks early is best way to stop its spread.



Variable milfoil has delicate featherlike leaves that give it a bottlebrush or raccoon tail appearance in the water.

MILFOIL HARVESTING – THE PICTURE OF FAILURE

Right now we are waging an aggressive battle to contain the invasive milfoil infestation in Great Pond because losing this fight has such dire consequences for our whole community.

What is failure? It's Great Pond and Long Pond overrun with milfoil, growing around virtually the entire shoreline and out to where the water is 15- 20 feet deep. It's our lakes so full of this invasive weed that swimming becomes virtually impossible and boat-

ing greatly impeded. Failure means reduced property values, fewer summer vacationers and failed local businesses.

Failure could also mean milfoil harvesting. It's being done all over the country as a last resort to make weedclogged lakes usable for boating, swimming, kayaking and other recreation purposes ... and to save local lakeside communities.

What is milfoil harvesting? It's removing milfoil from the lake surface to provide open water for recreational activities and navigation. This work is usually done with aquatic plant har-



One of Chautauqua Lake Association's eight milfoil harvesters that was used to remove 15 million pounds of the invasive plant from their lake last summer.

vesters, barge-type watercraft that cut the milfoil off below the surface, pull it out of the lake on conveyor belts and transport it to shore for disposal.

But harvesting is the last resort. Why? First, because it doesn't kill the milfoil. Growing up to an inch a day, the milfoil is soon right back up to the surface. So milfoil harvesting is a never-ending job. Second, the milfoil harvesting equipment is very expensive and its operation costly.

Harvesting is employed when a lake is overrun with milfoil. A good example is Chautauqua Lake in western New York, which is just over 13,000 acres, about 20% larger that Great Pond and Long Pond combined.

The Chautaugua Lake Association employs 8 milfoil harvesters, 8 barges, 3 mobile shore conveyors, two loaders, a fleet of eight dump trucks and a summer staff of 40 to fight its milfoil battle. The replacement value of the equipment is \$2,845,000 and their annual operating budget is over \$500,000.

According to their website, they removed 15 million pounds of milfoil in 2012. To give you some idea of how much that is, they averaged 60 dump truck loads a week ... all summer long!

Milfoil harvesting is something to be avoided, at almost all costs. We've got to continue with our aggressive removal action while our milfoil infestation is still contained. We've got to stop it now ... before it fills our lakes and empties our wallets.

OUTBREAKS DISCOVERED

continued from page 3

ner of Great Pond. The exact extent of the invasive plants could not be determined due to the very poor visibility in the water and the intermixing of the invasive and native plants.

A diver from the Maine Department of Environmental Protection attempted to remove the invasive plants last October but, as a result of the poor visibility, a decision was made to conduct the work this spring when the water clarity should be better.

At this time there is no evidence to suggest how the milfoil got into these three new locations. Given their distance from North Bay it seems unlikely that the outbreaks were the result of plant fragments from the work site in North Bay.

These new outbreaks do clearly underscore the importance of both the BRCA continuing to do its survey work on Great and Long Pond and the need for everyone to be very watchful for milfoil plants and plant fragments.

As we are learning, variable milfoil can be a very persistent threat, but with your help and support, we can beat this invader and keep it from spreading further and taking over our lakes.

BELGRADE GIVES \$20,000; **ROME \$10,000**

At last summer's Belgrade town eral well being of the entire commumeeting for non-resident property owners there was a strong and compelling argument made for the town to step up its investment in the battle against milfoil on Great Pond. Fortunately for our community, that's just what happened.

At the Belgrade town meeting on December 18, 2012, the Select Persons voted to donate \$20,000 from the Belgrade Water Quality Improvement Fund to the STOP MILFOIL Capital Campaign in 2013, four times the amount donated by Belgrade last vear. Those monies will be used to help fund the cost of removing the milfoil from Great Meadow Stream and North Bay of Great Pond.

The Belgrade Select Persons clearly understand the importance of the milfoil work as it relates to the gennity. They were also motivated by the matching grant fund which will double the town's \$20,000 contribution putting \$40,000 into the STOP MILFOIL Capital Campaign.

At the Rome annual meeting held on Saturday, March 9, 2013, voters overwhelmingly approved an article raising \$10,000 for the STOP MIL-FOIL Capital Campaign. This is double the amount that Rome gave last year and will result in \$20,000 being contributed to the fund thanks to the matching grant.

Many thanks to the Belgrade Select Persons and voters in Rome for stepping up to make these very significant contributions. As a result of their decisions a total of \$60,000 is being added to the STOP MILFOIL Capital Campaign this year.

CHEMICALS: continued from page 9

to downstream Great Pond, prevent spread to other waters via recreational use, and reduce the growth in Salmon Lake to a level that could be managed with removal by hand and bottom barriers. Our objective has been met; the

treatment has been successful to date – no Eurasian water milfoil was found in 2010-2012 – but the DEP expects that Eurasian water milfoil will rebound in the future.

Also, it's important to note that the growth of Eurasian water milfoil was confined to the approximately 7-acre outlet cove of Salmon Lake where plants were at much lower density compared with the variable milfoil in Great Meadow Stream/Great Pond.

Question: What chemicals are typically used for infestations of invasive aquatic plants in Maine?

Answer: Since 2003, DEP's IASP has used fluridone and 2,4-D to treat invasive aquatic plants in Maine. Additional products in the DEP IASP's general permit are diquat dibromide, endothall and triclopyr.

Question: How do these chemicals work?

Answer: Aquatic herbicides are in two general categories: contact and systemic (diquat and endothall are contact herbicides while the others are systemic). Contact herbicides kill the plant tissue exposed to the chemical but do not kill the roots while systemic herbicides are taken up by the plant and moved throughout the plant, potentially killing the entire plant if conditions are suitable.

Question: How and when are these chemicals applied?

Answer: Aquatic herbicides may be in liquid or granular form. Liquid product is typically applied by surface spray or subsurface injection. Granular forms of herbicides are typically applied by use of granular spreaders. Both forms are typically applied from a conventional boat or an airboat. For the two herbicides used by DEP in recent years, 2,4-D may be applied at any point in the growing season because it requires a relatively short contact time while fluridone requires a longer contact time and therefore must

to downstream Great Pond, prevent be applied near the start of the growspread to other waters via recreational ing season.

Question: What are the drawbacks and concerns about using chemicals in our lakes?



Granular 2,4-D being applied to Salmon Lake in 2009.

Answer: Applying herbicide carries with it some level of risk for altering the lake or river system. Given what an herbicide does - kills plants - this isn't surprising. Our concern is when the risk goes beyond the target plant to other non-target plants and animals that are of benefit to the particular lake ecosystem. When considering an aquatic herbicide application, DEP IASP must weigh the benefits of the proposed herbicide use against the potential undesirable short and long term effects of this use, including whether all resource standards and uses are maintained.

Question: Who has the authority to grant usage of chemicals to treat invasive aquatic plant infestations in Maine?

Answer: Aquatic herbicides may only be applied pursuant to a discharge license issued by DEP's Division of Water Quality Management. Title 38, Chapter 3 specifies that aquatic pesticide treatment shall be conducted by DEP, Department of Inland Fisheries and Wildlife or an appointed agent thereof. Chapter 20-A of the same statute prohibits treatment of public drinking water supplies without prior written consent of each public water supplier. Any herbicides used must be registered by the Board of Pesticides Control (BPC) and applied by an applicator certified and licensed by the BPC in the aquatic category.

Question: Under what circumstances would the use of chemicals be considered for the variable milfoil infestation in Great Meadow Stream and North Bay?

Answer: As the DEP IASP staff stated at public forums in Belgrade in the summer 2012, all plant control techniques – including use of herbicides – are being considered for the Great Meadow Stream/North Bay infestation. The IASP's priority is to attempt to reduce the plant density with mechanical controls to a level of growth that can continually be managed mechanically. No matter the plant removal technique used in Great Meadow Stream/North Bay, ongoing removal effort into the foreseeable will be required to keep the plant growth at an acceptable level.

Consideration for chemical use of this infestation will take into account: the degree of infestation remaining after significant removal efforts by BLA and BRCA and whether mechanical removal truly is a feasible technique to get the infestation under control; the threat of spread within Great Pond and to other lakes, including the presence (or lack thereof) of new infestations in other parts of Great Pond; and the likelihood of maintaining long-term plant density reductions using non-chemical control measures following a one-time herbicide treatment.

Question: How much would it cost to chemically treat the infestation in Great Meadow Stream and North Bay and who would pay for it?

Answer: It's impossible to say without a determination of which herbicide is to be applied, frequency of application and how much area is to be treated. Also, permit requirements require extensive lake surveying before and after treatment.

To date, herbicide treatment costs have been borne by DEP because of the aggressive and extraordinary threat of hydrilla and Eurasian water milfoil – found in only a few lakes – to State waters. The cost of herbicide treatment for control of the more ubiquitous variable leaf milfoil would likely be borne primarily by the lake association/community with minor support – mostly technical in nature – provided by DEP.

HOUSING AND EQUIP-MENT NEEDED

Here's another way you can help. There is a need for additional equipment and for accommodations to house our milfoil crew members this summer. Here are the specific items and housing requirements:

- 1. Housing Lodging for 4 members of the BRCA milfoil crew from approximately June 1st until August 30. The ideal accommodations would be near North Bay of Great Pond and include a kitchen.
- 2. Housing A second lodging for 4 members of the New England Milfoil crew for approximately 15 weeks over the summer and into early fall. Again, the ideal accommodations would be near North Bay and include a kitchen for meal preparation.
- **3. Outboard Motor** A reliable 40 or 50 HP outboard motor to be used on a 14' whaler type boat.
- **4. Boat and Moto**r A 14' 16' whaler type watercraft with a reliable outboard motor.
- **5. Pick** Up Truck A used pick up truck for transporting the pulled milfoil from the take out point near North Bay to the compost site in Belgrade.
- **6. Misc. Gear** Canoe paddles, life jackets, large tarps, large cooler, diving masks and snorkels.

If you can donate this needed housing or equipment, please contact Milfoil Program Director Toni Pied at 207 512-5554 or send her an email at: brcamf@belgradelakes.org.

Thank you very much for help. Every dollar saved here can be used for removing milfoil and preventing it from further spreading in our lakes.



HERE'S HOW YOU CAN HELP

MAKE A DONATION

Help fight invasive milfoil. Make a donation to the STOP MIFLOIL Capital Campaign. Go to this website, www.belgradelakesassociation.org or send a check made out to "BLA - STOP MILFOIL" to:

Belgrade Lakes Association PO Box 551 Belgrade Lakes, Maine 04918

REMEMBER OUR MATCHING GIFT GRANT...

...PAST DONOR GIFTS WILL BE MATCHED 1 TO 1, NEW DONOR GIFTS WILL BE MATCHED 2 TO 1.

CALL FOR HELP

Call the STOP MILFOIL Hotline if you have questions, find milfoil or milfoil plant fragments in our lakes or want to volunteer.

STOP MIIFLOIL Hotline 207 512-5554

LEARN MORE

Learn more about invasive milfoil and the progress being made to combat it at these websites:

www.belgradelakes.org www.belgradelakes.org www.mainecola.org www.mainelakesresourcecenter.org

Thank you for helping save our lakes and their future in the Belgrades.

