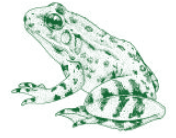


# Raymond Waterways Newsletter

Published by Raymond Waterways Protective Association

*"To protect and improve pond and lake water quality and foster watershed stewardship"*



Summer 2010

## Invasive Plant Remediation

Diver Assisted Suction Harvester



The **SS MilFoiler** - Diver Assisted Suction Harvester - a more efficient method for removing invasive plants from Sebago Lake (page 2)

## Plant Patrol - Surveying the Lakes

Invasive Plant Patrollers - Bob & Sybil French, Panther



### Prevention is Critical to Protecting Our Lakes!

More volunteers are needed to conduct plant surveys on all of Raymond's lakes. Learn how to get involved in surveying your lake - page 3.

## Thank You SS Milfoiler Sponsors!

Mary - managing plants in basket



The SS Milfoiler project would not have been possible without the generous support of the **Entrust Fund, Port Harbor Marine** (boat, motor, dock) and the **Pearson Family Charitable Trust** \$10,000 Matching Challenge grant. Thank you!!

## Watershed Protection Projects

Crescent Lake - Infiltration steps installed on steep bank



Stormwater runoff carries nutrients to the lake and can damage water quality. Advice on managing runoff is free to all property owners on any Raymond lake. Grant funds for completing projects are available for some lakes. Read more on page 5 & 6.

**Join RWPA today in protecting Raymond's lakes and ponds!! Membership form - page 7**

## Dear Friends of Raymond Waterways...

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It has been an extremely busy summer and we have a lot of news to share!!

**RWPA Newsletter...** we apologize for the late mailing of the newsletter. Our staff have been focused on building our milfoil boat and visiting properties to provide advice for controlling runoff. Time in the office has been very limited this summer!

**RWPA Annual Meeting...** we had an excellent annual meeting in 2010. If you missed us this year, keep an eye out for the date of the 2011 meeting in our April appeal letter.

#### Send in Your Membership Donations...

To support our operating budget each year we need to raise \$30,000 in donations. To date we have raised ~\$15,000 in membership contributions. Uncertain if you have given this year? Contact us at [lakes@raymondmaine.org](mailto:lakes@raymondmaine.org) and we can let you know. Every donation counts! *RWPA is a 501(c)3 non-profit. Donations are tax deductible.* Thank you to all those who have contributed through membership funds and to those who gave additional funds to support the SS Milfoiler / Pearson Matching Challenge. We successfully raised the funds needed to support the SS Milfoiler project in 2010 but we are behind in our annual membership funds. We hope you enjoy reading the newsletter and had a chance to enjoy summer on the lakes!



RWPA 2010 Annual Meeting

## RWPA Builds a Diver Assisted Suction Harvester - DASH

A typical DASH is a pontoon boat with a suction pump and long hose that extends to a scuba diver who gently pulls milfoil plants from the lake bottom and places them into the hose. The suction pump then sends the plant material into a collection bin on the boat that filters out the water but retains the plants for proper disposal.

RWPA is a member of the Maine Milfoil Consortium and was able to receive federal funding to cover a portion of the cost to build our own DASH. In addition, we applied for and received state funds from the "milfoil" sticker program and a foundation grant from Entrust.

**Why build our own DASH, rather than hire a diver and DASH as we have in prior years?** We can reduce our hourly operating cost by 50% and therefore double our effectiveness at fighting our milfoil problem with the limited budget we have.

This project was a success due to the numerous project partners and funding support. We are indebted to Port Harbor Marine for providing a pontoon boat and motor; docking and on the ground support; and providing maintenance and storage during the off season. The support and guidance of the Town of Raymond public works director, Nathan White during the design and building of the DASH was invaluable. Thanks goes to Ross Wescott on Panther Pond for sign designs and donation of sign printing by DGI-Invisuals. Special thanks to the Pearson Family for helping raise the remaining \$20,000 to support the building and operating of the SS Milfoiler in its first season through their generous \$10,000 matching grant challenge. We thank each of you who contributed to our special requests for funds to support this project.

**Special Thanks**  
**Entrust Fund**  
**Port Harbor Marine**  
**Pearson Family Trust**  
**Town of Raymond**

**Why should residents on Crescent Lake, Raymond Pond, Panther Pond and Thomas Pond share our concern?** If you look at a map of lakes in our area with known milfoil growth, you will see that "we are surrounded." Many of our residents like to move a boat between Sebago and their lake. If we can reduce the milfoil at the marina where their boat is trailered, we can reduce the risk of milfoil being transported to one of these other lakes. Milfoil and invasive plants affect all of us, and we must all work together to reduce the risk of further spreading, and reduce or eliminate established colonies in Sebago Lake.

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## Prevention... Prevention ... Lake Plant Surveys Critical Component

In 2009, staff and volunteers were able to complete shoreline surveys of Crescent Lake, Panther Pond, Thomas Pond, Raymond Pond, Notched Pond, and the Tenny River. No invasive plants were found in these six areas. Sections of Sebago Lake and the Jordan River were surveyed by staff to document milfoil infestations and target areas for remediation.

### Early detection of an invasive plant infestation is critical to preventing a lake-wide infestation.

There are 11 plants on the state's list of invasive aquatic plants. Five of these plants have now been documented in Maine's lakes. To be sure no invasive plants have been introduced to our lakes, we need to continue complete full surveys of all Raymond lakes. Invasive plants can grow in 20 foot depths - to the depth sunlight can penetrate. An infestation could have devastating effects on our smaller lakes where as much as 70% of the lake is less than 20 feet deep and vulnerable to invasive plants.



**Infested Lakes Surround Raymond's Lakes**

**Remember, Raymond lakes are surrounded by lakes that have invasive plant infestations (see map). This puts us at high risk of having an invasive plant introduced to one of our lakes. We are asking you, the people who live on each lake, to become active in the survey effort!** Several of our lakes only have one or two residents that assist with the survey effort. The more trained eyes, the better your lake is protected! One or two people per lake is not enough to protect each lake. Please contact us to learn how you can become involved in the invasive plant patrol effort on your lake. **We have mentors willing to help get you started! FMI contact us today - lakes@raymondmaine.org or 207-671-3329.**

### Good company and great desserts!

In June 2010, Bunny Wescott and Sibyl French, property owners on Panther Pond, requested all residents on Panther Pond who were interested in plant surveys to gather to discuss how coordinate efforts on Panther Pond and create a support network to assist others who are interested in helping survey become familiar with identifying invasive and native plants. Residents from other Raymond lakes were invited to join. They discussed various methods for surveying, offered mentoring to those who needed more training and had people sign up to survey various areas of the lake (see map on page 4). Nineteen people attended. RWPA hopes to generate this same level of participation on other Raymond lakes. Please contact us today and join in protecting your lake from an invasive plant infestation!



Panther Pond residents gather to discuss the invasive plant patrol effort for 2010 on Panther Pond.

**Helpful tools and resources:** Visit the Maine Center for Invasive Aquatic Plants website to see their excellent field guide and quick key—both provided free when you attend their trainings. [www.MCIAP.org](http://www.MCIAP.org). One of our Panther Pond property owners, Ross Wescott, is known statewide for his invention of the trunk scope - also known as “Ross’s Rolls Royce.” This is helpful for a better view of the lake bottom. Ross has offered to provide assistance to anyone interested in building their own scope. View the scope up close: [www.mainevolunteerlakemonitors.org/TrunkScope.pdf](http://www.mainevolunteerlakemonitors.org/TrunkScope.pdf)

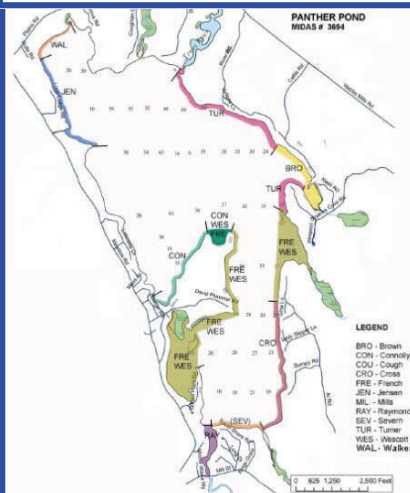
### Plant Patrollers Do Make a Difference!

In 2009, a newly trained volunteer found invasive hydrilla in a tiny cove in Damariscotta Lake. This resulted in a state effort to survey, control and minimize the impact of the infestation. Limited plant surveys were completed near public launching points in past seasons but the location where the plant was found was never included - it was considered a lower priority area. To view the full story visit: [http://mainelakes.org/documents/Milfoil%20newsletter%2009\\_09.pdf](http://mainelakes.org/documents/Milfoil%20newsletter%2009_09.pdf)

**“The creation of strong, active Invasive Plant Patrol lake teams is seen as essential, not only to ensuring the quality of invasive aquatic plant surveys, but also to the long term sustainability of the effort. Each patroler can focus more comprehensively on a smaller survey area; no one’s survey area is too onerous” - Roberta Hill, Maine Center for Invasive Aquatic Plants**

## Plant Surveys and Mapping Efforts on ALL Raymond Lakes

**Contact RWPA today - get involved in conducting plant surveys on your lake!**



Volunteers mark who will survey each sector on Panther Pond

**A combined group effort is the most effective method for conducting a thorough plant survey.**

As you can see from the map, Panther Pond patrollers have defined who will survey different sections of the pond. Panther Pond is the second largest lake in Raymond and is still in need of more trained volunteers to cover the full shoreline out to

depths of 15-20 feet. Several areas are still in need of coverage on the west and north shore of the lake. However, more trained eyes throughout the summer will result in a more comprehensive survey. We hope you will consider joining in the survey effort on your lake.

On Sebago Lake surveying has been focused on mapping areas known to have invasive plant infestations. In preparation for the milfoil remediation, RWPA staff have been mapping the plant locations in project areas to record the density of the infestation. Maps generated from these surveys will help target remediation efforts for the SS *Milfoiler* in 2010.



A houka system supplies air to diver, Sean Bilodeau as he surveys invasive plant infestations in Sebago Lake. Surveys will help target remediation efforts in Sebago.

Get involved on your lake today!

Raymond Pond and Crescent Lake have only had 2 active patrollers to conduct the annual plant survey and Thomas has not had any volunteer patrollers. RWPA staff continue

## Courtesy Boat Inspections - Another Prevention Effort

Our 2010 rangers are diligently inspecting boats this summer and have had two important catches. In July, ranger Sean found a 7" fragment of *hybrid variable milfoil* on a boat entering Sebago Lake. The boat had previously been in Little Sebago Lake. Hybrid variable milfoil is in several nearby Maine lakes and is different than the current variable milfoil found in Sebago Lake. In addition, ranger Chris did a thorough inspection of a boat entering Panther Pond after they mentioned purchasing the boat at one of the milfoil infested Sebago Lake marinas. He removed a plant fragment that was identified as a native plant. We continue to remove variable milfoil fragments from boats exiting the Raymond Beach - Sebago Lake ramp. If you choose to boat in an infested lake, please be sure to complete a thorough visual inspection before launching in our Raymond lakes!



RWPA 2010 Lakes Protection Rangers (left to right) Sean Bilodeau, Scott MacKechnie, Chris Flynn, Mark Willis, Peter Walgteen; and Executive Director, Noralee Raymond

SUMMER 2009 INSPECTIONS		
Lake	# Inspections	Plants Found
Sebago Lake	2943	37 (11 invasive)
Crescent Lake	791	11
Panther Pond	93	1
Thomas Pond	70	5
<b>TOTALS</b>	<b>3897</b>	<b>54 (11*)</b>

\*1 variable milfoil plant found on boat entering Sebago L. 10 V. milfoil plants exiting Sebago L.

Here is a quick glance at the number of inspections per lake completed in 2009. We found and removed 11 invasive Variable milfoil plants on boats at the Sebago Lake launch. Look for our 2010 data on our website this winter or in the 2011 newsletter.

**When our staff are not at the ramps, please remember to inspect your boat (trailers, live wells, tackle) upon entering and exiting all lakes! Remove ALL plants. Avoid boating near areas of dense vegetation. One 1/2" fragment can take root in a lake and begin a new infestation - devastating the lake.**



## Diver Assisted Suction Harvester - Invasive Plant Removal Efforts

### What is a Diver Assisted Suction Harvester (DASH)?

The DASH is a more efficient method of removing invasive plants. More info on page 2. Invasive milfoil crowds out native plants, alters fish habitat, and destroys recreational waterways.

**Are You Suctioning Plants up from the Bottom of the Lake?** No, there is a diver at the end of the suction hose who carefully digs into the mud to pull the plant and roots out of the lake. The suction hose send the plants to boat into the milfoil baskets.

**Should I Remove Plants from the Lake? No!!** Invasive plant removal requires a permit from the Department of Environmental Protection.. If plants are removed incorrectly, you can further spread an infestation. Contact RWPA if you are interested in training for removal of invasive plants in Sebago Lake. No invasive plant infestations have been found in Panther, Thomas and Raymond Pond or Crescent Lake.

**Where Are the Current Project Locations?** Port Harbor

Marine, the Jordan River (lower), and Bay View Estates. Additional non-DASH efforts to eradicate milfoil continue in the upper Jordan River and Dingley Brook. At each of these locations the residents and businesses are providing funding and volunteers.



**Invasive milfoil captured in baskets on the SS Milfoiler. Crew members Ben & Sean**

**Milfoil Removed to Date:** We have estimated removal of 22 yards of milfoil since operation began on July 28th. We will continue to work through September 30th.

**Partnering Increases Project Success:** RWPA has brought together 4 groups to increase success of the Jordan River project. The Jordan River runs from the Panther Pond dam along 85 and outlets at Memorial Park into Sebago Lake. Panther Pond Association, Indian Point, Panther Run Marina, and Jordan River Condo Assn have joined efforts to provide volunteers and funding to control milfoil in the river. We are excited to work with each group to better control the milfoil.

## Raymond Pond Conservation Project Complete, However...

The Raymond Pond Conservation Project was a three year grant project aimed at reducing storm water runoff and erosion that negatively impacted the water quality of Raymond Pond. Through the grant, 30 erosion projects were completed, technical assistance was provided to an additional seven property owners and six hands-on workshops were held around the pond.

Projects included the enhancement of shoreline vegetative buffers; repair of eroded paths with crushed rock, erosion control mulch or infiltration steps; establishing proper drainage on roads and driveways with crowning, ditching or diverters; repair of culvert inlets and outlets.

The success of this project can largely be attributed to the enthusiastic landowners; involved and knowledgeable RWPA volunteers; and the tremendous support provided by the Town of Raymond Public Works Department.

Did we fix all erosion problems on the lake? No, there is still more work to be done. If you live on Raymond Pond and have an eroding camp road or driveway; eroded bare soil path or open area; or a shoreline area that could use more vegetation, you can still receive free technical assistance. Inexpensive conservation practices are practical, affordable, easy to install, and can make a big difference in water quality. If you know you have an erosion problem or need to plant a shoreline buffer, contact us today and do your part to protect Raymond Pond.

*Funding support for the project was provided by the US EPA through section 319 of the Clean Water Act in order to prevent or reduce water pollution in Maine. Section 319 grants are administered by the Maine DEP in partnership with the US EPA. Local match was provided by Portland Water District, the Town of Raymond, and Raymond Waterways Protective Association.. The Town of Raymond served as the grant sponsor with project management provided by RWPA. Full project report not yet available.*



**BEFORE:** Undefined path, bare soil shorefront with direct flow of runoff into the lake

**AFTER:** Crushed stone path to define walking area, bare soil areas covered with erosion control mulch. Sitting area defined, vegetative buffer enhanced.

Nelson Nadeau - Two Acre Is.

## Panther Pond Conservation Project - Phase II - Join the Effort!

All Panther Pond watershed residents are encouraged to participate in this grant to reduce runoff and erosion. Remember, **financial assistance and FREE technical assistance** is available. Please help us protect Panther Pond! Pollution from soil erosion has been identified as the **most damaging pollution source** threatening Panther Pond. What can you do to protect the lake? Establish or enhance shoreline vegetation to capture and filter stormwater runoff; cover bare soil paths and open areas with erosion control mulch or crushed rock; divert driveway and path runoff into vegetation with waterbars (timbers or rubber blades); establish proper drainage on roads with crowning, ditching, and culverts.

The Panther Pond Conservation Project Phase I was a tremendous success - we fixed 46 properties and roads that were impacting the water quality of Panther Pond. You can view many of these projects in the Phase I report available on the Panther Pond Association website: <http://raymondmaine.org/community-resources/panther-pond-association>. This report was mailed to all property owners on Panther Pond. We are now in the midst of Phase II with a goal to fix 30 more sites. We have already begun projects at Camp Hinds and several private properties and roads this summer.

Let's keep the momentum going as we continue Phase II. For more information on Phase II contact Noralee at 671-3329 or [lakes@raymondmaine.org](mailto:lakes@raymondmaine.org). For more information on Panther Pond Association events and activities contact PPA at [ppa@raymondmaine.org](mailto:ppa@raymondmaine.org). *Funding support for the project was provided by the US EPA through section 319 of the Clean Water Act in order to prevent or reduce water pollution in Maine.*



Camp Hinds—boy scouts convert gravel steps into infiltration steps to capture runoff washing down path



Before: Stormwater runoff and foot traffic erodes path and flows directly into the lake  
After: Waterbars, erosion control mulch and vegetation stabilize bank. Access limited.

## Crescent Lake Watershed Association - Elden Lingwood

Crescent Lake Watershed Association wants to thank everyone who helped us get off to a great start during our 1st official year. Here are our major accomplishments:

- Approved bylaws, elected officers and a steering committee, and confirmed our purpose with about 100 people at our 1st annual meeting
- Conducted electrical conductivity testing of the lake and all tributaries during the heavy Spring-early Summer rains. Minimal data suggests that water entering the lake from our tributaries is cleaner than water entering the lake from our properties and roads.
- Established a phosphorus testing program that will be continued in 2010.
- Installed a web page at the Town of Raymond website, [www.crescentlakemaine.org](http://www.crescentlakemaine.org). You can blog!
- Evaluated 18 properties within DEP's LakeSmart program. Look for the white signs at the 11 properties that were given the LakeSmart award. Become involved in LakeSmart! Go to our web page for more information.
- Five property owners attended an Invasive Plant Patrol workshop. This is a big job, we need more volunteers to help with this critical activity.

- Assumed responsibility for testing dissolved oxygen.
- Noralee Raymond, Executive Director of RWPA has written and submitted a request on our behalf for funding of a Clean Water Act 319 grant to support storm runoff remediation projects. **We are excited to announce we will receive funding to support the Crescent Lake Conservation Project in 2011!**

Why is this work important? Our water clarity was significantly reduced due to heavy rain in 2009, as it was in 2008. This is what also happened to other lakes in Maine, but we don't live on other lakes. We live on Crescent Lake, so your support and involvement in your Crescent Lake Watershed Association is important! Join your neighbors today and become involved in protecting Crescent Lake.



CLWA 1st Annual Meeting 2009



# Water Quality Monitoring—Ups and Downs for 2009 - Charlie Turner

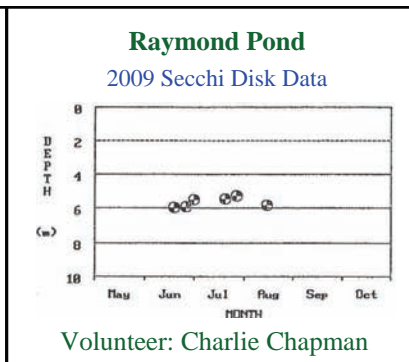
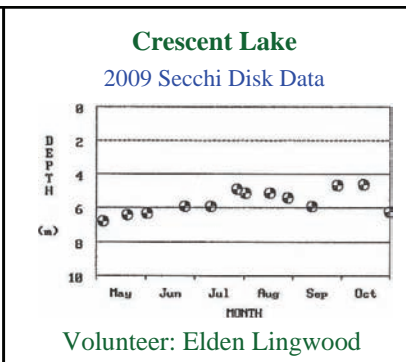
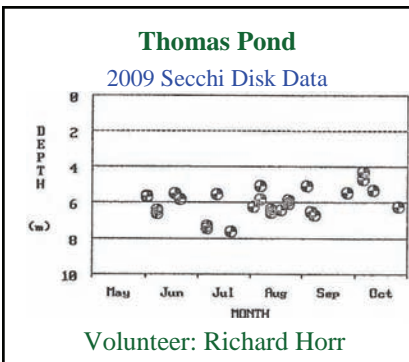
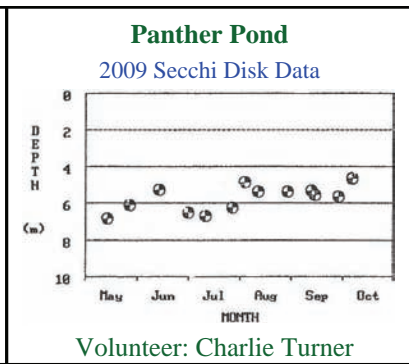
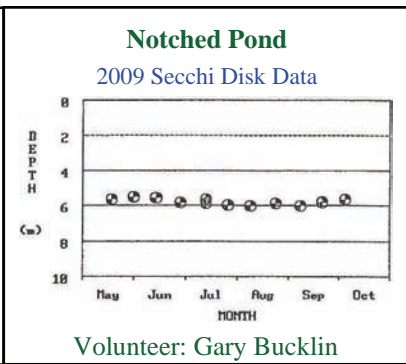
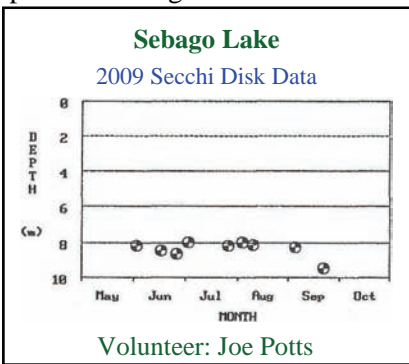
As most of us know, 2009 was a very wet summer, which of course meant much runoff to our lakes. This resulted in a substantial loss of clarity for MOST of the waterbodies in Raymond compared to 2008, exceptions being our smallest and largest lakes, namely Notched Pond and Sebago Lake.

August, September and October were the most damaging months, as the accumulated runoff became more apparent. Even the winners (Notched and Sebago) posted less than a tenth of a meter (about 4”) gain for the season. So all in all it was a downer of a season for most of us as far as clarity is concerned.

It appears that this year might be signaling a comeback, as to date (June 2010), secchi readings are up (meaning lower depths, increased clarity). We can only hope that this trend will continue. For a more detailed look at 2009, see the graphs for each lake below, along with the names of the people monitoring each lake. More details are available on the website.

Clarity Change 2008 to 2009		
Lake	Meters	Inches
Crescent Lake	- 0.56 m	-22.5”
Notched Pond	+ 0.08 m	+3.0”
Panther Pond	-0.76 m	-30.0”
Raymond Pond	-0.38 m	-15.0”
Sebago Lake	+0.06 m	+2.5”
Thomas Pond	-0.97 m	-38.5”

\*Negative numbers mean a loss in clarity. Positive numbers denote a gain in clarity.



**RWPA**  
Wish List

- Zodiac Boat
- Trolling Motor
- Kayaks
- Garden Rakes
- Life Jackets
- Shovels
- Metal Rakes
- Pitch Forks
- Tools
- 5 g buckets

We are looking for lake photos for our website. E-mail us today with your favorite lake photos!!

## 2010 RWPA Membership Form



Thank you to our members who have responded to our annual appeal sent in April.  
If you have not yet contributed please consider sending a donation today.



My lake/watershed is (please circle one):    Crescent    Raymond    Thomas    Panther    Sebago    Notched    Nubble

Enclosed is 2010 Annual Contribution (please circle)    \$5000    \$2500    \$1000    \$500    \$300    \$150    \$100    \$50    \$25    Other\_\_\_\_\_

Enclosed is SS Milfoiler Donation:    \$5000    \$2500    \$1000    \$500    \$300    \$150    \$100    \$50    \$25    Other\_\_\_\_\_

Name \_\_\_\_\_ Phone Number \_\_\_\_\_ E-mail \_\_\_\_\_

Mailing Address \_\_\_\_\_

Please add me to the RWPA E-mail List for Periodic Project Updates \_\_\_\_\_

*RWPA is a 501(C)3 Non-profit. Your donation is tax deductible. Thank you.*

Items Needed: Zodiac or Small Stable Boat to Tender Diver & Plant Survey; Trolling Motor; Kayaks & Garden Rakes for Volunteers to Assist with Fragment Control; Shovels, Metal Rakes & Pitch Forks for Erosion Projects



Port Harbor Marine has been an invaluable partner in our efforts. They donated the boat, motor and trailer and their staff have been an integral part of on-the-ground efforts such as loading/unloading the milfoil baskets and boat maintenance.

Many thanks to the Pearson Family for their \$10,000 matching challenge grant and to all the individuals who contributed to this special appeal to support the building and operating of the SS Milfoiler in our first season.

SS Milfoiler in operation in the Jordan River. Deck hands Ben and Sean oversee

on-board operations. Board member Elden volunteers a day to assist with overseeing the diver and capturing any fragments that occur during operation.



Our thanks to Ross Wescott for his time designing signs for the SS Milfoiler and DGI-Invisualls for donating the printing. Signs will be installed on the boat this fall.

Thank you to the Town of Raymond for their continued support in helping to protect Raymond's lakes.

When the baskets are full, milfoil is transported away from the lake with the help of Raymond Public Works



Volunteers are a critical part of the work we do!  
(Left) Indian Point members use benthic tarps to eradicate milfoil near their docks.

(Right) Panther Pond Association volunteers paddle down the Jordan River to the project location to lay tarps and removal milfoil. PPA has been working to remove milfoil from the upper Jordan River. Areas worked in past seasons continue to be clear of milfoil.



## Raymond Waterways Protective Association

To protect and improve pond and lake water quality and foster watershed stewardship

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