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# WATCH FOR AN ANNOUNCEMENT **ABOUT OUR 2021 ANNUAL MEETING!**

- Weekend, late summer
- Hoping for an outdoor location
- All health protocols to be followed
- Date and Time to be determined

### **President's Message**

by Mike Coltin

With encouraging news regarding the pandemic, it appears we are turning the corner and hopefully we can return to our way of life prepandemic. Despite the restrictions but following all safety protocols, 2020 was very productive for the PLIA, as you will note in the following articles. There was a significant increase in the number of watercraft using the lake, with more than **15,000** inspections performed by Lake Hosts! The Milfoil Team and Weed Watchers were very active as well. Through generous donations, a second hookah was purchased for the Milfoil Team's use. Thanks to a grant from the Lamprey River Advisory Committee, we were also able to acquire and test a new side scan sonar device to search for milfoil in the lake by boat. The success of these programs couldn't take place without the many volunteers who unselfishly give their time.

The Annual Meeting has not been scheduled at this time. Stay tuned for more information.



A membership coupon is included (p.7) for this year's renewal. New membership is always encouraged. Our memberships are at about 50% of households around the lake this year, so your support is crucial! And as always....See you on the lake!





**Our Invasive Species Team is working harder** than ever to prevent, find, and remove this threat from our lake. We need volunteers! For more information, see pp. 2, 5, & 6

#### **Our Invasive Species Programs**

You will notice that our newly designed Membership Coupon (see p.7) has a pawprint that contains the names of our Programs. Three of them comprise a comprehensive plan to address invasive aquatic species and the threat they pose to Invasive Species Pla Pawtuckaway Lake. You may recognize the graphic we are using to describe the way our programs work together toward this end. It is the three-legged stool:

You can see that the three programs that all support the mission are of equal importance and strength.



• **Prevention** is the goal of our Lake Hosts – both paid and volunteer – who conduct courtesy boat inspections at the State Park and the Fundy boat launch. Their job is to catch invasive hitchhikers before they enter the lake. Lake Hosts also educate boaters about the dangers of invasive species and the proper way to clean their boats.

• **Detection** is what **Weed Watchers** are trained to do, monitoring the lake and its shores to find invasive species of all kinds. They will remove all but milfoil, which only

certified divers are allowed to extract.



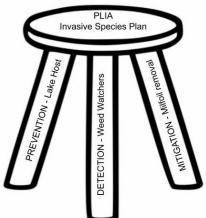
 Mitigation is the job of our Milfoil Team. SCUBA divers must get certified to remove milfoil from the lake. If Weed Watchers have marked an area of suspicious growth, the Milfoil Team will dive to verify an infestation. Those same divers regularly sweep areas of known infestations or scan new areas to detect milfoil plants, marking them for later removal by our certified Weed Control Divers. Kayak support teams ensure the divers' safety by warning boaters and swimmers of their activity.

The members of these programs work hard to protect property values and recreational opportunities for everyone who uses the lake. Because all our programs work toward the same goal, we maintain all donations in our general fund, rather than accepting restricted gifts, so that we can properly allocate them to a specific effort where needed. Over 75% of our annual revenue is expended on invasive species management, so you can be sure that your generous donations and memberships are well-spent.

The sponsors that appear throughout this edition of PawPrints are local, reliable, and enthusiastic boosters of Pawtuckaway Lake and the PLIA. We hope you will show your appreciation for their support by visiting their establishments and using their services.



171 Rte. 27, Raymond, NH 603.895.4114



#### More about Annual Meeting

Remember how much fun it was to gather at the State Park a couple of years ago? Our aim is to hold another meeting there but delays and closings due to COVID-19 have made that prospect uncertain. Depending on the availability of the Pavilion, the Annual Meeting could be on a Saturday or Sunday in late July or August this year. Stay tuned!

#### Be On the Lookout

As you travel around the lake, here are some floating objects to watch for:



 Orange, green, and purple floating foam markers – Please keep your distance, as these are used to show where milfoil infestations have been found or suspected and are awaiting further action by the Milfoil Team.

• Orange flag with a white diagonal line – Again, please stay away, as this is a "diver down" flag in a support kayak. NH boating laws require boats to stay 150' away from this flag since divers are nearby locating and removing milfoil.





 "No Wake" buoys – These mark shallow or narrow areas of the lake. Slow your boat to headway speed, or 6 mph, to avoid causing erosion to the lake bottom

or shoreline.

- Solid red or black buoys These are channel markers; go between them.
- Buoys with black or red tops These are navigational markers



to warn boaters of rocks or sand bars. Stay to the North or East of the black-banded ones, and to the South or West of the red-banded ones, for safe passage.

• Loon Nesting Sanctuary floating signs – Please respect the nesting loons on a nearby island, and don't venture closer than the signs or make loud noises to frighten the birds away.

#### **Spotlight on Members**

Without our members the PLIA would simply not exist. Their support, their willingness to volunteer, and their investment in the lake and its health are what keep our Programs running. If all goes well, we can thank them in person at a Volunteer Cookout this fall!



Recently, Jay Kolodze, owner of Batteries + Bulbs in Manchester, donated some valuable pieces of equipment to our Milfoil Team. Thanks to Jay for the generous donation of two deep cycle marine

batteries and two chargers for our hookah units. This equipment is crucial for the gear the Milfoil Team uses to search for milfoil they tag for removal. Our fight against milfoil just got stronger.

THANK YOU, JAY!!!



We are happy to announce a partnership with Troy Brown of the Mountain Road Trading Post! Our T-shirts are now for sale at his newly opened establishment. He has pledged to promote the PLIA, to publicize our fight against milfoil, and even to sell Welcome Booklets at the Trading Post. His spirit of support inspires us all.

THANK YOU, TROY!!!



#### **Outreach**

Look at the new pawprint graphic on our membership form. You will see by the size of the pad that "Outreach" is our most all-encompassing program. What exactly do we mean by "Outreach"? Included in this category are public education efforts, such as the important messages our Lake Hosts give to boaters about the dangers of invasive species and the best ways to keep



PLIA OUTREACH their watercraft clean and pest-Education free. We offer instruction to homeowners of private boat ramps and on other water bodies in town to spot and guard against invasive species.

Our website, www.pawtuckawaylake.com/, is a valuable educational asset as well. It contains articles about boating safety, lake ecology, best practices for clean water, a guide on milfoil, instructional slides about invasive species, conservation rules and laws, recreational regulations, winter safety standards, and much more.

Our member services include educational talks by various experts at Annual Meetings.



Pawtuckaway Lake Improvement Association PO Box 41, Nottingham, New Hampshire 03290

www.pawtuckawaylake.com

Outreach means communication, and the PLIA sends out periodic email news blasts on topics of interest to lake lovers, posts information on our facebook page, publishes this annual Pawprints newsletter, and distributes a Welcome Booklet filled with resources on lake health and recreation.

The PLIA often partners with community organizations for specific projects. Last year we worked with the Lamprey River Advisory Committee to obtain a grant to study the effectiveness of side scan sonar on detection of milfoil in fresh water bodies. We recently participated in a joint venture with the Trails Committee of the Nottingham Conservation Commission to design and build a bridge over

a stream at Marsh

Woods. We obtained a donation of all the materials to build the bridge from Home Depot. Finally, twice a year, our volunteers pick up trash along a section of roadway on Route 156 as part of NH 's Clean and Scenic highway program.











#### **Weed Watchers**

It would be an understatement to say this year has been like no other, because of COVID-19. But we are pleased to report that Weed Watchers have met the challenge and done their duties: on top of 192 hours of lake survey patrolling, the team removed early growths of purple loosestrife and revisited the seven original phragmites sites, pulling new growth at two of them. They found new milfoil growth and disposed of many Chinese mystery snails. We have found innovative ways via



Zoom to train new members and provide reviews for existing Weed Watchers. We look forward again to patrolling the entire shoreline of Pawtuckaway Lake for early detection of invasive species as well as welcoming and training new members. We began 2021 with a Weed Watch Refresher and Training Course via Zoom that featured a talk by Therese Thompson on April 10 entitled "Protect Our Lake". You can see the slide show here: https://pawtuckawaylake.com/wp-content/uploads/2021/03/ Teaching-weed-watchers.pdf. We also now have new T-shirts for all volunteers! Co-Captains Steve Soreff and Peggy Tucker

believe that everyone on Pawtuckaway Lake should become a Weed Watcher! Just email Steve: soreffs15@aol.com or call 603 895-6120 to sign up.

#### Lake Hosts

Pawtuckaway's team of volunteer and paid NH LAKES Lake Hosts educates boaters on invasive plants and animals at the public boat ramps at both the State Park and at Fundy. Our Lake Host team is the front line in preventing invasives from entering Pawtuckaway Lake but also any water body that people may visit in the future, public or private. Prevention costs far less than eradication!

Dee Decker, our Lake Host Coordinator for Pawtuckaway Lake, is genuinely concerned that invasive species may enter Pawtuckaway Lake at private boat launches and access points. In 2020, there was a massive surge in new paddle and motorboat purchases. This group of first-time boaters is not familiar with aguatic invasive species and could unknowingly introduce an expensive problem into our water that we are unprepared for. The mission of the Lake Hosts is to teach boaters how to inspect their own watercraft and



follow Clean, Drain, and Dry procedures to prevent spread of invasive species when Lake Hosts can not be present. If you are interested in learning about volunteering as a Lake Host, please reach out to Dee Decker at deedecker.plia@gmail.com. Be an ambassador for the PLIA!



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#### **Milfoil Team**

The Milfoil Team was very active in 2020, logging 886 volunteer hours searching for and removing milfoil. While milfoil was discovered in two new locations-the mouth of Gove's Cove and in Tuckaway Shores Cove—there were plenty of positive notes for the year:



 The team grew to 9 divers, with 4 certified to remove milfoil, and 17 support kayakers.

 In 2020 we discovered and removed 71 gallons of milfoil, down from the 126 gallons we discovered in 2019.

In addition, we acquired a side

scan sonar device through a grant from LRAC (Lamprey River Advisory Committee), which will allow us to scan larger areas of the lake to detect new potential milfoil infestations. (See p.7)



 New for 2021, the PLIA has purchased an additional hookah rig that will allow two more snorkelers to search for milfoil, increasing the area we can cover in each search session.

We are looking for additional SCUBA divers—as well as snorkelers who would like to be trained to use the hookah equipment—to join the team. Anyone interested in snorkeling, SCUBA diving, or being a milfoil support kayaker should contact Milfoil Team Leader Neil Santos (neilsantos@comcast.net, 603 548-1701).

#### Water Testing

Our Water Testing Team takes samples from designated spots in the lake and various tributaries monthly throughout the season for laboratory analysis. We participate in the Volunteer Lake Assessment Program (VLAP) of NH Department of Environmental Services, which provides reports of the test results of our lake water, measuring levels of phosphorus, oxygen, chlorophyll, clarity, and other indicators of water quality. Because of coronavirus restrictions last summer, it was impossible for NH DES to fully staff







their labs, so they were only able to offer testing services every other month. As a result, we sampled water in May, July, and September in 2020. Overall, the test results were similar to previous years, so our lake water is stable, which is a good thing. This year we expect to be back on a monthly testing schedule. If you would like to join the Water Testing Team, please contact Team Captain Mark Wageling (mswageling@gmail.com, 603 533-5899).

#### Grants

Searching for milfoil in Pawtuckaway poses our biggest challenge and consumes most of our Milfoil Team's time and energy. In 2020, the PLIA was awarded a grant from the Lamprey River Advisory **Committee** to acquire a high tech structure scan sonar to assist us in this task. We hope to use this equipment to search large areas of the lake by boat to locate possible new areas of milfoil. Last fall, our Milfoil Team



Leader Neil Santos adapted and tested the equipment and wrote a report about its potential use and efficacy. We thank the Lamprey River Advisory Committee for their generous support and for giving us this opportunity to explore new avenues to respond to the threat of invasive aquatic species in NH lakes. Pawtuckaway Lake is part of the Lamprey River Watershed and keeping it clean benefits the entire system. You can read Neil's report at: https://pawtuckawaylake.com/wp-content/ uploads/2021/01/Report-on-the-Use-of-Sidescan-Sonar-for-Locating-Milfoil-002.pdf.

Location	1995 NH-DES Load	1990-1994 Estimate	2016-2020 Estimate
	(%)	from VLAP Data (%)	from VLAP Data (%)
Whites Grove Brook	1	0	0
Mountain Cove Brook	24	24	10
Fundy Brook	2	2	1
Back Creek B	33	44	25
Round Pond Brook	16	21	11
Fernalds Brook A	11	9	53

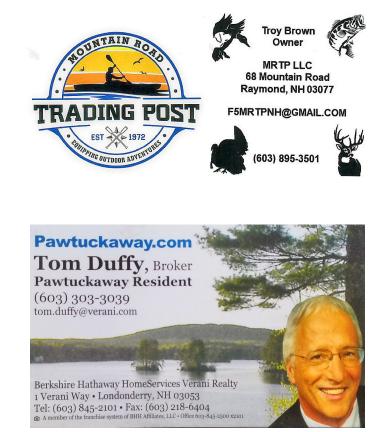
The PLIA is currently **studying** the way that **phosphorus** enters and leaves the lake. Its excessive presence in the water increases nuisance levels of aquatic plant and algal growth, which in turn deprive the lake of oxygen. We hope to collect the kind of data that will support a grant for funding

programs to prevent phosphorus from entering the lake in high quantities. This kind of conservation work is a big part of the PLIA's mission. Stay tuned for news about our progress in this area.

Can't remember whether you have paid or renewed your membership this year? Want the convenience of recurring small monthly payments that will satisfy your membership dues so you never have to think about it again? Memberships and donations can easily be made through **PayPal**, but there is also an "auto pay" option you can set up via PayPal to spread out your membership donation payments across the calendar year, in smaller instalments. Just make sure you give us your contact information so we can stay in touch with you throughout the year!

# **PAWTUCKAWAY LAKE IMPROVEMENT ASSOCIATION MEMBERSHIP 2021**

1	NAME(S)		
i		YOUR MEMBERSHIP DONATION SUPPORTS	
I	LAKE ADDRESS		
	MAILING ADDRESS	LAKE WEED HOST WATCHERS Invasive Species Species	•
I	CITY STATE ZIP	Prevention Detection Volunteer Volunteer	
	PHONE #1	Paid MILFOIL TEAM Wilfoil Removal Water Quality	
i	PHONE#2	Volunteer Volunteer	
1		PLIA	
i	MAIL CHECK & FORM TO - PLIA MEMBERSHIP, PO BOX 41, NOTTINGHAM NH 03290		
I	PAYPAL - MEMBERS.PLIA@GMAIL.COM	Education Conservation Volunteer	
I	🔲 \$25 🗌 \$50 🔲 \$100 🗌 OTHER 🔤 I WOULD LIKE TO VOLUNTEER	vounteer	
-	7		



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