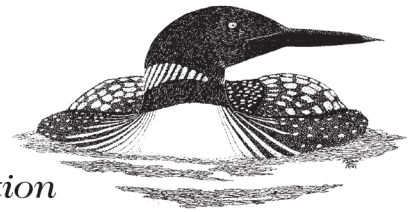


PawPrints

SUMMER 2015

A publication of the Pawtuckaway Lake Improvement Association



2015 Annual Meeting

Saturday, June 13th
9:00am
Nottingham School

Last October, the PLIA signed a Partnership Participation Agreement with NHDES to work together on the lake's water levels and quality issues. We are happy to say these have been improving in recent years! We are the first lake Association in NH to have this close cooperation, and increased testing and management as a result. Come to the meeting, and hear about what's been going on!

Questions?

Call or email
 tom.duffy@verani.com
 603-303-3039



2013 Annual Meeting: Upper right Will Urban and Tom Duffy. We had a great turn out last year . . . let's do it again! The PLIA needs your support.

SAVE THESE DATES!

July 4th
 Annual Boat Ride Parade. Leaves the North End at 10:30am. Get their early

July 18th
 Annual Loon Census, Steve Soreff, Chief Loon & Coordinator @ 8am

August 28
 NH DES Winter Drawdown

The Pawtuckaway Lake Improvement Association is a private, nonprofit corporation formed to monitor and act upon environmental and safety issues in the Pawtuckaway Lake watershed area and other issues of concern to its members.

The Association routinely conducts water sampling under the New Hampshire Department of Environmental Services.

To join the PLIA email notification list, or if you are on the list and have changed your email address, please send your email address to: pdkelly@comcast.net

Pawtuckaway Lake Evaluation – Spring 2015 - An Update Prepared by the NH Department of Environmental Services

Throughout this past year, NHDES continued its efforts under the Partnership Agreement with PLIA to evaluate Pawtuckaway Lake conditions. A public meeting was held August 28, 2014 in Nottingham which had a focus on winter dock protection. Darlene Forst from the DES Wetlands Bureau answered questions and offered to meet with dock owners. Through the fall and winter, NHDES staff continued to assess conditions in the lake to answer key questions about water resource management effects concerning phosphorus concentrations in the lake during the fall drawdown, and the location, abundance, and types of plants growing in the lake.

Lake Drawdown - On October 15th, NHDES began to draw the lake down to reach the 6-foot drawdown target for the 2014/15 winter. The lake was held near 4.8 feet below full pool elevation from November 27 to December 3, 2014 to again demonstrate the future drawdown level. The bulk of the water released this year was directed through Drowns Dam to improve phosphorus export. The lake level was drawn down over 5.8 feet from February 17 through March 14. Next year's drawdown target will be 5.5 feet and in 2017, 4.8 feet, which is the final drawdown level called for in the Lamprey River Water Management Plan.

Aquatic plant survey - Another aquatic plant survey was conducted using sonar and collections by hand sampling. The lake drawdown levels last winter were similar to historical conditions, so this survey can be considered another baseline condition. The surveys from the last two years detected small changes in plant density that are within the normal variability in plant growth. These results will be compared to the surveys that will be conducted in future years.

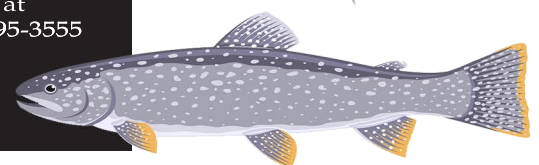
2014 Phosphorus values - NHDES measured stream height and phosphorus concentrations at the outlet dams during the fall drawdown from October 10 through December 4. From these measurements, NHDES calculated the amount of phosphorus exported from each dam. As a comparison with past operations, NHDES also estimated the phosphorus export if this year's release followed historic operations. Recent operations direct most of the flow out of the lake via Drowns Dam instead of Dolloff Dam. This produced a much greater export of phosphorus as a result of discharging water with a higher concentration of phosphorus. NHDES estimates that the historical drawdown practices would have released 350 pounds of phosphorus. The new drawdown operations released 1066 pounds of phosphorus (716 pounds more than would have been historically released).

Phosphorus Export from Pawtuckaway Lake Dams during 2014 Drawdown (Oct 10-Dec 4, 2014) and comparison to historical drawdown practices

	P exported from Drowns (in pounds)	P exported from Dolloff (in pounds)	Sum of P exported (in pounds)
2014 P export	1,049	17	1,066
P export using historical drawdown practices	85	265	350
Difference in phosphorus export	964	-248	716

HELP PRESERVE OUR LAKE BECOME A LAKE HOST!

A few hours, whether morning or afternoon, weekends, can make a big difference in our lake's future and help us meet our match requirement. Contact Donna Danis at ddanis@comcast.net or call at 603-895-3555



President's Message from Tom Duffy

Its been a very busy year on the PLIA and on the lake! The NH DES continues to perform winter testing in addition to our summer water testing. We have affirmed that by draining 80% of the water from the Northern end (Drown's Dam), we are flushing out almost 3 times the damaging phosphorous! The added benefit is this: we are not causing all that phosphorous to migrate all the way thru South Cahnnel To Dolloff Dam, rather flusing it where it most accumulates. We now have an aquatic plant study in hand and bathymetric (depth) measurements. The final report on the Lamprey River Instream Flow pilot program is due for hearings September 21, 2015.



A 95 acre property with over 500 feet of frontage on the lake was donated to the Society for the Protection of New Hampshire Forests by Helen Fernald. We now have 6,235 acres of contiguous conservation land in and around the park, the largest such block in Southern NH. The PLIA, the town, and many lake lovers contributed to this as well. Please support the Society for their efforts.

The PLIA filed to become a Non Profit Corporation. We have an 11 member Board of Directors, and can now accept direct donations of money and property. Come to the Annual Meeting on June 13 at 9 am and meet them all!

The Lake Hosts have monitored the boat launches all last summer at a cost of \$ 11,500, split between NH lakes Assoc, Town of Nottingham, and PLIA. They stopped exotic milfoil and other invasives 10 times. It seems we are seeing more of it come in on boats, and we remain well staffed with volunteers to inspect at the Fundy and State park ramps. Well done, Lake Hosts!



Loon Families

Our lake still has two pairs of nesting loons that return every year to fish, play, nest, and raise their chicks. And entertain us with their calls, their fishing prowess, their antics when chasing off intruders, their preening dances. They are extremely territorial, so each pair keeps to one end of the lake, the same end every summer.

The couple that stays in the north end of the lake nested last summer on one of their favorite little islands near the Fundy. They successfully hatched two chicks around July 1 and managed to raise them till they were big enough to fledge

Please invest in the future of Pawtuckaway Lake by becoming a member today!

Membership

Members have the option to join at one of three different levels. Each level helps support additional conservation and community services. If you care deeply about these programs or you don't have the time to volunteer, joining at a higher level is a way for you to show your support. You can still join at the traditional \$10 per year or you can help fund these important expanded services by joining at a higher level.

\$10 - Basic Membership Level. This membership level covers the cost of the basic services the PLIA has provided for the past 20 years.

- Water Quality Testing Program • PLIA Annual Meeting
- PawPrints Newsletter • PLIA mailings • Road & Island Cleanup Supplies • PLIA contribution to NH Lakes Association, and other conservation affiliations

Weed Watchers 2014 (Submitted Steve Soreff and Peggy Tucker)

We had a busy year. We continue to have regular patrols looking for any exotic weeds on the vast shores of Pawtuckaway. We logged 187 hours of weed watching from June through September. On May 24, Therese Thompson provided a great training and review session for a combined group of Weed Watchers and Lake Hosts. Throughout the season, the crew removed several recurring packets Phragmites and Purple Loosestrife. Early detection and eradication guides the work of the weed watchers. If you would like to join us, contact Co-Captain Weed Watchers Pawtuckaway Stephen 'Steve' Soreff, at Office 603 895-6120, Cell 603 568-3202 or e-mail soreffs15@aol.com

by summer's end. Lake dwellers kept track of their comings and goings, reporting to each other anytime potential trouble appeared, rejoicing when they remained healthy and active. The south pair didn't fare as well, possibly because that section of the lake is more crowded with boats and there aren't as many safe nesting spots. These two loons aren't usually fazed by jet skis or noisy humans, however, and they attempted to nest, albeit later than the north pair. When their first nest failed, they found a new spot, undaunted by its proximity to the campers and the boat launch at the mouth of Neal's Cove. Sadly, that nesting attempt failed as well, and it appeared that a predator may have raided the nest and stolen the eggs. We 'loon'atics look forward to welcoming our loons for another season!

\$25 - Community Membership Level. This membership level, in addition, supports, educational, and community programs.

- Pawtuckaway Kids Programs • Community Events
- Boating Safety Programs

\$50 - Conservation Membership Level. This membership level, in addition, helps fund the environmental and conservation initiatives that are protecting our lake for future generations.

- Lake Host Exotic Species Prevention Programs
- Weed Watchers Program • Conservation Programs
- Environmental Studies
- National/State/Local matching grants

MEMBERSHIP APPLICATION

Mail your check to: PLIA, PO Box 30, Raymond, NH 03077

Name _____

Mailing Address: _____

City _____ State _____ Zip _____

Lake Address: _____

Telephone _____

Email _____

I have enclosed a check for:

- \$10** Basic Membership Level
- \$25** Community Membership Level
- \$50** Conservation Membership Level

Please check your preference for receiving future issues of PawPrints:

- Emailed PDF** file (Choosing the emailed PDF copy saves the PLIA significant printing and postage costs)
- Printed copy - US Mail**

Thank you for your support!