

BELGRADE LAKES ASSOCIATION

Spring/Summer 2023

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



PRESIDENT'S MESSAGE

By Bert Languet
BLA President

Welcome to the summer edition of the Belgrade Lakes Association newsletter. Thank you for your continued membership in and support of the BLA – Maine's oldest lake association. Did you know we were the first lake association to form a Lakesmart program?

Following the application of the herbicide treatment in Great Meadow Stream, our expenses for milfoil decreased by around \$100,000 in 2022. While we are awaiting inspection for this year to see how milfoil comes back, we have reduced our planned expenses to \$40,000 in 2023 to help cover andy needed pulling and the continual monitoring. We shall see how long the treatment allows for reduced milfoil expenses as it is likely that we will need to increase funding for



Bert Languet

pulling milfoil in future years. Milfoil will never be completely eradicated. Having the herbicide treatment as an option to lower our costs allows us to use these funds and shift our focus to erosion control measures that will keep the dirt out of the lakes and stem the threat from algae blooms. This is significant since we measure water quality from the standpoint of algae blooms and the spread of milfoil and other invasive plants.

The 7 Lakes Alliance has been working to obtain 319 grants from the state and ARPA funds from the towns to really attack the erosion of soils in both Great and Long Ponds following the successful creation of lake management plans funded by the BLA. These plans layout the strategy for addressing the dirt in the lakes. Our towns have also stepped up with increased funding and awareness of dirt-contributing town roads and properties. The BLA was able to increase the amount of funds dedicated to CBI (courtesy boat inspections), YCC (youth conservation corps), funds to 7 Lakes Alliance for an erosion control manager, and funds used in the purchase of an additional truck for the YCC that will allow work to continue throughout the year. These are very exciting times, and I am confident our lakes will continue to stay healthy and thrive as a result of these actions.

Loons – we got 'em. Dick Greenan and Blaine Horrocks have put out the nests on Great and Long Ponds. There is a real need for more awareness about poisonous lead tackle which can kill loons if ingested – unfortunately, we had an incident on Great Pond last year where a loon perished. The BLA is sponsoring two interns from Colby to study loons this summer along with the continued work of Lee Attix. Dick Greenan has been the spearhead of this effort along with the help of Blaine and Nathalie Horrocks.

Thanks to Paul Feinberg for starting the conversation about how septic may impact our water quality. For this year our focus will be on education and watching the study that 7 Lakes

Alliance is doing with North Pond. A new septic can cost \$20,000 to \$30,000, so finding ways to keep yours healthy is not only good for the lakes, but is also good for your budget. Regular maintenance such as pumping every 3 to 5 years can help. Do you know when the last time you had your septic pumped? Do you know where the tank lid is located? If not, then it might be time to find out before it becomes a very costly problem.

Our annual raffle should be in full swing by time you read this newsletter. Thank you to all the donors and volunteers who are selling tickets. A big thanks to Andy Cook and George Atkinson for organizing this annual event. The money raised goes toward our mission of preserving the water quality in our two lakes. Perhaps more importantly - having the BLA members selling the tickets and being present builds awareness of the BLA and the importance of our work. Please consider volunteering to sell tickets – it can be a lot of fun.

Our annual Meeting will be on July 30th from 4-6 PM at the Belgrade Lakes Golf Course. Our membership committee is looking to add two smaller events to reach out to the community this summer. Thanks to Carol Johnson and Stephanie Gardner for heading this up. If you have ideas or want to host an event – please reach out to them.

Finally, thanks to our superb newsletter team of Polly Beatie, Liz Fontaine, and Marcel Schnee. I continue to be amazed at how they put together this great publication!

Best regards,

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BLA Attends Nonprofit Day at Maine's State House

Belgrade Lakes Association (BLA) President Bert Languet and Treasurer Blaine Horrocks participated in the June 6 Nonprofit Day at Maine's State House. This event was organized by the Maine Associations of Nonprofits and involved 120 nonprofit advocates from an array of nonprofit organizations, legislators, and staff members. The event centered on the wide-ranging and positive impacts Maine's nonprofits have on Maine's communities and how expanded/improved advocacy skills can positively affect nonprofit organizations.



BLA President Bert Languet (left) and Treasurer Blaine Horrocks (right) in the Maine Statehouse Hall of Flags

TRY TICK TUBES

By Bert Languet BLA President

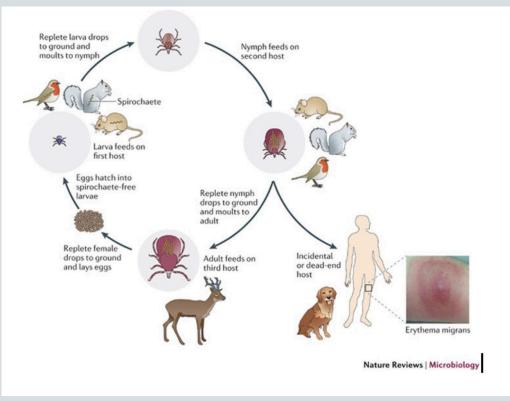
Got Ticks? It seems like they are everywhere. There are many solutions to get rid of them including nasty chemicals, cedar spray, and other organic methods. Many of those methods also work against beneficial insects and are thus harmful to the environment. A Harvard study found that using 'Tick Tubes' is highly effective when they completed a study several years ago. Tick tubes were developed by the Harvard University School of Public Health and are a no-spray way to kill deer ticks and prevent the spread of diseases such as Lyme, babesiosis, and anaplasmosis. I have used homemade tubes on my property for more than five years and have seen a huge reduction in ticks.

How do you make tick tubes?

Tick tubes are made by mixing permethrin with water to dilute it (5 parts water to 1 part permethrin) and spraying the mixture onto cotton balls. You allow the cotton balls to dry and then you stuff them into cardboard tubes. You can use paper towel or toilet paper tubes which will break down over time and decompose. Commercial tubes are often camouflaged and coated with wax to make them last longer.

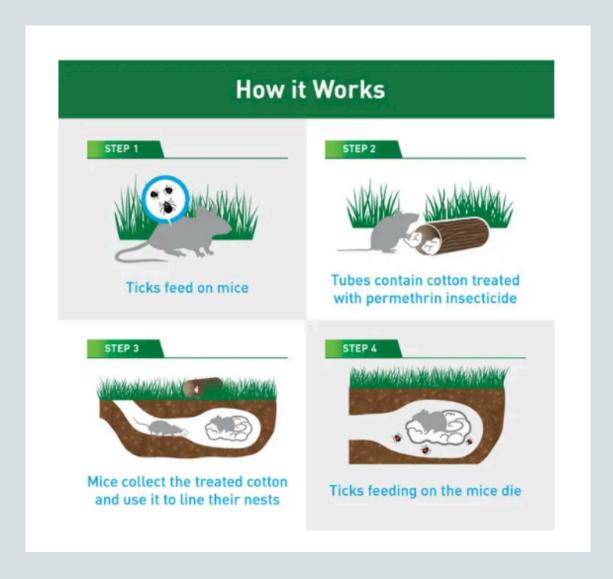
Tick tubes are available commercially from companies like Thermacell and Damminix and can be fairly pricy ranging from \$60 to \$75 for 24 tubes which treat about one acre. You can make them yourself for a lot less, and there are instructions on YouTube or can be found by doing a search on any browser.

Life Cycle of a Tick:



How do tick tubes work?

Tick tubes work by breaking the cycle of a tick's development. Mice take the treated cotton back to their nest for padding. Every time the mouse comes back to the nest with a tick – the tick dies and thereby breaks the cycle and prevents the tick from moving on to the next stage.



I have found this simple device helpful in managing my property, and I hope this helps you in managing yours. Get outdoors and enjoy the summer.

MILFOIL UPDATE FROM THE BELGRADES

By Richard LaBelle
BLA Vice President

It's been nearly one year since the herbicidal treatment in Great Meadow Stream took place on the north end of Great Pond. The treatment was supported by Maine Department of Environmental Protection and other regulatory agencies in an effort to knock back the milfoil and make it more manageable. Initial indicators of the treatment success were positive, but we knew it would be a full season before we would have real results.

This spring, divers have been in Great Meadow Stream to check for milfoil regrowth and/or new growth. The results are in: there was no milfoil found! While this is the best-case scenario for our lakes, other similar treatment areas (including Annabessacook Lake in nearby Monmouth and Winthrop) have seen regrowth after being treated with herbicide. This unfortunate evidence reinforces the importance of our continued efforts and vigilance. We must continue to band together to ensure our milfoil programs are funded so that we can monitor, manage, treat, and educate.



Richard LaBelle

While Great Meadow Stream has long been the site of the greatest milfoil infestation, there are other streams on Great Pond that remain impacted: Robbins Mill Stream, Rome Trout Brook, and Swann's Brook. There has been significant discussion about how to proceed with milfoil management in these smaller areas and, at this time, crews will continue to remove milfoil manually, as well as to install benthic barriers to cover the plants. We are pleased to once again be partnering with the team at 7 Lakes Alliance to execute our milfoil and management goals.

When you support the battle against milfoil through the BLA, you can be assured that the funds are spent to protect Great Pond and Long Pond. It allows our team to work with contractors to ensure we have consistent monitoring, treatment, and oversight at the highest levels needed. We're monitoring the success of the herbicide treatment and the traditional work of sending teams out into the field to monitor and remove milfoil. Your continued support is still needed and very much appreciated.

One more thing: Don't forget about the Adopt-a-Shoreline program! This volunteer-driven program is a priceless tool in protecting our lakes against the expansion of milfoil and the introduction of other invasive aquatic plants. For more information on adopting a shoreline, please contact us at the BLA office or email adoptashoreline@7lakesalliance.org.

IT IS NOT JUST FLUSH AND FORGET

By Paul Feinberg Chair of BLA Septic Initiative

Pump or pay the price of a ruined vacation. Yes, that septic holding tank should be pumped at least every 5 years for a seasonal residence and every three for a year round. When your friendly pumper lifts the lid, you should be there to check on the condition of the tanks to see that all of the baffles are intact.

Next concern is the leach field and the overall condition of your septic system. First question is how many of you know where your tank and leach field are? Do you know how it all works - it is not just flush and forget. It is harder to determine the condition of your leach field as it requires, at least, a certified inspector. It seems nobody gets an inspection until they sell their house and then, if it is in the Shoreland Zone, it is required that the Buyer obtain a certification that the system is in good working order.

Your BLA is very concerned about how failed systems contribute to the external loading of the lake that can add to the phosphorous problem which, in turn, produces algae so the water goes green like in North Pond last summer. We are working with 7 Lakes Alliance, who is closely monitoring this situation, and learning of new ways to facilitate the detection of failed systems. If successful, we will be able to use their findings in Great Pond next summer.

Our rebate program is still available. We will rebate 10% of the cost of septic work, including pumping and replacement, up to a maximum of \$500. Please contact me at PFeinberg1@ gmail.com should you have a claim and provide me a copy of a paid receipt.

This fall we hope to do a survey of Great Pond shoreland property owners, similar to that of Long Pond, in an effort to establish an accurate data base for the installation date and type of system for each property. In the winter we hope to employ a Colby intern to search the town and state records to complete this database, so we will know for each property what exists and, in the spring, move forward with a remedial process.

Please do pay attention, and you will then be "flush smart."

\$ REBATE \$ Save Money When You Protect Your Lake! YOU'LL EARN MONEY BACK ON BUFFER PLANTS AND LANDSCAPING, AS WELL AS SEPTIC PUMP-OUTS AND SEPTIC SYSTEM INSPECTIONS! Stable shorelines and stopping stormwater runoff are so vital to lake health that BLA will reimburse Great and Long Pond shorefront homeowners 10% of their investment when they build or reinforce their vegetated buffer strip, and/or complete a septic tank or cistern pump-out, and/or septic inspection this year. This offer is good for buffer work or purchase and completed septic pump-out and/or septic system inspection between August 1 and December 31, 2023. The Rebate limit: \$500. Proof of completed work required. Get your REBATE by mailing your receipt, showing plant materials purchased and itemizing completed work to: BLA REBATE PO Box 551 Belgrade Lakes, ME 04918 Be sure to include your USPS address so we can send you your money! Include phone and email too, please.

GREAT MEADOW STREAM SPRINGTIME SURVEY FINDS NO MILFOIL

By Sharon "Captain" Mann
7 Lakes Alliance Invasive Aquatics Program Director

With the support of 7 Lakes Alliance and BLA, the Maine Department of Environmental Protection permitted the application last June of a low-risk herbicide, ProcellaCOR, to greatly reduce the footprint of invasive variable-leaf milfoil in Great Meadow Stream.

On May 18, I snorkeled the length of Great Meadow Stream ... and found NO evidence of invasive milfoil!

While there is no sign of invasive milfoil yet, we expect some regrowth later this season or in 2024, based on the results of a similar treatment in another Central Maine waterbody, Annabes-sacook Lake. Still, the results of the treatment allow 7 Lakes Alliance and the BLA to deploy resources in a more focused way, including in Rome Trout Brook and Robbins Mill Stream.

Motorboat access into Great Meadow Stream will remain restricted while the effects of the herbicide treatment continue to be observed.

Curly-leaf pondweed update

On a chilly Mother's Day, 7 Lakes Alliance's dive crew conducted its preseason SCUBA survey of the East Pond Serpentine, the stream that connects East Pond to North Pond, in search of curly-leaf pondweed, a menacing invasive spreading throughout our watershed. Curly-leaf pondweed was discovered in the Serpentine in 2021.

Curly-leaf pondweed reproduces asexually through a special type of winter bud called turions. Turions look like tiny pine cones, and they can remain dormant for up to five years. The barbed structure of turions makes them particularly difficult to manage as they easily stick onto fishing lines, nets, waders, and other equipment.

So far it appears the crew's efforts have paid off as the density of curly-leaf pondweed in the East Pond Serpentine is greatly reduced compared to this time last year.

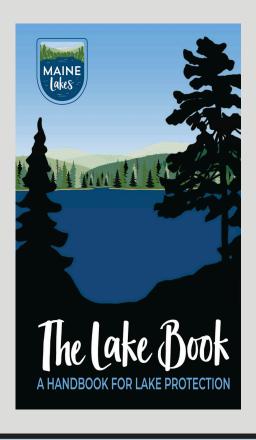
We are fortunate to have, returning to the Serpentine for another season, the same crew members as last summer: Jill Holden, Brennan Gunster and Maya Cohen, all of whom are led by Dive Leader Briahna Loring.

There is no motorboat restriction in the East Pond Serpentine; however, we ask that motorboats avoid areas with heavy vegetation to protect our divers and to minimize the spread of curly-leaf pondweed.



Curly-leaf pondweed turions, or winter buds, can remain dormant at the bottoms of lakes for five years before sprouting.

We are happy to report that there is a comprehensive source of information about lakes protection available to everyone who cares about Maine lakes! It is the much-awaited 4th edition of "The Lake Book: A Handbook for Lake Protection," put out by the statewide organization Maine Lakes. You can read it online and download it to your device for free, or order your own spiral-bound hard copy for \$8.50. The web address is: www.lakes.me/lakebook.



Invasiv	∕e Aquati	ic Events
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Courtesy Boat Inspector Training Link to register: https://tinyurl.com/227z7wn7		Plant ID and Adopt-A-Shoreline Workshops Link to register: tinyurl.com/2s3h8maz		Invasive Aquatic Plant Paddles Link to register: https://tinyurl.com/2dt8jbbx	
6/28/23, 1 pm	Great Pond Boat Launch	6/28/23, 10 am	137 Main St. Belgrade Lakes	7/05/23, 1 pm	Great Pond, Mill Stream
6/29/23, 1 pm	Fairview Grange	6/29/23, 10 am	Fairview Grange	7/08//23, 8 am	North Pond
7/19/23, 1 pm	Great Pond Boat Launch	7/05/23, 10 am	137 Main St. Belgrade Lakes	7/29/23, 8 am	East Pond
7/20/23, 1 pm	Fairview Grange	7/06/23, 10 am	Fairview Grange	8/09/23, 1 pm	Great Pond, Mill Stream
8/2/23, 1 pm	Great Pond Boat Launch	7/12/23, 10 am	137 Main St. Belgrade Lakes	8/19/23, 8 am	Salmon Lake & McGrath Pond
8/3/23, 1 pm	Fairview Grange	7/13/23, 10 am	Fairview Grange	9/09/23, 8 am	North Pond
8/16/23, 1 pm	Great Pond Boat Launch	7/19/23, 10 am	137 Main St. Belgrade Lakes	9/16/23, 8 am	East Pond
8/17/23, 1 pm	Fairview Grange	7/20/23, 10 am	Fairview Grange		
		7/26/23, 10 am	137 Main St. Belgrade Lakes		
		7/27/23, 10 am	Fairview Grange		
		8/2/23, 10 am	137 Main St. Belgrade Lakes		
		8/03/23, 10 am	Fairview Grange		
		8/09/23, 10 am	137 Main St. Belgrade Lakes		
		8/10/23, 10 am	Fairview Grange		
		8/16/23, 10 am	137 Main St. Belgrade Lakes		
		8/17/23, 10 am	Fairview Grange		

SUMMER'S THE TIME TO TAP INTO LAKESMART, YCC

By Stuart Cole Erosion Control Project Coordinator

The summer work of 7 Lakes Alliance's LakeSmart and Youth Conservation Corps programs is well underway. What those programs do – and how BLA members are able to tap into them – bears repeating.

LakeSmart and the YCC are two ways 7 Lakes Alliance furthers erosion control on all seven lakes and the larger streams that feed them. The aim is to mitigate stormwater runoff into waterbodies. That's because runoff contains dirt which itself contains the naturally occurring element phosphorus. Algae feeds on phosphorus, so too much of it in a lake risks algal blooms. Hence the mantra: Keep the dirt out of the lakes!

LakeSmart is a free and voluntary program that helps waterfront homeowners identify issues that contribute to runoff into lakes and streams. Trained LakeSmart volunteers or 7 Lakes Alliance staff evaluate properties to determine what can be done to minimize runoff. If a property has – or adds – enough runoff safeguards, it will be accorded the coveted LakeSmart award.

LakeSmart recommendations can be implemented by the YCC which is comprised of high school and college students. This year, we have 20-plus YCC crew members, including all of last year's workers, plus a few new hands. Since early May, the YCC has been installing erosion-control best management practices. Those include vegetative buffers, rain gardens, driplines, rubber razors, defined paths and parking areas, erosion-control mulch, riprap, and infiltration steps.

Property owners pay for materials that 7 Lakes Alliance procures along with any needed permits. The YCC provides the labor at a reduced cost to the homeowner. (The balance of the expense is funded with grants, private donations, and municipal contributions.)

This late in the season, the YCC's cup runneth over. However, this summer is a great time to have an erosion-control evaluation of your property. Over the winter, we can design a project and have it ready for implementation in the summer of 2024. To arrange an evaluation, contact me at stuart.cole@7lakesalliance.org or 207-495-6039.

Speaking of infiltration steps

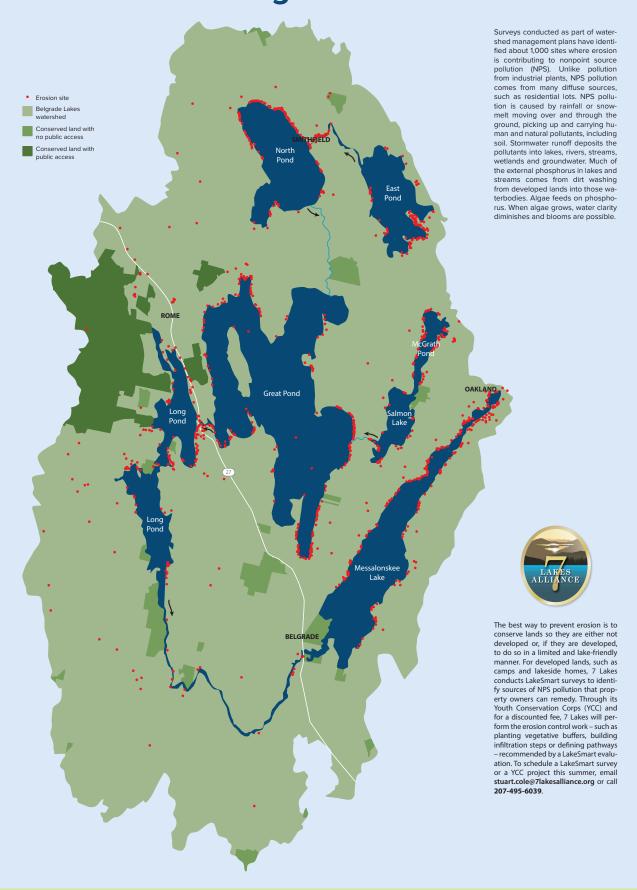
Infiltration steps are an effective and attractive erosion-control measure. Infiltration steps are built with timbers and backfilled with crushed stone or pea stone to help water soak into, rather than run over, the ground. Infiltration steps can include smooth stepping stones that are aesthetically pleasing and gentler on bare feet than crushed stone.

Infiltration steps mitigate erosion in three ways. One, they eliminate steep, compacted paths to the water. Two, they are better at absorbing water than sod or compacted soil. And three, they provide stable, defined paths to the water.



Planting vegetative buffers is just one of the erosion-control measures the 7 Lakes Alliance Youth Conservation Corps installs along shorelines. Here, the YCC is replacing turf with blueberry sod, one of the most effective buffers against stormwater runoff and erosion.

Erosion in the Belgrade Lakes Watershed



7 LAKES ALLIANCE HAS FULL SUMMER PLANNED

Along with controlling erosion, battling milfoil, and collecting, testing and analyzing water samples, a major summertime thrust for 7 Lakes Alliance is engaging people in programming that is fun and enlightening. New events, mostly at the 7 Lakes Alliance headquarters at 137 Main St. in the Belgrade Lakes village, are added weekly to the lineup of summer offerings at 7lakesalliance.org/allevents.

Here are a few events that may be of interest to you and your family:

- The ever-popular Chewonki nature series returns. Chewonki is an environmental education organization that teaches appreciation and stewardship of the natural world. On most Tuesdays at 3 p.m., Chewonki educators present free hour-long programs that often feature live animals. This summer's lineup includes "Scales & Tails," "Owls of Maine," and "The Bugmobile."
- At noon on July 6, Dave Rocque, retired State of Maine Soil Scientist and a foremost expert on septic systems, will offer more than a dozen helpful suggestions on the care and maintenance of septic systems. This is vital information for protecting the health of the lakes.
- On July 13 at 4 p.m., Jason Seiders, of the Maine Department of Inland Fisheries and Wildlife, will discuss invasive fish species and their impacts on our native fisheries resources. A Belgrade resident, Seiders will talk about invasives in central Maine waters, control methods used to minimize their impact, and new invasive species recently discovered in central Maine.
- 7 Lakes Alliance celebrates its fifth anniversary on July 16 at 4 p.m. while unveiling an exciting new era for the watershed at the annual Summer Celebration. All are invited to come hear the news while enjoying appetizers and drinks.
- 7 Lakes Alliance Assistant Lake Scientist, Lizzy Gallagher, will talk about the "Frog Days
 of Summer" on July 18 at 3 p.m. Lizzy researched amphibian development while earning
 her master's degree in biology. She will talk about local frog species, their amazing adaptations, and some of the threats they face.

Throughout the summer, 7 Lakes Alliance also will conduct courtesy boat inspector training, invasive plant ID workshops, invasive plant paddles, and a myriad of hikes. Additionally, 7 Lakes Alliance hosts the Belgrade Lakes farmers market from 8 a.m. to 1 p.m. each Sunday throughout the summer. Learn more at 7lakesalliance.org/allevents.

New Look For Logo

7 Lakes Alliance has updated its logo. Working with a professional design team, they have created a brand that is reminiscent of the former logo while better reflecting the Belgrades' singular beauty. The logo is already being used on many of their promotional materials. Look for it soon on ballcaps and T-shirts that you'll be able to purchase at 7 Lakes Alliance headquarters.

While the logo has been tweaked, their mission remains the same: to preserve the lands and waters of the Belgrade Lakes region for all.





Lizzy Gallagher, 7 Lakes Alliance's Assistant Lake Scientist, will talk about the "Frog Days of Summer" at an education program July 18.

BLA SUPPORTS WORK TRUCK FOR YOUTH CONSERVATION CORPS

By Blaine Horrocks
BLA Treasurer

The Belgrade Lakes Association (BLA) Board of Directors is pleased to announce a contribution of \$20,000 toward the acquisition of an additional work truck to support 7 Lakes Alliance's erosion control program. This newly acquired GMC Sierra 1500 Crew Cab will be used primarily to transport personnel (i.e., Youth Conservation Corp crews) and supplies to work sites in the Long Pond/Great Pond area. This marks a significant contribution toward BLA's long standing goal of promoting the highest possible water quality of our ponds by curbing soil erosion. As we are all aware, dirt entering our waters not only decreases water clarity, but it also contains phosphorus which contributes toward the possibility of algae blooms. This contribution also marks a major step in follow-on support of the BLA sponsored 2018 Great Pond / 2022 Long Pond Watershed-Based Management Plans. The BLA thanks our many members and supporters in making this contribution possible.



THE BLA RAFFLE A WIN FOR YOU – A WIN FOR OUR LAKES

By Andy Cook Raffle Committee Chair

The Belgrade Lakes Association's (BLA) mission is to "preserve and protect" the water quality of Great Pond and Long Pond. The recent East Pond and North Pond algae blooms are indicators of the urgent need for our work. You can help by buying raffle tickets, and you will be helping the lakes!

This summer, with an excellent slate of prizes and the need for the lakes, we hope to raise \$80,000. Come on down, buy a ticket, buy a book, buy four (the bonus raffle), buy a bunch for your relatives, for your great aunt twice removed, for your long-lost cousin, your neighbors, everyone - get everybody involved with "skin in the game" for our lakes and the raffle. **Win!** Last summer



Nancy Fuller did, Mike Gebo did, David Reynolds did, as did Terry Jacques (1st prize!).



First Prize
18-foot Godfrey Xperience Cruise
Pontoon Boat with 40 HP Motor and
EZ Loader Trailer

Thank you Hamlin's Marine!

In fact, you can even join us and volunteer to help out at the raffle tables. We need you, your enthusiasm for the lakes, and your personal touch and concern – BLA members make it happen! We miss you! Join us!



Thank you Hammond Lumber!

A BIG thank you also to Lake Point Real Estate, Day's store, the Rizzos, Dick Greenan's Loon tours, The Farmers Market, Lynch Landscaping, the Village Inn and all our volunteers.



Some of our younger volunteers

THANK YOU ALL!

Win – Win - \$80,000 – join us – and WIN for our lakes – we can do it!

2023 BLA LOON SURVEY UPDATE

By Dick Greenan Chairman, BLA Loon Preservation Project

As you may or may not know, your Belgrade Lakes Association is now into their fifth year of their Loon Preservation Project, a responsible comprehensive program and plan to support our loon population in the very best sustainable manner. We are taking our loss in chick longevity very seriously and are trying to get ahead of it.

Your very own past BLA President and upper Long Pond resident, Carol Johnson, documented Belgrade's first 2023 loon arrival in front of Day's Store on upper Long Pond on March 18th! With the ice still in on April 5th, we then



Similar to last year, one of the first four returning loons was this 2021 banded male photographed by resident photographer, Alex Wall. He (not Alex) couldn't wait for ice out!

counted four adults in this same open 300-yd watery landing strip. It wasn't until the ice went out on April 13th that our loons returned in earnest. One of the four adults was our banded male from the Castle Island territory in upper Long Pond who was also one of last year's early arrivals. He just couldn't wait to get back up to the lake, I guess!!

We refurbished Long Pond's Tracy Cove floating nest on April 30th and, once again, observed the territorial pair swimming right over to the nest as we motored away. Experiences like this make all the work worth it!



2023 Long Pond's Tracy Cove floating nest placement

We typically begin surveying Great and Long Ponds in mid-May in those loon territories where we have had activity in the past. We already have a pair in Long Pond's Beaver Cove that just couldn't wait and, last year, started breeding early on April 24th, although unsuccessfully.

Well, now for some Great News!! Thanks to our loon consultant and mentor, Lee Attix, and Colby College's Professor of Biology and Program leader, Catherine Bevier, we have two Colby College interns this summer. Kate Jaffee and Brynne Robbins will provide some young eyes along with some tremendous accumulative experience! Our valued loon volunteers will continue with their eyes on the lakes, but now they will be assisted by two very capable and dedicated students as we make our daily observations. Equally important will be their expertise in record keeping of the collected statistics to better assess our efforts for future activities.



Kate Jaffee



Brynne Robbins

Kate is a current sophomore majoring in environmental science with a focus in biodiversity and conservation. Brynne is currently a freshman with a major in environmental policy and has most recently provided testimony in support of DEP's Lake Restoration and Protection Fund. Both of our new interns come with a great deal of experience including courtesy boat inspection, invasive plant patrolling, junior environmental and floating education, etc. Please join us in welcoming Kate and Brynne! We are very fortunate to have these two individuals on our team!

Our loons typically nest around Memorial Day and, with an average 27-28 day gestation period, we expect to see our first chicks as early as June 18th and more until around the 4th of July.



Great Pond Nesting female on her spot!

Last year was both a very interesting, yet troubling year. Out of the 25 known loon territories in both Great and Long Ponds, we documented 15 nesting pairs from those possible 25 territories. Out of these 15 nesting pairs, we had 12 successful nests with 13 chicks hatched. BUT, only 4 chicks from Great Pond survived to fledge for the 2022 Fall Fly Off. On Long Pond, not one out of the 6 chicks survived due to a myriad of reasons. Let's hope that our feathered friends have better luck this year!



Adult building hummock nest in Long Pond's Ingham Stream

We must continue not to disclose the exact locations of our Loon Nesting Sanctuaries as the birds obviously need all of the privacy that we can afford them. Along the same lines, the State-wide 200' No-Wake Zone, although important for so many obvious reasons when actually practiced, is just not adequate to ensure our loons' safety. Well-intentioned canoeists, kayakers and, in particular, paddle-boarders, result in way too many birds being flushed from their nests because these birds perceive a threat from a human, especially one who is standing.

As I have stated before, our loon population, as well as the Belgrade Lakes Association's Loon Preservation Project, is contingent upon your support. Although we are in our fifth year of the Project, we continue to have our work cut out for us. Increased funding will enable us to maintain monitoring, funding of at least one evening banding session, and hopefully Belgrade's first Live Loon Cam. But it can only happen with your support.

Please support the Loon Preservation Project. It is easy to donate online at blamaine.org or via mail at the Belgrade Lakes Association, PO Box 551, Belgrade Lakes, ME 04918. Your assistance is sincerely appreciated by all of your volunteers. Thank you, and we'll see you on the lake!



Boater demonstrating zero respect for the nesting birds, not to mention the resultant erosion in this all-important wetland.

ANOTHER DAM REPORT!

By Dick Greenan Chairman, Belgrade Area Dams Committee

As I write this column, our all-volunteer Dams Committee just received some welcomed news; that is, if you like rain a lot! They are now forecasting 3.28" of precipitation for the next 10 days. Long Pond is already at its summer 3" above full pond level, but both Great Pond and Salmon/McGrath have been slow getting up to their summer levels, and this rain should finally get us there.

Last year was a busy year for your Dams Committee. The Salmon Lake Dam 9' x 10' radial steel gate was rebuilt with new steel, gaskets, cables, etc., to give us another fifteen to twenty years of service. In addition, we installed a valve midway in the gate to accurately measure out the mandated 1 cubic foot per second (CFS) into the stream ultimately running into Great Pond's Hatch Cove. In the past, the gate had to be adjusted practically daily by one of our two Salmon Lake Dam Committee volunteers to maintain the 1 CFS. Previously, due to the gate's inherent design, the flow was estimated to be 2-4 CFS though it was often plugged up by our local beaver pop-



Local Contractor, Shawn Landry, is installing the new valve in the Salmon Lake Dam.

ulation! Particularly with our recent droughts, keeping more water in Salmon/McGrath will be a welcome relief to its residents, especially those attempting navigation through the thoroughfare.



Village Dam abutment facing Route 27 in October



Village Dam abutment facing Route 27 in December

It would be nice to have a summer without a major dams project, but such is not the case unfortunately! Late last summer we had the Village Dam surveyed by Knowles Industrial Services Corp. and received a quote for \$100,000 to excavate all of the loose concrete down to the exposed rebar, re-paint the rebar, and re-concrete with a new mixture more suitable to address the forces in play, ice in particular. In lieu of dropping the lake 3' to access the damaged concrete, a cofferdam will need to be engineered and installed on the upstream side of the dam to expose the damaged concrete and keep the field dry for the 2-3 weeks required, without losing any water in Great Pond. The above cost was itemized in our 2023 Dams Committee Budget Request to the five participating towns in our Inter-local Dams Agreement



The concrete deterioration is throughout!

with unanimous support to date for this project. Thank you all!

But, (and there is always a "but"), the dam's concrete patches over the past 27 years have finally succumbed to our Maine weather, ice, and road salt. Photographs taken this past October, and again two months later, show a marked increase in deterioration. We do not have an exact age as to how old the Village Dam concrete abutments and structure are, but we can document that this serious concrete deterioration has now taken its toll. The concrete has been cosmetically patched over the years, but moisture has permeated the patches and concrete down to the rebar which, during its rusting process, has further deteriorated the concrete down to, basically, mush. The process has been further exacerbated by the road salt coming off the Rt 27 bridge as evidenced by the greater breakdown closer to the bridge.

Without repair, components of the dam are certain to fail, and according to Kennebec County Emergency Management Agency's Director, Art True, the Village Dam will not make it through another winter without repair. Some have asked what would happen if the dams were removed? In 1975, Central Maine Power (CMP) stated the following during a public meeting:

QUESTION:

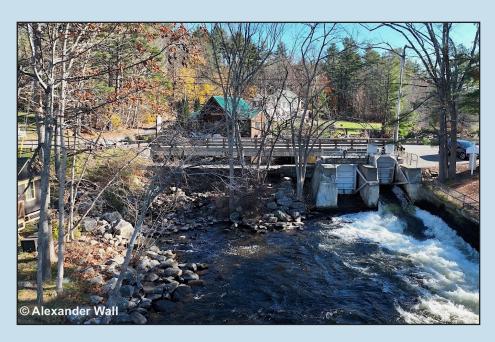
What would happen to the lakes if the dam gates were permanently removed and the water allowed to drop to original lake levels?

ANSWER:

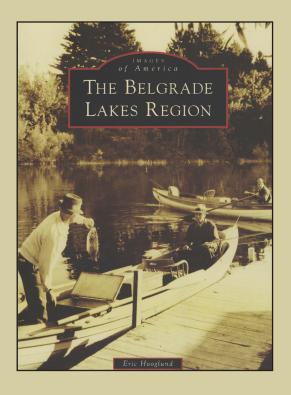
"Salmon Lake-McGrath Pond would drop about six feet, Great Pond roughly seven feet, and Long Pond about three, subject to levels of the stream bottoms immediately ahead of these dams. The impact on individual lake and stream front properties would vary according to the character of the shoreline. Docks, water intakes, swimming and boating conditions would be affected and some property lines might be altered. Without the dams the remaining lakes would be subject to wide variations in levels which would be uncontrollable." The impact on water quality due to further erosion and run off would also be catastrophic.

We have looked to the County, State, and Federal governments for some infrastructure assistance, but, to date, our needs have fallen on sympathetic but deaf ears. We haven't given up beating the bushes, and as it is said, "pray for a miracle, but prepare for the worst," or something to that effect!

Best to all, and Thank You for your continued support – we can sure use it!



The forested and rural Belgrade lakes region in central Maine has been a summer tourist area for more than 125 years, attracting families to its seven lakes- called ponds by locals- that are interconnected by streams. This chain of lakes acquired its collective name from the town of Belgrade, which borders five of the seven lakes, including the three largest ones. In 1849, a railroad built two stations in Belgrade, and by the 1870s, the combination of the lakes, trains, and numerous farms offering fresh produce and dairy products fostered the growth of tourism in the area. During the golden age, from around 1900 to 1945, grand hotels, resort spas, and family and youth images for this book came from the extensive photograph collection of the Belgrade Historical Society, which was assembled by the late Lawrence Merrow Sturtevant. The captions are based on Hooglund's professional training as a historian and his lifetime knowledge of and love for the Belgrade lakes region.



If you would like a copy of this book, it can be purchased at Oliver & Friends in Belgrade Lakes Village, or you can contact the Belgrade Historical Society by email at belgradehistoricalsociety@gmail.com

SUMMER SAILING OPPORTUNITY UPDATE

By Paul Feinberg and Tom Hale

You've wondered what it is like to grab a tiller and haul on lines to move a boat swiftly and nearly silently through the water, but you need instruction to get started? Guess what? This is your year to start! The Great Pond Yacht Club has an excellent adult education program for you to learn how to sail or brush up your skills. You can learn the basics of sailing and of racing, so soon you will enjoy cruising with friends or competing alongside our other members!

We are fortunate to have Tom Hale running short sessions for all skill levels. As a veteran boat builder and racer, he is an amazingly knowledgeable sailor and, most importantly, he loves to teach and be on the water doing practical sailing lessons. You can learn on your boat or his and can be scheduled nearly any day of the week at a mutually agreeable time. Start now to begin a lifetime of sailing adventures. You can reach Tom by calling him at (410) 212-7898.

In addition to the adult program, the GPYC has an association with SailMaine, a sailing camp at the Center for All Seasons beginning on July 10. It runs for six one-week sessions with one in the morning and one in the afternoon. These sessions are for beginner and intermediate sailors in the provided 420s and RS Teras. Mornings are for 8-12 year olds in the Teras and afternoons are for 12-17 year olds in the 420s. We are proud to offer this to all kids in the Belgrade community. Here is a link for new families to register – https://www.sailmaine.org.

Jump aboard one of these opportunities to get yourself or your kids out on the beautiful waters of the Belgrade Lakes this summer. Sailing is a lifetime skill, and you are missing out on excitement and camaraderie if you don't sail with us this summer!





PFAS IN THE BELGRADES

By Dr. Danielle Wain
7 Lakes Alliance, Lake Science Director

In April, the Maine CDC expanded the list of waterbodies with fish consumption advisories due to elevated levels of PFAS (also known as "forever chemicals"). While none of the Belgrade lakes are currently on this list, some nearby waterbodies are, including Messalonskee Stream, where it is suggested that people consume no more than three meals per year of fish caught there.

As Messalonskee Stream is the outlet of the Belgrade Lakes watershed, one naturally wonders if there could be cause for concern upstream.

While there has not been extensive PFAS sampling by the State of Maine in the Belgrades, smallmouth bass were sampled in Great Pond in 2014 and white perch were sampled in 2022. In 2014, the fish had a mean concentration of 4.7 parts per billion (ppb) PFAS (below the 7.5 ppb limit for warmwater fish). The state is still awaiting results from the 2022 samples.

PFAS INFORMATION: PFAS are man-made chemicals that have been used in industry and consumer products worldwide since the 1940s. Ex. nonstick cookware, water-repellent clothing, stain resistant fabrics and carpets, some cosmetics, some firefighting foams, and products that resist grease, water, and oil (some fast food wrappers).

Exposure to PFAS

- · Drinking contaminated municipal water or private well water
- Food grown or raised near places that used or made PFAS
- Eating fish caught from water contaminated by PFAS (PFOS, in particular)
- Accidentally swallowing contaminated soil or dust
- Eating food packaged in material that contains PFAS
- Using some consumer products such as stain resistant carpeting and water repellent clothing.

What do PFAS do to humans? Epidemiological studies have revealed associations between PFAS exposure and health effects, including altered immune and thyroid function, liver disease, lipid and insulin dysregulation, kidney disease, adverse reproductive and developmental outcomes, and cancer.

DRINKING WATER: Are PFAS in bottled water? PFAS have been found in some brands of bottled water. The FDA has not put enforceable limits in place yet. **Do Brita filters remove PFAS?** Common water pitcher brands like Brita and Pur reduce bad-tasting chlorine and contaminants like heavy metals. But they weren't designed to remove PFAS or even reduce their concentration in your tap water. **Does distilled water have PFAS?** Distillation is a highly effective method of removing PFAS from water.

GREAT POND AND LONG POND WATER QUALITY UPDATE – JUNE 2023

By Dr. Danielle Wain 7 Lakes Alliance, Lake Science Director

In 2021 and 2022 with support from the state, 7 Lakes Alliance, BLA, and partners developed Watershed Based Management Plans (WBMPs) for Great Pond and Long Pond respectively. These plans were developed because both Great Pond and Long Pond are listed as impaired by the state (< 25 lakes in the state have this designation!) due to poor trends in water clarity over the last 50 years.

One of the primary purposes of these plans is to set targets for phosphorus in the lakes. Phosphorus is a key nutrient that fuels algal growth, so reducing the amount of phosphorus in the lakes can help to minimize the likelihood of algal blooms. For most lakes, the primary source of phosphorus is the watershed - the surrounding land that drains into a lake or other waterbody. When it rains, some water seeps into the ground, but a lot of it runs off the surface and into the lake, bringing sediments and phospho-



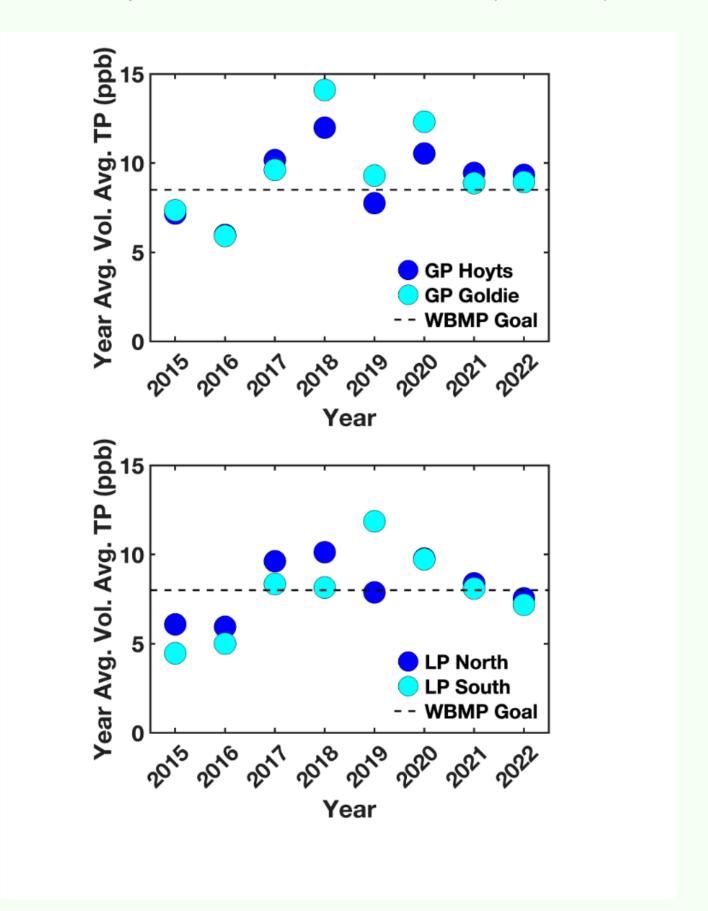
Dr. Danielle Wain

rus with it. Phosphorus sources are different in each lake, but they can also come from septic systems, waterfowl, the atmosphere, and the lake sediments under certain conditions.

For both Great Pond and Long Pond, the science that went into the WBMPs indicated that the primary source of phosphorus was runoff from the watershed. Programs such as LakeSmart and Youth Conservation Corps help reduce the amount of phosphorus running off existing developed land into the lakes. Protecting land from development and encouraging smart development in the watershed are also important factors in reducing the amount of phosphorus entering the lakes.

So how are we doing? In 2022, Great Pond was above the target level of phosphorus in the lake (see Figure). We don't expect improvement overnight, and it is a positive sign that the phosphorus concentrations held steady from 2021. In 2022, Long Pond was below the target level of phosphorus in both basins. While this is good news, it doesn't mean our work is done. Much can depend on the weather from year to year – the massive rain event we experienced on April 30th – May 1st led to a lot of run off into the lakes. 7 Lakes Alliance sampled 16 of the largest streams entering Long Pond, in addition to some sites on Great Pond. We also had volunteers from BLA who adopted a stream that they sampled throughout April and May. This data is currently being analyzed at Colby, and we hope to know more soon about how much phosphorus may have entered the lakes during this time. It's crucial that we continue to build a more resilient watershed as these types of events become more frequent with climate change.

Figure: Year averaged Total Phosphorus (TP) for two sampling sites on Great Pond and the two basins of Long Pond. Data is from the 7 Lakes Alliance - Colby Water Quality Initiative.



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The newsletter staff (Polly Beatie, Liz Fontaine and Marcel Schnee) hope you enjoy this edition.

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