



# LEA Lake News

## Spring/Summer 2022



### In this issue of Lake News:

- Impacts of Big Wakes
- Tips for Fishing with Kids
- Summer Camps, Courses, and Classes
- Beaver Management Techniques
- Helping our Loons



# Priceless Prevention vs. Expensive Control

Colin Holme

We are in an area blessed with beautiful, clear lakes and ponds. Our communities have been carefully stewarding them for generations, and unlike many waterbodies to the south, our lakes have remained free of noxious algal blooms. However, several waterbodies in the region now have invasive aquatic plants. LEA has been making substantial progress knocking back and controlling these infestations, but it is expensive work, and once introduced, full eradication of an invasive plant ranges from very difficult to impossible.

When you are living on a pristine lake that you have known for years, it is hard to imagine it any other way. But I want you to take a minute and close your eyes. What if “your” lake turned green from the end of June through August every year? What if your grandkids have to jump off the dock into milfoil or European naiad when they are adults? Or if swimming required putting on rubber water shoes to protect your feet from sharp invasive mussels growing along the rocks of your shoreline?

More and more people every year don't have to imagine these scenarios because it is their reality. This is because many communities took their lakes for granted and prioritized unrestrained development or unfettered access over planning and simple common sense actions.

We need to take the time to think through different possible futures – both in the short- and long-term – so we are not caught off guard and end up ruining something priceless for our children, grandchildren, and generations to come. LEA has been very proactive by looking at what is happen-

ing in other lake communities and enacting policies, like phosphorus control and courtesy boat inspections, to help us avoid the problems that others have fallen into. But, ultimately, we need your help to be successful. The financial support of members is what keeps our organization running every day, but we also need your help at the local level to ensure our municipal officials and volunteers understand how important lakes are to this area, our well-being, and the economy. We need your help when it comes to statewide laws and policies too. Sending letters to your local representatives and the environmental and wildlife committees in Augusta helps to make our voice louder around lake and water quality issues.

If you are not already receiving it, I encourage you to sign up for our electronic newsletter, which comes out roughly twice a month and can keep you up-to-date on current lake initiatives, policies, and events. You can sign up by visiting the home page of our website: [www.mainelakes.org](http://www.mainelakes.org).

Thank you for your continued support. Together, we can keep our lakes beautiful.

Colin Holme, Executive Director



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Dear Members and Friends,

I never cease to be amazed by our ever-changing lakes. In the glorious Maine summer, it's hard to imagine the frozen snow-covered expanse that defines a Maine lake in wintertime. As I sit sunning on a gently rocking dock in July, I like to reflect on how the changing seasons work to keep the lakes healthy. Spring snowmelt, rain, and wind serve to replenish and reoxygenate the water in anticipation of the summer growing (and boating and fishing) season. The data we collect at LEA throughout the year helps us to better understand the impact of a changing climate as the winters become warmer and shorter. With this information, we hope to develop strategies to preserve the delicate ecosystems that characterize our lakes.

While climate change remains the biggest long-term threat to our lakes, recreational activity can also take a toll. The increasing popularity of wake boats accompanied by a lack of information about proper use poses a substantial risk in terms of shoreline erosion and loon habitat. Over the winter our board spearheaded the Maine Boating Impact Coalition with several partners who have an interest in furthering education in this area. It is our hope that wake boating can continue in a way that is consistent with preserving the health of our lakes.

We remain cautiously optimistic about the summer of 2022. Our 50th anniversary gala, originally scheduled for 2020, will take place on July 21st at Stone Mountain Arts Center in Brownfield with a special appearance by Noel Paul Stookey of Peter, Paul and Mary fame. We have limited seating and expect to sell out quickly, so please keep an eye out for your invitation in the mail and check our website for details. Our popular Paddle Battle is back in person on June 25th, with opportunities for kayaks as well as paddleboards and a special race for kids. We are looking forward to once again

engaging with our membership in hands-on fun and educational experiences at the Science Center and on our trails. Please check in regularly with our website and follow us on Facebook, Instagram, YouTube and LinkedIn to stay up to date.

You may have noticed a slight change in our logo. The forward-facing loon in the circle is now looking and coming directly at you. To me this represents engagement. We are working together to preserve the healthy environment that benefits our lakes and our lives. We can't do it alone, and neither can you. It is this partnership with the community that fuels LEA and keeps us on track. I can't thank you enough for both your financial support and for your commitment to living in harmony with these wondrous waterbodies that bring us so much joy.

Respectfully,  
Lydia Landesberg, President



## Mark your calendars for

LEA's 50<sup>th</sup> 52<sup>nd</sup> Anniversary Gala!

Dinner, drinks, live and silent auctions and special guest Noel Paul Stookey!

Seating is limited so please reserve now at: [mainelakes.org/gala/](https://mainelakes.org/gala/).





# Green Means Go...to Your Nearest Lake Professional

Ben Peierls

LEA gets lots of questions about unusual lake phenomena, but I bet most people would know something was wrong if they saw a green scum on the water surface. They could be observing a cyanobacteria bloom. These algae-like bacteria threaten many lakes around the world with unsightly surface scums, noxious odors, and toxins that can harm humans, pets, and wildlife.

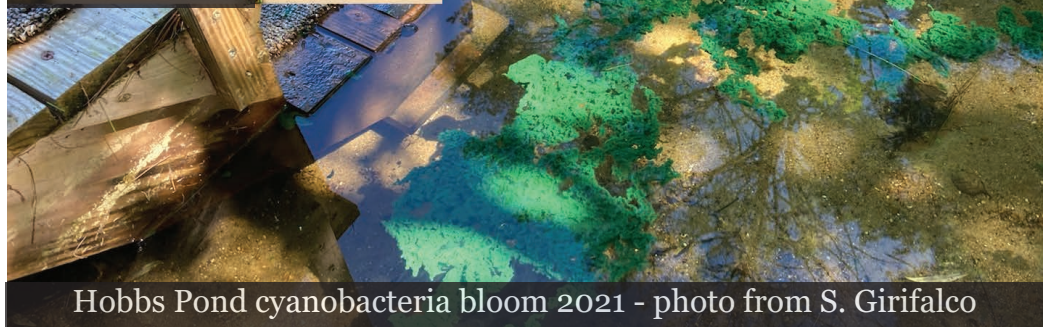
Lakes in the LEA service area have been fortunate so far to avoid these devastating events. But some of our neighboring lakes have not been so lucky.

In August 2021, lake observers started noticing green globs showing up near the shore of Hobbs Pond (also known as Little Pennessewassee) in Norway, just northeast of the LEA service area. One swimmer went to the hospital complaining of nausea, hives, and tingling of extremities. The town was notified, and signs were posted warning the public. Sal Girifalco, president of the Lakes Association of Norway, reported that they sent a sample to Maine DEP for analysis and identification. The culprit behind this ephemeral bloom was a filamentous cyanobacteria in the genus *Planktothrix*, which can produce toxins. Unfortunately, the state did not run a toxin analysis despite the sick swimmer. The bloom disappeared within two weeks and no obvious cause was ever found.

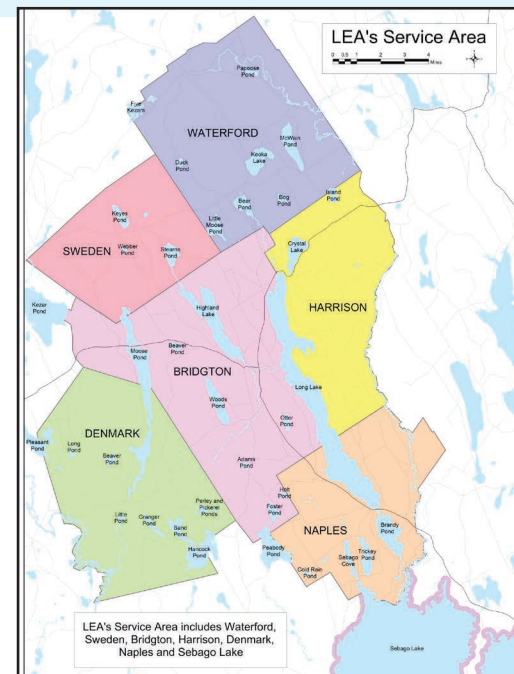
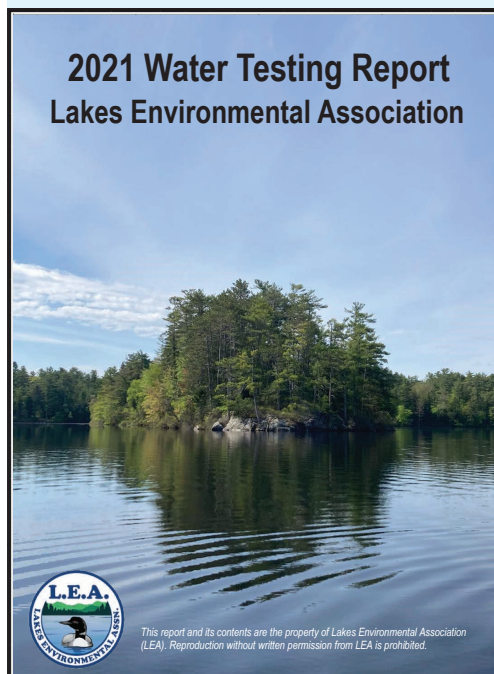
Three months later and about 20 miles to the south, Casco resident Candace Carr noticed a blue-green discoloration on the water surface just offshore and next to the shoreline near her home on Thomas Pond, which flows into Sebago Lake. A similar bloom happened at almost the same place and time in 2020. Candace brought a sample to LEA and we identified it as a cyanobacteria called

*Dolichospermum*, another group of species capable of producing toxins. November is not when we normally expect to see cyanobacteria blooms, but it could be that fall rain storms and wind mixing provided the phosphorus necessary to initiate and support the bloom. There is also concern that overloaded septic systems could have been the source of nutrients.

Both blooms dissipated within a couple of weeks and no one was seriously hurt. But these events should be taken as an early warning of things that might happen if we let down our guard with respect to lake water quality. If you ever see what you think is a bloom, report it to Ben or Maggie at LEA, or file a report with DEP at: [maine.gov/dep/water/lakes/reportbloom.html](https://maine.gov/dep/water/lakes/reportbloom.html).



## Want to know your lake's current water quality?



Check out our latest water testing reports at:

[mainelakes.org/testing-reports/](https://mainelakes.org/testing-reports/)



# Woodland Owner Appreciation Day, Year Four!

Alanna Yannelli

I was in a fifth grade classroom this week, talking about how forests protect clean water and store carbon (yes, fifth graders can talk about these things), and a student said, “Hey, do you help organize the Woodland Owner Appreciation Day?”

Let’s just say the word is getting around.

Actually, she is a granddaughter of a past host of WOAD and loves spending time in the woods with her family. It made me think that this is who we’re doing this for. Not necessarily for us, or for the present moment (although we get to enjoy the woods too), but for future generations - our kids and grandkids, who will have land passed down to them or purchase a tract of forest on their own. These undeveloped spaces will be even more precious in the future and will need a fresh crop of stewards to maintain them. How exciting!

Five years ago, we joined Portland Water District and others to reach out

to folks who own large plots of forested land. We wanted to find out what concerns these landowners were facing and see if there was any way we could help them keep their land wooded. This first iteration took place on a rainy afternoon and was called “Woods, Water and Warblers.” We had great food and good conversation, but unfortunately, not many landowners.

The next year, LEA took on a more prominent role, changed the name of the event, and hosted it entirely outdoors at our Highland Research Forest. Offering food, drink, and access to a variety of professionals with a high level of expertise did the trick! It was a hit, and since then, it has continued to grow.

The overarching goal of this event is to help keep land as undeveloped woods because forests are vital filters for clean and fresh water. They are also spaces for wildlife, carbon storage, oxygen creation, timber harvesting, and recreation. We set up the day to connect at-

tendees to local resource professionals to answer questions about their woods and provide insight on harvesting for sustainable income, wildlife management, and future planning.

This year, we are holding the event on October 1st, and Loon Echo Land Trust will be hosting at the Peabody-Fitch Woods in South Bridgton. This is a spectacular location with 252 acres of forestland and 2.5 miles of trails surrounding the bucolic fields of Bridgton Historical Society’s Narramissic Farm. If you have forested land in the area, mark your calendar! Attendees can go on walks and talks, and we make sure to leave time for networking with other landowners and resource professionals. We will provide lunch, drinks, and prizes. Participants of all ages and all levels of forest management are welcome. If you are interested in attending, please click on Woodland Owner Appreciation Day under the Events dropdown on our website. Hope to see you in the woods this fall!



Past WOAD participants talking about forest management



# Notes from the Bench

Ben Peierls

Winters are usually the time when we catch up on all the projects set aside during the busy summer season. Winter 2022 was not one of those times. Our winter lake monitoring project kept me, Maggie, and Shannon quite busy this year. The three of us made multiple visits to 13 different lakes for a total of 32 different trips. And that was in spite of a shorter “safe ice” season—ice was starting to pull away from the shore in spots during our last trips in mid-March. We measured ice thickness and collected our usual sonde profiles on each trip, but we also measured water clarity, light levels, and phosphorus. We imaged many of the samples using our FlowCam, producing our most detailed view of winter lake algae communities to date.

Along with analyzing samples and reporting on last year’s research, I have been working with the Maine labora-

tory accreditation officer to meet all of the requirements for the MLSC lab accreditation. One of requirements is to accurately measure phosphorus levels of a sample sent to us. After we run the analysis, we submit our results and they need to be within a certain range of the known value. I just completed one of these proficiency tests and our results were within 0.2 parts per million of the actual concentration, well within the satisfactory range. Once we are certified, we can make and submit our own total phosphorus and chlorophyll measurements to DEP’s lake monitoring program. We currently send samples for analysis to the state lab, which has just announced a significant price increase, making accreditation more important than ever. With the busy summer ahead, I’m already thinking of how much I’ll get done when winter rolls around...



Maggie Welch and Shannon Nelligan heading out on the lake

## Eco-Explorers Camp for Kids



Imagine yourself at eight years old. So much of the world is brand new, and one of the most exciting things is getting a new game on your tablet. Wait, that’s not right. I’ll start over. Remember yourself at eight years old. Much of the world is brand new, and the most exciting part of summer vacation is swimming, exploring the woods, and learning about nature without feeling like you’re in school. Yeah, that’s much better.

Eco-Explorers camp is a four-day experience at the Holt Pond Preserve, designed to get kids outside, connecting with nature and making new friends. Our small group, led by experienced LEA educators, will wander the forests, fields, and wetlands of the preserve, learning about nature. Campers will leave with knowledge about the plants and animals common to Maine and amazing memories to share with their families.

Eco-Explorers runs during the first week of August and is open to kids ages 7-11. Campers will be dropped off at the Holt Pond Preserve at 9 am and picked up at 3 pm. Cost is \$150 for LEA members and \$175 for non-members. Scholarships are available if needed.

For more information visit our website, or contact Mary: [mary@mainelakes.org](mailto:mary@mainelakes.org).



# Trainings and Lakes Symposium

Alyson Smith

One of the most effective ways that LEA can help preserve and protect lakes is through the actions of others: we hold trainings, classes, workshops, and many other gatherings in an attempt to share knowledge and promote stewardship of our precious resources. We're pleased that these offerings are now mostly in-person once again.

Three Maine Department of Environmental Protection contractor certification trainings took place at the Maine Lake Science Center this past winter and spring. Participants learned why erosion control practices are important, how to properly install and maintain erosion and sedimentation control best management practices, and learned about regulations that help protect water quality. Conservation practices for landscapers and homeowners was also added to our offerings this spring. You can find a list of certified contractors at [www.maine.gov/dep/land/training/ccec.html](http://www.maine.gov/dep/land/training/ccec.html). In addition, local municipal officials attended sessions in solar siting and shoreland zoning.

In partnership with Portland Water District and Eaton Peabody Law Firm, LEA offered a real estate continuing education class this spring. This accredited course focuses on maintaining the value of lakefront property and the vital role that real estate agents play in relaying information about lakes to new property owners.

We will be hosting a Lakes Symposium in June for local associations and others invested in our lakes to share information, knowledge, and experience with each other so that we can better steward and protect our waters.



Milfoil vs. Bladderwort

On June 28<sup>th</sup>, the Lake Stewards of Maine will present a live Aquatic Plant Identification workshop with a focus on the eleven invasive aquatic plants considered to be the most imminent threats to our state and their native look-alikes.

Audubon presented on their Renewable Energy Siting Tool with LEA this spring



## Lake Ecology Course, July 12-14

Our three-day, immersive Lake Ecology course for high school students will take place mid-July. During this course, students will explore lake, forest, and wetland ecosystems and gain a comprehensive understanding of watershed science. Through field trips, lab analyses, and data-driven discovery, attendees will dig into a variety of concepts in basic limnology and the impact humans have on lakes and our freshwaters. This class is taught by LEA's Science Center Research Director Dr. Ben Peierls, Staff Researcher Maggie Welch, and Educator Mary Jewett.



If you or someone you know is interested in signing up for this summer's Lake Ecology course or any of these trainings, please contact Alyson at [alyson@mainelakes.org](mailto:alyson@mainelakes.org).



# Eyes On (and in) the Water Needed on Long Lake

Alanna Yannelli

Since the 2017 discovery of several large and established monoculture patches of invasive Variable Leaf Milfoil in Mast Cove and Salmon Point, LEA has had a full-time dive crew in Long Lake. With the initial big patches already addressed, our crew of 4-5 divers now spends much of their time surveying the littoral zone (the shallow waters where sunlight reaches the bottom), sometimes going days without seeing milfoil (which is a good thing!). The crew typically surveys via sea sled, which is an adjustable fin blade with a handle – pulled slowly behind a motor boat by a rope – and the surveyor is able to come up for air and go down to the bottom as needed (check out

our video on YouTube!). This is the fastest way for us to survey a large area -- a necessity for covering the 38 miles of shoreline on Long Lake. We also kayak and snorkel in small coves, hand pulling plants as we see them. In 2020 and 2021, this amounted to over 1200 hours of crew time on Long Lake each year. Last year, surveying helped us find and begin addressing large patches of milfoil in Cape Monday Cove and individual plants and small patches near Bridgton Academy beach and the Harrison boat launch. Surveying is a vital tool to ensure we do not have another “outbreak” of milfoil, and it is something that almost anyone can help with. This is where you come in!

Specifically, we are looking for volunteers on Long Lake to scout for milfoil and other invasive aquatic plants. Establishing a solid team of plant surveyors on the lake would allow us to put more masks in the water doing actual control work, build needed capacity for our management program,

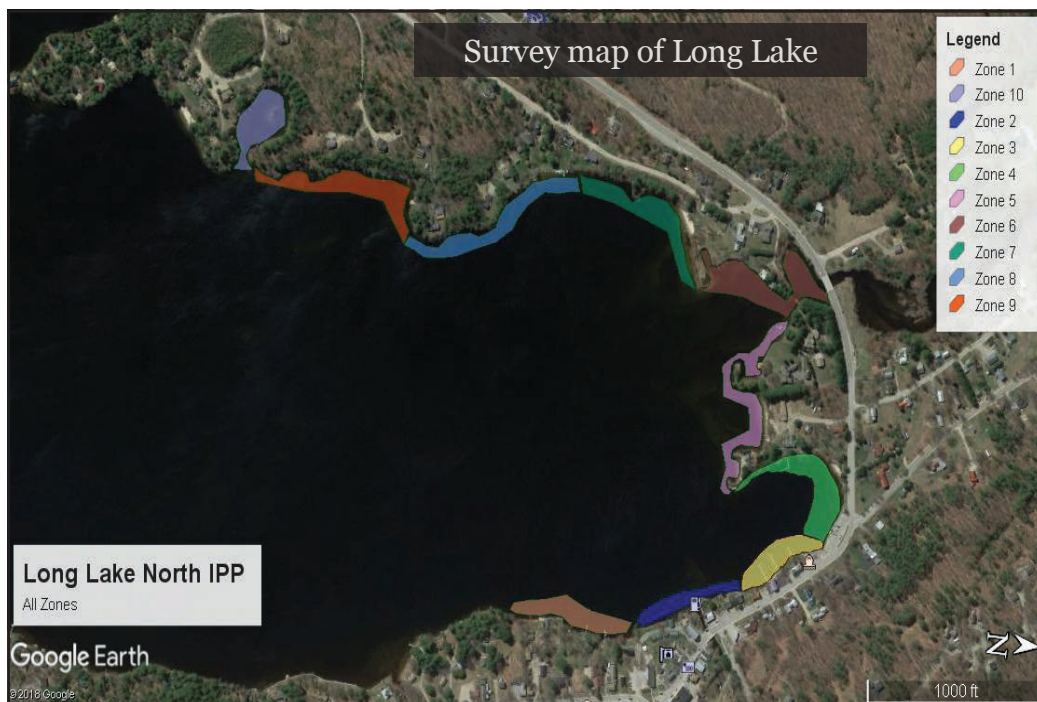


Invasive Milfoil

and increase our ability to respond to any new findings in Long Lake. We will provide survey and plant identification training, a reporting system, and opportunities to spread the word, not the plant! In return, we ask that you check your designated area(s) a few times during the summer via kayak, canoe, paddleboard (preferably with a scope to see underwater, which we can provide), or by snorkeling (this is the best) and to share your findings with us. The more help we have, the more time we can spend knocking back established infestations, which will keep us ahead of the curve on Long Lake. If you're interested in learning more and joining our survey team, please reach out to [alanna@mainelakes.org](mailto:alanna@mainelakes.org). Thank you!



Native aquatic plants





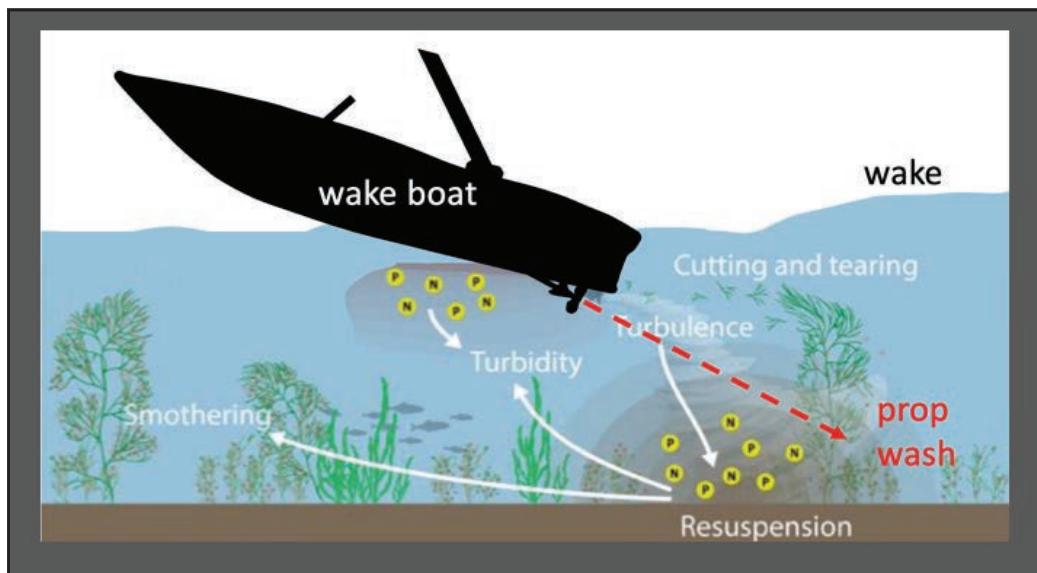
# Wake Surfing Impacts and Possible Solutions

Lakes are the main attraction, economic lifeblood, and calling card of this area. They are important and meaningful to everyone and can be enjoyed in myriad ways.

However, one individual's or group's good time should not be at the expense of others -- or the health of our lakes. This has become a growing concern with wake boats, especially when they are used near the shore or in shallow waters. These specially designed boats plow through the water at slow speeds and create 2- to 5-foot waves for someone to continually surf behind without the need of a ski line. While this is an amazing feat in engineering, these big waves can have a big impact on our waters.

There have been numerous studies on how long it takes these wakes to dissipate over the water's surface. One of the best studies done to date shows that it takes more than 500 feet to get these wakes to a similar size of those created by a waterski boat. When these big waves hit the shore, they can erode the soil, damage docks, beaches, and property, and can flood loon and duck nests. Swimmers, canoers, kayakers, and paddleboarders struggle to navigate these large waves, and it can make for a dangerous situation.

Additionally, when pulling a wake



surfer, the prop of these boats is angled downward, which can stir up sediments along the bottom of the lake. This clouds the water and releases nutrients that feed algae.

Wake surf boats also pose a unique new risk with their ballast tanks. These boats suck up 2,000 to 6,000 pounds of water to push down the back of the boat which helps create a larger wave. These ballast tanks are not easily seen or accessed and are nearly impossible to fully drain. Because of this, they can harbor invasive plants and species like milfoil, microscopic zebra mussel larvae, or the spiny water flea.

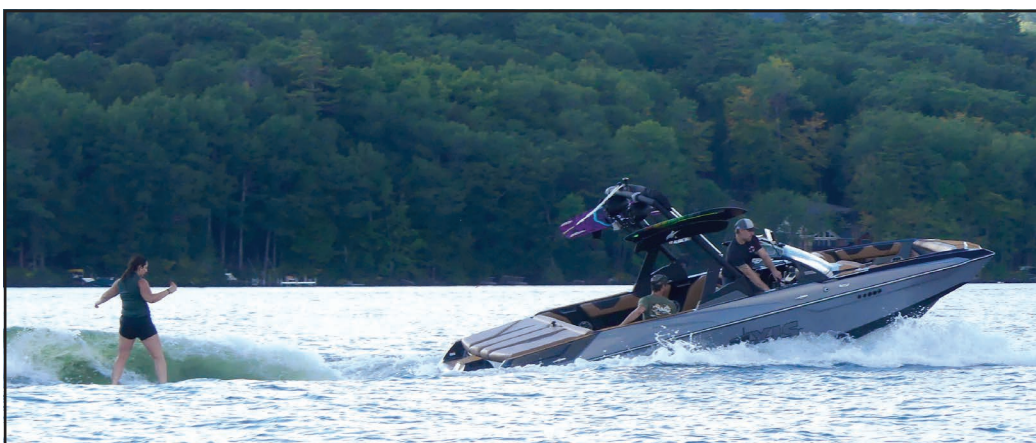
While these issues paint a negative picture of this new sport, it is not all

bad news. Wake surfing can be done with minimal effect on our lakes and other users. By staying more than 500 feet out from shore and in water deeper than 20 feet, wake impacts and sediment resuspension can be minimized.

Dealing with the threat of invasive species transport is a little trickier. At a minimum, internal ballast tanks should be flushed or sterilized with a diluted bleach solution if a wake boat is going from one lake to another – particularly if one of the lakes has known invasive species.



Today, more and more parts of the country are starting to restrict this new sport. With Maine's pristine lakes and ponds at risk, it is time for us to consider sensible regulations that allow wake surfing to continue but ensure our lakes remain healthy and safe for all users.





# Lake Mixup

N S L I A



B E R E G



T E I L N



K D N I R



Now, rearrange the circled letters to find the answer to the puzzle.

*After endless problems with his old motor boat, Jim traded it in for another vessel in hopes of smooth...*



Visit [mainelakes.org](http://mainelakes.org) for game solution.



## Foster Pond Beaver Intervention

Janet Coulter and Maggie Welch

Foster Pond in Bridgton is a favorite of our water testing team. The pond's small size, serene atmosphere, and rocky shoreline work together to create a beautiful, yet accessible, test site. Last May, however, water testers found their typical launch site on Foster's rocky shoreline underneath water. We soon learned that the unusually high water level was due to beaver activity.

In July, swamped docks and changing shorelines led residents to discover a beaver dam in the outflow creek. In order to reduce the threat of a blowout, which could silt up the stream and harm fish, the Maine Department of Inland Fisheries and Wildlife (IF & W) recommended removing 6-8 inches of the dam. Shorefront property owners heeded their advice and deconstructed the upper portion of the dam. But the beavers had their own insurance plan and constructed a second dam about thirty feet downstream from the original.

Although volunteers continued to open the dams periodically, residents were becoming concerned that some of the older properties alongside the pond might experience flooding, which

could hinder the function of their septic systems. To address this issue, the Foster Pond Association officers contacted their members and reached out to property owners of low-lying camps regarding the integrity of their wastewater systems. After conducting a walking tour of the most-flooded sites, they concluded that no septic systems were threatened.

Still, the flooding continued and IF & W staff proposed either winter trapping or bringing in a beaver mitigation specialist, like Richard Hesslein, to look at other intervention strategies.

In lieu of trapping, Janet Coulter and Reed Martin contacted Richard Hesslein in September. The three then paddled the pond, viewed the lodges and foraging areas, and walked the outflow stream. Richard then generated a plan, which involved a water bypass system for the dams.

Last October, Richard began construction of a series of rebar and wire mesh cages that would maintain current water levels. Although he could offer no guarantees, the system seems to be working and residents continue to monitor the water level closely.

Beaver baffle on Foster Pond





# Loon Restoration Project Updates

Maggie Welch

LEA's collaborative Loon Restoration Project is now in full swing. The first year focused on developing methodology and setting up a volunteer network to support citizen scientists collecting data. This year, we are building and deploying rafts, training volunteers, and surveying lakes for loons.

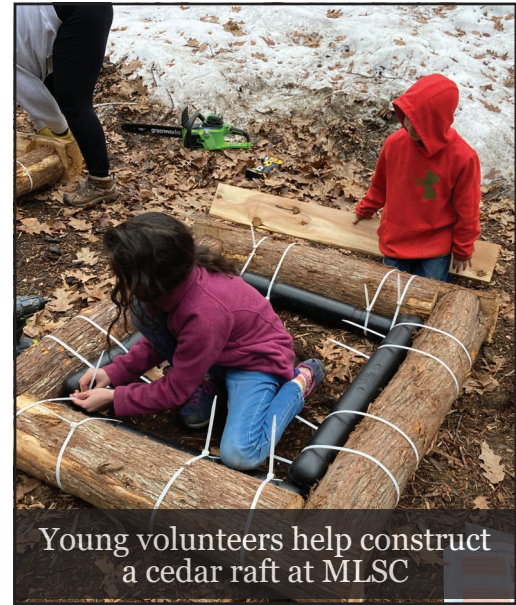


While folks are often excited to build and launch nesting rafts, it is best to only use them when necessary. For this reason, our team uses specific criteria to determine if a loon raft would be appropriate for a given area.

This winter, volunteers worked with project scientists to determine if their lake met these criteria which include: the presence of a territorial pair, failure of the pair to produce chicks at least once every three years, nest failure caused by a problem that rafts can remedy, and the presence of volunteers willing to help monitor rafts.

When a lake was determined to be a good fit for a raft, volunteers were provided with a choice between cedar and modular designs. Rafts were built by volunteers and staff at multiple workshops hosted by LEA, Maine Audubon, and Maine Lakes. Volunteers received training on both raft building and loon monitoring in-person and online.

In late April and early May, the newly constructed rafts were deployed, and loon surveying and monitoring began shortly afterwards.



Young volunteers help construct a cedar raft at MLSC

For more information about LEA's loon restoration work, please contact [maggie@mainelakes.org](mailto:maggie@mainelakes.org).

This project is funded by the US Fish and Wildlife Service on behalf of the Bouchard Barge 120 Buzzards Bay Oil Spill Trustees.

## Your Legacy on the Lake Depends on You

Charlie Tarbell, LEA Treasurer



*This is part of a series of articles about the LEA Lakes Legacy League.*

Let me guess: You are reading this newsletter because you have a special place on a unique lake in Maine. Either you love watching the four season changes reflected in the clear waters of your lake, or you delight in your springtime return to your special seasonal place. I can relate, for I share that love of a special place on a Maine lake.

As I age, I often daydream about how my kids, and their kids, will cherish my

special place on the lake, even after I'm gone. I've made estate arrangements to ensure that they will get the house and that ownership won't create an undue financial burden on the next generation. Maybe you have too. I imagine my progeny delighting in the same things I find special about my lake house – family, friends, boating, swimming, hiking, campfires, cook-outs, early morning paddles, late night skinny dips. Living lake life.

Ahh, but what about the lake itself? To help ensure that the lake on which my future vision depends remains as healthy and pristine as it is today, I've designated Lakes Environmental Association (LEA) as one of the beneficiaries of my estate. I'm going to help ensure LEA exists for at least another

fifty years, continuing to do an outstanding job protecting the lake I love – and many other lakes. As a current LEA member, I'm sure that I don't have to convince you of the important role that LEA plays in protecting our lakes.

In summary, I'm taking steps to ensure that my special place is conveyed to my family and that the lake upon which my special place depends is also protected.

Please help to protect your legacy on the lake you love. Join me as part of the LEA Lakes Legacy League (LLLL) by declaring LEA as a beneficiary in your estate planning. Then contact Colin Holme or me for inclusion in the LLLL. Your kids, indeed the next generation, will thank you for your legacy of healthy lakes.



# See Something, Say Something – Boating Conflicts on the Rise

Since the onset of the pandemic, an uncrowded landscape combined with fresh air and clean water has lured many away from city life to work remotely in western Maine. This fact, combined with a surge in boating, has caused our lakes to be busier than ever.

With many new boaters, more people around full-time, and a trend toward larger and more powerful boats, there has been an increase in the number of conflicts. This change has been most dramatic on the larger lakes, but medium-sized lakes are also feeling the pressure.

In the last two years, LEA has received numerous complaints about inconsiderate boaters creating safety concerns for paddlers and swimmers. There have also been questions about the effects of large wakes on wildlife, the environment, and our shorelines.

Our lakes are public waters that belong to the people of Maine. In many ways, they are like giant, beautiful parks that we all share. But they are not the proverbial “Wild West”. There are already boating rules in place that have been ‘on the books’ for many years. However, many don’t know these rules and others have been blind to the side effects of their own behavior. Some of these laws may also need to be updated, based on current boats and lake use.

This spring, Representative Jessica Fay of Raymond introduced LD 1663, which proposed to phase in a boater education requirement. Despite having the full support of the Maine Department of Inland Fisheries and Wildlife, the bill was watered down to only apply to people born after 1998. While this law is a start, it exempts the majority of current boat owners and requires no education requirement for people aged 35-50, who are responsible for most boating accidents.

Boating has been part of lake life for generations, but with more people on the water, care and consideration needs to be part of the equation. If you are a boat owner – even if you have been doing it for decades – you will learn something from reading the *Maine Boater’s Guide*. If your boat is creating a large wake (intentionally or unintentionally), you should be far from shore. Recent studies have shown that waves from wake surfing take more than 500 feet to dissipate to levels similar to waterski wakes. Lastly, if you see reckless behavior, report it to the Maine Warden Service and let our staff know about it. LEA is working right now with other groups across the state to address wake impacts and promote common sense education requirements. We know from experience that we can all share the lake, but we need your help to protect it.

## Concerned about dangerous or inconsiderate boating?

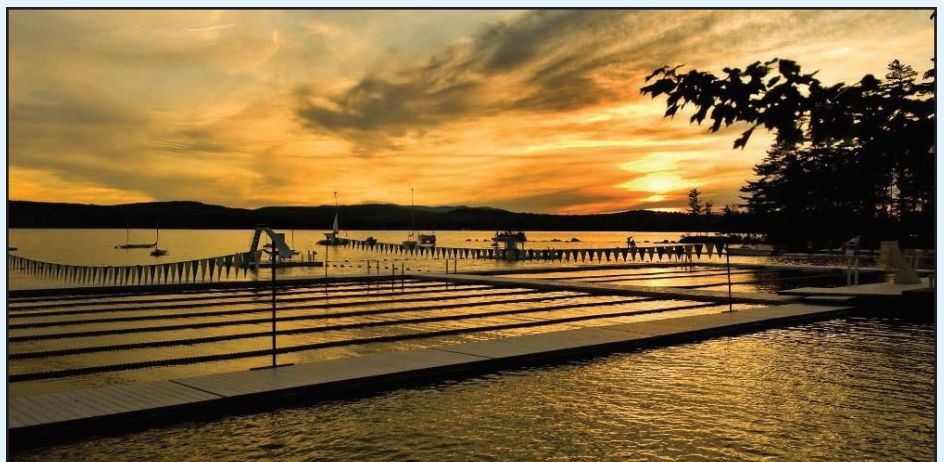
Here are a few things you can do:

1. Don’t be part of the problem! Learn the rules by reading the *Maine Boater’s Guide*: [maine.gov/ifw/docs/maine-boating-laws.pdf](https://maine.gov/ifw/docs/maine-boating-laws.pdf).
2. Report reckless behavior to the Maine Warden Service by calling 1-800-452-4664. The distribution of Maine Wardens is partially determined by call volume.
3. Send photos, videos, or recount your personal experience to the Maine Boating Impacts Coalition: [mbic.maine@gmail.com](mailto:mbic.maine@gmail.com). This will help us understand incident rates on our waterbodies and advocate for new laws if appropriate.

## Mark your calendars for LEA’s Annual Meeting

Taking place at beautiful Camp Takajo on Long Lake

Tuesday, August 23rd at 5pm





# If You Want an Invasive-free Lake, it is Time to Chip in

Colin Holme

Who should be responsible for the cost of milfoil control work?

LEA spends about \$200,000 annually removing invasive milfoil from Long Lake, Brandy Pond, Sebago Lake, the Songo River, and Sebago Cove. Grant funding from the Maine Lake and River Protection Sticker provides about a quarter of that funding. Shorefront landowners contribute about 20%. Annual requests to the surrounding towns cover another 10% of the costs. So, who covers the rest?

For the past two years, approximately half of our milfoil control work has been funded by a grant from a charitable foundation. A thoughtful board member of this foundation who resides in Massachusetts reached out to our organization because he saw how bad the problem was in his home state. He heard about our work and knew that Maine still had a fighting chance against these invaders.

If we are going to succeed, we need to be proactive and look at different possible future scenarios. Right now, our lakes community is relying on the generosity and forethought of others to take care of a problem that is not only at our doorstep -- it has stepped into our house.

Last year, we found several new patches of milfoil in Long Lake. Because we had funding, we were able to remove them all. In Sebago, cleaning out the busy Northwest River Cove is now within reach. If we don't have the resources for this work to continue, it won't. We need to heed the advice of those who have lived through the old expression: "You don't know what you got till it's gone."

You can help fix this problem and keep milfoil and other invaders from taking over our lakes. LEA has dedicated accounts for this work, so please consider donating to support our milfoil control efforts.

## Tips for Fishing with Kids

Shannon Nelligan

It is always rewarding when you cast out your lure and get a fish on the line! Sharing this experience with children is even more fulfilling. When you start out teaching a child to fish, be sure to state that fishing requires patience. It's important to help kids understand that not every time you go out, a fish will be caught and this doesn't mean that time was wasted. Even though catching a fish is not a guarantee, using the right equipment will help tremendously. When starting out, use a biodegradable rubber worm with an "O-ring" to keep it on the hook. Night crawlers can increase the chance of catching sunfish or perch if you are standing along rocky edges or on your dock. For bigger fish, the same setup can work well, although casting the bait into deeper water is ideal -- especially for bass.

It's also important to teach respect for the fish and understand a fish's limitations. This starts with knowing what you could catch. Species like trout are sensitive to warm waters and being handled by humans. Bass are more resilient and can withstand being lipped, handled, and caught in most conditions. When you do get a fish, be sure to show your kids how to remove hooks safely. There are many techniques, but I recommend using fishing pliers or a tool like an eagle claw hook remover (which you can find at most tackle shops).



Before you go out, check the regulations for the species, lake, or river. Be sure to include your child in this "pre-fishing" research. You can find the rules and regulations in the *2022 Maine Inland Fishing Laws* booklet online or you can get a paper copy at your town office.

Another tool to help you increase your success rate is knowing where fish are stocked. These reports are available online through the Maine Department of Inland Fisheries and Wildlife website, show which waterbodies have been stocked with hatchery fish, and are updated weekly.

Fishing can be both peaceful and exciting and is a life-long activity that you can do with your children. Every time you go out, you learn a little bit more about our lakes, streams, and rivers firsthand!

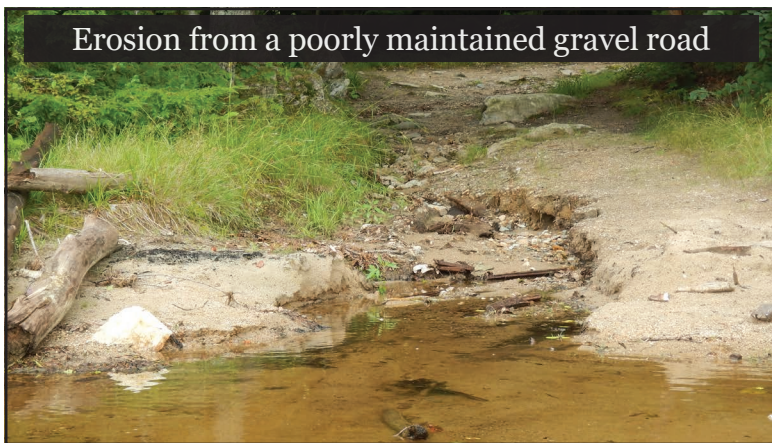


# Quality Roads and Driveways Keep our Waters Clean

Lauren Pickford

Properly maintaining your driveway or private road is likely the most important thing you can do to preserve our lakes and ponds. This is because the largest source of pollution to Maine waters is soil erosion, and roads and driveway are the primary culprits. Each year, heavy rainfall and snowmelt wash tons of gravel, sand, and soil into the water, carrying nutrients and other pollutants along with it.

Erosion from a poorly maintained gravel road



The vast majority of all erosion problems within a watershed originate from camp roads -- but we can fix it! Maintaining effective drainage and providing frequent opportunities for stormwater to leave the travel surface are key aspects of a healthy road and a healthy lake.



Rubber razor prevents erosion by diverting stormwater

Good camp roads begin with proper construction, but no matter how they are built, all roads and driveways need regular maintenance. Here are some tips to help get you started:

- \* Keep your road or driveway above the original ground level. This will allow it to dry out and help prevent the road from rutting or becoming soupy.
- \* Maintain a crown to provide for adequate road drainage. Crowning a road is essentially creating a slight ridge in the center of the road that water will run away from. In certain areas, it is generally better to have the road slope gently in one direction; this is called ramping.
- \* Regular grading is necessary to maintain the crown after winter plowing. Grading should be done with a steel tine rake, York Rake, or Front Runner-type grader by an experienced operator. When grading is done, make sure there isn't a berm left on the shoulder. Berms catch and accumulate stormwater, which leads to erosion and loss of road material.
- \* Dust problems? Poor road surface material may be to blame. Gravel roads can lose as much as ½ inch of surface material per year via dust. In addition to reducing visibility and contributing to dirty vehicles and buildings, dust removes fine particles which are essential to keeping a hard-packed road surface. Consider adding calcium chloride flakes if you notice dust problems. A good application can last 2-3 years.
- \* Some roads have steep slopes and limited options for re-grading. In these cases, waterbars and diverters may be the answer. Gravel or paved waterbars, rubber razors, or open-top box culverts can pull water off of the road and into low vegetated areas away from water bodies.
- \* Good ditches are essential for good roads. Ditches collect road runoff and subsurface water, allowing water to drain away from the road. They should be stabilized with vegetation or lined with rock, with outlets to low, natural areas away from any water bodies or wetlands. Ditches should be U-shaped to allow for the water to flow over a wider surface area, as opposed to V-shaped ditches, which are prone to erosion.

Taking care of our roads and driveways is a team effort that will benefit lakes and your wallet. Forming a road association can also help lower the burden and cost of maintaining communally used camp or gravel roads. If you need advice on what to do about your road, culvert, or ditches, please reach out to [lauren@mainelakes.org](mailto:lauren@mainelakes.org).



# Porous Pavers and Pavement

Lauren Pickford

Porous pavement can turn a parking lot back into paradise... Well, not exactly, but it can help! When porous paving is used in place of traditional asphalt, it creates less impervious areas and increases the infiltration of stormwater. With severe storms and flooding on the rise across the state, it is time to take a closer look at this innovative stormwater control.

Stormwater runoff is the most prevalent form of pollution in Maine, carrying contaminants and phosphorus into our waterways. Porous pavement absorbs rainwater and allows it to drain below to a bed of materials that filter pollutants. It also prevents runoff from building up by directing stormwater back into the ground before it has time to collect and cause erosion, which is bad for our lakes, streams, and wallets.

By eliminating runoff, permeable pavement reduces the need for other drainage features like detention ponds, swales, and ditches. This provides more usable land and can save on overall construction costs.

A common misconception about porous pavement is that it doesn't work in winter -- but it's quite the opposite. Researchers have found that the need to apply road salt in the winter is reduced because the air trapped in the pavement stores heat and releases it to the surface, promoting the melting of snow and ice.

There are many different types of porous pavements, including pervious asphalt, pervious concrete, interlocking pavers, and plastic grid pavers. Porous pavement can be used in place of regular pavers or asphalt in most instances. Driveways, parking areas, sidewalks, and even high-traffic roads like the Maine Mall Road in South Portland are made of porous pavement. If you want to see it in person, check out the permeable pavers at the Bridgton Library or the porous pavement adjacent to the sidewalks on lower Main Street in Bridgton.

When you are planning your next paving project, consider using porous pavers or pavement on your driveway or parking areas. It is better for the environment, better for drainage, lasts longer, and can cost you less!



Porous pavement on lower Main Street in Bridgton



Porous pavers at the Bridgton Library





Lakes Environmental Association  
230 Main Street  
Bridgton, Maine 04009



## Upcoming Events at LEA

**June 16** - Lakes Association Symposium: A morning dedicated to local lake association partnerships, programs, and projects

**June 25** - Paddle Battle: 2K and 5K races on Highland Lake for paddleboarders and kayakers

**July 9** - Chainsaw Safety course: Rural life in Maine can involve a chainsaw. Learn how to use one safely.

**July 12-14** - Lake Ecology course: Interactive, hands-on field course for high school students

**July 21** - LEA 52nd Anniversary Gala: Dinner, drinks, auctions, and live music

**August 23** - LEA Annual Meeting: At Camp Takajo on Long Lake

**October 1** - Woodland Owner Appreciation Day: A thank you event for forested landowners

### **All summer long - Pop-Up Walks:**

Sign up for adventures at Holt Pond, the Highland Research Forest, and more.

For more information about any of these events and to see our virtual offerings, please go to: [mainelakes.org/events-calendar/](https://mainelakes.org/events-calendar/).



LEA members enjoying pop-up walks

