



KEEPING SAFE DURING ALGAL BLOOMS

By Lizzy Gallagher | Assistant Lake Scientist

Warm weather and sunshine in the Belgrades mean lake time! Unfortunately, when conditions are favorable for swimming, they can also be ripe for algal blooms.

Algal blooms occur when there is rapid growth of algae in a waterbody. Certain algae can produce toxins, meaning algal blooms can be harmful to humans and pets alike.

The blooms that occur in this region are caused by tiny algae that can be seen only under a microscope. This means that when there are algal blooms on a lake, you may notice a change in the color or smell of the water, but you won't be able to see individual algae themselves.

Luckily, there are guidelines we can apply to stay safe when blooms occur. 7 Lakes Alliance reminds you that before swimming or recreating in the lakes, you should LOOK and SMELL. Look for visual signs of an algal bloom. These include: murky water, green and/or blue-green coloration that can look like a paint spill, and scum on the surface,

especially near shores. If you don't think you could see your feet when standing in 4 to 5 feet of water, you should stay out. Foul-smelling water can be another sign of an algal bloom.

The most important thing to remember is, "When in doubt, keep out!"

This is especially important for pets, as they are more likely to drink the water or lick their fur after swimming. If you or a pet has come into contact with an algal bloom, rinse off with soap and fresh water as soon as possible. If you are staying somewhere that uses lake water in the plumbing, take short showers to minimize breathing in the shower mist or seek alternative options during the algal bloom.

As part of 7 Lakes' water-quality monitoring, we test for common algal toxins when there is a bloom. However, we cannot test for all toxins.

We hope this advice empowers you to stay safe this summer, but if you have questions, please call us at 207-495-6039.

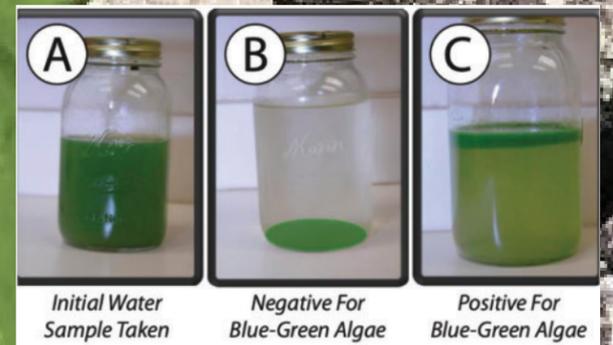
WONDERING IF THE ALGAE ALONG YOUR SHORE IS HARMFUL?

The jar test is an easy way to find out. Simply fill a jar with lake water. Initially, the entirety of the contents may appear green (A).

Let the jar sit for 24 hours. If the algae settles to the bottom (B), it's likely harmless.

If a green ring forms on top (C), the algae may be harmful.

If that's the case, please call 7 Lakes Alliance at 207-495-6039.



Source: Kansas Dept. of Health and Environment

REASON TO CELEBRATE!

This is a momentous summer. Along with our usual outstanding work throughout the watershed, we have extra cause to celebrate. 2023 marks 7 Lakes Alliance's 5th anniversary, built on our predecessors' 35-year legacy of land and water conservation.

In just 5 years, 7 Lakes has greatly advanced our efforts to better understand and address the causes of declining water quality, to prevent and halt the spread of aquatic invasives, to conserve land and to help educate neighbors and visitors about how to protect the special nature of the Belgrade Lakes region.

Thanks to many generous donors, landowners, volunteers, governmental and community partners, 7 Lakes is making a difference!

But the fact is, our job has just begun. Converging challenges of climate change, including harsher storms, increased erosion, new invasive species, combined with unsustainable land use endanger this fragile landscape. It is imperative that we act now to forever protect our lakes and lands.

An East Pond sunset.
Photo courtesy of Sally Stevens.

GRANT PROGRAM HELPS ALLEVIATE EROSION ISSUES

Sue Feiner was at a loss. She wanted to protect McGrath Pond from the stormwater that rushed across her property, gashed the ground and swept harmful dirt into the lake. But she and her husband were not prepared to spend \$13,000 to repair Woodrest Lane, the gravel road that was the source of the erosion issues.

The Feiners' situation illustrates why 7 Lakes Alliance annually applies for and administers Clean Water Act grants to resolve erosion that is damaging to a lake's water quality. In the 2022-23 grant cycle, 7 Lakes received \$308,650 from the Maine Department of Environmental Protection for work around Great Pond, North Pond and McGrath Pond-Salmon Lake. More recently, 7 Lakes received \$224,434 for erosion control around Long Pond and Messalonskee Lake.

The grants' impact is more than doubled, with property owners, lake and road associations, businesses and towns providing matching funds in excess of the grant.

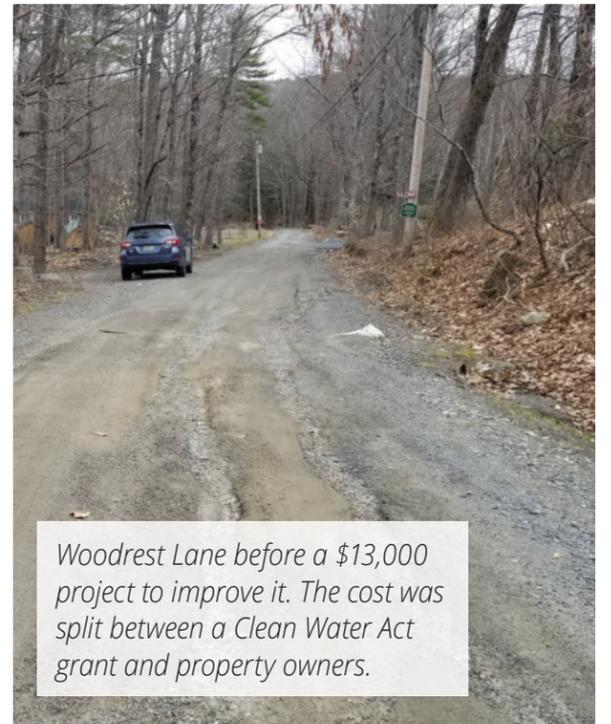
Grant-funded remediation work is "without doubt the most important set of projects we've undertaken," said Lenny Reich, 7

Lakes board member and president of the McGrath Pond-Salmon Lake Association. "7 Lakes Alliance staff have been central to that effort, from direct involvement in the formulation of our Watershed-Based Protection Plan, to submission of grant proposals to Maine DEP, to hiring contractors and overseeing projects to completion."

7 Lakes Program Director Charlie Baeder noted the work completed in 2022 keeps an estimated 93 tons of sediment (equivalent to about four dump truck loads) and 79 pounds of phosphorus out of the lakes annually. Phosphorus is a key nutrient on which algae feeds; too much phosphorus risks an algal bloom.

On Woodrest Lane, 1,500 feet of roadway was re-crowned and re-ditched, and two culverts added, to funnel stormwater away from the lake. The \$13,000 cost was split evenly between the grant and property owners along the road. Feiner said the project would not have happened without the financial aid. "We definitely weren't going to shell out \$13,000," she said.

The process unfolded seamlessly and the results are "fabulous," she said. "When it



Woodrest Lane before a \$13,000 project to improve it. The cost was split between a Clean Water Act grant and property owners.

rains, you can tell there's not thousands of gallons of water washing through the grass and cutting into the shoreline. It was good to have knowledgeable people walk the property and tell us what to do to protect the lake. Because we love the lake."

Property owners experiencing erosion issues can contact 7 Lakes Alliance at 207-495-6039 to schedule an evaluation.

INFILTRATION STEPS ARE EFFECTIVE, ATTRACTIVE

By Stuart Cole | Erosion Control Project Coordinator

One of the most effective – and attractive – erosion-control measures that 7 Lakes Alliance recommends is infiltration steps.

Infiltration steps are steps built with timbers and backfilled with crushed stone or pea stone to help water soak into, rather than run over, the ground. Infiltration steps mitigate erosion in three ways:

1. They eliminate steep, compacted paths to the water.
2. They absorb water better than grass and compacted soil.
3. They provide a stable, defined path to the water.

Often, property owners ask that their infiltration steps include smooth stepping

stones, which are aesthetically pleasing and gentler on bare feet than crushed stone.

Infiltration steps are among the menu of erosion-control measures that can be suggested in a LakeSmart evaluation and installed by 7 Lakes' Youth Conservation Corps. LakeSmart is a free, voluntary program that helps property owners identify and remedy erosion issues at their waterfront homes and camps. The YCC installs erosion-control measures at a reduced labor cost, with property owners paying for materials.

To schedule an evaluation of erosion issues on your property, contact me at stuart.cole@7lakesalliance.org or 207-495-6039.

IS YOUR SEPTIC SYSTEM HURTING THE LAKE?

*By David Rocque
Site Evaluator and Soil Scientist*

Most people know wastewater contains dangerous pathogens, but fewer realize it also contains nutrients that, if they reach a lake, can trigger algal blooms. Blooms look, smell and feel awful, and can contain toxins that can sicken or kill fish, animals and humans.

That's why lakefront homeowners should limit nutrient inputs to the lake, including taking good care of their septic systems. For a septic system to work, it must be designed, installed and maintained properly.

Septic tanks should be pumped every three to five years. Tanks trap and hold solids that are heavier or lighter than water. Because there's not enough oxygen in septic tanks for rapid decomposition, solid matter accumulates faster than it breaks down. Over time, the tank can become too full of solids

Septic systems should be replaced as soon as possible if they were installed before July 1, 1974. That's when Maine switched to site evaluations for septic system design. Older systems are under-designed and probably failing. Older systems that have not failed were installed in sand, gravel or atop fractured bedrock, and are not properly treating wastewater. This can be a major source of pathogens and nutrients to the lake and your well water.

SEE SEPTIC ON PAGE 8

SURVEY FINDS NO MILFOIL IN GREAT MEADOW STREAM

By Sharon Mann | Invasive Aquatics Program Director

Alice in Wonderland Syndrome is the phenomenon of perceiving something as smaller or larger than it actually is. For example, you might have felt your childhood home seemed much smaller after having returned later as an adult.

Similar experiences can occur in nature. For the past five years, I've returned to Great Meadow Stream each May after months of being away. After each winter hiatus, I experience the same sensation – the stream feels shallower and shorter, and the vegetation less complex.

These sensations are symptoms of seasonal patterns that all waterbodies experience each year. By midsummer, Great Meadow Stream will be full of a wide variety of canopy and understory plants, much like a forest.

This year, however, something was missing from what had become an otherwise predictable survey. As most native plants are just beginning to develop new growth from the streambed, invasive variable-leaf milfoil is typically nearing the water's surface in early May. But this year, there were no obstructions in the water to

prevent me from gliding clear across the water's surface.

In June last year, the Maine Department of Environmental Protection approved a treatment of a low-risk herbicide to reduce invasive variable-leaf milfoil growth in the stream. By the end of last year's season, no milfoil was in sight.

Even so, we expected to see *some* regrowth this spring. However, no invasive milfoil was observed during our spring survey.

New life is emerging in places once dominated by milfoil. A diversity of plants, some of which I haven't seen before, are now illuminated by sunlight through the water. These observations give me hope that Great Meadow Stream has turned a corner and is on the road to recovery, having been overrun with invasive milfoil for more than a decade.

While the threats of re-growth, the introduction of new invasive species, pollution and algae blooms are ever-present, we will continue to steward Great Meadow Stream by keeping a watchful eye, through the snorkel mask.



Invasive Aquatics Program Director Sharon Mann goes inverted searching for signs of milfoil in Great Meadow Stream in May, while Invasives Coordinator Josie Miller and diver Brennan Gunster look on. Following last summer's herbicide treatment of the stream, the trio found no evidence of milfoil regrowth.

CONNECT WITH US

- **Online:** 7lakesalliance.org
- **Facebook:** facebook.com/7lakesalliance2
- **Instagram:** instagram.com/7_lakes_alliance
- **Weekly email blast:** To receive, send your email address to info@7lakesalliance.org
- **Newsletter:** For printed copies, email a mailing address to info@7lakesalliance.org. Copies are also available in our offices and at 7lakesalliance.org.
- **Address:** 137 Main St., Belgrade Lakes, ME 04918. Our offices are typically open 8 a.m.-5 p.m. weekdays, and 8 a.m.-1 p.m. during the summer farmers markets.
- **Phone:** 207-495-6039



STAFF Q&A

Name: Lynn Geiger

Title: Erosion Control Policy Manager

Staff member since: April 2023

Education: Bachelor's degree in Geoscience and Astronomy (Wellesley College), master's degrees in Aerospace Engineering (M.I.T.) and in Civil & Environmental Engineering (Duke)

Previous work experience: Restoration & Policy intern (North Carolina Coastal Federation), Hardware Engineer (Lockheed Martin), Research Assistant (Wellesley & MIT)

What are the responsibilities of your role? Developing and implementing a long-term plan for combating erosion in the watershed.

What's the most rewarding aspect of your job thus far? Getting out from behind a desk and doing field work.

What's the most challenging facet you expect to face? Getting all 13 towns in the watershed on board with promoting erosion control management.

What about your job might surprise others? The amount of diversity it entails. In addition to developing policy, interfacing with municipalities, and administrative duties for Clean Water Act grants, I will be helping the lake science team with experiments and research to understand which erosion-control best management practices are most effective and what areas in the watershed are the most at-risk for erosion.

What's the most compelling reason for minimizing erosion in the watershed? Bottom line: It's cheaper than any alternative. Handling stormwater runoff (the cause of most erosion we see in the watershed) is kind of like a snowball rolling downhill. The easiest way to keep pollution from entering a waterbody is to stop it at the source. The further downstream you go, the more water you need to treat, and once it's in the lake, you can't get it out.

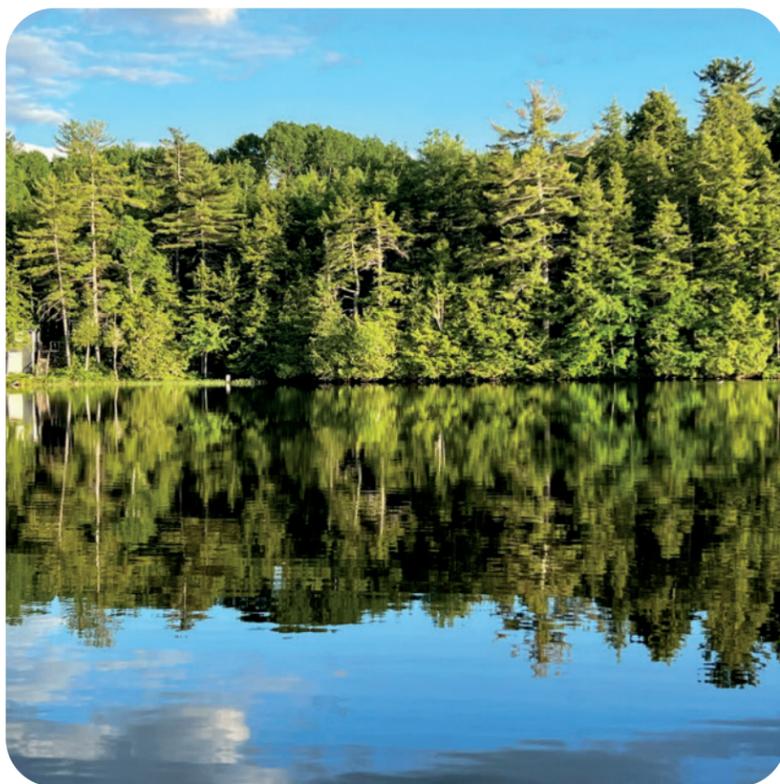
Conserving our L

What's at Stake

The waters and lands of the Belgrade Lakes region are under threat. Water quality is declining and cannot be taken for granted

- Excessive phosphorus poses risk of harmful algal blooms
- Undeveloped land provides 10x more protection of water quality
- Rising threat of new and spreading invasive aquatic species

These trends are cumulative and accelerating. Without immediate action, we will lose the lakes and lands we love



7 Lakes Act

to restore and safeguard o



- Conserve 30,000 acres, protect water quality, recreational resources, habitat
- Invest in the science needed to understand and offset phosphorus, which contributes to algal blooms
- Develop and launch strategies to restore and protect water quality
- Expand educational programs to connect more people with nature



Lakes and Lands

Management Plan

our lands and waters



s, to strategically
scenic vistas,
s, and wildlife

eeded to
t runoff that
ooms

weeping initiatives
water quality

ograms to connect

Our goals and efforts to protect the Belgrade Lakes Watershed

Restore and protect water quality

Full-time scientists
State of the art equipment
Year-round erosion control and prevention



Diminish/prevent invasive plants

Employ the best science to prevent new and remove existing infestations
Increase CBI workers and volunteers across the watershed to help identify invasive plants



Conserve land

Identify conservation opportunities that support water quality, wildlife habitat, and recreation
Ongoing stewardship of conserved land



Education & outreach

Empower our community to help steward our land and lakes
Outdoor classrooms on land and water



TOWN FUNDING BOOSTS CONSERVATION EFFORTS

7 Lakes Alliance’s work to control erosion and invasive milfoil is getting a boost, thanks to an additional \$30,000 in funding approved by voters across the Belgrade Lakes watershed.

At town meetings this spring, five communities that front the watershed’s seven lakes increased funding to 7 Lakes and its lake association partners. The funds will support the work of 7 Lakes’ Youth Conservation Corps and Invasive Aquatics Program. Also, funds are being sought for the first time from the Town of Mount Vernon; voters there will consider a \$2,000 request in June.

The Invasive Aquatics Program’s Courtesy Boat Inspectors and dive team also benefit from town funding, state grants and private donations. CBIs help prevent invasive plants from entering or leaving lakes at public launches; divers search for and remove milfoil and curly-leaf pondweed – the two known invasives in the watershed that threaten to choke our lakes.

7 Lakes sought increased municipal funding for the first time in seven years in 2022. Andy Cook, Rome resident and BLA (Great Pond and Long Pond) board member took a leadership role in analyzing the importance of healthy lakes to the town’s tax base and the Selectboard proposed that Rome voters approve doubling their contribution to the BLA and 7 Lakes to \$36,000.

This year, increased funding was sought from the six other communities along lakes, including first-time contributions to 7 Lakes for the YCC and the CBI programs. Individual town funding information can be found on our website.

7 Lakes’ appreciation of the towns’ voters and Selectboards cannot be overstated. Their support is an important acknowledgment that the lakes and streams are vital to their communities’ livelihoods and that those waterbodies face increasing threats that must be confronted.

ANOTHER OPTION FOR SUPPORTING 7 LAKES

Qualified charitable distributions let people age 70½ and older who have an Individual Retirement Account (including inherited IRAs) distribute up to \$100,000 annually directly from an IRA to a 501(c) (3) nonprofit with no federal income tax consequences. As a result, donors may avoid being pushed into higher income tax brackets and prevent phaseouts of other tax deductions, though there are some other limitations.

An IRA distribution to a qualified nonprofit can be used to satisfy the annual required minimum distribution rules (RMD), and is not included in the taxpayer’s adjusted

gross income. This option may provide donors the ability to make larger gifts or fulfill pledges without being limited by the annual charitable deduction allowance. The distribution also removes assets that may ultimately be taxable to their heirs.

As a reminder, with recent tax law changes and the increase in the standard deduction allowance, some direct charitable contributions may be non-deductible. If you are 70½, the IRA strategy may be worth considering. We encourage you to consult with your financial professional, tax or legal advisors before making a decision, as every individual situation is unique.



NEW LOOK, SAME MISSION

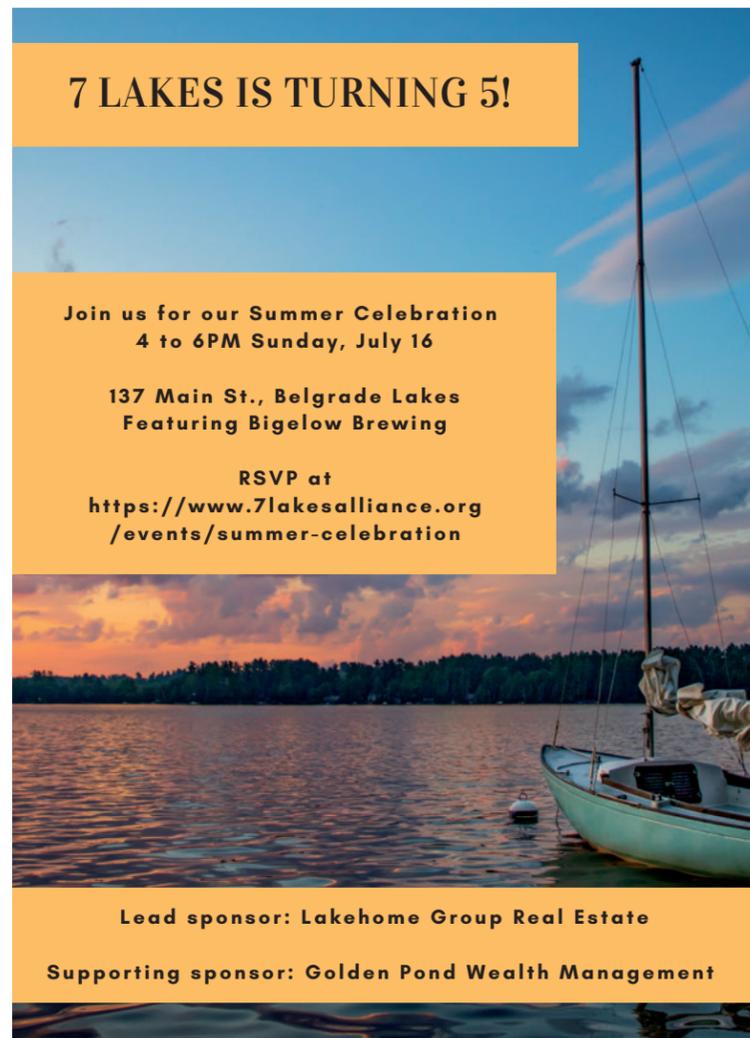
By Rachel Jablonowski | 7 Lakes Board Member

To update our look, 7 Lakes Alliance has adopted a new logo.

The staff and Board of Directors completed a collaborative process with a design team to refine the logo. The goal of this process was to develop a new logo that, while reminiscent of the old one, felt fresh and clean, and accurately depicted the Belgrade Lakes region. The new logo was designed for use across a range of platforms, including on the website, social media, in print and on merchandise.

The team selected new colors to reflect the lands and waters of the Belgrade Lakes region. The bold emphasis on “7 Lakes” brings the mission to the forefront. Although the team opted to remove the word “Alliance” from the logo, the name of the organization remains the same (the way Coca-Cola is simply known as Coke).

As you begin to see the new logo in use across 7 Lakes Alliance materials, have confidence knowing the mission remains the same: to conserve the lands and waters of the Belgrade Lakes Region for all.



SPRING RUNOFF SAMPLING IN THE BELGRADES

By Danielle Wain | Lake Science Director

The two most recently completed Watershed Based Management Plans (for Great Pond and Long Pond) indicated that most of the phosphorus in these lakes comes from the watershed around them. Algae feeds on phosphorus, so the more phosphorus in a waterbody, the higher the risk of an algal bloom. Programs such as LakeSmart and the Youth Conservation Corps are vital to maintaining water quality by focusing on reducing erosion – and thus phosphorus inputs – from shoreline properties.

To help understand what parts of the watershed are contributing the most phosphorus to all of the lakes, 7 Lakes began a stream sampling program in 2021 in which volunteers took samples during spring rain events on a small selection of streams. This year, 7 Lakes undertook a more comprehensive stream sampling campaign. That program consisted of:

- 41 sites where 7 Lakes staff collected samples by hand after rain events, including a large storm on May 1.
- 18 sites where volunteers collected samples throughout April and May.
- Five sites where we deployed our autosamplers (instruments that take

water samples at prescribed intervals). We acquired this useful technology thanks to the generosity of a 7 Lakes supporter.

Through our partnership with Colby College, these samples (almost 300!) will be analyzed to see how much phosphorus is in each. Watch this space to hear more when the results come in.

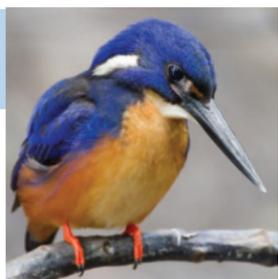
Thanks again to all our volunteers: Liz Collins, Karen Ashton, Valerie Hudspath, Rick Dorr, Lenny Reich, Pete Kallin, Cheri Heulitt, Sylvia Eppig, Edie Cornwall, Bill Kennard, Hillary Schultz, Sandy Colt, Jeff Briggs, Rich Roman, Eric Brown and Christine Keller.



Gallagher collects samples from Robbins Mill Stream following a torrential thunderstorm on May 1.



Assistant Lake Scientist Lizzy Gallagher collects water samples from an autosampler deployed on Great Meadow Stream, which flows from North Pond to Great Pond.



SUMMER CHEWONKI SERIES

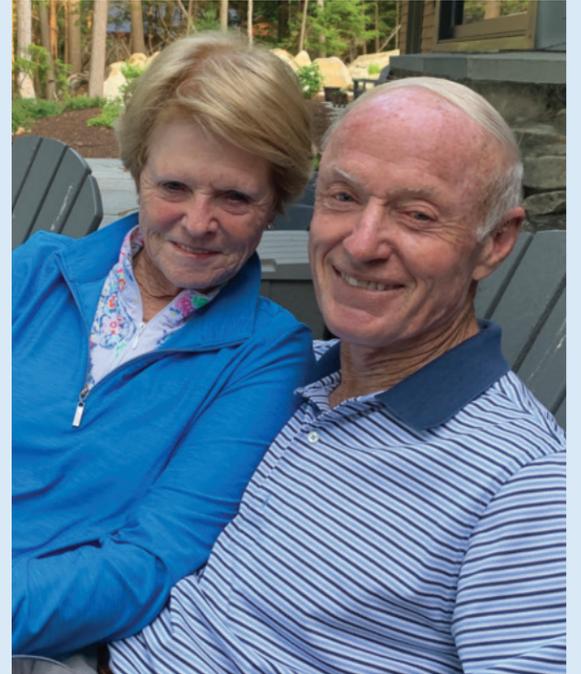
7 Lakes is pleased to sponsor the 2023 Chewonki Natural History series in Belgrade Lakes to honor the memory of Pat Klingenstein. Along with her entire family, Pat has been a dedicated friend and steadfast supporter of 7 Lakes and our predecessor organizations. Pat was deeply committed to education and healthcare and forever loyal

to her Maine roots where her philanthropy will have a lasting impact.

Learning comes alive with Chewonki's interactive experiences with intriguing animals and natural phenomena that spark wonder in participants of all ages. Join us for upcoming programs on July 5th and July 11th. To see the entire summer schedule, please visit 7lakesalliance.org

WHY WE GIVE TO 7 LAKES

By Richard Schmaltz
7 Lakes Board Member Since 2021



Joan and I met at Colby in the early 60's. Joan's roommate's family owned Alden Camps where we vacationed after graduating. We fell in love with East Pond and bought waterfront property nine years later (thank you Depositor's Trust for the loan!) We pitched a tent for the first three years and finally built a simple unfinished cabin in 1976.

Maine was a special place for our growing family. We swam, skied, entertained guests and even drank the lake water that was oh so pristine. Forty years or so later, with so much development and a lack of serious attention to conservation, a calamity occurred that was beyond imagination. East Pond developed a dreadful algae bloom. No swimming, no boating and a very bad odor. The lake was dead for us.

Thanks to a concerned group from East Pond Association, Whitney King at Colby, and importantly, 7 Lakes Alliance, the crisis led to a science-driven strategy to revitalize the lake. The plan restored water quality AND an ongoing program was initiated to improve conservation efforts and water quality. One bright spot to this event is that Belgrade Lakes residents now better understand why being LakeSmart is so important. We know that change and development can't be stopped, but consistent environmental stewardship is key to the future. 7 Lakes Alliance is the most effective organization to meet the challenges our area faces. Be it land conservation, invasive plant control and other LakeSmart initiatives, 7 Lakes will be there year-round with an effective science-based solution to hopefully solve the problems. That is why we are such fervent supporters of 7 Lakes. It's in our Nature.



Photo courtesy of Brian Rimm

CELEBRATE CONTINUED FROM PAGE 1

Since 2018, 7 Lakes has conserved nearly 2,400 acres. Strategically applying conservation principles, we strive to conserve about 30% of our watershed, up from only 10% (12,000 acres) today. We prioritize land that protects water quality, connects existing conserved lands, and offers access to outdoor experiences and provides wildlife habitat. This aspirational goal promises to restore and protect the health of the Belgrade Lakes region we all cherish.

How can you help? We have many volunteer opportunities that can make an impact. In addition, your donation of land or a conservation easement, or any gift that is meaningful could protect the place you love for today and future generations. To donate, go to 7lakesalliance.org/donate or call us at 207-495-6039.

Laura Rose Day

President and CEO | 7 Lakes Alliance

SEPTIC SYSTEM CONTINUED FROM PAGE 2

to work properly. This material goes out into the drain field where it will clog soil pores and cause smelly wastewater full of nutrients and pathogens to surface. Surfacing wastewater can wash into lakes with stormwater runoff, adding nutrients and pathogens to our waters.

In my 45 years as a site evaluator, I often asked, "When was the last time you had your septic tank pumped?" A typical response was, "I didn't know I had to until now." Waiting until a tank is full and the system fails is too late to pump it. Once the disposal field fails, you will need a whole new system, which can cost \$20,000 or more.

For more tips about caring for your septic system, visit <https://bit.ly/3zpgylZ>.

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