In this year of our 25th anniversary, we took a moment to look back to the very first issue of Lakeside! That issue, published in April 1992, announced the formation of this organization—The New Hampshire Lakes Association. Look what we found! We thought you would enjoy reading these words (again—for some of you) from our first chairman, Court Cross. His words so clearly articulated the foundation on which NH LAKES was formed and for the work we are continuing to do today—25 years later!

**CROSSCURRENTS**

New Hampshire’s lakes have often been called its crown jewels. Our state is blessed with nearly 1,000 lakes. They are a major resource of the Granite State. They are fundamental to our way of life — aesthetic, restorative, recreational resources — and they are a magnet for visitors. Tourism is the state’s biggest industry, generating $3.5 billion per year in retail sales alone.

Since their formation over 10,000 years ago, New Hampshire’s lakes have remained largely pristine. The principle cause of their degradation is over use by us — shorelands and hillsides too crowded by development. Pogo said it well, “We have met the enemy and he is us.” The chart on page 4 clearly shows that the more urban the county, the less healthy its lakes.

We have the knowledge to determine the fate of our lakes — with wise use they will last thousands and thousands of years. If we are careless, we will turn many into algae-fouled, weed-infested problems in tens of years.

It is also up to us to determine fair, equitable use of our lakes; how conflicting needs for water space can be resolved; how a finite resource can be shared by growing numbers of those who seek what lakes offer.

The lakes belong to the people. That fact is fundamental to our policies and our programs. We are neither elitist nor exclusive, but we are conservative in the best sense of that word — alert to problems and working vigorously to protect and preserve our greatest natural resource.

Please join in our essential work with your volunteer talents as well as your dollars.

From the very first issue of Lakeside (April 1992).

Court Cross, Chairman

Inspiring the responsible care and use of New Hampshire’s lakes to keep them healthy for the benefit of current and future generations.
Coming into my sixth summer with NH LAKES, I have been reflecting on my experience working with and for you on behalf of New Hampshire’s 1,000 lakes. I have realized there are many important pieces to the lake stewardship puzzle and have come to appreciate just how important the relationships we have with one another are to this work. We do this work together, and, to be successful, the effort requires the love and passion that you have for your favorite lake, the thousands of people who volunteer or in some way support what we do, the expertise and resources that lake management professionals and agencies provide and, of course, the resilience, beauty, and power of our lakes.

The mission of NH LAKES is to inspire the responsible care and use of New Hampshire’s lakes to keep them healthy for the benefit of current and future generations. We have a 25-year history of achieving our mission by learning and teaching, partnering and networking, influencing, and taking action on behalf of our lakes. Our most recent fiscal year ended in March 2017, and, by most organizational measures—financial and programmatic—we had a good year.

We were successful in getting the ‘Clean and Drain’ law passed to help prevent the further spread of aquatic invasive species. That law went into effect this past January 1 and we have since trained hundreds of Lake Hosts how to help boaters understand the requirements of the new law and the relatively simple steps they need to take to comply with it. Last summer, we taught hundreds of youth and their families how to take action to protect lakes through our Watershed Warrior program, and we will be doing so again this summer. And, although we hosted what we thought was our best ever Lakes Congress education, training, and networking event in June 2016, our attendees are telling us that the 2017 event we held a few weeks ago was even better!

We believe that, with your support, we are accomplishing a lot. But, we know that there is so much more to be done. A year ago, NH LAKES Board, staff, and key stakeholders undertook, with the support from the New Hampshire Charitable Foundation, a facilitated planning process to determine our strategic direction. We asked ourselves some hard questions. We are doing good work to prevent the further spread of aquatic invasive species, but are we doing enough to reduce the amount of runoff pollution entering our lakes? We do a reasonably good job advocating for lakes at the State House, but are we proactive and capable enough to help our lake association partners to enact local ordinances to protect their lake? These and other questions were asked and answered. The overarching answer was that we need to grow as an organization, and that is what we plan to do.

Please stay tuned as we roll out our plans to increase our impact across the state and to successfully address the growing threats to our lakes.

On behalf of NH LAKES,
Tom O’Brien
President & Policy Advocate

Healthy, Clean & Safe Lakes for Future Generations!

Please make a legacy gift to NH LAKES today through your will or revocable living trust. It is a simple way to support the NH LAKES mission and help to protect our lakes into the future. If you wish to name NH LAKES in your will or estate plan, we should be named as: New Hampshire Lakes Association, Inc., a nonprofit corporation, organized and existing under the laws of New Hampshire, address 14 Horseshoe Pond Lane, Concord, NH 03301. Our tax identification number is 22-2668396. If you have chosen to include NH LAKES in your estate plans, please let us know.
The 2017 Session of the New Hampshire Legislature came to an end with most of the final results in by the writing of this article. The deadline for bills to be passed by the legislature is in the latter part of June so the Governor can sign off (or not, as the case may be) by June 30. During this session, there were several bills NH LAKES worked on, meeting with the proponents of specific bills to understand their objectives, working with agency staff to understand the facts and possible ramifications of certain bills, collaborating with our statewide partners to build coalitions for or against specific bills, and providing testimony and participating in sub-committee meetings.

Here are the bills we tracked most closely during the 2017 Legislative Session:

• **House Bill 195** passed, creating a study committee to consider reducing the setback of temporary seasonal docks from adjacent property lines from 20 feet to ten feet. While intended to address some hardship situations in which there is limited lake frontage, we are concerned about the bill compromising safety.

• **House Bill 486**, proposing to expand the size and permitting requirements of wetland buffers, was retained for study. While wetlands buffers to lakes, rivers, and other water resources protect water quality and wildlife habitat, expanding the definition, size, or regulatory oversight of wetlands buffers has direct costs, an inherent bureaucracy, and potentially a lot of resistance.

• **Senate Bill 30** passed, addressing a loophole in the way woodland buffer points are counted under the Shoreland Water Quality Protection Act. Currently, developers can meet the letter, but not the spirit of the law, by clearcutting half of the 50-foot wide shoreline buffer. This bill reduces the size of the area in which vegetation is counted from 50 feet wide to 25 feet wide, while the points and square foot ratio will remain the same. This change won’t eliminate the problem entirely, but it does make it less practical to clear-cut shorefront area.

• **Senate Bill 73** would allow for the conversion of a bedroom into an accessory dwelling unit within an existing single-family residence, without upgrading or documenting that the septic system can support that potential additional use. The bill was amended to reflect existing rules and passed. When the occupancy capacity of residential property is increased through the addition of an accessory dwelling unit, there will need to be proven septic capacity for that additional use.

• **Senate Bill 119** was initially retained by the House but then was inserted into an unrelated bill (House Bill 527) and passed. This bill would allow dock owners to extend their docks up to 10 feet in order to reach a water depth of 4 feet at the end of their dock. NH LAKES advocated for this bill to be retained for study and to be put with House Bill 195, so that a holistic approach to dock permitting could be developed. NH LAKES and its partners wrote to the Governor to ask that he veto House Bill 527, and, in the midst of that activity, we were informed that the full Committee of Conference did not sign off on this non-germane amendment, killing House Bill 527. We assume that the provisions of Senate Bill 119 will come back for study, along with House Bill 195, later this year.

• **Senate Bill 118** passed to now include, within the Shoreland Water Quality Protection Act, lawns as a pervious surface. NH LAKES went on record as concerned that this definitional change might open the door to giving points to lawns as a vegetated buffer. We have been assured that this will not occur. While lawns may be pervious, they do not provide the same water quality benefits as a more robust vegetated buffer.

Bills that have been retained for further study, or which were specifically designed to generate a study committee, are expected to be taken up by these study committees starting in August, with a report expected to the House and Senate leadership by November 1. NH LAKES will attend all relevant meetings. The report ‘docket’ of viable bills will become the basis, along with any newly proposed legislation, for the 2018 Legislative Session agenda.

We thank our members and friends that provided grassroots advocacy by calling, emailing, and writing their representatives on behalf of lakes. Our system of law and rule making does require that we show up. Let’s continue to do so together for the benefit of our lakes!

**In Memoriam**

**Hollis E. “Buzz” Harrington**

We lost a real lake champion recently. Hollis E. “Buzz” Harrington passed away on June 11. Buzz was a long-time board member of NH LAKES and of the Stinson Lake Association in Rumney.

When I met Buzz and his wife Jane at Stinson Lake, one wind-whipped day in July of 2016, he was reveling in the company of nearly 30 family members that had gathered at their lakeside home to celebrate his birthday. I was scheduled to meet that evening with the Stinson Lake Association, and Buzz was apologetic that he couldn’t make that meeting due to his family commitments. He didn’t waver for a moment about that engagement with family, as he was clearly proud and pleased they would be gathering around him. But, his heart was also with the lake, and his commitment to the Stinson Lake Association and to NH LAKES over many years had a great impact on the mission of both organizations.

Along with all the boards on which he served, Buzz was a NH LAKES board member for nine years, serving from 1994 to 2003. Those were the early, formative years for NH LAKES, as it established itself as a legislative advocate for lakes and began developing the education programs for which we are widely known today.

Thank you, Buzz for all that you did on behalf of all of our lakes in New Hampshire. Your legacy lives on through us.

- Tom O’Brien, NH LAKES President, June 2017
The Blue Mind Rx: Wild Waters Can Be Lifelong Medicine for All People

Our wild waters provide vast cognitive, emotional, physical, psychological, social, and spiritual values for people from birth, through adolescence, adulthood, older age, and in death; wild waters provide a useful, widely available, and affordable range of treatments healthcare practitioners can incorporate into treatment plans.

The world ocean and all waterways, including lakes, rivers, and wetlands (collectively, blue space), cover over 71% of our planet. Keeping them healthy, clean, accessible, and biodiverse is critical to human health and well-being.

In addition to fostering more widely documented ecological, economic, and cultural diversities, our mental well-being, emotional diversity, and resiliency also rely on the global ecological integrity of our waters.

Blue space gives us half of our oxygen, provides billions of people with jobs and food, holds the majority of Earth’s biodiversity including species and ecosystems, drives climate and weather, regulates temperature, and is the sole source of hydration and hygiene for humanity throughout history.

Neuroscientists and psychologists add that the ocean and wild waterways are a wellspring of happiness and relaxation, sociality and romance, peace and freedom, play and creativity, learning and memory, innovation and insight, elation and nostalgia, confidence and solitude, wonder and awe, empathy and compassion, reverence and beauty—and help manage trauma, anxiety, sleep, autism, addiction, fitness, attention, stress, grief, PTSD, build personal resilience, and much more.

Chronic stress and anxiety cause or intensify a range of physical and mental afflictions, including depression, ulcers, colitis, heart disease, and more. Being on, in, and near water can be among the most cost-effective ways of reducing stress and anxiety.

We encourage healthcare professionals and advocates for the ocean, seas, lakes, and rivers to go deeper and incorporate the latest findings, research, and insights into their treatment plans, communications, reports, mission statements, strategies, grant proposals, media, exhibits, keynotes, and educational programs and to consider the following simple talking points:

- Water is the essence of life: The ocean, healthy rivers, lakes, and wetlands are good for our minds and bodies.
- Research shows that nature is therapeutic, promotes general health and well-being, and blue space in both urban and rural settings further enhances and broadens cognitive, emotional, psychological, social, physical, and spiritual benefits.
- All people should have safe access to salubrious, wild, biodiverse waters for well-being, healing, and therapy.
- Aquatic biodiversity has been directly correlated with the therapeutic potency of blue space. Immersive human interactions with healthy aquatic ecosystems can benefit both.
- Wild waters can serve as medicine for caregivers, patient families, and all who are part of patients’ circles of support.
- Realization of the full range and potential magnitude of ecological, economic, physical, intrinsic, and emotional values of wild places requires us to understand, appreciate, maintain, and improve the integrity and purity of one of our most vital of medicines—water.

The Blue Mind Rx includes (but is not limited to) safe and supervised participation in swimming, board sports, floating, soaking, diving, boating, voyaging, fishing, paddling, interacting, beach and coast walks, wildlife watching, and other blue space activities as best practices for health and wellness.

Extending this conversation to new sectors, constituencies, and areas of research and educating the public about the true value of healthy, wild waters is of utmost priority. A more complete understanding of the full value of the aquatic environment will build a stronger, deeper, wider, and enduring Blue Mind movement and underline the importance of restoration, conservation, and protection efforts. By improving education about the health benefits of water, providing adequate safety and skills training, and improving access for all communities, a healthy ocean and wild waters can be lifelong medicine for all people.
“I am inspired, now, to take action to protect the lake!” commented one of the 222 individuals who attended the 2017 Lakes Congress. Our 24th annual education, training, and networking event hosted on June 1 and 2 was a resounding success! Here are a few more comments attendees shared with us:

“Dr. Nichols’ keynote address was one of the best talks I have ever heard.”

“It was even better than being in school!”

“One of the best things about the Lakes Congress is networking with other people from lakes like mine.”

During his Lakes Congress keynote address, Dr. Wallace J. Nichols encouraged attendees to consider the four Es of water.

If you missed the 2017 Lakes Congress, or even if you didn’t and just couldn’t get to all the presentations you wanted to—we know that it’s hard to be in two places at once!—you can view most of the presentations at www.nhlakes.org/lakes-congress.

You can also check out the photos taken by volunteer photographer, Nick Brady of Nick Brady Photography.

And, if you haven’t yet gotten your copy of *Blue Mind*, the New York Times Bestselling book authored by Dr. Wallace J. Nichols, contact us—we have a few copies left! Purchases of *Blue Mind* through NH LAKES helps generate proceeds to support our work.

Thank you to our 2017 Lakes Congress Sponsors!

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SOLitude Lake Management

Save the Date!

Based on popular demand, the 2018 Lakes Congress will be held on Thursday, May 31, and Friday, June 1, at Church Landing in Meredith—please plan to join us!
Blue-green bacterium, commonly known as ‘cyanobacteria’, are getting lots of attention these days, and for good reason! As one of the first organisms on the planet, making their debut approximately 3.5 billion years ago, they are found virtually everywhere on the planet—in freshwater lakes, polar ice caps, thermal hot springs, and even arid desert environments. Oxygen is produced as a byproduct of their unique photosynthetic processes, and they are thought to be the main reason that we have a breathable atmosphere today—thank you cyanobacteria!

The downside to cyanobacteria, however, is that they are becoming especially abundant—and consequently problematic—in some freshwater systems. When conditions are right, these bacteria can divide several times a day, causing ‘blooms’, with larger forms developing thick surface scums that can be, at the least, aesthetically unpleasing and odorous, and, at worst, toxic to human and ecological health. If foul-smelling decaying material washing up on the shoreline is not bad enough, these bacteria can also produce varying toxins, which can have effects on human health ranging from relatively benign skin rashes through reactions that look like second-degree burns, to potent neurologic and liver toxins. Human and animal deaths have been attributed to the ingestion of cyanobacterial toxins. These toxins also have implications for surface drinking water supplies, as they can cause unpleasant taste and odor issues in water supply systems.

Cyanobacteria are predominantly blue in color, and get their name from the Greek word for blue, kyanós. They are similar in structure to regular bacterium, but function more like photosynthetic plants. For this reason, they were historically referred to as ‘blue-green algae’, a term nowadays that would make a freshwater biologist shudder! They are now commonly referred to as ‘Harmful Cyanobacteria Blooms’—HCBs for short.

A great deal of research is being done to understand when and why these elusive toxins are expressed, because they are not always present when there are bloom conditions, and sometimes they are present when blooms are not. Scientists are trying to understand the mechanisms and environmental conditions that trigger cyanobacterial toxin production. Much work is also being done looking at how these toxins may be incorporated into biota and the associated potential health effects, such as the uptake of toxins into food crop plant material and the food chain.

Despite all of this work, state and federal agencies responsible for overseeing water quality in recreational waterbodies and drinking water supplies are severely limited in their resources to track when and where and why cyanobacteria bloom events are taking place. Information (data) is needed to understand patterns that may exist and the connections to changing weather patterns, surrounding land use practices, and other factors. Many more “eyes on the water” are needed to determine when and where blooms occur.

In an effort to connect current research and monitoring methods, coordinate efforts across jurisdictional boundaries, and fill-in important gaps in critical information, a collaborative working group of state environmental water quality and beach monitoring programs, departments of public health, tribes, public water suppliers, nonprofit organizations, citizen monitoring groups, and academics, was formed. Originally just a ‘New England thing’, the workgroup has expanded throughout and outside of the United States, so is now officially called ‘The Cyanobacteria Monitoring Collaborative.’

The Collaborative invites anyone with an interest in learning more about cyanobacteria and those interested in contributing to the developing body of science through collecting data as a citizen scientist or a researcher to participate. The Collaborative has three major components which are tiered to allow participation from the public (bloomWatch), trained citizen scientists (cyanoScope), and environmental professionals and trained individuals (cyanoMonitoring).

To get all the nitty-gritty details about the Cyanobacteria Monitoring Collaborative—and how you and your lake association can participate—visit the Collaborative’s webpage at cyanos.org.

I hope you will be collaborating with us soon!
For the past five summers, I have had the pleasure to spend my weekends working the best job I have ever had. While at work, I got to talk with anglers, boaters, and kayakers, explain ecology, protect the environment, and interact with Marine Patrol and Fish and Game officers, all against the backdrop of a beautiful lake. My job was working as a Lake Host stationed at the Crystal Lake boat launch in Enfield, New Hampshire.

Growing up, I always had an interest in the environment. From an early age, I would explore ponds, lakes, and rivers to observe frogs, turtles, and other wildlife. I would spend hours in the school library reading biology books and animal field guides. As I got older, while my scholarly focus turned to history, my passion for the environment continued, so much so that, when I made plans for college, I decided that I had to somehow include an environmental aspect.

Luckily, around that time I heard about a summer job opening for a ‘Lake Host’ from one of my friends who was working as one. After applying for the position, and subsequently getting hired, I quickly fell in love with the job. I enjoyed playing a vital role in the protection of the ecosystem by inspecting boats for invasive species. Through my interactions with boaters, I was able to learn about what people used the lake for, and what connections they had with it. I also found that I had a tremendous opportunity to teach them how to help protect the lake that they so often enjoyed. Of course, the icing on the cake was the work environment. My ‘office’ was a lawn chair tucked underneath an information podium, with a spectacular view of the lake. Looking out over the water on a clear day and seeing a loon gliding across the lake, I was often reminded of what I was working to protect.

I worked as a Lake Host for five summers while attending school the rest of the year at St. Michael’s College in Vermont. While majoring in history, my work as a Lake Host inspired me to pursue a minor in environmental studies. I found there was a great amount of crossover between my environmental studies coursework and my work experiences as a Lake Host. I returned to my Lake Host job each summer armed with new information from my college studies.

In May of 2016, I graduated from Saint Michael’s College with a Bachelor of Arts in history and a minor in environmental studies. That summer, I returned to my position at Crystal Lake for what I knew would be my final season. I had decided that I would apply to work for the Vermont State Park Service the following summer. Working at a state park seemed like a logical next step in my career as I wanted to continue to work outside while helping protect the environment.

During my interview with the Vermont Park Service, the interviewers were especially interested in my work as a Lake Host. They explained that they were big supporters of such programs and commented that my Lake Host experiences and skills would transfer well to a position with the park service. I was hired!

While I will miss working alongside Crystal Lake this summer, I am very much looking forward to working for the Vermont State Parks Service on the Champlain Islands. I am thankful for all the experiences I had and skills that I gained as a Lake Host. I encourage other young people to work as a Lake Host—it is a wonderful opportunity that will help protect the environment and your community, it will prepare you for your future, and it might just turn out to be your best summer job ever.
Inside this issue
A Look Back to 25 Years Ago
From the President...
Healthy, Clean & Safe Lakes for Future Generations!
   NH LAKES Advocacy Update
In Memoriam
   The Blue Mind Rx: Wild Waters Can Be Lifelong Medicine for All People
2017 Lakes Congress
   The Cyanobacteria Conundrum - More Eyes on the Water are Needed!
Best Summer Job Ever
   Membership Matters
NH LAKES Happenings

NH LAKES Happenings

For over twenty-five years, NH LAKES has been led by a talented group of individuals passionate about lakes. These individuals come from all corners of the state and they relish every opportunity to hear from you—our members—to learn what NH LAKES can do to keep your favorite lake—and all our lakes—clean, healthy, and safe.

Welcome aboard!

Please join us in welcoming Nancy Devine to the NH LAKES Board of Directors. Nancy has been dedicated to various areas of philanthropy since 1978 with extensive professional experience in healthcare and community foundation marketing and development. She began her consulting business in 2002 to help small nonprofits in board development, establishing and implementing comprehensive fund raising programs and assisting professional advisors with charitable estate and gift planning strategies. She has a BA from St. Joseph’s College, Maine, and is a graduate of the Healthcare Philanthropy Institute, University of Wisconsin.

Nancy’s philanthropy extends past her work through volunteerism and gift-giving. She currently serves as regional board chair of New Hampshire Charitable Foundation, a trustee of the Pequawket Foundation, and a member of the Madison Conservation Commission. She is also involved with the lake water quality testing program for Silver Lake.

Upon joining the Board, Nancy commented, “The extraordinary gifts of nature in New Hampshire including our lakes and streams, mountains and valleys must bring each and every one of us to a place of protection and care. It is today that will secure tomorrow’s natural resources. Now is my time.”

To learn more about our current board members and committees, visit our website (www.nhlakes.org) and select “About Us.” If you or someone you know loves our lakes and is interested in contributing their “time, talent, and treasure” to NH LAKES, please contact NH LAKES President, Tom O’Brien, at tobrien@nhlakes.org or 603.226.0299.