

Lake Raponda Environmental Foundation

Spring Newsletter

Our Mission: “To raise funds that can be invested in projects and actions that will help preserve, protect, and improve the environmental condition of Lake Raponda and its watershed.”



Beautiful, charming, healthy, serene - that's how we want everyone's Lake Raponda experience to be. However, this ideal state does not happen automatically. It requires community commitment to excellence, leadership to guide, and resources to achieve. The Lake Raponda Environmental Foundation (LREF) exists to help facilitate the favorable outcomes we all want for our Lake experience.

Spring Update Report:

Fund Raising Results:

The Lake Raponda community responded enthusiastically to the 2020 fund raising campaign for the newly formed Lake Raponda Environmental Foundation (LREF). The campaign began in earnest following the introductory informational letter that was sent in October to all households within the entire Lake Raponda watershed area. By end of 2020, 56 individual donors had contributed \$17,472. This is a great start that will allow us to begin investing in numerous lake enhancing initiatives, including most notably a substantial increase in coverage for the 2021 Greeter Program (aka “clean boat” program)

2021 Greeter Program

The objective of the Lake Raponda Greeter program is to inspect and prevent watercraft contaminated with unwanted plants and animal species (Aquatic Invasive Species – “AIS”) from entering the Lake during the summer months. As the “Greeters” will convey to all visitors, AIS would devastate the Lake’s environment, negatively impacting its beauty, health and recreational benefits.

We are partnering with the state of VT and town of Wilmington to fund and implement a substantially enhanced program for the inspection of watercraft entering Lake Raponda this spring – fall 2021. We will be expanding coverage to 7 days per week from Memorial Day through mid-September. During this expanded time frame, there will be 8 hours coverage Monday – Friday and 9 hours coverage Saturday and Sunday.

Thanks in large part to donations made to LREF, we are able to substantially increase the Lake community’s funding for this expanded program. Paid “Greeters” will be on duty Thursday through Monday of every week, while volunteer “Greeters” will cover designated times for the less busy Tuesday and Wednesday every week.

In the past, members of the Lake Association have volunteered as “Greeters” for those less busy mid-week times not covered by the paid employee “Greeters.”

Please consider volunteering! And no need to worry about knowing how to be a “Greeter” as on-line training will be provided in May. Also, we have experienced volunteers who are always ready to help out and are always available to answer your questions. If interested in helping or if you have any questions, please contact Bob Bois at bbois131@gmail.com or cell phone: 508-877-7876.

High Water Quality: A1 Initiative

For the past several months, representatives from LREF and LRA have been discussing with VT Department of Environmental Conservation – Watershed Management Division the opportunity to reclassify Lake Raponda as an “A1 high water quality” lake. This is the highest rating for any Vermont lake, and only very few Vermont lakes are deemed “A1.” (The majority of lakes in Vermont are classified as B1 or B2 waters).

According to VT DEC management, a “A1 high quality water” designation by VT DEC would ensure enhanced mechanisms for managerial and possible financial help for remediating a problem if a problem does occur for our Lake. Importantly, to gain “A1” status the lake must have an established track record of minimum acceptable water quality metrics including phosphorous level, chlorophyll A, and secchi measures as well as physical presence of native species versus (no) invasives. Key point: the “A1” classification is not an aspirational goal but rather a designation of existing “high water quality” that needs to be protected and would prompt priority attention and action from the state if needed. This includes prioritizing Act 76 funding if an “A1” lake’s water quality falls below the “A1” criteria (Act 76 provides \$5 million funding for “high quality waters.”). “A1” status and relevant data could also be used as leverage for advocacy with legislators and local officials to improve conditions that help protect water quality. VT DEC management also noted that our chances of getting the state of Vermont to intervene on the sediment load issue re: Lake Raponda Road are likely to be higher with an “A1” classification and high quality data.

This “A1” opportunity for Lake Raponda appears very promising – a lot to like! However, before going forward with an application to the state, VT DEC officials will be invited to address the broader Lake Raponda community as well as Town of Wilmington officials to give all stakeholders a chance to hear the proposition firsthand and to ask questions, if any.

Shoreland Protection

It appears there will be much development activity around the Lake over the next two years: several new home constructions and at least one major property redevelopment. The LREF Board felt we should sharpen our knowledge of the Shoreland Protection Act in case there is a need to guide actions and/or comment to the appropriate people.

The Board first conferenced with Mike Tuller, Town of Wilmington Zoning Administrator. Mike asked that residents and “interested parties” keep him as well as the Agency of Natural Resources (ANR) apprised of any “intensive changes” to properties.

The Board followed up with a conference call with Laura Dlugolecki, Lakes and Ponds Permitting Coordinator for VT Department of Environmental Conservation, Watershed Management Division. Laura was extraordinarily helpful and enlightening about salient details of the Shoreland Protection Act and about enforcement.

Laura emphasized that with regard to new development, a Shoreland Protection permit is needed to create new cleared areas or new impervious surfaces (e.g., house, garage, decks, parking areas) within 250 feet of the shoreline. Removing trees, shrubs, and groundcover is considered creating “cleared areas.”

The Act requires that new development be set back at least 100 feet from the shoreline and should follow these development standards: Avoid steep, unstable grades with slope greater than 20%; No more than 20% of parcel should be impervious surface; No more than 40% of parcel should be cleared.

Expansion of existing development is permitted to the back or side of the parcel, but not closer to the lake.

There was much discussion about enforcement. Laura stated that most of the complaints come from local zoning officers and private citizens. Laura encouraged us to use our website and newsletters to educate and reinforce the regulations and permitting procedures to keep things positive and avoid punitive actions.

Laura has also provided a very insightful 17- minute video on the essential elements of the Shoreland Protection Act, which may be found on the LRA

website. Also, attached to this newsletter is a 2-page printed summary of the Act, which conveniently highlights all the main points.

Water Quality Study and Monitoring

In light of increasing incidence and concern about E. coli and cyanobacteria affecting our Lake experience, LREF has explored hiring an expert consultant to study the occurrence of E. coli and cyanobacteria blooms on our Lake and to recommend an action plan to eradicate or at least minimize the problem.

Cyanobacteria, also known as blue-green algae, are a type of bacteria found in most water bodies. Most cyanobacteria are microscopic and go unnoticed. However, under certain conditions they can grow prolifically, forming unsightly and potentially toxic blooms, which may appear as thick pea soup or green paint. These blooms can form when warm surface water mixes with abundant phosphorous, which encourages growth of cyanobacteria.

The expert we spoke to is Ken Wagner, Water Resource Manager – Water Resource Services based in Wilbraham, MA. Ken has 40 years experience in this field and focuses on proper data collection and analysis, problem solving, and crafting of management solutions.

Ken would begin his study by analyzing nutrient concentrations in the Lake and the watershed, and more specifically oxygen and phosphorous status. Once enough contaminants have accumulated in the Lake, internal nutrient loading controls the conditions. As noted above, temperature increase is another important factor over which we have minimal control, therefore increasing the need to control nutrient levels to avoid algae blooms.

There are solutions to eradicate cyanobacteria blooms, but it could be cost prohibitive to treat an entire lake. However, after study and monitoring it could be efficient and effective to target identified pockets of cyanobacteria incidence while the longer-term plan has to be better control of nutrient loading.

Ken could also help us study the increasing incidence of E. coli. Ken believes he could prove whether the source of this problem is birds or humans. Ken has already opined that he believes the cause of this relates mostly to geese, gulls and ducks that are likely grazing around the beach area especially on the grassy

areas. If Ken can validate that, solutions include geese/duck deterrents like a roll-back fence and/or a circulator mechanism to keep water flowing around the beach area.

There's little doubt that Ken could help us address both the cyanobacteria and E. coli issues affecting Lake Raponda as well as help us influence Town officials of appropriate actions that should be taken. However, there is a cost, of course. Ken estimates his first-year study and recommended action for our situation would cost about \$7,500. We will continue to consider Ken's proposal, but we will also explore other alternatives before making a decision on how to proceed.

Land Conservation Protective Actions

The Foundation will continue to look for and fund opportunities to protect the Lake from development pressures. The Association has a history of this type of beneficial activity dating back to when several generous individuals in partnership with the Vermont Land Trust secured development rights to a large parcel on the west side of the Lake, strictly limiting development to two lots. The remaining acres are protected from future development in perpetuity by the Vermont Land Trust. It is a goal of the Foundation and its directors to continue to raise and maintain funds for the purpose of protecting the Lake through securing conservation and development restrictions on potentially developable land.

Enjoying Our Wildlife

Seeing wildlife is one of the features of Lake Raponda that we are lucky to enjoy. What we do protecting our lake helps keep it natural and allows these wildlife experiences to continue and flourish. There are also additional measures we can take to further enhance the experience. Following are two examples: one for the Wood Ducks and one for the Loons.

Wood Ducks are beautiful waterfowl who are secretive and particular about their habitat. They prefer secluded areas where there are natural cavities in trees, typically in wetlands, shallow areas of lakes, and in the woods near water. To attract these beautiful ducks, five nesting boxes were just recently placed around the edge of Lake Raponda. Here's what a male Wood Duck looks like:



Male

Glossy green head with prominent crest at the rear, white throat, bright red eye, and red and white bill.

Loons, of course, are one of our favorite waterfowl visitors. What's new this year is a prefab nest site for the loons that will hopefully prevent the predator losses of the past few years. On April 21, Eric Hanson (VT Center for Ecostudies), Nicki Steel, Joe Zigmont, and Henry Dandeneau placed this new nesting raft (see picture below) in a shallow, remote location at Lake Raponda's southern end very close to where the loons had successfully nested several years ago. So now – hopefully – the loons will select this new nesting raft for their nursery and help the loons rear a chick or two on Raponda this summer!

The following photos were contributed by Joe Zigmont (the Loon nesting “raft’)
and by Nicki Steel (Loon parent protecting newborn chicks).



How To Help Make A Difference

All lakeshore and watershed property owners should assume part of the responsibility of protecting our Lake. Actions on land have a direct impact on water quality, habitat, and shoreline stability. Caring for the environmental health

and well-being of Lake Raponda and its watershed will help preserve and enhance one of Vermont's most iconic lakes for generations to come. It is realized that not everyone can volunteer for the Greeter program or one of our other Lake Wise initiatives, but you can help enormously by supporting LREF. Please consider making a 2021 donation to LREF so that we can continue to invest in projects that will help preserve and improve the environmental condition of Lake Raponda and its watershed. **And good news – all donations to LREF are tax-deductible!** Please address your check to "Raponda Foundation" and send to our LREF Treasurer, John Meyer, at 312 Lake Raponda Road, Wilmington VT 05363. Thank you!

And if you should have any questions or comments about LREF endeavors, including anything covered in this newsletter, please don't hesitate to contact any member of our **Foundation Board of Directors**: Tom Laughlin, President; John Meyer, Treasurer; Ann Loughran, Secretary; Bob Bois, Director; Will Melton, Director; Jack Widness, Director; Gordon Watson, Director.

Thank you for your support!!!!