# Lake Breezes



June 2022



#### BACK AND BETTER THAN EVER!

775 East Lake Road

Games, games, games!
Live music with Sammy Blanchette!
BBQ from Off the Rails!

Happy Cow Cones ice cream!
Great, must-have raffle items!
Family photo sessions with Russ Hurlburt!

Adults \$10 Ages 4-9 \$ \$5

## Register today!

Rain date: Monday, July 4; dogs/alcohol prohibited

The Registration Link is in the 'Rescue Our Lakes' Article, on page 2. Sign up today!

Watch our Facebook page, Lake Rescue VT, for more exciting events this summer!

# Milfoil Mitigation Update

Plans are well under way for the 2022 season and our continuing efforts to control and/or eliminate invasive Eurasian Milfoil from our lakes. Our divers. Cat and Shane Yoder, will begin surveying milfoil growth in the coming weeks as the growing season begins. We will be purchasing an additional 15 'bottom barriers' to supplement the existing 48 vinyl sheets which block light and kill the weeds underneath. Our DASH boat (Diver Assisted Suction Harvesting) will begin operation on July 1, as earlier deployment is not permitted by the State of VT. We have purchased a new motor for the boat. as the old one had repeated failures last season. We are increasing the amount of time the Yoders will be coming this summer, from 3 times a week to 4 times a week, weather and conditions permitting.

During the 2021 season, 2761 gallons of milfoil were removed by a combination of DASH boat harvesting and hand pulling. This relatively low amount (2020 saw 6700 gallons of weed removed) was likely due to a rainy season and the beneficial effect of the bottom barriers. We are hoping for a good outcome this year with added bottom barriers and increased diver hours.

We will once again have a 'Greeter' at the Boat Launch area to inspect boats coming and leaving the lake.

Con't on p.2

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Con't from p.1

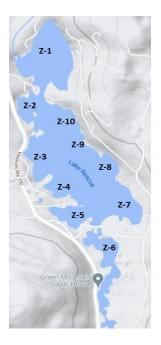
## Milfoil... 2022

The final ingredient in our efforts is having volunteer kayak patrollers to scoop out Milfoil fragments throughout the lakes. The plants float and re-root in other parts of the lake after being cut by boat props. We are asking our members to carry "pool skimmers" in their boats and kayaks



while paddling to pick up floating pieces of milfoil. We also encourage homeowners to harvest the plants along their shoreline. In 2021 our members spent hundreds of hours helping with these efforts.

In preparation for the 2022 summer season, we have divided the lakes into 'zones' and we are looking for volunteers to patrol for milfoil plants



and fragments on a regular basis. In this way we will be able to leverage the impact the professional divers can make by increasing their efficiency. Currently, we have good coverage for Zones 1,5,6 and 7, and are looking for patrollers for the other Zones. We will gladly show you what to do! Please contact us at lakerescueassn@gmail.com

# The 'Rescue Our Lakes' Campaign

The Rescue Our Lakes Committee is thrilled to share that we've surpassed the \$300K mark in our fundraising efforts, and there's more still coming in! A huge (virtual) hug of appreciation for all that you, the Lakes community, has done over the past two years. We look forward to celebrating with everyone this summer!

Speaking of summer celebrations, the ROL committee shifted focus from fundraising to "friend-raising" this past winter and has been hard at work planning the great return of the Annual LRA Independence Day celebration. This year the event will be held from 3-6pm, and will have food, ice cream, raffles, games, live music and more! We encourage pre-purchasing your tickets RIGHT HERE, as the first 30 households to buy tickets will receive a special gift!

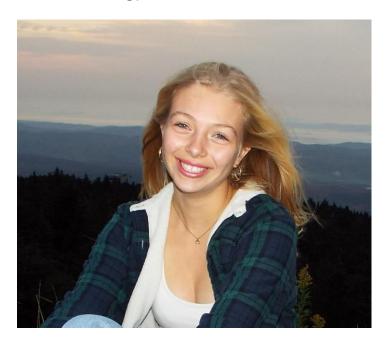
As many of you have seen, our social media presence has really started to take off, and our hope is that we'll grow membership of the LRA by alerting new Lake lovers to our group. OUR ASK OF YOU: Please take a moment when you meet a neighbor and ask them if they're a member of the LRA and encourage them to sign up and come join us on July 3rd!

Our community is our strength, and we need all the support we can as we continue to protect the lakes that we care so much about.

# Mary Rita Batesole Scholarship Awarded

The 2022 Mary Rita Batesole scholarship has been awarded to Clara Gignoux of Cavendish, VT. Clara graduated from Green Mountain Union High School and will attend Renssalear Polytechnic Institute in the fall. Clara's accomplishments at GMUHS include being President of the Environmental Club and organizing a recycling program at the school. She was a joint counselor at the GMYCC camp in Plymouth.

Clara plans to become and Environmental Engineer and has a particular interest in renewable energy resources. She was drawn to



RPI because of its extensive research opportunities. "I realized at a young age when there was less and less snow, and our pond began to dry up in the summer, how quickly human emissions and pollution could change the world. Since then, I have known I wanted to make a difference. I believe that being an environmental engineer could help; I want to create solutions to help our environment."

# Sedimentation and Dredging

This spring the LRA has been assessing the impact from winter storms and need to dredge the Narrows. Initially, our assessment is based on our own general observation that the navigability has not been adversely affected and we can defer dredging for another year. If water depth levels in the project area appear to be shallower as the season goes on, LRA will commission another bathymetric survey to confirm the observations and determine the location and quantity of material that needs to be removed. We will keep you apprised as the season progresses.



The 2013 Dredging Project

The benefit of pushing back the project is that it effectively extends the useful life of the 2013 dredging project. The LRA permit to dredge the river channel in Round Pond, expires on August 7, 2025. Depending on emerging conditions, the dredging will take place in the fall of 2023 or 2024.

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Con't from p.3

#### Sedimentation...

Town of Ludlow has received a 2022 Better Roads grant from the VT Agency of Transportation (VTrans) for culvert and stream bed improvements on East Lake Road near Archibald Lane. The tributaries crossing East Lake Road and entering Lake Rescue at this location cause significant stream bed and road erosion from the hillside above, causing flooding and washout of Archibald Lane into the lake. The award is for \$16,600 with a town match of \$4,175, for a total project cost of \$20,875. A second, smaller grant was also awarded to stone line that area along East Lake Road. We will continue to apply for future awards to address other problem areas around the lake.

The Stormwater Master Plan (SWMP) for the Town and Village of Ludlow, completed a year ago, identified two projects around Lake Rescue were identified as 'high priority' and preliminary designs were drawn up. One project is along Scott's Landing and Tepper Drive and the second one is between Red Bridge and Lake Shore Drive. The Red Bridge Road project did not receive permission from the landowner where the project was to take place and will not go forward. The Scott's Landing project is awaiting funding decisions. We will keep you updated.

# **State Dock Update**

In 2018, the LRA and several property owners filed a complaint against the VT Department of Environmental Conservation (DEC) protesting the proposed placement of a 48' dock at the fishing access boat launch. (More information about the suit can be found <a href="https://example.com/here">here</a>. Please note especially the <a href="https://example.com/LRA Report">LRA Report</a> which details our position.)

Resolving the complaint continues at a slow pace. In January 2022 the VT Environmental Court ruled on motions submitted by the DEC to exclude certain evidence submitted by the

Appellants (LRA and lake property owners) in preparation for trial. A video hearing was then set for April 2022. However, very sadly, our attorney, George McNaughton of Lamb & McNaughton law firm in Springfield, VT, passed away on March 24

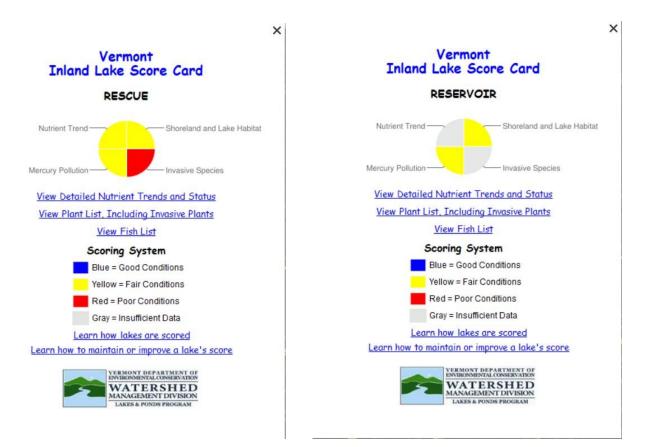
George's son, Ethan McNaughton, has assumed his father's caseload and has secured a hearing postponement until August 1. We are in the process of determining what our next course of action will be.

## **Other News/Reminders**

- Emerald Ash Borer: Consider having an inventory of Ash trees on your property, in preparation for our area becoming infested with this insect. Early intervention may save your trees and avoid costly removal later. For more information, Visit this website
- Loons: We had a pair of nesting loons on the lake. Sadly, it looks like their egg was lost, most likely to an eagle or other predator. They may possibly 'try again' this season. If this is the case, do not approach the nesting area to try to get a 'good shot'. They are easily disturbed and need ample distance from humans.
- No Wake Buoys: We have observed people running their boats through the Narrows at a high rate of speed. This is unsafe and further erodes the fragile shoreline. There is a risk of grounding, which would damage the prop. Please observe the No Wake Buoys.

## The Vermont Lake Scorecard

Vermont has over 800 lakes with 220 of them larger than 20 acres. The Lake Scorecard was developed by the Vermont Lakes and Ponds Management and Protection Program (VLPP). Vermont Lakes and Ponds monitors these 220 lakes through several programs which will be described below. The data collected through these efforts are then consolidated and presented in a Lake Scorecard. Here's what the Scorecard for our lakes looks like:



The scorecard is a simplified way of answering the question, "How is my lake doing?" by looking at 4 categories Nutrient Trend, Shoreland and Lake Habitat, Aquatic Invasive Species and Mercury Fish Tissue Contamination.

#### **Nutrient Trend**

This score is based on long-term nutrient enrichment trends from two monitoring programs.

- The Spring Phosphorus Sampling Program is conducted annually in the spring right after ice-out. Water is sampled to determine phosphorus levels and compared to prior years.
- The Lay Monitoring Program uses volunteers to monitor Total Phosphorus, Chlorophyll-a and water clarity (as measured by Secchi Disc readings) during the months of June July and August. At Lake Rescue this valuable service is performed by Bill Vanneman. The data are tracked over time.
- The final Nutrient Trend score combines the Spring and Summer Total Phosphorus, Secchi and Chlorophyll-a scores, representing and overall trend for each lake.
- Here are the underlying data for Lake Rescue:

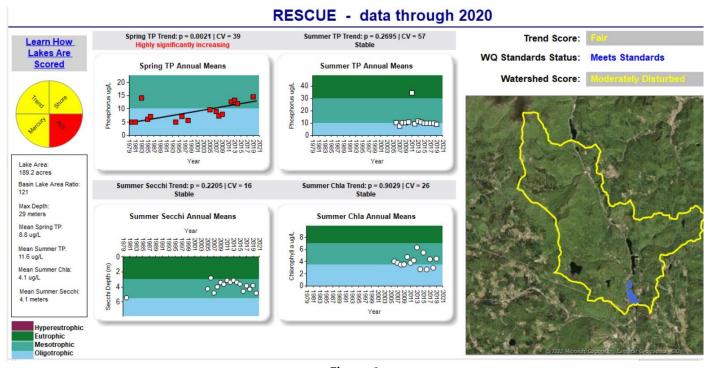


Figure 1

The overall rating for Lake Rescue is FAIR, but there is an upward trend in Spring Total Phosphorus. High Phosphorus levels are generally due to fertilizer runoff and contribute to increased vegetation growth. Recent years have seen an increase in lily pad patches. Reducing lawn and garden fertilizer use is essential to reduce Phosphorus in the lake.

#### **Shoreland and Lake Habitat**

The Vermont Lake Scorecard uses the same criteria as the US-EPA National Lake Assessment (NLA) to score a lake as good, fair or poor for lakeshore disturbance. The VLPP scientists select 10 locations along the shoreline of a lake and rate each 15x15m plot based on the nature and degree of disturbance (e.g., building, lawn, dock, seawall, agricultural activity, etc.). These ratings are combined into an index for each lake and rated as either Good, Fair or Poor. Lakes Rescue and Pauline have a FAIR rating for our shoreland.

We can work together to improve our Lake Scorecard and the health of our shoreland environment. Reducing the amount of cleared shoreland will add a buffer to harmful run-off and aid the lake's ecology. Shoreland buffer strips have multiple benefits. They can filter out pollutants, stabilize soil, provide a protected corridor for wildlife and shade the water's edge, keeping the water temperature cooled. A buffer's duff and ground vegetation slow the runoff on the ground, increase the absorption of soil and catch sediment. In the shallows adjacent to a buffer, aquatic plant growth is not as dense as those near shore areas where clearing has brought in more light. The immature phases of flying insects, such as dragon flies, live in protected spaces among the woody and leafy debris in shallow water. They need to crawl out onto shore vegetation to emerge as flying adults. A naturally vegetated shore provides bank stability through a complex mix of root depths and patterns. Mown grass has shallow roots and cannot withstand the erosive forces of waves and high water. A further benefit is that Canadian Geese will not come ashore where there is dense vegetation.

#### **Aquatic Invasive Species**

There are nearly 40 species of native water plants in our lake, so don't be alarmed if you see vegetation growing in the water. But several plant and animal species are non-native and harmful. Such species include Eurasian Milfoil and Zebra Mussels. The scorecard shows either 'blue', no known species, or 'red', invasive species are present. We at Lake Rescue had some Milfoil found from the late 1990s to 2004 and for many years were Milfoil-free. In 2013 Milfoil was again discovered and the infestation continues to this day. Lake Rescue, not surprisingly, has a POOR rating.

#### **Mercury Fish Tissue Contamination**

The Mercury Fish Tissue Contamination score reflects the most recent data that VLPP has regarding the presence of mercury in the food web of Vermont Lakes. Mercury pollution is a serious environmental problem, contaminating forests, soils, rivers and lakes. Much of the mercury reaching Vermont comes from air pollution originating outside the state. The airborne pollutants enter the state waters as acid rain.

The data used was from a study of 93 randomly selected lakes in Vermont and New Hampshire. Several types of organisms, including yellow perch, were tested for presence of mercury. Lake water and core samples of lake bottoms were also analyzed for mercury content. Results indicated that 40% of lakes in Vermont were likely to have scores exceeding allowable EPA limits. Lake Rescue was deemed FAIR in mercury contamination.

Due to the presence of mercury, the state recommends limiting eating the amount of fish caught in Vermont waters and other fish.

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#### **Water Quality Standards and Watershed Scores**

In addition to the four measures described above, which are used for the Scorecard, VT measures adherence of lake waters to Water Quality Standards and evaluates how 'disturbed' the Watershed is. See Figure 1, right side.

The Water Quality Standards look at factors such as Total Phosphorus, Ph (acidity), Chloride, Dissolved Oxygen and E Coli. Lake Rescue waters MEETS STANDARDS. We are fortunate that the Black River flows through our lakes, continuously bringing fresh water from further upstream. The evaluation of the Watershed looks at how much of the Watershed is impacted by Land Development, human-induced alterations to the biological, chemical and physical processes of a Watershed's lands that impact the receiving water, in this case a lake. The Lake Rescue Watershed is deemed MODERATELY DISTURBED.

We at the LRA work with the local and state community to continuously improve the ecology in and around Lakes Rescue and Pauline. We face challenges regarding Milfoil, Sedimentation, Water Quality and Watershed Disturbances. Together we are addressing these challenges and look for improvements in the coming years.

Thank you for your continued support!

Source: VTDEC, Lakes and Ponds Section.

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Promoting Water Safety, Environmental Education & Improved Water Quality

www.LakeRescue.org

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The Lake Rescue Association is a 501c3 Non-Profit organization. All donations to the 'Lake Restoration and Preservation Fund' are tax deductible