

Lake Breezes



June 2019

An April Storm and More Sediment Problems

On Sunday, April 14, 2019 the lakes were hit by a storm that caused significant erosion, and depositing sediment into the lakes. The largest deposits of sediment are at the mouth of the Black River and the streams entering the lakes near the intersection of East Lake Road and Ellison's Lake Road, and Archibald Lane. Other areas included the drop outlet in Slacks Pasture cove near Carpenter's Point and another outlet discharging into Round Pond.



May 18, 2019 photo of the sand bar near the mouth of the Black River. Water level is only a few inches deep and it is likely that when lake level is lower in the middle of the summer season the sand bar will be above the water level.

In October 2018, LRA hired a geology and engineering firm to perform a bathymetric survey near the mouth of the Black River in the same area that was restored in 2013 after hurricane Irene. The survey showed that as of October 10, 2018 the mouth of the river and the area north of the Narrows has filled in between 6 and 18 inches since the restoration in 2013. (The Griggs-Lang Bathymetric Survey

is available on [here](#)) Now, after the April 2019 storm the sand bar is visible again in the picture on the left.



April 17, 2019 photo of the mouth of the stream flowing down from the corner of East Lake Road and Ellison's Lake Road.

Sediment has been an ongoing challenge for the lakes. In previous years LRA has worked with the Town of Ludlow with funding from the Better Back Roads program to install drainage infrastructure to slow down the erosion and sediment reaching the lakes. Maintenance of the drainage system is a continuous process. LRA has created a map of the drainage infrastructure and road segments that need to be addressed. (See [here](#) for the map of drainage infrastructure) The Town highway department has cleared many of the ditches, drop outlets and catch basins, however, more recent weather activity has started to fill in the cleared out areas.

Con't on p.4

Milfoil Plans for 2019

We are grateful that our divers, Cat and Shane Yoder, are able to return again this year to pull milfoil from the lake. We will supplement their efforts year by year by adding 'bottom barriers', which are light-blocking mats of polyethylene vinyl which are put down over milfoil hot-spots to kill the invasive weed. This not only kills the milfoil in the hotspot but as importantly allows Cat and Shane to focus their harvesting efforts on other areas of the lake. We have 'tentative' state approval for 12 of these mats, which are 10 x 50 feet and would cover six thousand square feet of affected lake bottom. Each one of these, along with the 'rebar' to hold them down, costs \$450, excluding tax and shipping. They will be put down at selected areas by Cat and Shane and left in place for 8 weeks, starting after June 17 when the fish have finished spawning.

This year's state grant will be for a total of \$3,700, including funds for the Greeter Program at the Boat Launch. Last year's grant was for \$7,600; we do not know why this year's grant is so much less. No doubt, the state has many requests from affected lakes in Vermont. With the added expense of the bottom barriers, we expect to spend more than \$25,000 for milfoil extraction and remediation this year.

We are optimistic the use of these bottom barriers will help advance our goal of ridding the lake of Milfoil but also believe that success will depend on the united efforts of the Lake Rescue community. Avoiding boating activity in milfoil hot spots, being able to identify and mark submerged milfoil plants for later harvesting and safely removing loose fragments floating on the water's surface are small steps that if taken collectively will help slow the spread of this invasive plant.

Update on ADA Dock at Fishing Access

Following a consensus at the LRA Annual Meeting last August, the LRA board and a group of homeowners filed an appeal to the state's decision to install a 48-foot ADA-compliant dock at the Lake Rescue Fishing Access Boat Ramp on August 30. The court ordered the parties to a mediation, which was held on January 29th in Brattleboro. The mediation resulted in a hold on the dock decision, while both the state and the LRA produce evidence-based reports showing why and what type of dock should or should not be installed. Our report is due on December 31, 2019.

The state is installing these types of docks at many other state boating access locations across Vermont lakes. While we are not opposed to a dock installation in theory, we believe the state's choice of Lake Rescue's Round Pond fishing access is highly problematic for several safety and environmental reasons.

We are forming a subcommittee to pursue research and complete tasks that will inform our reports. We are considering:

- 1) a time-lapse video camera to document boat launch activity;
- 2) putting in place a false dock to document navigation/safety problems;
- 3) collecting comparative data of VT lakes with docks already installed;
- 4) securing expert consultation regarding ADA-compliant dock construction;
- 5) milfoil and sedimentation data showing the effects of increased boat traffic;
- 6) data and rationale that speak to two standards the state upholds in making these decisions: that the project will not "adversely affect the public good" and will be "consistent with the public trust doctrine."

If there are members who are willing to devote some volunteer time to help with this effort, we would be most appreciative.

LRA Awards First Mary Rita Batesole Environmental Education Scholarship



This scholarship was launched in the spring of 2019 in memory of Mary Rita Batesole, whose many years of committed stewardship of the environmental health and well-being of Lakes Rescue and Pauline in Ludlow, Vermont was unwavering. The scholarship will support a regional graduating high school senior or currently enrolled college or vocational student pursuing environmental education, broadly defined. Students must demonstrate a strong commitment to the environment and be planning to earn a college degree or vocational certificate in any field related to understanding and promoting environmental health and/or environmental sustainability.

We are pleased to announce that Madeline Hiller, a senior from Woodstock High School with an

impressive academic record, will be the 2019 recipient of the scholarship, receiving \$1,000 toward tuition remission. She will be attending Middlebury College and pursuing a degree in Environmental Studies. Congratulations, Madeline!

A Milfoil Success Story: Yes, It Can Happen!

This article is reprinted from the FOVLAP* Newsletter, Fall 2018

Glover VT- The Shadow Lake boat wash greeter staff discovered Eurasian watermilfoil in three separate cases in August 2011 and an official VTDEC survey determined the size of the infestation at about a quarter of an acre. The Shadow Lake Association president at that time applied for a state permit to install benthic barrier mats to cover and contain the growth as we worked to gain control of this aggressive nuisance species. Science has shown if you are able to reduce the number of fragments being produced by reducing the biomass that you can reduce and even stop the spread of milfoil. Once we obtained a state permit, approximately 10,000 square feet of benthic mat held in place with rebar was installed by professional divers and volunteers hoping to smother the life out of this invasive species. The Shadow Lake Association and an anonymous donor funded the project. The main area of dense plants was covered but many scattered patches and outliers required an extensive hand pulling campaign, mostly managed by two very dedicated volunteer snorkelers. Shadow Lake Association

provided education and updates to lake residents so they understood what we were doing and why we must all work together as a united force. The cove area in jeopardy was waterfront shared by a few residents and a bed & breakfast rented out for the summer. High recreation activities at the cove interfered with the control program. In full compliance with Vermont state regulatory requirements and with technical advice from DEC, we placed buoys in the water to delineate a 'No Boating or Swimming' perimeter around the milfoil stand in order to safeguard not disturbing or spreading the milfoil. Monitoring the condition of and the frequent straightening of the mats became a weekly schedule. Recreation disturbance caused the mats' edges to open in gaps allowing for milfoil to escape. We had purchased AquaScreen matting for its lightweight ease to install and needle punch fabric which allowed for gasses built up from decomposing plant matter to escape. At Shadow, we enjoy high water clarity. Because the cove site was shallow, sunlight easily penetrated the mat screen helping the milfoil to remain viable so we obtained a suction harvesting permit to use if the mats failed. The state advised us to wait one more year for the mats to do their job. Eventually, after three years the mats did work and we finally saw signs of milfoil collapse in the cove. After DEC determined the milfoil was dead, divers were once again hired and many volunteers assisted in the removal of the mats and the rebar in 2014. Our management worked to save the cove but the milfoil had time to insidiously spread to many areas around the lake. Shadow Lake Association also hired experienced divers to examine the rest of the lake with a fine-toothed comb. A total of 22 sites of milfoil were found and managed over the past six years. Both trained volunteers and divers marked, pulled, and properly discarded the invasive species. Maps were made and records were kept of each milfoil site,

depth found and dive dates filed. We were methodic in our lakewide milfoil attack. As the years progressed, our vigilance has finally paid off. During the season of 2017, we found only two small milfoil plants and at the end of September 2018, after 4 1/2 back-to-back diver-assisted lake surveys, NO milfoil was found anywhere in Shadow Lake! Next year, once again, we will hire divers to inventory the lake beginning in June through September so we can quickly find any milfoil or other Aquatic Invasive Species (AIS) before they become firmly established in this beloved lake.

 * FOVLAP = Federation of Vermont Lakes and Ponds

Con't from p.1

Sediment Problems

Several LRA board members met recently with Ludlow Town Manager Scott Murphy and Highway Department head Ron Tarbell. They are well aware of the road runoff and will work cooperatively with us to do what they can to mitigate the effects of the latest rain and snow melt. Some of the ditches and catch basins have already been cleaned out. The larger ones, such as at the corner of Ellison Lake and East Lake Roads, will be cleaned out when water flow is at a minimum to reduce further sediment flow. This should take place later in the summer or early fall. The LRA will assist in identifying a 'Better Roads' project location for the 2020 grant cycle.

Save The Dates !

Independence Day Picnic --- July 5
 (Rain Date July 6)

Annual Meeting -August 3, 9AM
Ludlow Community Center



Promoting Water Safety,
Environmental Education &
Improved Water Quality

WWW.LAKERESCUE.ORG

*Visit our Facebook Pages!
Lake Rescue Association and
Lake Rescue Vt*

Board of Directors

Bruce Zanca
Barbara Silver
(CoPresidents)
Natalie Fisher
Kevin Golmont
Phillip Newell
Mike O'Neil
Ann Rose
Bill Vanneman
Frank Wingate

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

