



President's Letter

I am sure that we can all agree – 2020 was a year that cannot disappear into the far recesses of our memories fast enough. The pain and suffering inflicted by the ravages of the Covid-19 pandemic were devastating. Factor in the

first half) are going to social unrest and the political discord that dominated the headlines and our computer feeds day in and day out, and the grinding economic consequences and the social isolation caused by measures taken to keep the pandemic under control, and you have the prescription for a horrible year for the ages. Of course, we all further test us.

Even while we all struggled to maintain proper social distancing and stay healthy, people continued to flock to Lake St. Catherine to enjoy its beauty and tranquility. And we - your neighbors who serve on the Board of the Lake St. Catherine Conservation Fund (LSCCF) - continued to work hard to find ways to improve the quality and enjoyment of the lake, focusing on the area south of the bridge.

recognize that we are not out of the woods yet, and conditions in 2021 (at least for the Environmental Conservation (DEC) to grant **our application to install a full-lake laminar flow aeration (LFA) system throughout Little Lake**, or, at a minimum, allow us to restart the partial system that had operated in Little Lake without any negative consequences from 2012 to 2018. This featured a series of virtual meetings and conversations with DEC officials, and submission of additional evidence of the value of this approach. As most of you know, the latest development was

Figure 1 October 2020 Photo Contest Winner - Jenny Lynn Parker



will reverse course, we a preliminary decision in December 2020 by the DEC to deny our permit application, followed by a virtual public meeting in January organized by the LSCCF to push back against that decision. While we are not optimistic that the DEC

Throughout the year, we tirelessly searched for ways to convince the Vermont Department of have not and will not give up on LFA, which we are convinced that it is the best available method to address the problems caused by excess organic material (muck) in Little Lake.

While debate about aeration rages on, we continued to deploy **other tools to improve the area south of the bridge** throughout 2020. The two main ones were **harvesting and dredging**. Further down in this newsletter, I have included details on both of these programs and what we plan to do in 2021. We carried out a series of tests of various dredging techniques in the permitted area along the northwestern corner of Little Lake. We now know a lot more about what works and what does not, including clear evidence that we will need access to a heavy-duty dredge to tackle

a different tack – **cooperating** the dense vegetation in the northernmost area abutting the Town Park. For the third year in a row, the harvesting program shattered all records for removing Eurasian water milfoil (EWM) and other excess vegetation from the channel and Little Lake this year. Despite this success, navigation within Little Lake was still often challenging. The simple fact is it is becoming increasingly difficult to keep on top of the exponential growth of EWM and pond weed.

with the Lake St Catherine Association wherever possible.

Encouraged by the results of a meeting to explore possible reconciliation by rank-and-file members of both organizations in early 2020, the LSCCF and LSCA boards have engaged in a series of exploratory conversations. The next step was to set up two joint working groups – one on watershed management and the other on the possible use of herbicide in Little Lake for the first time in over a decade.

Well aware that simply doing the same thing over and over in the hope of achieving a better result is one definition of insanity, we decided to take a leap. Please read the article below for the further details.

Whether and how to deploy herbicides in Little Lake is not as straightforward. After long and hard deliberations, and several discussions with LSCA and DEC representatives, the LSCCF Board tentatively agreed to endorse **a three-year plan to use an herbicide in Little Lake**. This decision is contingent on two key conditions: 1) agreement

Figure 2 November 2020 Photo Contest Winner - Gianetta



that harvesting must continue and 2) establishment of a vigorous measurement protocol to ensure the herbicide application has no unforeseen consequences for the fish, water quality and enjoyment of Little Lake. Again, I invite you to read more about the current plans below.

None of the programs I described above would be

The first breakthrough was on watershed management as the two associations agreed to join forces to expand **the Lake Wise program**, especially south of the bridge. If successful, this grassroots effort will bring significant improvements in efforts to reduce runoff into the possible without the essential, strong support of our LSCCF members and other concerned citizens in our community. We cannot thank you enough for your generosity and encouragement over the years.

Sustaining a long tradition of giving, many members added invaluable donations to their annual dues check. Others responded overwhelmingly to the \$7,500 challenge grant offered by several Board members by contributing another \$11,770. This included a very generous check from another Board member and brought the total for the challenge drive to \$19,270. In addition, the Wells voters approved a \$20,000 grant once again to support our work. A similar measure will be on the ballot again this year, and we urge you all to support it.

**LSCCF Plans for
Herbicide Use in Little
Lake in 2021-2023
Full Plan to Be
Announced in Mid-
March**

Hello to everyone in the Lake St. Catherine Community. As previously announced last Fall, we are moving forward with deploying herbicides in Little Lake in 2021. You will be hearing much more on this later in March and including a **request for your help!**

**Eurasian Water Milfoil Reduction
Plan:**

Over the past year, the Lake St. Catherine Conservation Fund (LSCCF) and Lake St. Catherine Association (LSCA) have been

So, the challenges are great and, sometimes, can seem endless. Nonetheless, the LSCCF Board members remain committed to fighting for the restoration of Little Lake as a core element in the overall health of Lake St Catherine and the Town of Wells. More than ever, we believe that, as long as you, our members, and the residents of Wells are with us, we will succeed. For Wells to thrive and Little Lake to return to its glory, we must.

David Emmons
LSCCF President



working together to discuss the best ways to mitigate the persistent and intensifying problem caused by an invasive weed - Eurasian Watermilfoil (EWM) - found throughout the lake, but especially in Little Lake. EWM significantly degrades the natural habitat of our lake and impact accustomed uses of boating, swimming, fishing, and other activities.

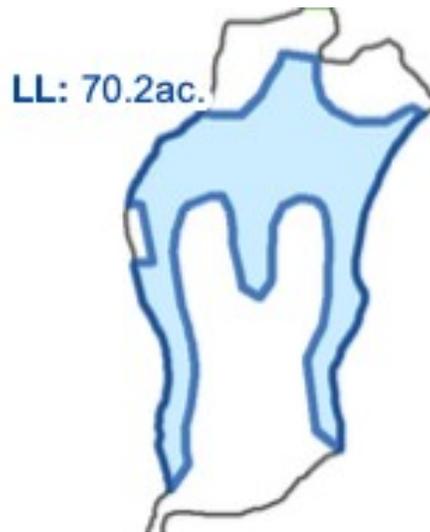
Last fall, we announced that our two organizations will work together in 2021 and beyond to treat the Little Lake, with a new herbicide that has shown tremendous effectiveness

in reducing EWM here and many other lakes around the country. For the past two years, the LSCA has been using a new, highly targeted herbicide called ProcettaCOR in the Big Lake and the Channel with excellent results.

Our mutual goal is to get the Lake St. Catherine as close to EWM-free as is possible in the next few seasons. EWM spreads quickly, re-roots easily and is carried across our lake by boat props, water currents and other means. No area in the lake is immune from EWM when another area suffers from it. Working in concert with the DEC, we have developed a 3-year treatment plan to gain control over the milfoil throughout the Little Lake.

2021 Little Lake Herbicide Application Map:

Working with the herbicide contractor, SOLitude and the DEC, we have selected the northern third of the Little Lake and the complete east and west shorelines to the southern end of Little Lake as the best parts of the lake to treat in 2021 for the greatest reduction of milfoil (see areas shaded “blue”). The DEC allows a maximum of 40% of Little Lake to be treated in any one season. After an evaluation of effectiveness, we would do the same to additional areas in the lake in 2022 and, if necessary, 2023. Also, mechanical weed Harvesting will continue in the Little Lake and Channels as needed to maintain maximum navigation.



The three-year program will cost approximately \$90,000 inclusive of \$36,000 in 2021.

We are tentatively scheduled to treat the Little Lake on Tuesday June 22nd

More details will be forthcoming from the LSCCF and LSCA in mid-March including specifics on how we as lake residents and friends of the Little Lake can help make this plan come to life.

Thank you again for all your support in the past and consideration for the future! Let’s get EWM on the run and out of our lake!

Your Chance to become Lake Wise

We are excited to announce that LSCCF is partnering with LSCA on the Lake Wise program.

We would like to recruit at least 10 homeowners to participate in the Lake Wise program. **Best of all, participating is easy and free!**

What Is Lake Wise?

The Lake Wise Program is an Agency of Natural Resources initiative that awards lake-friendly shoreland property, including that of state parks, town beaches, private homes, and businesses.

Program Goal

The goal of Lake Wise is to establish a new normal, a new culture of lakeshore landscaping that is proven to help protect the lake. A property that earns the Lake Wise Award will represent a "model" shoreland property. The Lake Wise Award certifies a property is well managed, using shoreland Best Management Practices, and is maintained to care for the lake.

To earn the Lake Wise Award a property is evaluated in four categories: Shoreland; Recreation Area; Driveway; Septic and Structure. If a property has excellent stormwater runoff practices, but no native shoreland vegetation, then it may earn a Lake Wise Certificate, but not the full Award sign.

Passing two of the four categories earns a Certificate, but to post an Award sign that shows a property as a model for lake friendly living, the property must pass all four categories. A property must have a functioning septic system to pass as well as this would be a "showstopper" from receiving the Award sign.

Lake Associations or lake groups with 15 percent Awarded participation in the Lake Wise Program will receive the Gold Lake Wise Award. Marketing research shows that once 15 percent of a set population partakes in a similar action, a trend is set, and others will be attracted to follow the

same actions. The Gold Lake Wise Award is an impressive accomplishment for a lake community, and lake residents living on such a lake should take tremendous pride in their actions to keep their lake clean and healthy now and forever.

It's easy and at no cost to you!

1. Simply notify us that you would like to participate.
2. An Advisor will fill out the assessment of your property - Homeowner does not have to be present but certainly advised to be home if they can, as it is a great learning experience.
3. Work scheduled and delivered.

This quote from one of your neighbors!

"Yesterday Ashley and her crew came to plant at our home at Cones Point. They were fast, efficient, and so quiet that I didn't even realize they were there. Ashley and (Spenser?) were helpful when I asked questions about the plants, and tolerant while I had them tell me the names of the plants so I could make a diagram of what was where. They did a GREAT job!"

The plants look great and I am confident that we have laid the foundation for a healthy 15-foot barrier between the maintained yard and waterfront. The resulting garden will be attractive with its varied textures, color and plant height. At the same time, it will help with run-off and erosion.



So, I hope you continue to get the funding you need to keep up the good work and I will do what I can to support you. Let me know if I can be of assistance in any way." - Susan H.

Please for the sake of the lake, sign up for the Lake Wise program!

Dredging Update

Figure 4 Cutter head dredge rental unit for September 2021



One of our

directors purchased a small dredge for his personal uses that was like the design that the LSCCF intended to buy last fall. The LSCCF was able to test the dredge capabilities in September of 2020. A dewatering area was placed near the shoreline on the owner's lawn using a plastic liner over straw bales. The dewatering bag was placed inside, resting on a wire mesh with blocking underneath to allow better drainage. The dredge pumped into the bag which captured the sediment while allowing clean water to be

returned to the lake through two PVC pipes between the containment and the lake.

The process worked well for pure sediment but working in any area where there were plant roots or vegetation, the dredge head clogged quickly. This design is expected to work well around dock areas where there are minimal weeds but significant silt, which was the intention of the director who bought it. A dock with these characteristics will be tested as soon as possible after the fish spawning season (June 22, 2021) in an area within the DEC permitted dredge area. At the same time, we will test placing the dewatering bag directly in a dump truck within a containment area like the 2020 test, which will simplify sediment removal once the bag is full. For the larger area of the DEC permit, a different



dredge technique will be necessary. Subject to the availability of funds, the LSCCF plans to rent a dredge for the month of September 2021 with a 66-inch-wide cutting head, lowered to the bottom to follow the terrain of the bottom. The total cost for the dredge rental and associated materials will be approximately \$19,000.



Figure 52020 Tim Makepeace Section Dredging and associated dewatering area

on harvesting and dredging that the lake needs so badly.

HARVESTING in 2020



Last year, the LSCCF, in partnership with the Town of Wells and the Poultney Mettewee Natural Resources Conservation District (PMNRCD), continued its mechanical harvesting program, begun in 2017, to control

proliferation of Eurasian Water Milfoil (EWM) and other native aquatic nuisance plants on the Little Lake portion of Lake St. Catherine. Virtually the entire 150 acres of Little Lake has shallowed to less than two meters and the surface is clogged with aquatic plants, rendering navigation extremely difficult, if not impossible. The goal of the harvesting program is to remove as much plant material as possible in order to help restore and maintain Little Lake as an open body of water.

In 500 hours of operation between June 15 and September 18, an estimated 2,500 cubic yards of plant material, roughly the size of a small ranch house, were extracted from Little Lake, creating navigation channels along the populated shorefronts and a north-south axis through the center.

A second harvester owned by LSCCF could not be made operational for the season. As a result, the program was not as effective as it could have been. It is expected to be ready for 2021.

LSCCF Photo Contest

We hope that you are all having as much fun with the Photo Contest as we are! The participation has been fantastic, and the photos are amazing. We started the contest in October, and we continue through to September. Winners receive a \$25 gift certificate to the Wells General Store.

Our October winner was Jenny Lynn Parker, November was Gianetta Marie, December Karen Veslor, and January Peg Young. Thank you all for participating!

So please keep your cameras clicking and your entries coming our way. We'll pick a winner every month and then turn those 12 photos into our first annual Wells, VT calendar!

Visit the web page (www.lakematters.com) and Facebook to submit your photos and for announcements and upcoming events.

And please, for the sake of the lake, consider becoming a member of the Lake St. Catherine Conservation Fund. Your generous support will help us execute the remediation plans including

Each harvester load was off-loaded to a conveyor trailer parked at the shore on an access road constructed for that purpose in 2018. Each conveyor load was brought to and off-loaded at the designated disposal area. (See map)

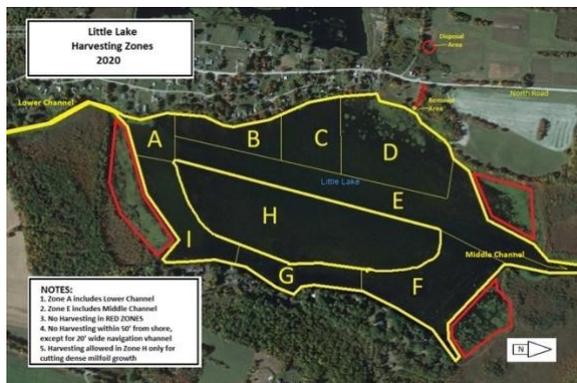


Figure 6 2,500 total cubic yards of plant material were removed from Little Lake

- 630 c.y. from along the west shore (zones B, C, D)
- 485 c.y. from along the east shore (zones F, G, I)
- 195 c.y. from the lower channel (zone A)
- 1,220 c.y. from the center navigation lane and middle channel (zone E) ** Estimates based on 5 cubic yards per harvester load