THE THOMPSON LAKE OBSERVER

Fall 2021 Issue No. 195

Oxford dam with newly installed east gate(left). Photo by Paul Cain

TLEA's New Program: LakeSmart

We are pleased to announce that we initiated our LakeSmart property evaluation program this past season. LakeSmart is an educational and reward program that helps lakefront homeowners manage landscapes in ways to reduce erosion and protect water quality. Participating homeowners receive individualized suggestions for keeping pollutants in stormwater out of lake waters. Homeowners fill out a questionnaire and the team will use this information and their own observations in the following 5-part evaluation: driveway and parking areas, outdoor structures, outdoor areas, shoreline buffer and water access, and buffer integrity. ***The program is free, non-regulatory, and voluntary!***

The homeowners will receive a written evaluation along with suggestions to better control runoff. This will be important in reducing "non-point source pollution" around the lake which is our biggest threat with respect to water quality. The LakeSmart program is free to Thompson Lake homeowners, but due to the limited number of evaluators, all requests will be handled on a first come, first served basis.

Board volunteers Ron Armontrout, Marcia Matuska, Kathy Cain, Jim Skinner and Ken Mendelson were trained in the principles of avoiding shoreline erosion and how to evaluate a lakeside property by Mary Wickland and Roy Lambert of the Maine Lakes Society this past summer. Subsequently, the team has completed 28 home evaluations around the lake. Eight properties were awarded the LakeSmart award and one more will be awarded when their new septic system is finished. LakeSmart signs were presented to 4 property owners so far.

If you would like more information about the LakeSmart program or would like to have your property evaluated or be trained to do an evaluation, please contact either Marcia Matuska, mmtlea@gmail.com, Kathy Cain, cainkathryn37@gmail.com., or call 207 539-4535.

Why is Erosion Control So Important?

Shoreline erosion is the major contributor to phosphorous deposition in a lake. Phosphorous is one of the main components of this runoff and it is the critical nutrient for the growth of algae. If a lake starts to have algae blooms, a vicious cycle can occur. Algae produce oxygen during the day but consume it at night. When the algae die and settle at the bottom of the lake they will continuously and exclusively consume oxygen from the water.

As a result, the oxygen level in the bottom of the lake decreases, which causes natural iron and aluminum in the sediment to release more phosphorous. This then leads to more algae growth and blooms.

So, even when the external source of phosphorous contamination is corrected, the cycle has begun. Once this happens, studies have found that 50% of the phosphorous in an endangered lake is coming from the sediment feeding the algae. Once this happens it is virtually impossible to reverse. Not good.

This problem of "non- point source" erosion will become more critical as we deal with the effects of climate change. There is an increased risk of run off into the lake with the increase in the intensity of summer storms. Also, as the summer water temperature rises and the duration of the winter ice cover decreases, the rate of growth of algae can increase dramatically. This is a problem that threatens many Maine lakes, algae blooms and even toxic algae are becoming more common.

Report on Milfoil Removal 2020

Alex Bernardy, the crew leader for our milfoil removal crew reports that they had another successful season identifying and removing colonies of milfoil from the lake. The crew spent a large portion of their summer monitoring the Pine Point area and removing any regrowth. This area is now largely clear of milfoil. This is the result of our multiyear effort to remove this 10-acre area of infestation. This is important to allow boat traffic here and not have fragmentation and migration of plant particles to other parts of the lake.

This past year, the only remaining dense growth of milfoil exists in between the Robinson dam and the orange safety booms. This colony is too risky for the milfoil team to manually remove because of the proximity of the dam and the debris left over from the Robinson Mill. The crew will continue to monitor this colony to make sure it does not spread towards the main body of the lake.

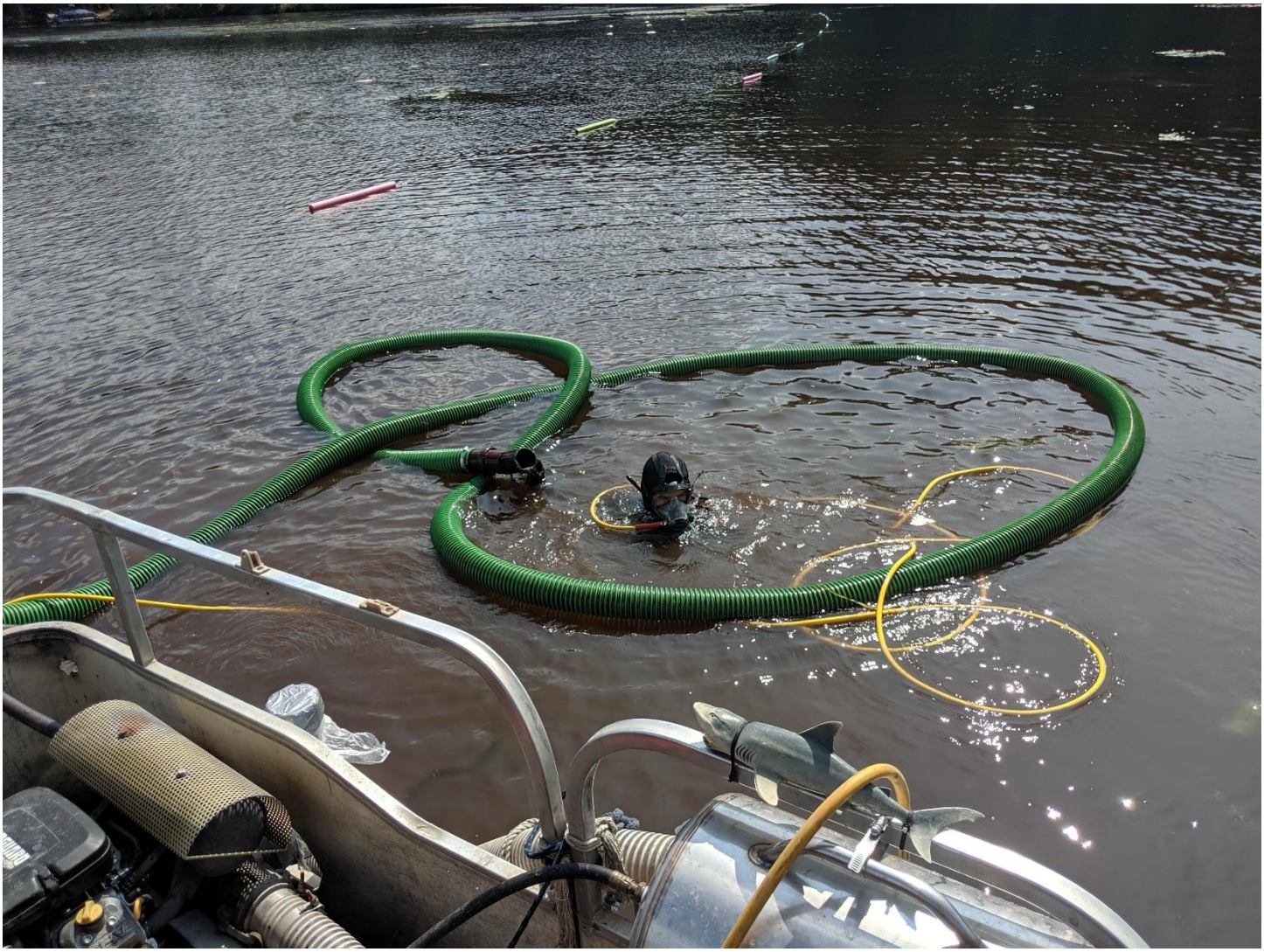
The crew is now focused on removing isolated colonies of milfoil throughout and surveying high risk areas of the lake for signs of infestation. Approximately a dozen of small to medium size new milfoil colonies were found in the north end of the lake. These colonies were found near the Robinson Dam, Pismo Beach, Briggs Island, and the mouth of Pine Point. Each colony was removed and recorded with a GPS. We will revisit each of these areas in 2022 and remove any regrowth.

TLEA'S plan for milfoil control for the next season will be similar to our 2021 season. We will continue to monitor and manage all reclaimed areas of the lake, as

well as survey new areas of the lake in search for new milfoil or other invasive growth.

Bruce Perlmutter, TLEA member from the Pine Point area, wrote to us regarding the work of the milfoil crew: "*Dear TLEA: I am writing to let you know how happy I am with the work of Alex Bernardy, Jon Randolf, and the Hippobotomus, removing the dreaded milfoil from Pine Point cove (among other sites!). I can tell you that everyone had an opinion about what should done and how to do it. The professionalism and hard work these guys showed was truly impressive. The cove looks beautiful. Thanks to their persistent hard work through many seasons. I am a grateful TLEA member and want to express my thanks."*

Thank you, Bruce. TLEA and the milfoil crew are working hard to protect the lake for everyone.



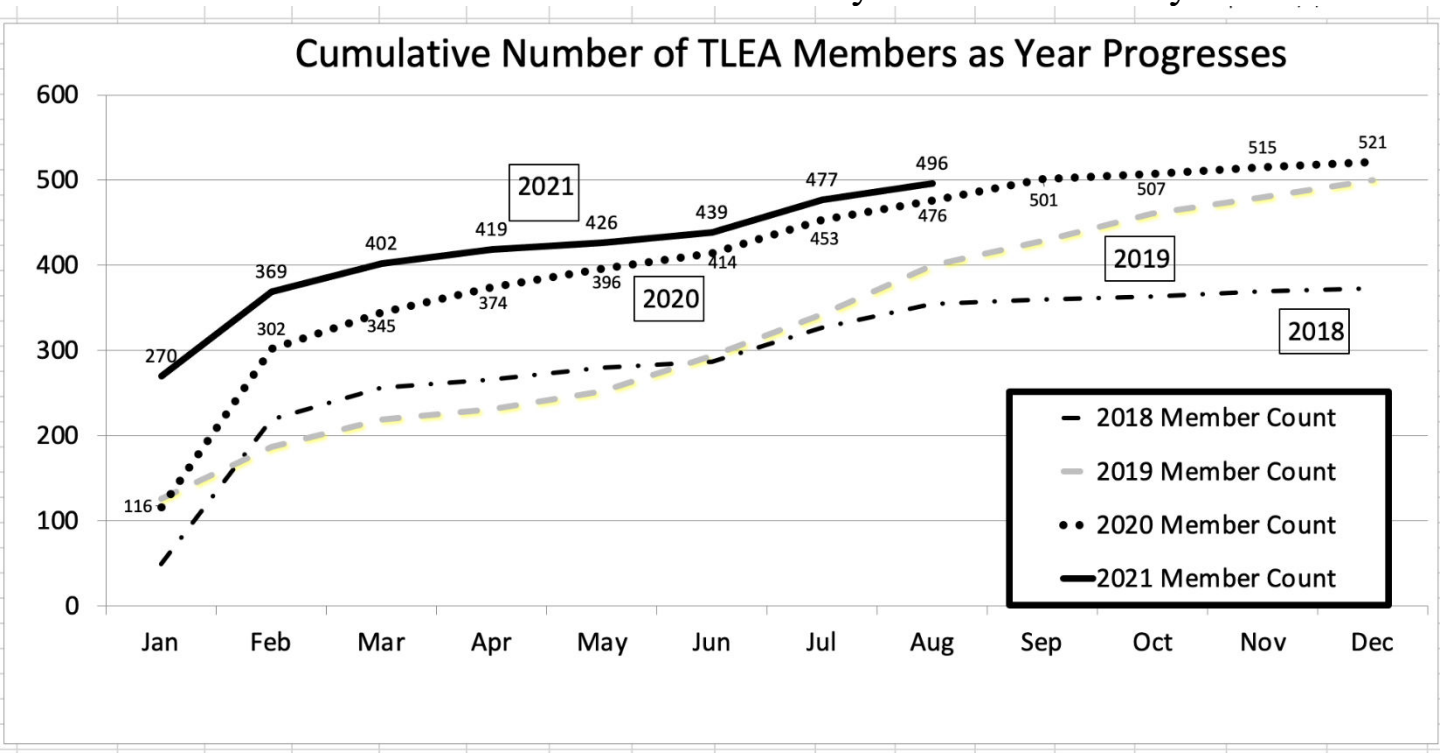
TLEA milfoil diver hard at work at Pine Point. Photo by Alex Bernardy

Courtesy Boat Inspection

Marcia Matuska reports that this past season TLEA staffed 4 boat ramps: Thompson Lake Marina in Casco, the Landing in Oxford, Pismo Beach, and we added the Robinson Marina in Oxford. The number of boats inspected at Robinson's was almost equal to that at Pismo, 234 vs 253. Given the number of boats entering and leaving at Robinson's, we will continue to staff that ramp in the future. The total number of boats inspected at all 4 ramps was 1329. This is significantly lower than the 1516 boats inspected in 2020. This is most likely secondary to the very rainy July. Plant fragments were found on 7 boats, and none were invasive. Statewide, 2538 plants were removed from watercraft, 20 of these were invasive. As always, it is so important to check your boat before and after you float. Remember: Clean, drain and dry!

Membership

Bill Booth, our membership director, reports that as of the end of August 2021, TLEA had 496 renewed as 2021 members which is a 4% increase over August 2020. Approximately 50 members from 2020 have so far not renewed, so a reminder mailing was sent out at the end of September. We hope to end the year with around 520 active members. Please renew if you haven't already.



Water Level and the Oxford Dam

There was much concern expressed prior to and at our 2021 Annual Meeting about the relatively high water levels at Thompson Lake and the capacity of the Oxford dam to maintain a proper level. Our TLEA leadership met with Oxford town

manager Adam Garland and town officials in early September and expressed the concerns of the membership. We were told that there was a defective actuator in the newly installed east gate that prevented the town from using this gate in the first part of the season. Fish screens at the west and middle gates have not been fully installed, so their use was also affected. These factors reduced the capacity of the dam to control water levels. The actuator has been repaired, the fish screens are now up at the east and west gates and as of late October the lake is coming down to a more normal level.

Our TLEA team, Marcia Matuska, Kathy Cain and Jim Skinner, emphasized the importance of stable water levels to the town officials. Avoiding unstable and high water levels is crucial in preventing soil erosion, uprooting of trees and algae growth. This has a direct effect on our water quality and recreational value of the lake. We reviewed our recommendations for water levels that TLEA had presented to and were accepted by the Oxford town Select Board in 2012. Our recommendations were to maintain a summer level of 16 inches below the top of the dam and to draw this down by October 20 to 32 inches. It is important to have a stable, relatively low water level in late October to November to allow for the spawning of Lake trout and the survival of their eggs. The low water level will also allow for water level rising with the anticipated snow melt and spring rains.

TLEA will continue to communicate with the town of Oxford officials to advise on the water levels and their environmental effects. We have pressed for the routine collection of readings of the water level and status of the gates. Now that there is a motorized, sliding gate at the east sluice we can collect data and calibrate how the gate affects water levels, which will allow the town to do releases in anticipation of rainstorms. We have also recommended to the town of Oxford that the four town (Oxford, Casco, Poland and Otisfield) Dam Advisory committee be reconvened to develop a maintenance plan for the dam.

Something Fishy……

Some anglers in the Mechanic Falls area were pleasantly surprised to catch exceptionally large salmon in the Little Androscoggin River this past spring. The Little Andro is the outlet to Thompson Lake and these fish had apparently escaped to explore life downstream. The Maine Department of Inland Fisheries and Wildlife (DIF&W) recognized this problem and worked with the town of Oxford to address this. State biologist James Pellerin told me that during the renovation of the dam and removal of the fish screens they experienced fish loss. At one point over 100

salmon were identified at the dam pool, and through the efforts of DIF&W many were returned to the lake. Unfortunately, the only operating gate in the winter-spring season was the west gate, which consists of stop logs which allows for flow over the top of the dam. The screen at the east gate is now in place, as is the west gate screen. The screen at the middle gate is manufactured and they hope to have this installed sometime next year.

Jim Skinner from the TLEA board has been communicating with Mr. Pellerin on this problem. There have been problems with debris collection at the fish screens and at times, injury to fish with high flows. The draw down may have to be earlier in the year to avoid leaf clutter in the screens. The screens may have to be modified to cut down on injury to fish (primarily salmon). The town of Oxford and Maine DIF&W are working together on this.

The Mendelsons receive their LakeSmart Award from Kathy and Marcia. Photo by Ron Armontrout.

Visit our website at:
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