THE THOMPSON LAKE OBSERVER

Spring 2019 Issue No. 187

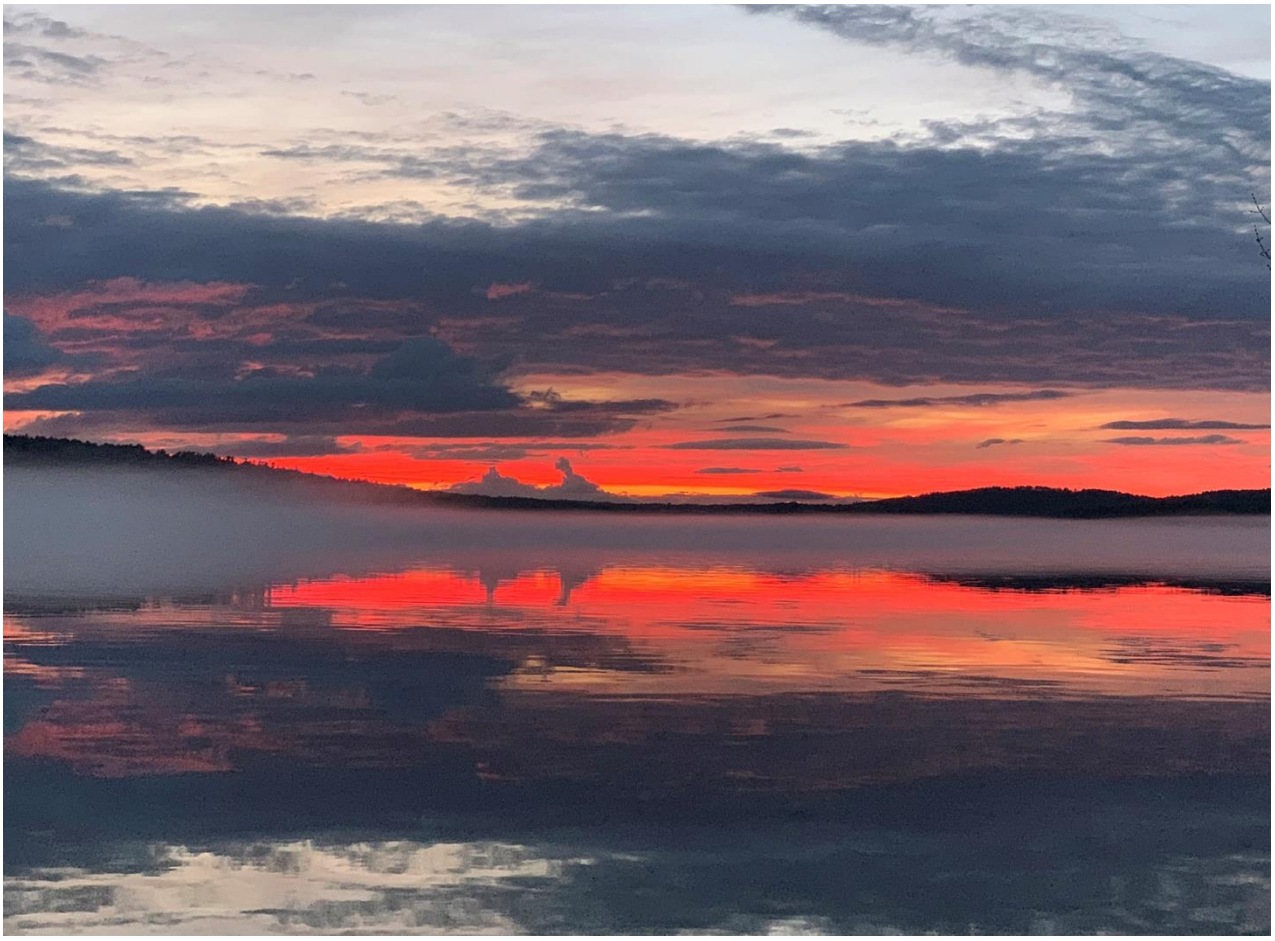


Photo by Kathy Cain

Dusk descends on an icy Thompson Lake

President's Message

(Submitted by Co- President Kathy Cain)

As I write this I am looking out at the ice floes on Thompson Lake. After a long and cold winter who isn't looking forward to summer? We have much to look forward to this year, but we have many challenges ahead to maintain the health of this lake we all cherish.

Our programs of Courtesy Boat Inspections (CBI), water quality, education, and milfoil mitigation are in good shape and will be working to protect the lake this summer. Unfortunately, we have been unable to find a program coordinator for our Youth Conservation Corp (YCC), so this will not be offered to property owners this year. This is a very important program that reduces soil erosion around the lake, which is the best way to prevent algae blooms and deterioration of the water quality. We are looking for an individual who has background in construction or environmental projects that could lead this program during the summer weeks. This is a paid position and we will provide training. Previous coordinators have been retirees or school teachers. If you or anyone you know meets these qualifications please contact myself or Marcia.

Our Milfoil Capital Campaign is entering its 3rd year. We thank all of you who have generously donated to this effort. If you haven't donated yet, please consider it. If you have, thanks to you and please consider another donation so we can finish the job. You will see more about this campaign later in the Observer.

Another challenge for the lake is the condition of the Oxford dam at the outlet. The town commissioned a study of the dam in 2018 that shows that parts of the 150 year old dam are in bad shape. Failure of this dam would adversely affect the value of the lake and the tax base of the bordering towns of Oxford, Poland, Casco and Otisfield. The town of Oxford is exploring options to renovate or replace the dam. Please see our report on this later in this Observer.

We need to increase our membership in order to maintain the many programs that benefit the lake. It is easy to take the water quality of the lake for granted. Everyone that enjoys the lake benefits from these programs; however our rate of membership of property owners on the lake is approximately 40%. A lake association is only as strong as its membership***. If you are not a member PLEASE JOIN US. If you are, please don't forget to renew.***

Annual Meeting 2019

The Thompson Lake Environmental Association Annual meeting will be held at the Oxford Recreational Hall, King St.,Oxford at 9:00 – 11:00 AM on Saturday, August 3. Make sure you mark this on your calender as we will discuss environmental issues affecting the lake and will be electing new members to the TLEA Board. The following names have been placed in nomination for re-election to the board (terms to 2021): Kathy Cain, Pete Laverdiere, Jade Doyle, Sharon Rice, Dr. Sarah Rice, Peter Siebert and Rosemary Nicklaus. Bill Booth and Susan O'Byrne are new nominees for the board. Elections for the following positions will also be held: Co-President- Kathy Cain and Marcia Matuska, Treasurer- Jade Doyle, Secretary- Susan O'Byrne. We will also have a slate of educational speakers and there will be TLEA merchandise for sale. It should be a good chance to visit with neighbors, learn about the lake and contibute to it's health. There will be baked treats as well. Don't miss it!

Capital Campaign for Milfoil Removal

We are making progress in our efforts to remove milfoil and prevent its spread throughout the lake. Our crew spent much of 2018 placing and repairing benthic barriers that control the growth of milfoil in the Pine Point area.This area has the largest infestation and is a source of migration of plant fragments to other parts of the lake.So far we have covered 5 acres of milfoil growt in this area.

The crew has also been monitoring the shoreline between Pismo beach and the Robinson dam and pulling milfoil where it is found. They patrol Hancock and Edwards's cove to locate and remove any re-growth of milfoil. They continue to monitor the cove across from Pismo beach and Hancock Cove to remove any new growth. Jim Pittman of the Robinson Marina is donating a slip for our "Hippobotamus" pontoon boat. Thank you Jim!

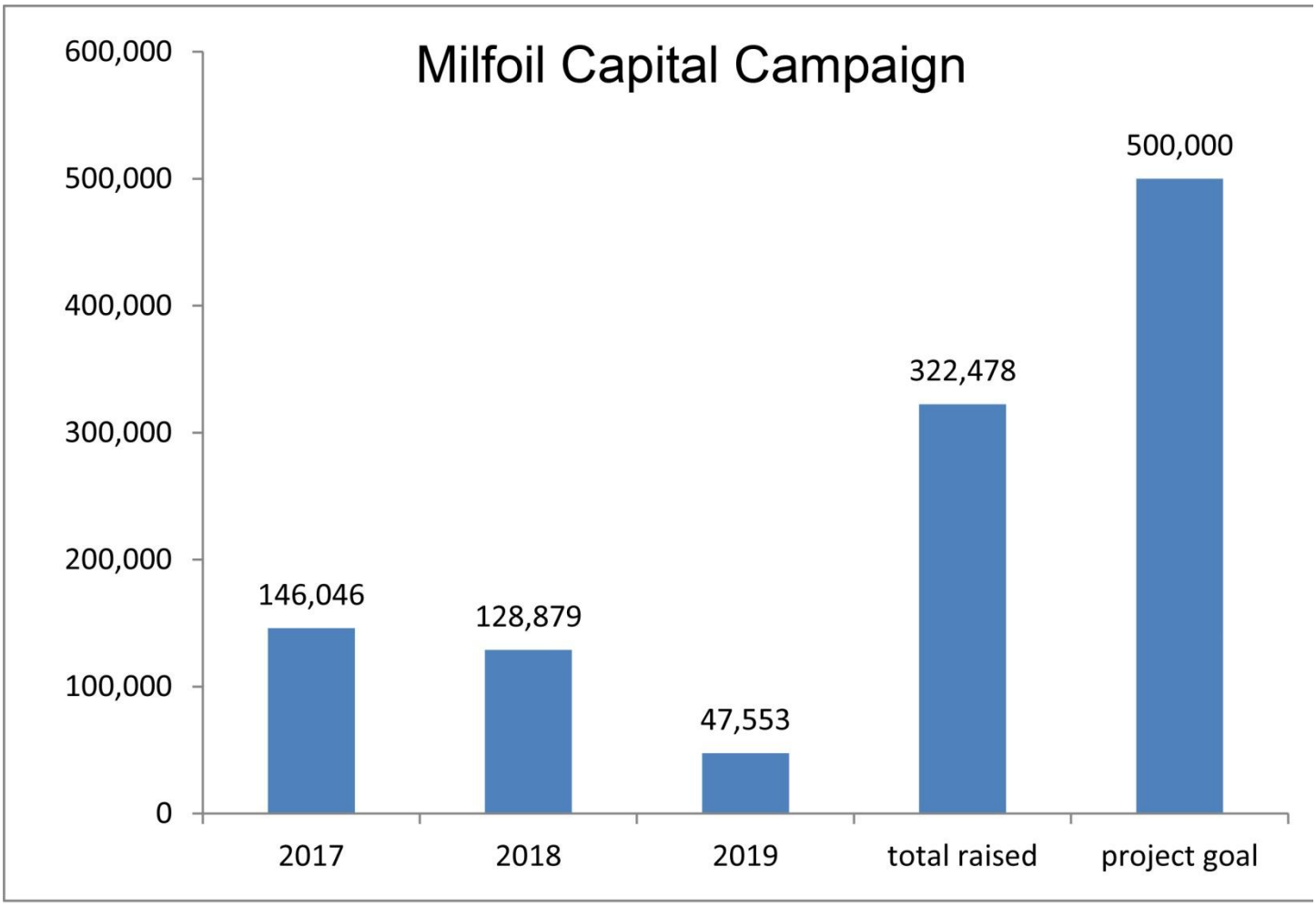
Our goals for 2019 are to:

- Move 2.5 acres of benthic barriers (tarps) from their present positon at Pine Point to adjacent areas
- Place benthic barriers in the Oxford dam area over the large , submerged stumps that harbor milfoil
- Diver assisted suction harvesting (DASH) of milfoil at the Pine Point area

- Use DASH, hand pulling and small tarps at the hard to access terrain at the Pismo beach and Oxford dam area
- Revisit Edward's, Hancock and Otisfield coves to hand pull any new re-growth
- Perform an invasive species survey of high risk areas of the lake in August

44,000 lbs. of milfoil was pulled or suctioned from the lake in 2018.

The Capital Campaign to fund this 5 year project is entering its third year and we are progressing to our goal of $500,000.So far 362 individuals, businesses, foundations and local towns have generously donate to this cause. We are past the half way point in our campaign and we need to continue this momentum to reach our goal. This progress is depicted in the following graft.



Milfoil and other invasive species are a continual threat to the value of the lake. Without this project we will eventually see a re-growth of milfoil and possible new

infestations of other, even more menacing invasive aquatic plants. Just recently the public boat launch at Lake Annabessacook (Monmouth) was closed and surface restrictions on motor boats were placed on Great Pond (Belgrade Lakes) because of milfoil. This could happen to Thompson Lake!

We need your financial support. If you have given or pledged, we thank you and urge you to consider renewing your support. If you have not given, please join us in this effort. We will publish our Honor Roll of Donors in the 2019 fall edition of the Observer. Donations can be sent to TLEA PO Box 25, Oxford, ME 04270 or contact Kathy Cain (kathryncain@myfairpoint.net).

Thompson Lake Water Quality Overview for 2018

Thompson Lake Water Quality Update

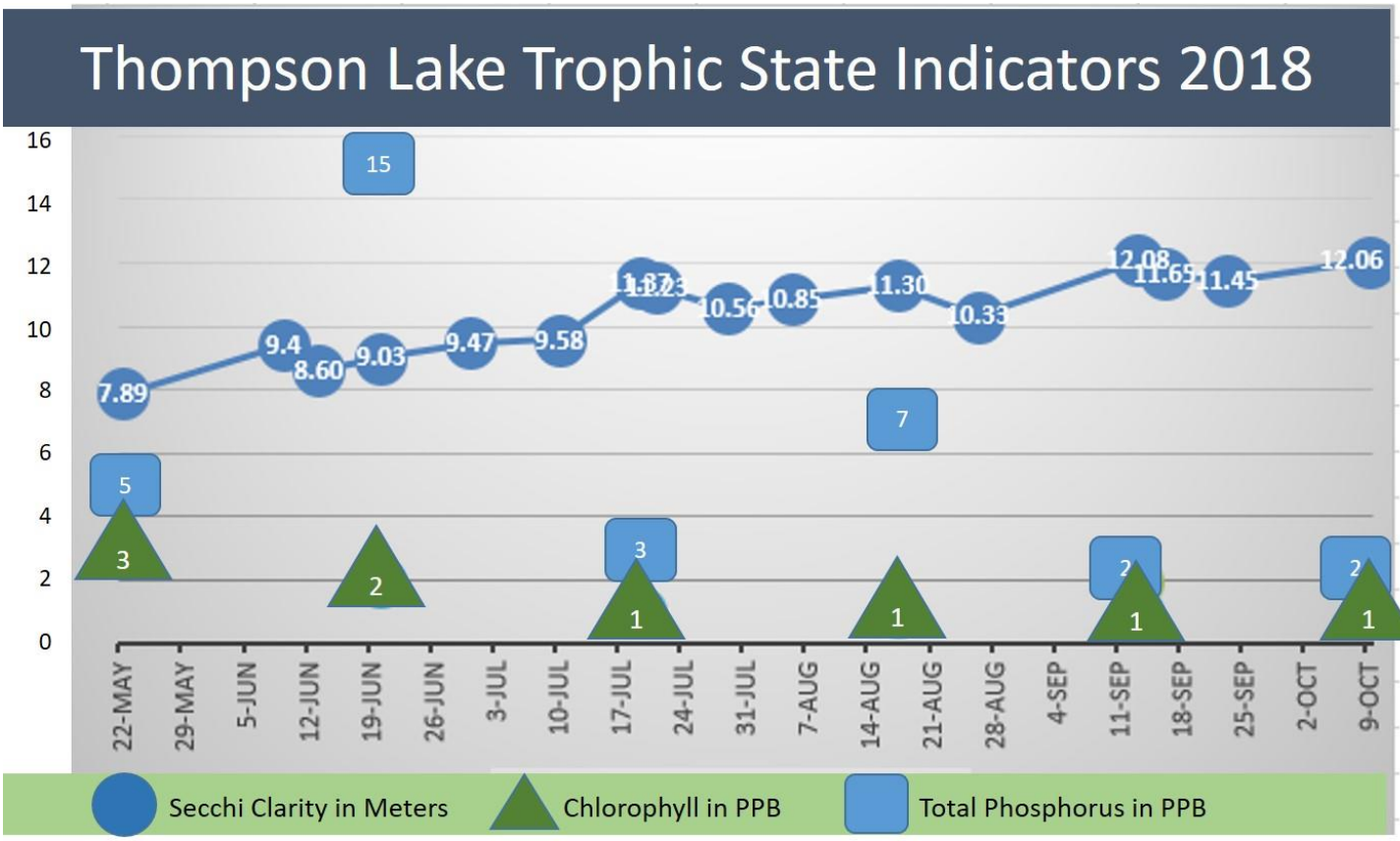
Scott Williams, Limnologist

Lake water clarity, as measured by a Secchi disc, remains a simple and reliable overall indicator of water quality despite increasingly sophisticated technology . Once again in 2018, Thompson was one of Maine's clearest lakes. Some of the deepest readings ever recorded for Thompson were measured last summer in July, August and on October 9, when the depth that one could see down into the lake was 12.1 meters (nearly 40 feet)! When all of the data have been compiled and analyzed, last summer will very likely be determined to be one of the best years for Thompson's water quality since we first started recording data in 1977. The historical average for the lake is 9.0 meters. The average in 2018 was approximately 10.5 meters.

To put this in perspective, the average water quality for Maine lakes during the past few decades has ranged from approximately 4.8 to 5.8 meters. Average calculations include Maine's clearest and least clear lakes. But only a few lakes in largely undeveloped areas of Maine are clearer than Thompson.

The clarity of Maine's lakes varies from year to year. A major influence in this variability is annual precipitation. A high percentage of our lakes tend to be clearer during relatively dry years, because less polluted watershed runoff reaches lakes during such periods. Last summer was the fourth consecutive dry year in southwestern Maine, and we had anticipated that Thompson would be very clear as a result.

This good news should be tempered by the fact that in recent years several Maine lakes with a history of above average water quality have experienced dramatic unanticipated declines, including severe algae blooms (water clarity reduced to 2 meters, or less). Researchers suspect that the influences of climate change which includes a reduction in the duration of ice cover, abnormally high summer water temperatures, and extreme weather events, have been factors. To date, Thompson Lake continues to exhibit resilience due in no small part to the ongoing work of TLEA to protect the lake. But the capacity of healthy lakes to withstand the stresses of climate change is not infinite. Continued effort to identify and resolve problems in the watershed remains the best hedge against this threat. For more information on the effects of climate change on Maine's lakes in 2018, the following link is to related articles from a recent edition of the Lake Stewards of Maine's newsletter: https://www.lakestewardsofmaine.org/mediaresources/the-water-column/



Editor's note: This report highlights the importance of the erosion control measures performed by the YCC.

Courtesy Boat Inspection 2018

(Submitted by Marcia Matuska)

Courtesy Boat Inspection (CBI), will continue again this summer. We will be covering the Marina in Casco, the Landing in Oxford and Pismo Beach in Oxford. If the town of Oxford employs park attendants this year, we hope to train them to do the courtesy boat inspections at Pismo so that we can cover Robinson's Marina as well.

If you or anyone you know is interested in applying for the job, email me at mmtlea@gmail.com. It is a great summer job for a retiree who wants to sit by the lake and read while waiting for the boaters to pull up. Hours can be negotiated!

Boat inspections continue to be very important. Just this last summer Eurasion Milfoil, which is much more invasive than Variable Leaf Milfoil, was found in Cobbossee Lake and a new invasive to Maine, European Frogbit, was also identified in Cobbossee. It is important that we all inspect and drain our boats before and after we float.

Youth Conservation Corp

Unfortunately, TLEA will not be able to have YCC this year. We lost the board member overseeing YCC and the Crew Leader and administrator we hired last year will not be coming back.

We feel that YCC is an important part of protecting the lake and hope to resurrect it next year if we can. If you know of anyone interested in being on the board that would be willing to supervise this program, please let us know.

Grants

(Submitted by Stan Tetenman)

So far this year we have received grants of $500 dollars from the businesses of Dead River Company and Poland Spring Bottling. We continue to solicit funds from various foundations and charitable groups to support our programs. Many organizations have contributed to our milfoil Capital Campaign and will be recognized at our Annual Meeting.

Membership

Rosemary Nicklaus will be stepping down this year as director of our membership committee. Rosemary has worked hard over the years to promote the association and expand our membership. Fortunately, she will remain on the board. *Thank you, Rosemary for your efforts.* New director Bill Booth will be taking over and we plan to launch a membership drive this summer.

The best motivator for new members is "word of mouth" promotion of TLEA. If you think our programs are beneficial to the lake and all who enjoy it, please spread the word!

Proposed Revisions of the EPA Clean Water Rules

The federal Environmental Protection Association (EPA) has recently proposed to revise the "clean water rules" that defines the watershed that is regulated by the Clean Water Act of 1972. Which waters are defined as "Waters of the United States" and subject to federal regulation has been a contentious issue over the years. In 2015, the Obama administration attempted to clarify which streams and wetlands would be regulated. This in turn, created some controversy and push back from land owners and agricultural producers. The proposed revisions to these rules could effectively roll back the protections on 60% of the waterways and wet lands that we presently have. We have concern that this could put our watershed at risk and could adversely affect our lake water quality, our well water, and increase the risk of floods. This could ultimately affect the tourist based economy on Maine.

There was an EPA citizens hearing on these proposed revisions held on Feb. 7 at the Portland Public Library and representatives of the TLEA board were there. In conjunction with the Maine Lakes Society we expressed our concerns; part of our statement is below:

The Clean Water Rule was developed in 2015 to clarify which waters would be protected by the Clean Water Act and it was designed to reduce confusion and litigation. It became necessary after a split decision by the Supreme Court on the definition of federally protected waters. It was developed through extensive scientific research and public input. It includes reasonable exemptions for agricultural producers as land stewards.

The Clean Water Rule definition of federally protected water is based, in part, on the premise that tributaries that flow into navigable waters are potential sources of contaminants, even if they only flow seasonally. We consider this to be common

sense; seasonal pollution can be just as bad as full time pollution. Removing this standard could remove protections for 60% of this country's streams. We are concerned that this change would adversely affect our watershed, our water quality and the fisheries of the lake. These effects could last for generations.

If you would like further information regarding this topic we suggest you log onto www.mainelakessociety.org. Let your congressional representatives know how you feel about this proposal, we need to protect our watershed.

Oxford Dam

The dam at the outlet of Thompson Lake was constructed in 1863 to provide hydropower to turn the looms at the Robinson woolen mill. This resulted in raising the lake level by 10 feet, converting what was a channel stream to the stump laden, but navigable area of Pismo beach. The mill became insolvent and the dam was taken over by the town of Oxford in 2009.

In 2012 the town requested that TLEA research data on ideal water levels for the lake. Our recommendations were to maintain the level at 14 inches below the top of the dam in the summer and 32 inches in the winter. These levels were to reduce scouring of the shore land with ice, reduce erosion, provide maximal recreational benefit and maintain a healthy fishery. We stressed that consistent water levels were important to the health of the lake.

The dam is now in serious disrepair. A recent inspection by the engineering firm MBP Consulting assessed the overall condition of the dam to be "fair to poor". The center gate is not fully functional, and the hydraulic capacity of the remaining west and east sluices are not considered sufficient to safely pass a "small storm event" If the center gate is restored the hydraulic capacity of the dam could handle a "10 year flood" but this is much less than the 100 year flood spillway design required. To compound this, the east sluice is presently out of service because its stoplog boards are bowing and near the failure point. If the east sluice were to fail it is estimated that the lake level could drop by one foot in 6-7 days.

This situation threatens our water quality, property values and the tax base of the 4 towns that border Thompson: Oxford, Poland, Casco and Otisfield. Erratic water levels could destabilize our shore land resulting in increased run off of phosphorous and sediment. This would stimulate algae growth and de-oxygenate the water which would affect the biology of the lake and diminish its recreational and economic value.

If the dam were to breach lake levels would drop precipitously, exposing our shores to muck and vegetation and make many parts of the lake unnavigable. Considering the age of the dam and our era of climate change; with increased run off from storms and snow pack, this is not farfetched. This would drastically affect the value of the lake for years to come.

Presently, the town of Oxford plans to perform repairs to the east gate this fall. The Oxford Dam Committee is working on a long term plan for dam. All four bordering towns: Oxford, Otisfield, Poland have a stake in this problem. The town managers are currently discussing the plans and funding options. There is much to discuss here and we will keep you informed as the situation develops. We should be looking for a solution that will protect the lake for many years to come. Temporary repairs will not be enough to renovate this once sturdy, but now ancient dam and protect the resource of the lake.

TLEA will be working with the Dam Committee in an advisory role to help rectify this situation. Funding of this project will be a challenge and the town of Oxford has set up a private donation fund to assist with this. Donations should be sent to the Town of Oxford, PO Box153, Attn: Finance Dept., Oxford, ME 04270. Specify that the donation is for Thompson Lake dam repair and maintenance

Briefly Noted:

Ice Out Winners: Ice out on Thompson was officially on April 22 this year. Our ice out contest winners are Tom Doyle, Jane and Mark Conley, Ellen Guenthner Tierney, Beth Mac Callum, Guy Roberge, Andy and Kathy Toolan and Paul and Kathy Cain. Please note, ice out is declared when the lake is navigable by boat from north to south. Ice spotters this year were Kim Peterson at the southern shore and Peggy Dorf at the north. Thank you Kim and Peggy!

Loon Count: Our loon count for the lake will be held on July 20. Contact Peggy Dorf at peggydorf@ymail.com if you can help as a counter.

2019 Maine Lakes Conference: The Maine Lakes Society annual Maine Lakes Conference will be held at the University of Maine at Farmington, on Saturday, June 22. For further info log on to www.mainelakessociety.org.

Septic system inspections: LD 216 is a bill in the state legislature that will require septic system inspections for property sales within shoreland area statewide. Prior

to this inspections were only required for coastal properties. This will be an important measure to ensure our lakes are protected, as many older septic systems are poorly functioning or outdated.

If you have any comments, suggestions or information for the Observer please let me know at paulcain@myfairpoint.net.

IF YOUR ARE NOT A MEMBER OF TLEA, PLEASE JOIN US. WE NEED YOUR SUPPORT TO CONTINUE OUR PROGRAMS FOR THE LAKE. Membership forms are available at out website:www.thompsonlake.org.

A Friend of the Lake: Victor Di Christina

Victor Di Christina had an accomplished career as an aeronautical engineer outside of Maine, but he visited the lake as often as he could. Victor and his wife Gerri bought a camp lot at the old Wacipe Falls summer camp in Otisfield in 1968. As his daughter Kate puts it, he lovingly and skillfully renovated one of the dorm cabins to a beloved family vacation home. This began a lifetime love affair with the lake and the loons. Their family of 5 children has many fond memories of summers at the home. They now bring their extended families to the lake to build even more memories. Victor passed away this past January and his family set up a memorial fund to give back to the lake through TLEA. So far the fund has raised $1,025. Our thanks goes out to the Di Christina family and friends. Information about creating a memorial fund can be obtained by contacting any board member of TLEA.

Victor and Gerri Di Chistina

Visit our website at:
www.thompsonlake.org

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