#### The THOMPSON LAKE

# OBSERVER

Fall-Winter 2013 Issue No. 171



Fall comes again to Thompson Lake. (Photo, Kathy Cain)

#### Inside:

Annual	Meeting	Report.	 	.р.3
Erosion	Control	Projects	 	.p.7
Summer	Storms.		 	. <i>p</i> .10

#### PRESIDENT'S REPORT

Summer has come to an end, the leaves are changing, and the morning air is crisp. Not long from now we will bundle up for the winter chill and summer on Thompson Lake will be a winsome memory.

Thanks to spectacular weather in July and August, summer on Thompson was fun for all. It was also full of environmental challenges. Three large rain events -- in June, August, and early September -- resulted in increased runoff into the lake, so unfortunately, our water quality decreased somewhat. Landowners should assess their shorelines for signs of erosion. If you have problem areas, such as paths or driveways that drain into the lake, lawns that have an unfettered run off or unstable soil at the waterline, we would like to help you repair these erosion-producing problems. Contact us so that our Youth Conservation Corps can advise and assist you in solving these problems. Most are easy to fix, and the experienced YCC team uses only manual labor.

Another challenge continues to be the threat of milfoil in our lake. Our Hippobottomus crew worked hard at harvesting milfoil or smothering it with benthic barriers. This is a constant battle; without these efforts, I shudder to think how our lake would look. Please continue to support this effort by paying your TLEA dues and consider an added contribution to Milfoil Eradication. If you should happen to see milfoil fragments washing onto your shoreline, it is best to remove the fragments and toss them into the woods or a garden, far away from the lake. Milfoil decomposes rapidly, and local farmers consider it great fertilizer. If you should see signs of a new milfoil colony that has taken root, please mark it by placing a weighted down plastic bottle in that area, and call TLEA. Please don't attempt to remove it yourself. The milfoil crew is skilled at digging for the root system and pulling the plant out without fragmenting.

We hope you had a great summer on Thompson Lake and look forward to many more. Help us protect and improve our water quality by joining TLEA if you haven't already. If you are a member, we thank you for your support, and urge you to tell your neighbors what we are about and encourage them to join. We must never take the health of this lake for granted. If we all work together, we can make a difference.

In closing, we wish to acknowledge two long standing directors who have retired from the board. Marcia Pottle and Sandy Roderick, with their love of the lake and dedication in helping to preserve its beauty, have truly made a difference over the years on the Thompson Lake Environmental Association.

Have a wonderful winter, wherever you may be and we'll see you next year!

Kathy Cain

#### 2013 ANNUAL MEETING HONORS AND INFORMATION

The 2013 TLEA Annual Meeting on August 3 treated 63 individuals to a full morning of news about our lake as well as a large variety of homemade refreshments.

Kathy Cain and Marcia Matuska, co-presidents, opened the meeting by presenting flowers and thankful praise to Marcia Pottle and Sandy Roderick, two long time directors who retired this past year. Sandy was unable to attend the meeting. These two directors' love of this lake and their years of dedication to TLEA have helped preserve its beauty. Many thanks to them for their years of dedication.

Francis Brautigam, the Regional Fishery Biologist from the Maine Department of Inland Fisheries and Wildlife, spoke on a variety of topics and programs. His talk included a discussion of fish habitats and the challenges from illegal introduction of invasive species of fish which upsets the balance of nature. He also spoke about why it is necessary to restock native fish into lakes and ponds. Such restocking helps maintain sufficient numbers of fish for recreational purposes, especially in a fishery like Thompson Lake where salmon are unable to spawn.

Francis explained how the 2012 Lake Auburn fish kill was the result of a perfect storm: a hot summer combined with a major rain event that dumped many inches of water which in turn caused major run off. The cold water fish then descended to the depths to find cool water. Algae bloomed with the warmed water, and as it decayed, it robbed the water of oxygen, even in the deeper depths where the fish fled from the warmth. This illustrated the extreme importance of our erosion control efforts on Thompson Lake.

Heather True, of the Cumberland County Soil and Water District, reported on the 319 Grant application for remedial work in the towns of Casco and Poland, which will address soil erosion problems identified in the 2010 watershed survey. (See also p.7.) Heather explained the damage that can occur when erosion sites are left unchecked. Soil eroding into the lake carries phosphorus, which in turn causes poor water quality and algae blooms.

The remainder of the meeting was filled with reports from the TLEA directors updating the membership on the financial status and summer activities. Some members attending were concerned about lake levels and had questions about the

status of the dam. Dr. Scott Bernardy fielded these questions and also reported on milfoil growth. He reported that Pine Point located at the northern tip of the lake is heavily infested and is was being assessed for possible herbicide intervention by John McPhendron of the Maine DEP. It must meet specific criteria to qualify.

The elections were held with 3 new directors, Joy Lowe, Jade Doyle and Rosemary Nicklaus, being voted in by the membership.

There was an array of TLEA merchandise for sale. New items included were puzzles, cutting boards, DVD's created by Joel Dulberg, and illuminated themed glass blocks. The meeting closed with the 50/50 and raffles. The raffle items included a framed and matted photograph donated by Kathy Cain and a mosaic tray donated by Anita Delekto.



Annual Meeting highlight: Co-Presidents Kathy Cain and Marcia Matuska with retiring director Marcia Pottle. (Photo Bob Tracy)

#### **BOARD OF DIRECTORS, 2013-2014**

Scott Bernardy - Otisfield Karen Brown - Poland Tony Caggiano – Otisfield Kathy Cain (Co-Pres.) - Oxford Anita Delekto - Oxford Peggy Dorf - Oxford Jade Doyle - Falmouth Sue Ellis - Poland Linda Gonya – Poland Jean Hankins - Otisfield Barry Jorve - Casco Pete Laverdiere - Oxford Marcia Matuska (Co-Pres.) - Poland Rosemary Nicklaus - Oxford Dan Porter - Otisfield Kendall (K.C.) Putnam - Cumberland Tom Ray - Poland Sharon Rice - Poland Stan Tetenman – Poland Bob Tracy - Otisfield

#### **ALGAE - NOT ALWAYS SO BAD**

At the end of this summer, TLEA fielded some reports about strange things growing in the lake. This summer one of the most common sightings was greenish-yellow clouds looking like cotton candy that showed up in shallow water near the shoreline. One of our members reported that she has seen these other summers, but this year they seemed to be more prominent.

An investigation shows that these greenish-yellow things were actually metaphyton. According to *The Field Guide to Aquatic Phenomena*, metaphyton are made up of several different kinds of algae and may be a foot or more in length. But unlike the planktonic algae that result in whole-lake blooms, these metaphyton do not affect lake transparency and are usually localized. These kinds of algae do not necessarily indicate the presence of excess nutrient levels or phosphorus in the water.

Then there are jelly-like balls you can spot on the bottom of lakes, especially in clear lakes where light reaches the bottom, or in shallow, calm waters. These are colonies of Nostoc, a blue-green algae. These balls range in size from a fraction of an inch to larger than a golf gall. While they look slimy, the balls are fairly hard and tough. We should not be concerned about these algae, either. Sometimes they also appear on damp forest floors and in ditches.

#### PROFILES OF TWO DIRECTORS

Stan Tetenman was born in Lynn, Massachusetts, but moved to Auburn when he was 11. After graduating from Edward Little High School in 1962, he went on to Massachusetts College of Pharmacy. He owned and operated Scott Pharmacy in Lewiston for 29 years. After selling the pharmacy, he worked as pharmacist in various Hannaford stores. His retirement in 2012 has left more time for his hobbies, which include reading, golf, and cribbage.

Stan was married to Cathy in 1978. They have two sons, Scott, who lives in New York, and Marc, who lives in Jackson Hole, Wyoming. Stan and Cathy have three grandchildren.

The Tetenmans purchased property in 1996 on Black Island Cove in Poland and have lived there year-round since 2003. About that time, he became more involved with TLEA, and, responding to Sue Ellis's suggestion, he became a director. Stan serves as TLEA's grant writer, a job he has done with great diligence and success for the last few years. He also participated in the last watershed survey.

In addition to his work for TLEA, Stan is an active participant in Poland town activities. He has served on that town's library board and comprehensive planning committee. Currently he is a Poland selectman.

Stan says he enjoys the peace and serenity of living on Thompson Lake, especially in the morning and evening hours.

**Pete Laverdiere** and his wife Bev have lived on the mainland of Black Island Road for 18 years. They have celebrated 50 years together and have 4 children, 8 grandchildren, and 2 great-grandchildren.

Pete was born in Lewiston but spent 10 years in Waterville and 11 in Skowhegan. His education was at Skowhegan High School, Boston College, the University of Maryland, and American College. His profession was as an Insurance and Financial Planner with Prudential, from which he retired in 1995.

In 2004 Sue Ellis and Kathy Cain drafted Pete to become a director. Since then he has been very active in many committees, including particularly the Membership and Dam Committees. He always shows up to help out at TLEA mailing parties and merchandise sales, or with any odd job that needs doing. In fact, Pete likes variety, and he likes the fact that Thompson Lake includes a variety of areas.

## MAJOR EROSION-CONTROL PROJECTS PROPOSED FOR 2014-15

In September, Cumberland County Soil and Water Conservation District, on behalf of TLEA, submitted a grant proposal to the Maine Department of Environmental Protection to significantly reduce erosion and the export of sediment and phosphorus into Thompson Lake by installing 44 conservation measures in the Casco and Poland parts of the watershed. These 44 sites include many of the 106 sites identified in TLEA's 2009 survey of the Casco and Poland parts of the watershed. If the proposal is successful, the project, known as a 319 project, will be funded through the federal Clean Water Act. It will be similar in nature to the 319 implementation grant which TLEA recently received for work in Otisfield.

Heather True of the Cumberland County Soil and Water Conservation District wrote the grant proposal and, if it is funded, will oversee its implementation for TLEA. She believes it is a strong proposal from an environmental group with a good track record of solid accomplishments. We expect notification from the DEP in October. If the proposal is granted, preliminary work will begin as early as February 2014 and extend into 2016.

Preliminary estimates indicate that, when completed, the project will reduce pollutants leading to the lake by approximately 78 tons of sediment annually.



Sandhill cranes dashing across a field on Megquire Hill. (Photo Sue Ellis) It is not known if they made it to either Tripp or Thompson Lake.

#### YCC FINDS SOLUTIONS

This summer's YCC crew followed the pattern of every Thompson Lake YCC crew since the first group started their erosion control work in 2002. Under coordinator/crew chief Justin St. John, the youngsters completed 16 projects in Otisfield, Poland, and Oxford. As always, the crew of four worked without the use of power tools, depending on muscle, intelligence, and experience to formulate and carry out varied solutions to varied problems.

According to Justin's Final Report, the crew's largest project was the construction of a 36 foot retaining wall in Oxford. The purpose of the wall was to prevent massive amounts of sediment from being carried into the lake. As Justin wrote, "Retaining walls are big, high impact jobs for us that do a lot of good."

The most common issue facing the crew was probably undercut shorelines, which occurred in about six of their projects. Depending on specific circumstances, the crew solved this problem by stabilizing banks with rip rap, placing erosion control mulch, and building vegetated buffers. Other frequent problems involved pathways and driveways. In such cases the YCC used water bars, box culverts, and razor-bars to divert water. Drip-line trenches solved one bad situation, and a curtain drain another. One of their more ambitious projects was building a plunge pool within an intermittent stream. The pool catches sediment and prevents it from running into the lake. All these solutions improve the resident's property but, more important in the long run, also keep the phosphorus-laden runoff from the lake.

The YCC is shut down for the winter, but next summer they'll be back at work. Please keep them in mind when confronting your driveway, shoreline, or pathways next spring. These young people have the experience, know-how, and muscle to solve most erosion problems!

#### **BOAT INSPECTORS PERFORM VALUABLE ROLES**

With another successful season over for the Courtesy Boat Inspectors, fall is also the time for some stock taking. This was the 11th year TLEA has stationed a small group of inspectors at launch sites around the lake, hoping to prevent invasive plants from entering or leaving Thompson. When we began the program back in 2003, we were one of the first lake organizations in Maine to do so. We started by organizing a dedicated group of unpaid volunteers at the marina in Casco on busy weekends. Now CBI has become a state-wide program funded largely by the state that operates on weekends and holidays all summer.

This year the crew around Thompson Lake spotted six boats carrying plant fragments, of which four were variable leaf milfoil. All were leaving the lake. According to supervisor Dan Porter, TLEA's four CBIs conducted 1085 boat inspections on the lake's three boat ramps this summer. Of these, 40 percent occurred at the Casco marina; 33 percent at the Landing on Route 121, Oxford; and 27 percent at Pismo Beach, Oxford. These figures are sharply up from last year's 759 boat inspections, a 30 percent increase. It appears that Thompson Lake is becoming more popular with boaters.

Over the years the CBIs have actually become more important. Although they are thought of primarily as boat checkers, Dan Porter points out that's not their primary role. "Actually, the most valuable roles of the CBI are as information sources to boaters and as the faces of TLEA for boaters visiting Thompson Lake," Dan said. "CBIs teach boaters how to inspect their own boats and gear for plants. They inform them of the illegality of leaving plants on boats as they move within the state of Maine. And as they do this, they represent TLEA with knowledge, courtesy, and respect."

#### MILFOIL CREW FINDING MORE MILFOIL

TLEA's Milfoil Crew spent another summer confronting somewhat different milfoil conditions. Last year's warm weather, together with the early occurrence of ice-out, produced a surge in milfoil growth. This summer, unlike last, it proved necessary to put down tarps in Otisfield and Edwards Coves. According to Scott Bernardy, the crew found even more new growth in Hancock Cove, which required many new tarps. The major good news this summer was that Serenity Cove is still free of milfoil, as it has been for the past two years.

Scott continues to be most concerned about the heavy infestation at Pine Point. TLEA is still waiting for the DEP's recommendations concerning using herbicides at this location. This summer Scott fielded many more calls and reports about milfoil fragments washing down the lake. Most such fragments, he believes, originated at Pine Point. He suggests that those finding fragments record not just their location but also record the wind direction. This will help establish the source of the fragments. Those finding fragments should dispose of them well away from the lake.

Scott also mentioned that the Milfoil Crew reported that some of their tarps have been damaged by boaters who have not lifted their propellers when passing over or near them. He reminds those using the lake to be careful and courteous. These tarps are both expensive to manufacture and important to the future health of the lake.

## THREE MAJOR SUMMER STORMS LEAD TO REDUCED WATER CLARITY

Three heavy periods of rain this summer resulted in significant loss of the lake's typical excellent water clarity. These rain events occurred in June, August, and September.

Bob Tracy, the TLEA director who measures Thompson's clarity with Secchi disk readings, reports that the ten measurements he conducted from the middle of May through late August produced an average of only 7.6 meters (23.15 feet) of visibility. This compares unfavorably with the historical average of 9 meters or 29.5 feet. The best reading was produced on May 15, when clarity was 10.7 meters. However, just one month later, following storms which dropped some 8 inches of rain, the worst reading of the summer was recorded: 6.4 meters. The July reading indicated a slow recovery, but August 9-10 another devastating storm quashed that expectation.

The third rain event of the summer apparently had less effect. On September 2-3, as recorded by Bob and June Tracy's rain gauge at Otisfield Cove, we received between 4 and 5 inches of rain. Nevertheless, the Secchi reading on September 4 improved to 8.6 meters, and on September 18, Bob's final reading of the year, it was up slightly to 8.8 meters.

The August storm wreaked havoc on Otisfield's Cobb Hill Road, which drains down steeply into the lake at Otisfield Cove. The storm was a truly memorable event also for the family at the Pottle family camp in Otisfield Cove, "Loseekum," who watched as one of their small bridges over Loseekum Brook washed into the lake. They managed to save a higher bridge, normaally several feet above the stream, only by roping it to several trees. During the storm they watched as a large delta formed far out into the lake at the mouth of the brook. (See picture below.)



Camp Loseekum's delta after heavy August rains. (Photo Bob Tracy)

#### IN MEMORIAM BOB COTTON



Robert G. Cotton, for many years a devoted director of TLEA, died in Norway on September 6. He was 83 and leaves two children, seven grandchildren, and six great-grandchildren.

Bob, whose home was on the east shore of Thompson Lake before his recent move to the local Veterans Home, was one of the first directors of TLEA. Born in Thomaston in 1930, he

graduated from South Portland High School and spent most of his life in Maine. He served in the Army and National Guard.

Bob was an early member of TLEA and became a director in 1974. He retired from TLEA directorship in September 2011, after 47 years of faithful service, probably establishing a record for longest service on the board of directors. While on the board, Bob was always someone you could count on to volunteer for a project, and he was always the person you looked for when something went wrong with anything mechanical. A quiet man who never spoke out of turn, Bob earned the respect of the rest of us who always valued his judgments.

#### **NEW MOSQUITO STUDY TACKLES 40 SPECIES**

One of Maine's most numerous natives doesn't usually make it into promotional literature designed for summer visitors. We're talking about mosquitoes, which constitute the biggest pest most lakeside residents confront each year with a variety of sprays, candles, and even (this year) zappers shaped like tennis rackets. Be assured that some Maine professors are taking the problem seriously, too. At the University of New England in Biddeford, researchers are studying which of the 40 mosquito species are most responsible for their warm-weather misery. Their goal is to drive mosquitoes away from the high traffic locations of the campus, with the aid of strategically chosen birds, bats, and plants. Noah Perlut, Assistant Professor of Environmental Studies, states, "We're not trying to get rid of all the mosquitoes; that's not possible." But they're working on it. [Adapted from Tom Ferent, Mr. Lakeside Blog.]

#### ONLY 11 LOONS, NO CHICKS, COUNTED IN JULY

The annual Audubon Society loon count on Thompson Lake turned up a total of 11 loons, with no chicks at all. The loons were spotted in Otisfield Cove, near Pine Point, in the open water between Hancock and Edwards Cove, and in the big area out from Kamp Kohut.

Why no chicks this year? Very possibly because the loons built their nests during a dry spring, and these nests were washed away during torrential rain and rising lake level in early June.

Volunteers for next year are urged to call Peggy Dorf at 539-2973 or peggydorf@ymail.com

# www.thompsonlake.org Visit our website at:

Thompson Lake Environmental Association
P. O. Box 25
Oxford, ME 04270

ADDRESS SERVICE REQUESTED

Published three times annually by the Thompson Lake Environmental Association (207) 539-4535
Editor: Jean Hankins

Non-Profit
Organization
U.S. Postage
PAID
Oxford, ME 04270
Permit # 71