The THOMPSON LAKE

OBSERVER

Spring 2012 **Issue No. 166**

Dave Duguay of Byron, Maine, showing off stuffed moose head. Duguay, an Oxford County Commisioner as well as a Maine Guide, shot the moose last fall. The head now graces the living room of the McAllister-Duguay camp in Otisfield Cove (photo by neighbor Bob Tracy).

ICE OUT MARCH 23rd

PRESIDENT'S MESSAGE

Hello to all as we celebrate the ice out and getting the water back. In this issue I want to tell you all about snow fleas. This isn't a joke, as some of my fellow directors thought when I mentioned the topic to them. Every winter I see these little critters around and thought you'd enjoy knowing more. Next year, check them out for yourselves!

On a warm sunny winter day, take a look at the base of a tree where the snow may have melted down to expose some leaves, or where the snow is shallow or hollowed out a bit. There you'll find a sprinkling of what looks like pepper or ashes on the surface of the snow. Each speak is actually a snow flea. Snow fleas are tiny insects which come out on warm sunny days to eat decayed plant material or sap oozing from the tree. Though they hop around they are not really fleas, but actually an arthopod called Collembola, commonly called springtails. They measure about 1/8 inch long. Two "tails" on their back end are tucked up underneath their belly, held in place by tiny hooks. When the fleas, or springtails, want to move, they just release the spring loaded tails, called furcula, which hit the snow and send them flying into the air. However, they cannot control their flight or direction.

These are not just winter critters. They can be found any time of year in the forest living in the leaf litter stuck to the underside of leaves or on the surface of the soil. They also live on the surface of ponds. But, because they blend in so well, they are very hard to see.

Researchers have synthesized their protein, which resembles anti-freeze and allows snow fleas to operate in sub-zero environments.This protein proves to be glycine-rich and unlike any previously known protein. There are hopes that similar proteins may be useful for storing transplant organs and for producing better ice cream. Because such a protein might prevent the formation of ice crystals in tissues, transplant organs could be stored at lower temperatures, increasing their lifespan outside a living body.

Sue Ellis, Co-President

YCC GETS READY FOR NEW SEASON FIXING YOUR PROBLEMS

Led by new coordinator-crew chief Justin St. John, himself a veteran YCCer, the 2012 Youth Conservation Corps is ready to move their wheelbarrows and shovels out of winter storage and get to work. They are looking for problems to solve, so if you have rainwater washing sand down your driveway, waves scouring your shoreline, or bare patches of soil exposed near the beach, you could probably benefit from Justin's advice. For a free consult or for more information, contact Justin at thompsonlakeycc@gmail.com

WATER QUALITY OF THOMPSON LAKE IN 2011

Scott Williams, Aquatic Biologist

Thompson Lake experienced a somewhat below average year in 2011, compared to historic averages for indicators of lake quality. Over the years, Thompson Lake has shown significant variability in three of the prime indicators of lake health: water clarity, the concentration of phosphorus, and the concentration of algae. It shows less variability in the fourth indicator, the concentration of oxygen dissolved in the water.

Water Clarity. The average water clarity for the 2011 season was 8.4 meters, compared to 8.9 meters in 2010. The historical average for Thompson Lake is 9.0 meters. The current water clarity remains well above the average for Maine lakes. Relatively few Maine lakes experience water clarity readings as high as Thompson Lake!

Phosphorus. The average concentration of phosphorus in the lake in 2011 was 9 parts per billion, a notable increase from previous years and from the historic average of 5 ppb. This increase is the result of heavy persistent rain during the early summer, which caused a great deal of storm water runoff flowing into the lake from the watershed. In addition, the reduced sampling period in 2011 very likely skewed the data toward higher readings.

Algae Concentration. The average concentration of chlorophyll was 2.3 parts per billion, slightly up from 2010, but still well below 2010's 4.1 ppb and the historic average level of 2.6 ppb.

Dissolved Oxygen. Thompson Lake has maintained high levels of dissolved oxygen through the summer/fall period for as long as data have been collected – even in the deepest spot in the basin near Hayes Point. This characteristic of exceptional water quality is the primary factor that allows coldwater fish to thrive in the lake. The critical oxygen level for trout and salmon is 5.0 parts per million. Few lakes in the region are able to sustain such healthy levels of dissolved oxygen through the summer months.

Additional water quality indicators, including pH, water color, and total alkalinity were monitored throughout the season. All were within the normal range of historical values for the lake.

Gloeotrichia. TLEA members reported unusually high levels of Gloeotrichia algae, especially in areas where wind and wave action caused the colonies to accumulate along the shoreline. This blue-green algae often appears in Thompson during mid to late summer. It is suspended near the surface, and has the appearance of tiny, fuzzy, off-white dots. Some describe it as "tapioca in the water." It has been associated with water quality problems in a small number of Maine lakes. For reasons not fully understood, it may be on the increase. On September 17 we measured the average concentration of this alga by estimating the level at the deep monitoring station off Hayes Point. The concentration of Gloeotrichia was approximately double what has been observed historically in the lake. Reports of similar increases in nearby lakes suggest that an external factor, possibly weather related, may have been driving this phenomenon. We will continue to closely monitor the concentration of this alga in the lake in 2012.

Summary. Moderate winter snowfall, combined with intense spring rain, resulted in heavy storm water runoff from the Thompson Lake watershed, which is undoubtedly why the phosphorus concentration in the lake was so high during the early summer. Water clarity was lower than it has been for most years in the last two decades. However, because the sampling frequency was reduced in 2011, it is not possible to know whether these findings reflected the overall condition of the lake during the spring, summer, and early fall.

Cobb Hill Road, Otisfield, after late winter snow. (Photo Bob Tracy)

OTISFIELD WOMAN SIGNS FIRST CONSERVATION EASEMENT ON THOMPSON LAKE

In late December, Ethel Bean Turner of Otisfield, an active member of the TLEA, donated a conservation easement protecting 56 acres of forest and shoreland on Thompson Lake to the Western Foothills Land Trust (WFLT). The protected property includes Sand Island and part of the peninsula known as "The Cape," including Long Point, a prominent peninsula on Thompson's western shore.

During the early 20th century, the Cape was the private estate of Dr. George Elliot, who in 1905 built an impressive lakefront home which remains today in the Bean-Turner family. Subsequently the Bean family developed a summer compound of rental cottages and auxiliary buildings.

While this is the first such easement to include Thompson Lake shoreline, it is actually the second in the Thompson Lake watershed. A few years ago Jean Hankins signed a similar easement with WFLT involving 130 acres bordered by Scribner Hill and Cobb Hill Roads.

The Long Point conservation easement represents the first of three WFLT easements in Otisfield completed late in 2011. The two others protect approximately 100 acres in the historic Pugleyville neighborhood, also known as East Otisfield. Joe and Callie Zilinsky and David and Ann Watson are the donors of these. Because of their close proximity, the three easements together will form the core of a Pugleyville Conservation Corridor.

August 15 - Walk with Ethel at the Cape in Otisfield. From 4-6 p.m., Western Foothills Land Trust and TLEA will collaborate with Ethel Turner on a walkabout at Long Point on the Cape, to show off the 56.4 acre conservation easement Ethel has just made to WFLT. All are welcome. For more information, contact Lee Dassler at 207-739-2124.

TLEA GOES TO 13TH ANNUAL MILFOIL SUMMIT

Four TLEA directors attended the session on March 2 at the Lewiston campus of USM, which as usual hosted a full house of environmentalists. Peter Lowell, Executive Director of Lakes Environmental Association, organized and chaired the summit. Keynote speaker this year was Patricia Aho, Commissioner of the Maine Department of Environmental Protection (MDEP).

Commissioner Aho spoke of the high regard she has for DEP staff and its work. She mentioned that Courtesy Boat Inspectors (CBIs) made 287 stops of vessels transporting invasive aquatic species (IAPs) in 2011, either entering or leaving Maine waters. They were among the 1786 total number of plants found on such vessels.

The DEP has declared 2012 the "Year of Self-Inspection." This is not intended to diminish the role of CBIs, but rather to emphasize the importance of teaching boat owners to become better inspectors of their own equipment. The Commissioner pointed out that, among DEP's many other functions, it has now trained over 1,000 contractors in erosion control. The DEP also deals with more than 3,000 oil spills every year. A video produced by LEA highlighted the remarkable contrast in numbers between Maine's 23 milfoil-infested water bodies with the more than 100 in New Hampshire – and over 900 in Massachusetts. All of the revenues acquired through the obligatory Maine boat sticker program are spent on IAP prevention and detection. DEP receives 60% of those funds and the Department of Inland Fisheries and Wildlife (IF &W) gets the remaining 40%. During a Q&A session following Commissioner Aho's remarks, George Smith, well known to Mainers as the 18 year leader of the Sportsman's Alliance, stated that he felt that the full 100% should go to DEP.

In conjunction with the theme of this year's summit, Sustainability of the Invasive Plant Removal Efforts, Lowell discussed several current projects: the production of a DVD for use in training CBIs; grants available to lake environmental organizations; and efforts by St. Joseph's College to renew the Maine Milfoil Initiative, the congressional earmark of 2010 sponsored by Senator Susan Collins that provided $100,000 to 7 Maine environmental entities (including TLEA) for milfoil abatement work. Peter described LEA's work at the Songo Lock in Naples where 4,000 boat inspections were made last year. He suggested that complete removal of milfoil in that region could well be a 20 year project and might require an increase in the fee to pass through the lock.

More informational talks followed. Roberta Hill of the Maine Volunteer Lake Monitor Program (MVLMP) presented a power point video noting that VLMP has now trained 2800 Invasive Plant Patrol members, some 500 of whom have become fully certified. John McPhedran, a biologist with DEP, spoke about the updated CBI handbook and maps which show locations and types of lake plant infestations. He observed that although boat registrations in Maine have dropped from 128,000 in 2002 to 120,000 in 2011, sticker compliance has been high, exceeding 92%. The 95 IF&W game wardens in the state carried out 25,000 boat inspections last year and issued 182 summonses and nearly 600 warnings for sticker violations. IF&W is presently working on a map illustrating locations of invasive fish species.

ICE DECLARED OUT ON MARCH 23 – NEW RECORD SET

Like much of the United States, Maine experienced some crazy weather in March. On March 6, one of the local tv meteorologists declared that winter was over. By March 20, Sunday River skiers were going shirtless, daffodils were starting to bloom, and porch furniture was pulled out of hibernation in response to temperatures reaching up to 80 degrees.

Yet the ice on the lake still refused to leave. Spongy, streaked with black, almost as potholed as the road between Otisfield and Oxford, the ice nevertheless held on. On Thursday, March 22, folks in Oxford reported hearing unusual crackling and tinkling sounds coming from the lake. Within a few hours the ice covering the north end of the lake simply sank, vaporized, or vanished. That evening, assembled for their March meeting, anxious TLEA directors gathered around the table, delving into the dilemma. "We've got to wait for confirmation tomorrow morning from the Heath," said chief judge Kathy Cain, looking rather frazzled, "but I'm quite sure it's out."

Saturday morning came, March 23, and with it the answer from the Heath: Ice still ran straight across the south end of the lake. Not much of it, to be sure, and it wasn't very thick, but the rules stated ice wasn't out until you could navigate from one end of the lake to the other, and this end was still blocked. But hold on – the ice was melting, and melting fast. By sunset, it was gone, and we had ice out. March 23. A new record, beating the 2010 record by one day.

A record-setting number of participants entered the contest this year. These 53 individuals sent in 109 guesses. Congratulations to Pete LaVerdiere and Andy and Kathy Toolan, who will divide the winner's half of the Ice Out Pot.

NEW WATER LEVEL COMMITTEE SETS GOALS

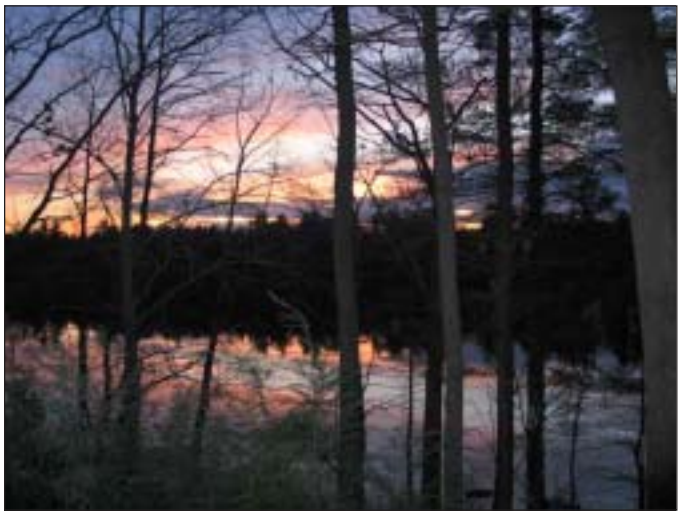
TLEA's new Water Level Steering Committee is conducting a study of Thompson Lake water levels and will be making recommendations to the Town of Oxford on optimal water levels for late fall, winter, and early spring. According to Scott Bernardy, who chairs the group, the committee must consider many factors: rainfall, snow pack, Maine's DEP water release regulations, and water releases via the spillway or the center gate of the dam at Robinson Mill. It will also look at the lake's historic water levels and the policies of dam managers on neighboring lakes.

The Oxford Dam Committee hopes to use this data to maximize the protection of the lake's shoreline, fisheries, and water quality. The TLEA Water Level Committee will also recommend an oversight plan that can respond to extreme fluctuations in winter precipitation so that ideal summer water levels can be obtained.

The stated goals of the Water Level Committee are:

1) Set a winter water level in place that is within historic perimeters.
2) Extend the length of the boating season as far as possible for the benefit of shallow waterfront property owners.
3) Protect shoreland and erosion control devices, such as riprap, from shifting ice.
4) Protect fish spawn zones by not allowing lake draw downs deeper than the level set in mid-October.
5) Establish an oversight plan to respond to excessive drought or high levels of precipitation.

The Steering Commitee plans to provide the Oxford Dam Committee with its recommendations no later than June 30, 2012. Members of the committee are Scott Bernardy, chair; Kathy Cain; Paul Cain; Linda B. Gagnon; and Pete Laverdiere.



Spring thaw, Black Island Cove. (Photo Sue Ellis)

DIRECTORS' PROFILES

by Karen Brown

Karen Brown. I, Karen Brown, and my husband, Bob, have owned land in Potash Cove on Thompson Lake since 1982. We had the shell of a log home put up and have spent years finishing off the interior. As many houses are, it is still a work in progress.

I was born in Bath, Maine, and when I was 11 years old, my parents moved my brother and me back to Massachusetts where they were born. I always said that I would move back to Maine, and 50 years later I finally did. But first, when I was a senior in high school, I met my future husband. We married in 1963. We have three children, Alyson, Timothy, and Cynthia. They have blessed us with 5 grandchildren. These 8 people are the greatest gifts in our lives.

When my children were all in school, I started working in a printed circuit board company where I spent 19 years. I took college courses to become an electronic technician and was placed in charge of the calibration lab for a number of years, and also the documentation lab. I was also the editor of the company newspaper, *The Quill.*

When we both retired in 2004, we moved permanently to Maine. Since moving to Maine, I have joined two quilting groups and enjoy that hobby immensely. I also enjoy making jewelry, cooking, traveling, and entertaining. When we retired, we bought a motor home, and in the last 8 years have traveled over 50,000 miles and visited 49 states and much of Canada. We both love to travel and do not mind spending 4 or 5 months in a 30-foot motor home. We not only have seen wonderful sights and have fantastic memories, but have also made some lasting friendships.

Even though we've been members of TLEA since 1982, I became a director only two years ago when Sue Ellis asked me to become more active in TLEA. Because of my involvement in my company newspaper, I wanted to help especially on the Publications Committee.

Thompson Lake is a wonderful place to live. It is peaceful and absolutely beautiful. I am very blessed to be able to live here.

Dan Porter grew up in Maine, married, had two children, moved to Massachusetts, and bought a summer home in the Silvaqua section of Otisfield 7 years ago. He spent childhood summers at the family camp on Madawaska Lake in northern Maine where he learned about the water, weather, motor boating,

sailing, canoeing, swimming, fishing, water skiing, camping, and much about himself, too. Now he looks forward to having his grandson at Thompson Lake for long stays every summer.

After two years of college and two in the Marines, with a roundtrip to Vietnam, Dan went to work for the federal government. He retired in January 2009 as the IRS Governmental Liaison for New England, managing IRS relationships with state governments, other federal agencies, and the Congressional delegation. He was National Project Manager for IRS's federal and state tax data exchange program.

Dan was elected to the TLEA board of directors in 2011 after serving on the YCC Steering Committee for a year. He now serves on the YCC and Finance Committees and also coordinates the Courtesy Boat Inspection program.

For many years Dan has been a strong supporter of TLEA's environmental work. "During the good old days of the 1950s and 1960s," he explains, "people did things to lakes we would be horrified at today. People bathed innocently in the lake. Ivory soap was a favorite because it floats. Outboard motors were noisy two-stroke engines that routinely emitted smoky exhaust and drizzled gasoline and oil. Fuel tanks were part of the motor and so were filled while mounted on the boat where fuel was regularly spilled into the water.

"There was no lake environmental association in the 1950s and 1960s," Dan contiinues, "and few rules about development. Camp owners built as close to the water as they liked, located outhouses or septic systems nearby, and used bulldozers and backhoes to remove rocks and deepen their shallow waterfronts. Planes flew low over the shore spraying DDT to kill mosquitoes. Road associations hired trucks to drizzle used motor oil on gravel camp roads to keep dust down. Backhoes dug deep ditches to drain water from the roads, straight to the lake shore. These practices have ended but remain strong in my memory. I remember, too, returning to the lake as an adult and seeing green slippery slime coating rocks on the lake bottom that was not there when I was a kid. On top of all that, boaters began to inadvertently introduce and spread invasive aquatic plants and organisms. What's next?

"By the 1970s some people began to understand the impact such practices had on the watershed and came together to save their lakes. TLEA was one of the earliest groups to form in Maine, and just look at the quality of Thompson Lake's clear waters 40 years later. I'm pleased to be part of TLEA's history by contributing to the many good works of this fine organization today. Please join us in support of TLEA financially or by volunteering to help with its varied projects. As much as your support and efforts will mean to TLEA and Thompson Lake, it will mean even more to you personally."

ANNUAL MEETING SCHEDULED FOR AUGUST 4

Please consider this your official notice of TLEA's Annual Meeting, to be held on Saturday, August 4, at the Oxford Recreational Hall, the green building located in Oxford at the corner of State Route 121 and King Street. The meeting is scheduled for 9-11 a.m. There should be ample parking and the usual interesting assortment of TLEA items to purchase.

By-law changes on agenda: Members will act on two changes in the by-laws. The first change will involve Article IV, Officers, as amended in 2008 to read: "The officers of the TLEA shall be a president (or Co-President), Vice-President, Secretary and Treasurer." The proposed change would read "The officers of the TLEA shall be a President, a Vice-President (or at the discretion of the Board of Directors, two or more Co-Presidents), a Secretary, and a Treasurer."

The second change will affect Article X, Sec. 8, which presently states: "The President may appoint, subject to the confirmation of the Board of Directors, four directors to serve under the Chairmanship as the Executive Committee until the next annual meeting of the TLEA." The proposed change would read: "The Executive Committee shall consist of the officers as defined in Article IV above, unless otherwise decided by the Board of Directors."

Nominations of Directors: The following directors have been nominated for re-election: Scott Bernardy, Peggy Dorf, Anita Delekto, Sue Ellis, Marcia Matuska, Stan Tetenman, and Bob Tracy. Two new faces, Linda Gonya and K. C. Putnam, have also been nominated.

BRIEFLY NOTED

Office Hours will be slightly different this year. This summer the office will be open for visitors only on Saturdays from 10 a.m. to 1 p.m. The first open day will be on June 16; the last on September 8. The office will be closed during TLEA's annual meeting, August 4.

TLEA Throws for Sale: Yes, you can still get one of TLEA's handsome colored throws to give away, toss over your bed, or just cuddle up in. To see what they look like in color, go to TLEA's website at thompsonlake.org. The price is still $50. To order one or for more information, contact Kathy Cain at 207-539-9122 or kathryncain@myfairpoint.net.

Pixie Williams will teach a **Native Aquatic Plants Identification course** this summer. Students must be Certified Invasive Plant Patrollers or intend to sign up for a training course this summer on Invasive Plant Patrolling at VLMP/MCIAP. Class limit is 12. For more information, email Pixie at pixiegemw@myfairpoint.net before May 15.

Visit our website at:
www.thompsonlake.org

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