

The THOMPSON LAKE

OBSERVER

Winter 2006

Issue No. 142



Our Winter Vacation: Alex and Leigh Bernardy on Sand Island's Big Rock (Photo, Scott Bernardy)

PRESIDENT'S MESSAGE

What a fall this was! The level of the lake, drawn down by the end of September, rose to spring levels in October and November. The folks at Robinson Mill attempted to reduce the levels by keeping the dam wide open, but the lake still filled faster than they could control. Once the lake freezes, that will be about the level until spring. Then we may have a higher than normal level when spring runoff occurs.

The Youth Conservation Corps Steering Committee has been putting in overtime hours this fall, applying for grants to help with 2006 funding. In order to fund the summer job crew, we need about \$15,000 more than what the four towns bordering the lake contribute. When one town (such as Poland) fails to contribute, it makes the total funding more difficult. We'll be working diligently to make sure this doesn't happen. As most of you know by now, the YCC crew members and their supervisor work on private land projects to keep phosphorous and other harmful chemicals from entering our beautiful lake.

At their October meeting, the Directors voted to begin a program to eradicate variable milfoil from Thompson. You may see some signs this spring and summer denoting "Milfoil Mitigation Project – Boaters Take Notice." This project will involve placing a large tarp, called a benthic barrier, over a milfoil patch for two months, a process which should kill the plants. The barrier will then be moved to a different location. TLEA is looking for volunteers to assist in this effort.

The Events Committee has also been busy looking at and planning new promotional products and events. Two are announced in this *Observer*. Also, the Ice-Out Contest slips are included in this *Observer*. Don't forget to send it in along with your membership dues! Last year's date, April 20, yielded three winners.

Our membership exceeded 400 this year. Although this is a near record number, it includes only one-third of the total number of Thompson Lake households. If you know of someone in the area who does not belong, let us know by either calling the office (207-539-4535) or by emailing (tlea@pivot.net) and we'll send information on how to join. In addition, we are already looking for new officers and directors for 2006-2007.

I hope you enjoyed our pristine lake this year, that you had a great Christmas and holiday season, that your good health continues; and that warm weather returns early.

Tom Ray, Co-President

PHOTO MATS - COMING SOON!



This spring and summer TLEA's Event Committee will be selling framed WORD mats as a fundraiser for the YCC. The word mat frames a photo under the letters M, I, N, and E. The letter A is left blank for purposes of explanation.

The back of the mat lifts up easily to enable you to place your personal photos under each letter. Each framed mat is pale green, with glass and a forest green metal frame. Approximate dimensions are 8 by 16 inches. Price is \$42 each. Remember, the photos are your own.

The spring *Observer* will have more information, and a sample will be on display at the TLEA Office.

EVENTS COMMITTEE PLANS MEGA-RAFFLE

Here's an advance alert: TLEA's Events Committee is hard at work planning a mega-raffle which will run from spring to August. The committee is looking for donations of **talents and treasures to help support the Youth Conservation Corps**. According to Sue Ellis, "the more items we have in the raffle, the more fun it will be, and the more money TLEA will have to support to the work of our YCC on the lake."

Watch for more details in the spring issue of the *Observer*. We'll let you know then where to purchase raffle tickets, what items are being included, and where and when to drop off donations.

Meantime, TLEA is looking for **good donations to this good cause**. What **talents and treasures** would you consider giving to TLEA? Consider donating a weekend at your camp, a dinner for two at a local restaurant, a leaf raking stint in the fall – any special service or special item.

Please contact us before **February 1** by calling 1-207-539-4535 (leave a message) or mail to TLEA at PO Box 25, Oxford, ME 04270. Thanks ahead of time for your participation and support of this special fund raiser.

STEERING COMMITTEE FOR YCC TAKES ON NEW TASK

TLEA's Youth Conservation Corps Steering Committee, which consists of Jerry Wax (chair), Jim Bishop, Joe Kiley, Sharon Rice, and Jean Hankins, has been spending a lot of time this fall and winter learning how to write proposals to non-profit foundations. The group is looking hard for funding for the 2006 YCC program. In October four of them signed on for a three-week adult education course in grant writing at Oxford Hills Comprehensive High School. To date they've submitted three grant proposals, with more in the works.

And their hard work has paid off already with a \$2500 grant from the **Carol and David Hancock Charitable Trust**. Word came in only days before the deadline for this issue of the *Observer*. The Committee anticipates more good news in the weeks ahead.

The Committee is also preparing to present their requests for funding to the four towns bordering Thompson – Otisfield, Oxford, Casco, and Poland, all of which have funded the program in the past. In the coming months, the general membership of TLEA will also have an opportunity to make individual donations towards this good cause.

THOMPSON LAKE GETS HEALTH CHECKUP

Annual physicals are not just for people. For years Thompson Lake has been getting an annual checkup, usually by local water physician, Scott Williams. Scott is well-known to *Observer* readers as the aquatic biologist with whom TLEA has contracted for many years to monitor the several factors that affect the water quality of the lake. Among these factors are *water clarity, phosphorus and chlorophyll levels, oxygen levels, natural color Ph*, and *total alkalinity*. Measuring and monitoring for changes in these levels is vital to assessing the health of a lake.

Water quality data has been collected on our lake since 1978. To date, there have been no negative trends in this data. Historically Thompson has benefitted from a low phosphorus level which in turn results in water clarity averaging 9 meters. This means Thompson's water is clearer than at least 90 percent of Maine lakes. Scott Williams, assisted by Bob Tracy, measures water clarity by using a secchi disk. They found that the average water clarity for 2005 was 9.4 meters, or 26 feet. The lowest clarity for the year occurred in May, when it measured 7.9. This figure is probably explained by the heavy May rains that brought large amounts of silt into the lake.

The biggest factor in water quality is phosphorus. In 2005 the average phosphorus level in the lake was 5 parts per billion (ppb), compared to the years 2003 and 2004 when the average was 4 ppb. But the spring and summer of 2005 were much wetter than in the previous years. Even so, the 5 ppb in 2005 compares well with Maine lakes in general, where it varies from less than 2 ppb up to the 38 ppb found in Sabattus Pond.

Very little phosphorus is indigenous. Most of it comes from the surrounding watershed. Anytime fertilizer with phosphorus is used agriculturally or residentially within the watershed, each rainstorm carries it into the lake. Another main source of phosphorus is household detergent which contains the substance. Once this detergent gets into the lake it can stay there a long time. This is especially critical for Thompson, which has the low flushing rate of .3, meaning that normally it takes three years for the lake's water to replenish itself. This is why everyone within the Thompson Lake watershed should use fertilizers and detergents that are *phosphorus free*. TLEA has informational brochures explaining what detergents are phosphorus free – just call the office for a free copy. When buying fertilizer, look for the three numbers provided on the bag, such as 15-18-10. These numbers stand for the amount of Nitrogen - Phosphorus – Phosphate, respectively. Look for fertilizers with a **zero** for the middle number. This tells you the product is phosphorus free.

In 2006, TLEA is also starting a program to monitor the levels of phosphorus in the tributaries of Thompson Lake. Water samples will be collected at select times and locations in an effort to compile a phosphorus level database. The data collected on the five major tributaries will be reported in the fall 2006 TLEA *Observer*.

THOMPSON SITE TOUR SHOWS OFF YCC PROJECTS

For some of us, the annual YCC Site Tour has become a pleasant fall tradition. In addition to increasing our knowledge of erosion control devices and the progress the Youth Conservation Corps has made in eradicating nonpoint source pollution, this yearly occasion provides us with a chance for a terrific tour of the lake. This is our opportunity to look at a number of backyards we wouldn't ordinarily get to.

So it was on October 22, when several town officials, some TLEA members and directors, and a few just plain curious folks, led by YCC Coordinator Joe Kiley, inspected a number of sites where the YCC had worked during the summer. While we saw a large number of razor bars and box culverts, it was at the Silvaqua site where we got the best example of what a difference these devices can make. The heavy rains this spring badly damaged both the town roads and private driveways in the Silvaqua area of Otisfield. But here, as Joe Kiley pointed out, there was minimal damage to the driveways where last year's YCC crew had installed the razor bars and culverts.

Another interesting site we visited was on Canada Hill Shores in Otisfield, where owner Chuck LeFebvre had asked the YCC for help with water pouring from State Route 121 down over the steep bank adjacent to his camp, washing sediment directly into the lake. The photo below shows one of a series of settling pools installed by the YCC. Like many other YCC projects, this is a work in progress which will require periodic inspection and cleaning out. We hope you'll come along next year!



Settling pool on Canada Hill Shores Road installed by YCC.

MEMBERSHIP UPDATE

After seeing membership numbers decline over the past several years, we saw an increase from 2004 to 2005.

2000	416 including 24 new members
2001	410 including 18 new members
2002	399 including 18 new members
2003	396 including 13 new members
2004	395 including 24 new members
2005	407 including 22 new members

Those 407 members paid a total of \$17,274.50 in dues and office support. Other unrestricted income in 2005 amounted to \$2,307.28 and came from dividends, net sales income and net income from the Ice-out project and the I-did-a-paddle project. That means that member contributions amounted to 88.2% of unrestricted income for the year.

The Membership Committee

2006 DUES ARE DUE!

Our fiscal year begins on January 1. Please check the date to the right of your name on the mailing label, which indicates the year in which you last paid dues. A few of you have already paid for 2006. We hope you'll let us know if our records are not in agreement with yours. Please fill out the enclosed envelope and send your check in today!

HOW DO YOU SPELL LAKE?

[Editor's note: Ethel Turner, proprietor of The Cape in Otisfield, sent us this interesting item, borrowed from a book titled *The Nature of Chinese Character: Gifts from the Earth*.]

The character for "lake," or "a sheet of water," is something of a riddle. Comprising three elements, its meaning is determined by the radical, three interrelated strokes suggesting drops of liquid. Combined with this are the characters for "moon" and "old," or "long life."

* * * * *

Only in lakes does water rest. Bounded by land on all sides, it lies perfectly still, reflective.

Unlike flowing water, which is eternally young, the water of the lake does not flow infinitely through space. It is old water. And in the long-lived waters of the lake, shines the moon.



"The Nature of Chinese Character: Gifts from Earth" - Aria, Eng Gon, Ehlers

TLEA MOVES TO MANAGE MILFOIL

The summer of 2005 saw the start of some very important work to help preserve the waters of Thompson Lake. Late in August volunteers placed eight benthic barriers over *variable leaf milfoil* in the Edwards Cove area of the lake. Benthic barriers are heavy, opaque tarps constructed by TLEA and volunteers. They measure ten by ten feet and are weighted. Each one provides about 800 square feet of coverage.

Before placing the barriers, TLEA obtained permits from the Maine Department of Environmental Protection (DEP). To date, the DEP has given approval permits for placement of the benthic barriers and handpulling of the weeds only to such established lake associations as TLEA. These eradication techniques are best left to the experts. Improper methods of removal can actually spread the invasive plants instead of containing them, and DEP will impose a hefty fine for such illegal activity. In addition, the DEP closely monitors the variable leaf milfoil locations, efforts, and progress. Their officials have pointed out that a harmless milfoil plant which is native to Maine looks very similar to the invasive variable leaf milfoil. Correct identification of these plants requires special training and even laboratory analysis.

Most of the areas of variable milfoil infestation in Thompson Lake are too large for the benthic barriers to cover at one time. Therefore, after a minimum of eight weeks, TLEA volunteers will move the barriers to adjacent areas. This process will allow native aquatic plants to return to the affected areas treated by the barriers.

Optimum eradication of this invasive plant will require a long-term commitment. To date 21 Maine lakes are known to have variable leaf milfoil, and some of them have been managing it for more than 7 years. Local lake association groups from Cushman Pond and Pleasant Lake think that they have made large gains in removing milfoil from their lakes. But so far none have completely eradicated variable milfoil.

For the 2006 season, TLEA will fabricate five benthic barriers measuring 30 feet by 60 feet each, providing 9000 square feet of coverage. Construction costs will total \$1500, and the tarps have a projected life span of three years. Initially three areas will be managed: Edwards Cove, Otisfield Cove, and Greeley Brook and Cove. TLEA's team expects to place these barriers three times in each cove during the summer. Making any significant headway will require several years of barrier placement, followed up with hand pulling. We'll be looking for more volunteers to combat this aquatic invader. Look for more details about this important project in the spring *Observer*. TLEA's contact person is Scott Bernardy, 207-878-5380.



*"What's Up Dock?" Looking toward Goat Island from Route 121, Oxford.
(Bob Tracy, Photo)*

PAST ICE OUT DATES

1902 - April 17	1928 - April 21	1954 - April 20	1980 - April 12
1903 - April 4	1929 - April 23	1955 - April 17	1981 - March 29
1904 - April 30	1930 - April 14	1956 - May 2	1982 - April 28
1905 - April 23	1931 - April 12	1957 - April 17	1983 - April 10
1906 - April 23	1932 - April 21	1958 - April 19	1984 - April 21
1907 - April 30	1933 - April 24	1959 - April 23	1985 - April 11
1908 - April 25	1934 - April 23	1960 - April 25	1986 - April 12
1909 - April 20	1935 - April 23	1961 - May 1	1987 - April 10
1910 - April 5	1936 - April 13	1962 - April 23	1988 - April 11
1911 - April 28	1937 - April 27	1963 - April 20	1989 - April 28
1912 - April 23	1938 - April 17	1964 - April 27	1990 - April 14
1913 - April 18	1939 - May 6	1965 - April 29	1991 - April 9
1914 - April 23	1940 - May 7	1966 - April 22	1992 - April 10
1915 - April 15	1941 - April 15	1967 - April 28	1993 - April 23
1916 - April 19	1942 - April 18	1968 - April 16	1994 - April 24
1917 - April 28	1943 - April 26	1969 - April 20	1995 - April 13
1918 - April 24	1944 - April 29	1970 - April 28	1996 - April 15
1919 - April 12	1945 - April 3	1971 - May 3	1997 - April 23
1920 - April 25	1946 - April 6	1972 - May 6	1998 - April 9
1921 - April 3	1947 - April 16	1973 - April 20	1999 - April 6
1922 - April 17	1948 - April 9	1974 - April 16	2000 - April 8
1923 - April 24	1949 - April 10	1975 - April 13	2001 - May 1
1924 - April 19	1950 - April 24	1976 - April 16	2002 - April 2
1925 - April 10	1951 - April 10	1977 - April 19	2003 - April 27
1926 - May 3	1952 - April 20	1978 - May 1	2004 - April 19
1927 - April 17	1953 - April 6	1979 - April 23	2005 - April 20

ICE OUT CONTEST 50/50 PRIZE

Sponsored by
Thompson Lake Environmental Assoc.

Guess the date of "ice out" on Thompson Lake

Split the Total 50/50 with TLEA
Same dates - split the prize

Final Day for receipt of Guess – March 15, 2006
\$5.00 Each Guess

Send to:

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

Name _____

Address _____

Telephone Number _____

Date(s) _____

_____ dates @ \$5.00ea = \$ _____



Thompson Lake Snowmobile, 1944. Lou Tucker at the wheel.

**Visit our website at:
home.gwi.net/~tlea**

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

OBSERVER

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

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