

Sabbathday Lake News

June 2008

Calendar of Events Annual Meeting

Wednesday, July 9, 2008

**At the Grange
Potluck Dinner
6:30 p.m.
BYO utensils and pot
luck.
Provided: beverages &
dessert**

**7:30 p.m.
Business Meeting
Election of Officers**

August Meeting

Saturday, August 16, 2007

Coffee and Donuts

At the Grange 9 am - 11 am
Watershed Survey

**See inside for
fun, summer
activities
pages 8 & 9**

In My View **Mike Cloutier, President** **Sabbathday Lake** **Association**

Greetings to the members of the Sabbathday Lake Association and friends. I join with you in bidding the winter of 2008 adieu; and look with great anticipation to the summer months ahead.

The Board of Directors have been meeting since January and working on various projects such as preparing for the 2008 Watershed Survey, YCC projects, and association summer activities. It looks to be a very active and interesting summer.

I read several newsletters from other lake associations throughout the year, and without exception the primary articles deal with the eradication and control of invasive aquatic plants, in particular variable leaf milfoil. Members of the various associations discuss their efforts to eradicate this insidious weed by many varied methods. As the plants have proliferated throughout the lake, the associations have resorted to extreme methods to try to control and remove them. For example some associations have resorted to

purchasing pontoon boats that have to be retrofitted with various vacuuming equipment enabling them to suck up the weed and their fragments from the bottom of the lake. Divers are sent to the bottom of the lake and use the suction hoses to vacuum the plants and fragments off the bottom of the lake. This process requires much money and man power to accomplish the task. Another method is the use of "blue tarps"

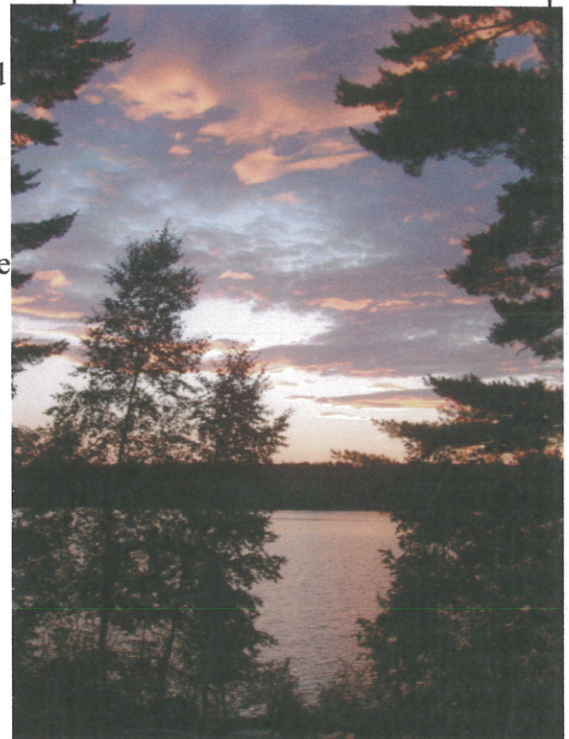


photo by Paula Gauthier

placed on the bottom of the lake over the infested area in order to block out sunlight and therefore kill the plants. This also can kill the good vegetation as well, again, expensive and labor intensive. (cont. on p. 2 **In My View**)

In My View (cont. from p. 1)

Another method is to hire divers to go to the bottom and pull each plant out by hand and bring it to the surface. This method is also expensive and labor intensive.

The bottom line with any of these methods are that they are not 100% effective. This brings me to my point.

All experts agree on one thing, it is easier to keep invasive plants out of the lake then to get them out of the lake once they have been introduced.

Sabbathday Lake is a small lake and the introduction of these plants would be a disaster on many levels. What can we do to help protect it, you ask?

- ◆ Be vigilant around areas on the lake where boats can be launched. There are many access points around the lake and we should all be responsible for monitoring boats that are being launched into the lake. Check for any fragments on the trailer, boat, motor or fishing tackle.
- ◆ Let the milfoil committee know that you would like to volunteer a few hours at the boat launch at Outlet Beach. If you don't, who will?
- ◆ Remember, we all have a "Stake in this Lake"

Water Quality Testing Results for 2007

In general, Sabbathday Lake continues to have above average water quality and clarity compared to most lakes monitored in Maine. In 2007, water quality for Sabbathday Lake was similar to the long-term average for the lake and showed an improvement in minimum transparency compared to 2006. The concentration of algae in the lake was slightly lower than in 2006, but higher than the historical average for the lake. The concentration of total phosphorus in the water was slightly higher than in 2006, and higher than the historical average for the lake. Dissolved oxygen loss in the "deep hole" of the lake was similar to previous years. The consistent loss of dissolved oxygen in the deepest area of the lake in late summer suggests that fish habitat may be threatened during that part of the year. One possible result of oxygen depletion is the potential release of biologically-available phosphorus

from bottom sediments. For this reason, it is important to continue to minimize any additional sediment inputs to Sabbathday Lake. We will be discussing this in greater detail at the August meeting.

The lake association now has an activity committee headed by Vice President Sharon Scannel. They have some fun activities in the works for this summer. Why not participate in some and meet the other residents around the lake? (See pages 8 and 9 for more details.)

By the time you read this newsletter most of the watershed survey will have been completed. We will have an in-depth presentation during our August meeting. Be sure to attend and hear all about it.

All these efforts are put forth by volunteers and we hope you all participate. You can get on the Board of Directors, participate in some summer events, attend the summer meetings or support the association by sending in your dues. Join in, it's fun.

Working together we can make everyone's experience at Sabbathday Lake a memorable one. I wish you all a wonderful, safe and fun filled summer.

See you on the water.... Mike Cloutier



Somebody
is ready
for a swim!

Courtesy Boat Inspection Update

by Lillian Nayder

In 2007, the Sabbathday Lake Association again received a grant from the Lakes Environmental Association to help fund the courtesy boat inspection program at the Outlet Beach boat ramp. From the end of May through Labor Day, 144 boats were inspected for invasive aquatic plants, down slightly from the 155 inspections performed in the 2006 season. Thanks go to Becky Delaney, Aaron Ricardi and Nate Johnson for their help. To date, no plant material has been found by courtesy boat inspectors at Sabbathday Lake but it is very important to remain vigilant, since a number of lakes in the vicinity are infested with variable leaf milfoil. Nearby lakes with documented infestations include Sebago, Little Sebago, Thompson, Middle Range Pond, Lake Auburn, Collins Pond and Pleasant Lake.

In 2007, a boat carrying variable leaf milfoil from Lake Arrowhead in southwest Maine was stopped from entering Lovewell Pond in Fryeburg by an inspector, and a boat entering Damariscotta Lake after visiting Lake Housatonic in Connecticut was stopped with Eurasian water milfoil. These are just two examples. Among the 76 Maine lakes with inspectors, 1069 plants were found in 2007, 170 of which proved to be invasive. Eleven of those 170 invasive plants were on boats entering a lake and 159 on boats exiting. With more than 5000 lakes in Maine, 28 of which have documented infestations, all boaters and lake community members need to be alert. As the Maine Milfoil Project Newsletter noted last summer, "we need to apply the 'Neighborhood Watch' concept to Maine's lakes."

Four invasive aquatic plant species have become established in Maine: variable leaf milfoil (and a hybrid form of this plant); Eurasian milfoil; curly leaf pondweed; and hydrilla. While preventing the introduction of invasive species into our lakes is the aim of the courtesy boat inspection program, the early detection of infestations is also a top priority. Plants can prove impossible to eradicate once they become established, and must be "managed" through a variety of means, most of which have very significant drawbacks; among the methods of management are mechanical and physical removal, including the use of

plant and suction harvesters, and biological and chemical control. According to the Lakes Environmental Association, the DEP estimates that if Maine lakes suffer "even a fraction" of the infestation now in Vermont lakes, "lakefront landowners can expect a property value loss of \$12,000 each on average" (<http://www.mainelakes.org/milfoil.htm>). There are substantial consequences of an infestation, the economic impact being just one.

If anyone is interested in volunteering as a courtesy boat inspector at Outlet Beach this season, please contact Lillian Nayder by phone (926-5233) or e-mail (lnayder@bates.edu).

Royal River Youth Conservation Corps

The Royal River Youth Conservation Corps committee has met regularly during the winter months to secure funding for the program, which was started 5 years ago to fix pollution problems in our watershed and encourage local youth to become environmental leaders. Phasing out grants and tightening town budgets have made this a challenging undertaking. Sabbathday Lake Association has continued its support with youth volunteers and a \$500 donation. In the summer of 2007, infiltration steps and buffer plantings were completed on the Allen property and maintenance work was done on Pond Road, West Shore Road and the Outlet Road. There was also work done at the New Gloucester Fairgrounds.

Scheduled 2008 projects have yet to be announced, but the new technical director, Blainor McGregor, will begin on May 27th and crew plans are well underway. For more details, visit royal@maine.rr.com.

Ruth Faut, RRYCC committee member

MERCURY FALLING

by Chris Ricardi

My love for fishing is one of the reasons I decided to buy property and live on Sabbathday Lake. When we moved into our house my wife Julie was pregnant with our first child. I had a premonition of a time in my future when I would become so busy with family life that I would not have very much time to cast a line. I had a thought that the situation would be much different if my fishing spot was right outside my backdoor. Sixteen years and three children later, both predictions have come true.

Each spring the ice breaks, I set my dock, and tie my aluminum fishing boat into position. Rods assembled, I wait for the morning and evening windows when I can sneak out and try to catch one of Sabbathday's big brown trout. By midsummer my attention turns to largemouth bass which prowl the shallows and become active in the warming water. My children like to catch fish and they often want to keep and eat them. And we do eat some of the brown trout that we catch. During the past few years the smelt population has thrived and the browns are growing big and fat again. When you run a knife down a brown's side you get a bright orange fillet that looks like salmon.

But within the delectable flesh there is a problem. In Maine and many other states in the northern and eastern US, wild fish are contaminated with mercury. Mercury has always been found naturally in the environment, but because of air pollution that comes from areas south and west of Maine, the amount of mercury in Maine has greatly increased in the last century. Mercury levels in Maine fish, loons, and eagles are among the highest in North America. The mercury falls in rain and enters rivers, lakes, and the ocean. In the air it is primarily elemental mercury like what you would find in a thermometer. But the elemental mercury can be transformed by bacteria into organic methyl mercury. When this happens, the

methyl mercury becomes soluble in the water where it is absorbed directly by fish through their gills. It is also taken up by plankton where it enters the food chain. Through bioaccumulation it becomes more and more concentrated as

it moves up the food chain. Predatory fish (and other animals) that are high in the food chain get the highest doses. The older the fish, the more time it has to accumulate mercury. People who eat those fish end up at the top of the chain and get an even higher dose. Methyl mercury in the blood of developing fetuses, babies, and young children can harm their developing nervous systems, brains, kidneys, and lungs. At higher doses it can also harm adults.



photos from Chris Ricardi

Prevailing winds in North America generally travel from west to northeast and our location in the northeast puts us at the downwind terminus for all pollution that comes from the Midwest. I have heard our geographic location referred to as the "tailpipe". In 2005 a study by the BioDiversity Research Institute identified a red zone of mercury deposition extending from pollution sources in mid-Atlantic states to New Brunswick. Maine sits right in the middle of it. The mercury problem had been first identified in the early 1990s after the Maine Department of Environmental Protection (MEDEP) completed a statewide fish

sampling and analysis study of 150 lakes and found elevated mercury in many of the fish samples. This led the Maine Bureau of Health to issue a statewide advisory recommending that people limit consumption of fish.

(<http://www.state.me.us/dhhs/eohp/fish/2KFCA.htm>)

The advisories have been in place since 1994 and remain in effect today because mercury levels in fish have not decreased. They warn pregnant women (or women who plan to get pregnant), nursing mothers, and young children (under 8 years old) to eat no meals of many types of fresh water fish including bass and brown trout, the main sport fish found in Sabbathday Lake. The advisories also warn older children and adults not to eat more than 2 meals a month of these fish. These advisories are designed to limit the dose of mercury a person would get from eating fish. Methyl

mercury is metabolized and excreted over time, and if you avoid eating too much fish, the concentration in your body will stay below toxic levels.

The mercury problem is not limited to fresh water fish. In 2004, the Food and Drug Administration (FDA) and the Environmental Protection Agency (EPA) also issued a joint advisory for eating

commercial fish. The advisory tells women and children not to eat any meals of certain fish like swordfish that are high in mercury, and no more than two meals a week of other fish or shellfish (that are relatively low in mercury). They say if you eat a meal

of wild fish, don't eat any other commercial fish at all that week.

(<http://www.epa.gov/waterscience/fish/advice/>)

The major single source of this mercury falling on Maine today is coal-fired power plants in the Midwest. Mercury is found at trace levels in the coal, but because so much coal is burned about 50 tons are released each year in the US. Another 50 tons are released each year from numerous other small sources (so make sure that you return all your fluorescent energy saving light bulbs to a recycling center unbroken!). Mercury is difficult to remove from the stack emissions because it turns into a gas at high temperatures unlike many other metals that become ash and can be captured. Fortunately the scrubbers that many plants use to remove sulfur dioxide and nitrogen oxides - the pollution that causes acid rain



and ozone pollution - also capture about a third of the mercury or there would be an additional 25 tons released each year from coal. Prior to 1990 an additional 100 tons were released in air pollution from municipal waste and medical waste incinerators.

Regulations in the 1990 Clean Air Act required these industries to install the most technologically advanced mercury control systems, and by 1999 they were no longer releasing mercury. This essentially cut mercury pollution in half in the US. But the 1990 regulations did not include coal power plants. In 2005 the EPA issued the Clean Air Interstate Rule which focuses on 28 eastern states and requires reduction in sulfur dioxide and nitrogen oxides. When the pollution controls are installed by 2010, there will be an estimated 25 percent reduction in mercury pollution from coal plants as a side effect. In 2005 the EPA also issued the Clean Air Mercury Rule requiring better pollution controls aimed at the mercury itself. But the controls are not required until 2018. So until then there will still be mercury falling in the rain. It will likely take decades before any noticeable drop in mercury is seen in Maine lakes. So what should we do when we get a brown trout to the net? Well...., I usually keep and eat a few trout each year. All of my children are over age 8, and I don't worry about the small number of trout meals we have. But we don't eat too many, and we only eat commercial fish with low mercury. And we eat no bass. I had to implement that rule when my oldest son was about 5 years old. There were a few tears at first when we released his bass, but after a

few times, he got over it. In Maine, bass grow slowly and take about 10 years to reach three pounds. They live in warm shallow areas of the lake where bacteria activity peaks in the summer and methyl mercury is highest. The data I have seen on fish in Maine show bass, pickerel, and other warm water fish generally having more mercury. A trout will grow to three pounds in about three years. Browns also spend most of their time in deep water areas, especially during the summer. Their exposure to mercury should be less. Another thing to consider is the type of lake in which the fish live. Fish contamination varies from lake to lake. In general, fish from lakes that are eutrophic (shallow warm water lakes with low water quality) are more contaminated than fish from oligotrophic lakes (deep cold water lakes with high water quality). Eutrophic lakes tend to have muddy sediments that act like mercury sinks, and wetlands or large shallow areas that support large weed beds and algae growth. When the algae and weeds die there is a bloom of bacteria. This drives the conversion of elemental mercury into methyl mercury. So in theory Sabbathday fish should be on the cleaner end of what is found in Maine. But without chemical data on fish from Sabbathday, we just don't know. So keeping in mind the Maine and EPA advisories is a good idea.



Sabbathday Lake Tee Shirts for Sale

For the last three summers the Lake Association sold beautiful white tee shirts with a loon floating on the lake in the sunset. We are going to be selling the tee shirts again, available at the Shaker Store. **Watch for new designs!**

ICE OUT DERBY

By Rick Fortier

E-mail sent: Thursday, April 10, 2008

Subject: Ice Out Derby

We have 21 bets on Iceboat Day. The range is from April 14 to May 5. The most popular date is April 22 (3 participants).

Just to give you folks who aren't here to see the conditions at SDLA some info: 10 days ago an ice fisherman told me the ice was 2 feet thick! There is now melting around the edges, but the ice is still white. In past years, Cheryl & I have thought it takes 2 to 3 weeks from the time the ice turns dark. Average ice out has been April 12. Earliest in last 30 years: March 15; latest: April 27 (three times). The bets this year are for a late iceboat (only 4 of 21 bets for earlier than April 21); but our snow is fast melting. Stay tuned. Happy spring! Rick

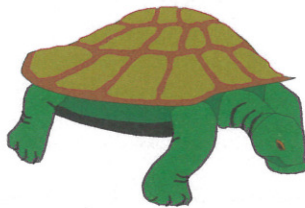
Sent: Sunday, April 20, 2008

Subject: Ice Out 2008

The ice cleared today by sunset, Sunday April 20. (Not sure about South Cove, but looks like nearly 100% water on a stiff south breeze.) Sailing anyone? Full moon tonight.

Nobody picked April 20. The closest bet was Kevin Fowler with April 21. Jennifer Elizabeth is runner-up with April 19. Happy spring! Rick Fortier

To join the ice out derby, send your e-mail address to cfortier@maine.rr.com.



SABBATHDAY SNAPPER

BY KAMKREW

Here's a story written by the Chan Cot Cove Kids last summer sent to the editor by Ellie Fellers.)

You know how summer goes, sleep-in, eat and swim. Snapping turtles that are two feet long is definitely not part of the routine. At around eleven in the morning, the kids at Chandler Cot-Cove jumped into the water and splashed around. Soon all the big kids were on the float and playing with a nerf dart gun.

Presently, one of the kids said, "Look! A huge snapping turtle!" They had been joking around saying, "Oh my goodness, there's a big turtle right behind you." They laughed when someone fell for it, but this was no joke.

Everyone on the float started screaming and the youngest one almost cried. The turtle swam up to the dock and threatened to get on it, but decisively turned around. Once it had gone around ten feet, it turned around and swam under the dock. When it finally appeared on the other side, everyone ran to the opposite side of the dock. The turtle came back a few more times, then reversed direction and swam away

Then it turned and almost came back but thought the reeds were more interesting and it glided away for the last time. Then it was a race for land and safety. Everyone reached shore at about the same time. They were all wrapped in towels and jabbering away. Once everyone was dry, most of the kids who had been on the float jumped into kayaks and a canoe. They searched for a while and finally found the turtle hiding near the reeds. One of the boys took pictures of it while the others just stared. After a while the kids got bored and paddled to shore. It will be a very long time before one of them forgets the Sabbathday Snapper.

Written by the kids: Zach Gray, 13; Jackson (10) and Ethan (12) Vara, Andrew Ellington, 11; Alexis Hahn, 13, Lauren Williamson, 13

SDLA Social/Activities Committee – Join the Fun!

The newly formed Social/Activities Committee is in full swing for the 2008 summer season. The goal of this new-formed group is to encourage lake owners to get involved in fun things around the lake and get to know your neighbors. **If you want to join the committee, contact Sharon at 603-475-3072 or e-mail her at sdla@comcast.net.**

Sabbathday Lake Paddlers and Pedalers

Mark your calendars!



For the past 2 summers, Paula Gauthier and Anne Maurice have run the Paddle and Peddle Outings! For the Paddle group, Paula leads a leisurely paddle (kayaks, rowboats, anything that floats without a motor and is propelled by paddles) around the lake, starting at Outlet Beach. This year's dates are July 19 and August 2 at 8:00 a.m. We hope to see you there!

Anne will lead the Pedal events starting at Grange Hall. This is a noncompetitive bicycle ride around the lake starting at 8:00 a.m. on July 12 and July 26. If you cannot meet us at Grange Hall, watch for us coming around the lake and join us anywhere along the way. **No need to RSVP for either event—just show up!**

BREAKFAST CRUISE Join your neighbors for a Breakfast Cruise. Enjoy a pontoon ride around the lake. The SDLA will provide breakfast and coffee. Catch up with your neighbors and share your stories about the lake! Sign up early for this event as we expect it to be very popular. The date is Sat. August 9 at 9:00 a.m. **RSVP by calling Sharon at 603-475-3072 or e-mail her at sdla@comcast.net.**

SDLA COOKOUT Food, drink, entertainment and great friends hanging out at the beach... it doesn't get much better than this! Join your lake neighbors on Saturday, August 16 from 4-7 p.m. at Outlet Beach for a cookout. We will provide grills for "bring your own" food. This is also a BYOB event. If you don't feel like cooking, you can purchase food at the snack bar. The SDLA will provide free ice cream for dessert! There will be some great musical entertainment led by Chris Ricardi. We will also set up games on the beach area for the kids and adults. **There is no need to RSVP but you can contact Sharon for more information at 603-475-3072 or e-mail her at sdla@comcast.net.**

SHAKER VILLAGE TOUR Brother Arnold has generously offered a free tour for SDLA members on July 12 at 1:00 p.m. This guided tour of the premises at the Sabbathday Lake Shaker Village provides valuable insights into the Maine Shaker heritage and culture of the past as well as the present. The tour lasts approximately 75 minutes. The Tour departs from the Museum Reception Center, which is housed in the 1850 Boys' Shop. **RSVP by calling Sharon at 603-475-3072 or e-mail her at sdla@comcast.net.**

SHAKER VILLAGE NATURE HIKE On Saturday, Sept. 13 at 10:00 am, you are welcome to attend a nature hike at Shaker Village. ***This hike is being offered free for SDLA members.*** This is a guided tour of the Shaker fields, forests, Loon's Point on Sabbathday Lake and the footbridge over Aurelia's Cascade. Seasonal flora and fauna make this hike special. Aspects of the more than 225-year long Shaker history in this place are included to make the hike complete. Your guide is Carol Beyna, a trained naturalist. The Nature Hike is 3 miles in length. Please wear appropriate footwear and clothing. Also, bring your binoculars if you wish. **RSVP by calling Sharon at 603-475-3072 or e-mail her at sdla@comcast.net.**

Sabbathday Lake Association Annual Membership Dues 2008

AMOUNT: \$15

Additional donations welcome!

Please send annual dues to: ANNE MAURICE, 10 CUSHMAN DRIVE
NEW GLOUCESTER, ME 04260

MAKE CHECKS PAYABLE TO: **SABBATHDAY LAKE ASSOCIATION**

NAME _____

ADDRESS _____

MAILING ADDRESS _____

TELEPHONE _____ E-MAIL _____

Benefits of belonging to the Association:

- ◆ News about what's happening around the lake
- ◆ Social gatherings to meet your neighbors
- ◆ Water quality testing
- ◆ Environmental Improvement Activities
- ◆ Web Site: <http://www.sabbathdaylakeassoc.org/>

SDLA CALENDAR OF EVENTS

When		What	Where
Wed., July 9	6:30 p.m.	SDLA Annual Meeting & Potluck	Grange Hall
Sat., July 12	8:00 a.m.	Pedal (Bicycle) Group	Grange Hall
Sat., July 12	1:00 p.m.	Shaker Tour	Shaker Village
Sat., July 19	8:00 a.m.	Paddle Group	Outlet Beach
Sat., July 26	8:00 a.m.	Pedal (Bicycle) Group	Grange Hall
Sat., Aug 2	8:00 a.m.	Paddle Group	Outlet Beach
Sat., Aug 9	9:00 a.m.	Breakfast Cruise	To be determined
Sat., Aug 16	9:00 a.m.	SDLA meeting	Grange Hall
Sat., Aug 16	4:00 p.m.	SDLA Cookout	Outlet Beach
Sat., Sep 13	10:00 a.m.	Nature Hike	Shaker Village

See the article "SDLA Social/Activities Committee – Join the Fun!" and other articles for more details on events!

Sabbathday Lake News

44 LAKE VIEW DRIVE, NEW GLOUCESTER, ME 04260

Sabbathday Lake News

The Newsletter of the
Sabbathday Lake Association

Please send your lake-related news contributions to the Editor
by E-mail to Cheryl Fortier, cfortier@maine.rr.com

SABBATHDAY LAKE ASSOCIATION

Board of Directors 2006 - 2007

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