

Celebrate Our Seasonal Lake

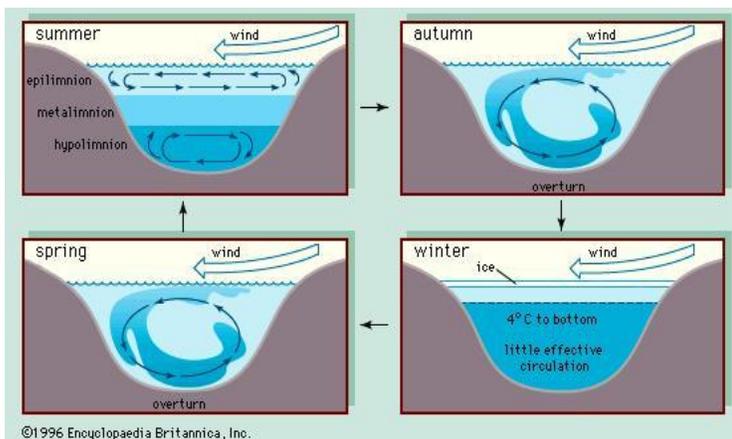
Song Lake is a vibrant system, full of life and constantly changing. Just as life above the water changes, so too does life in the lake. Although slower to respond to temperature changes, still the water eventually does cool and/or warm.

Many factors are involved: sunlight (daylight hours and cloud cover), water depth, water color and of course air temperature. With all of these variables, the lake timing of “ice on” and “ice off” varies from year to year. As well, the ice thickness varies.

Each year, however, we anticipate changes in the lake. Some we see, like ice and plant growth, but the biggest events are not visible to us. These events are called lake turnover, and they occur in the spring and fall, refreshing a stratified lake system. Lake turnover is the process of a lake's water turning over from top (epilimnion) to bottom (hypolimnion).

During the summer, the epilimnion, or surface layer, is the warmest. And the deepest layer, the hypolimnion, is the coldest. The sun's radiation does not reach this cold, dark layer and so the lake creates layers; stratifies. Then, during the fall, the warm surface water begins to cool. As water cools, it becomes denser, causing it to sink. This dense water forces the water of the hypolimnion to rise, "turning over" the layers. This happens again in the spring after the ice opens and allows mixing once again. Song Lake is a relative shallow lake, overall, with a few deep sites, so we don't know how much of the lake might stratify in a given year.

We may not witness these events, but this mixing of the layers are crucial events for our lake.



A Reminder: ICE FISHING

STOP Just as with open water fishing, all anglers must use certified bait and follow the state regulations for fishing, including having a license and marking their tip-ups.

Our Song Lake Watershed

Volume 14

www.songlakewatershed.org



Our Winter Lake

During the winter, it's difficult to imagine how life continues beneath the icy surface, but indeed it does. Floating ice forms a barrier with an insulating layer between the warmer underlying water and the colder air above a lake. Water under the ice typically stays very cold, but above freezing - about 39°F most of the winter months. Most lake organisms (phytoplankton/algae, zooplankton, and fish) are cold-blooded. The metabolism of these organisms slows down compared to warmer summer months. The ice forms a barrier to the fluctuation of gasses and energy flowing into and out of the lake, so oxygen levels may fall during the winter. Lower oxygen can harm the organisms, however, algae continue to photosynthesize and produce oxygen as long as there is some light. With the right balance, oxygen is being created as it is being consumed.

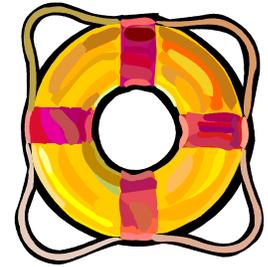
Be Safe on the Ice

Safe Ice Thickness*

Ice Thickness	Permissible Load	Ice Thickness	Permissible Load
3 inches	Single person on foot	12 inches	Heavy truck (8-ton gross)
4 inches	Group in single file	15 inches	10 tons
7½ inches	Passenger car (2-ton gross)	20 inches	25 tons
8 inches	Light truck (2½-ton gross)	30 inches	70 tons
10 inches	Medium truck (3½-ton gross)	36 inches	110 tons

*Solid, clear, blue/black pond and lake ice

Slush ice has only half the strength of blue ice. The strength value of river ice is 15 percent less.

IMPORTANT – NEW YORK STATE BOATER REGISTRATION – IT'S THE LAW

Beginning May 1, 2014, a new New York State law requires that **anyone born on or after May 1, 1996, must complete an 8-hour boater safety class to operate a motorboat.** The safety class is also required for those **ages 14 or older who operate a personal watercraft, such as a JetSki. Those 14 or under operating a personal watercraft must be accompanied by someone over the age of 18 who has completed the safety course.**

To take the safety class, you must be at least 10 years old.

The class is free, but a \$10 fee for participants 18 and older will be required for a permanent certificate. Additional fees apply to take advantage of the new New York Adventure License designation on your driver license, non-driver ID or learner permit. The course includes a minimum of 8 hours of classroom instruction, and students must pass a final exam with a score of at least 76 percent. Students will receive a temporary boating safety certificate upon completion of the course. A permanent certificate will be issued by the New York State Office of Parks, Recreation & Historic Preservation, once the \$10 fee is paid.

Operating a motorboat or personal water craft without the safety certificate can result in a fine of not less than \$100, but not more than \$250, or by imprisonment for not more than seven days, or both a fine and imprisonment. Scheduled classes for Cortland County:

Saturday, April 12, 2014 and Saturday, May 31, 2014
Cortland County Training Center, 999 State Route 13, Cortland.

The classes are free for adults and children over the age of 10. If you are 18 or older you will be required to pay NYS Parks a \$10.00 fee for your boating safety certificate. To sign up for either class, call Joyce Smith with the Cortland County Sheriff's Department at 607-758-5599 between 7 a.m. and 4 p.m. Monday through Friday.

For more information, go to <http://nysparks.com/recreation/boating/education.aspx>.

Water Testing UPDATE- YOUR HELP IS WANTED....

This little white and black disk is used to measure water clarity.

In 2014, we will begin another five year round of water quality monitoring with the Citizen's Statewide Lake Assessment Program. CSLAP is funded through the Department of Environmental Conservation and works with the New York State Federation of Lake Associations (NYSFOLA) to create a database of water quality information. Song Lake is a member of NYSFOLA, and therefore eligible for CSLAP. The fee for this program has been graciously funded for us by Cortland County Soil and Water.

Thanks to the steadfast efforts of Tony George and Carl Grillo, we have substantial data to work with. That said, **we need more folks on the lake ready to take up the secchi disk!** The water collection, testing and recording only takes a little time, and it's a fascinating way to get to know the lake better. There are eight testing days, from June 1st to mid-September.

The Watershed and Environment Committee invites you to join Tony and Carl – no commitments, just a chance to see what they do and how the program works. See if it's something of interest to you. You can reach Tony at 315-696-8045. We really do need your help to continue these efforts.

A Few Messages from the SLPOA Board

Election Year: This is an election year. All association officers' two-year terms expire, and one board members six-year term also expires. If you're interested in running or want more information, call any board member or officer.

SLPOA Newsletter: If you have news for our upcoming SLPOA community newsletter, please contact Gloria Wright at: gwright4@twcny.rr.com.

We have a Recreation Committee! Our thanks to Deb and Rick Henry. If you are interested in finding out more, call 510-504-2330.

SLPOA Septic Program Incentive



What it is:

To “incentivize” our septic system program, we are making a one-time offer for the current fiscal year July 2013 to July 2014 to current, dues paying members. We will reimburse current SLPOA members \$25 toward the maintenance, inspection and pumping of their septic tank/system. **That is the price of a year’s membership!** The work needs to be performed by a licensed septic service contractor of your choice. That fee is a separate agreement with the property owner based on property circumstances and work performed.

What to do:

Obtain a Membership Coupon from Al Socha. Fill in the coupon and when the work is finished, send the completed coupon, along with a copy of the receipt for the work performed, to Al Socha at 7438 Song Lake Rd, Tully, N.Y. 13159. You will receive a check from our treasurer for \$25 once the coupon is processed. If you are interested in participating in this initiative, please contact Al Socha at 488-2410 or al_socha@twcnny.rr.com

Yes Song Lake, we have an invader....

THE LOVELY INVADER; PURPLE LOOSESTRIFE

The Purple Plague, Marsh Monster, and Beautiful Killer are various names for this pretty, pesky plant. This invasive perennial grows in wetlands, roadsides, ditches, and shorelines. It is here in Song Lake, too. The thick stems and roots of this plant are so tough that it not only crowds out the native plants, reducing food, shelter and nesting sites for birds, turtles, frogs and other wildlife, but also makes areas impassable for boats.

A native of Europe, *Lythrum salicaria* thrives in North America because there are no natural enemies here. It was introduced in the 1800’s for bee keeping and as an ornamental and medicinal plant. It also found its way through ship ballasts and sheep’s wool.



Loosestrife as it appeared last year in August on Song Lake.

It may not be possible to eradicate loosestrife, but there are ways to reduce its rapid spread. One measure that can be taken is to cut the plants before they flower, thereby reducing seeding. This plant produces thousands of seeds that are in the soil and easily spread on muddy boots and equipment. This is one more hitchhiker to watch for on boats and boots.

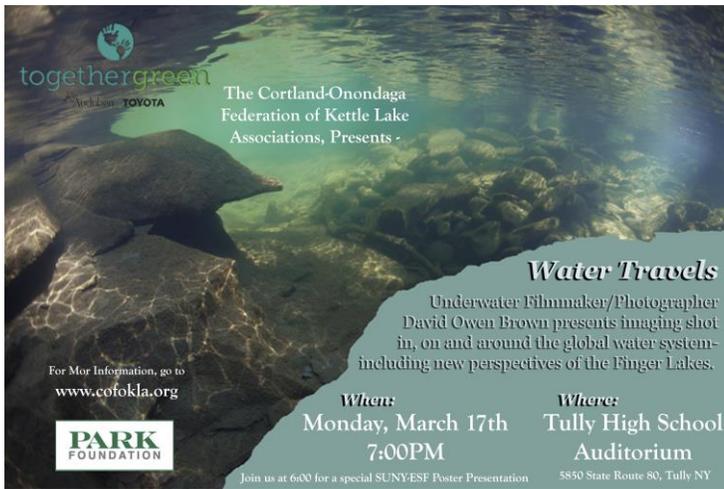
The USDA has approved the use of three species of beetles as biological controls for purple loose-strife. *Galerucella californiensis*, *Galerucella pusilla*, *Hylobius transversovittatus*, and *Nanophyes marmoratus* are the plant’s native control. These European beetles feed exclusively on purple loosestrife and do not impact other species. Since they feed only on loosestrife, their populations will increase and decrease with the availability of the plant. After release, it may take three to 15 years to impact the infestations, but trials throughout the US and Canada, have found biological controls to be 95% successful.

As we work to produce a watershed management plan for Song Lake, we will need to be mindful of the steps to take regarding control of loosestrife. For more information, these sites are recommended:

- <http://www.invasive.org/eastern/biocontrol/11PurpleLoosestrife.html>
- <http://www.dnr.cornell.edu/EXT/ext/publications.htm>

The Song Lake Watershed & Environment Committee

Please consider making a donation to the watershed fund. These funds provide the money needed for these newsletters, water quality testing and many other projects. We will continue to work on issues of importance to all those living on the lake and truly appreciate your support. To find out more about our work and that of the association please go to the website at, www.songlakewatershed.org. We would love to hear from you with your ideas and insights. To provide feedback about our work, give us a call, or email your comments to Songlakeassociation@gmail.com



C-OFOKLA UPDATE - The Song Lake Property Owners Association is a founding member of the Cortland-Onondaga Federation of Kettle Lake Associations, Inc. (C-OFOKLA).

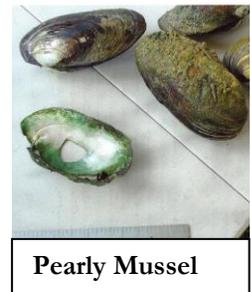
This year, C-OFOKLA is planning one big event: **Water Travels**, presented by award winning, underwater filmmaker/photographer David Owen Brown. The presentation illustrates the connections we all share through water, providing unique perspectives on the waterways of the world, weaving us home to those of central New York.

That same evening... March 17 at 6:00 p.m. at the Tully High School, students from Professor Kimberly Schulz's Limnology Practicum Class will present their kettle lake projects – three of them took place on Song Lake. Here is a summary of their projects.



A Mussel By Any Other Name... Implications of a potential zebra mussel invasion in Song Lake, by Avriel Diaz and Emily Landers. These students looked

at our native “pearly mussels” called Unionidae. These lovely mussels are declining throughout North America. One of our neighboring kettle lakes, Little York, has been colonized by zebra mussels, an invasive mussel that leads to many ecosystem problems. These students collected samples of the mussels from each lake and placed them in separate tanks holding Song Lake water and sediment. In these controlled environments, they were able to analyze the effect that zebra mussels might have on Song Lake. The results show that if introduced, zebra mussels could thrive and seriously upset the ecosystem of the lake with higher phosphorus from sediment release, lower oxygen, and “alterations in the lake's primary productivity, community composition and foodweb dynamics.”

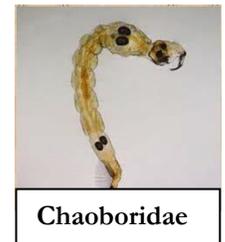


Pearly Mussel



What's in the Muck? A benthic analysis of Song Lake, by Anastassia Zabirowa,

Katherine McManus and Jesse Olsen. To assess Song Lake’s benthic community, these students collected samples of benthic material (lake bottom) at 23 different sites along Song Lake’s shoreline. They examined these for organic content and invertebrate presence to indicate the difference between the forested east side and the more developed west side of the lake. While the results were inconclusive, they did find an “...overwhelming majority of Chaoboridae...” which are the larvae of the Phantom Midge, also known as glassworms.



Chaoboridae



Heavy Fish, Light Fish, Yellow Perch, White Fish, by Ian Kenney and Harold

Nugent. These students compared the relative health, or condition, of the fish in Song Lake and Tully Lake. For this project, they identified populations of Yellow Perch and Chain Pickerel to compare. Their results are on the website: www.songlakewatershed.org



Chain Pickerel

These student projects truly help us understand and appreciate our lake. Their entire projects – with results – are on the website. Also, talk directly with these wonderful students at 6 p.m., Tully High School, March 17th.

If you would like to participate in C-OFOKLA, please contact Tarki at 315-696-5262 or Karen Lang at 607- 423-4653. To find out more, go to the website at www.cofokla.org



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