

THE SKANEATELES LAKE ASSOCIATION

Invites Current and New Members
To Brooklawn

The Waterfront of Nancy and Ted Norman
for its 2015 Annual Meeting and Open House

Sunday, July 12 - 5pm to 7pm

Brooklawn is located in the Hamlet of Mandana
6 miles South of the Village on Route 41A.
At the bottom of Fire Lane 43, cross the Brooklawn Bridge.



Please join us for our annual meeting for
A report on our progress & work planned for the season &
A presentation by Holly Gregg on the Finger Lakes Land Trust & how it helps protect Skaneateles Lake.

Come to toast and give a special thank you to 129 people and families whose annual memberships have sustained the Skaneateles Lake Association since 2011.

Indulge in the incredible lake view; enjoy a cool drink and some treats and go home knowing that your membership makes a difference.

Bring a chair if you want to sit, visit and soak up the incredible view.
Dress to enjoy the outdoors and grounds. Parking Directions on arrival.
Membership Registrations will be accepted at the door.

RSVP via the "Contact Us" tab at SkaneatelesLake.org. Please include names of all persons who will attend, telephone numbers and email addresses. You may also RSVP by calling 685-9106 and leaving a message with the same information.

SLA Lake Steward Program

Our lake steward program resumed this Memorial Day weekend and will continue through Labor Day with weekend coverage of the DEC State Launch through October.

We have eight stewards this year, all have attended Skaneateles High School, and are a mix of college and high school students---all with an interest in environmental studies.

They will cover the 3 active boat launches on the lake. The DEC site on West Lake Rd will have stewards from 8am to 6pm weekdays and 5:30am to 6pm on weekends. The town launch at Mandana

and the Town of Scott boat launch will be covered Fridays, Saturdays & Sundays. The stewards will be inspecting the boats for any vegetation and making sure the bilges are drained. They will be educating the boating public on bringing in their boats "clean, drained & dry" to prevent the spread of aquatic invasive species. At present the major threat to the lake is the Hydrilla weed, somewhat similar to Milfoil, but more prolific and more difficult to remove.

The stewards are making boaters aware of the new New York State law that will fine a person launching a boat with any

vegetation present on the boat or trailer. This law will be implemented in September 2015 and the first violation will be a warning. The second violation will incur a fine --- probably of \$150. In 2012, our first year with stewards, 701 boats were inspected with vegetation removed from 6% of the boats launched. In 2013, 2,471 boats were inspected and 4.4% had vegetation. Last year 2,796 were inspected and only 1.6% were found to have weeds, shellfish, or water chestnuts. A good trend. Hopefully, education is working!

SLA Board of Directors: Paul F. Torrissi, M. D., President - Buzz Roberts, M. D., Vice President - Dessa Coling Bergen, MLS, Secretary - Robert G. Werner, PhD., Treasurer - William Dean, Ph. D. - Jed Delmonico - Robert DeWitt - Charles Driscoll, Ph. D. - Fran Fish - Joseph Grasso - Bill Hecht - Joseph M. Hennigan - Deborah M. Hole - Richard D. Hole, Esq. - Robert Liegel, Esq. - Larry L. Rothenberg, Esq. - William R. Sawyer, Ph. D - Julie Scuderi - James Tift, M. D. - James Tuozzolo

Advisors/Committee Chairpersons: John Menapace (Milfoil Eradication Project) - Mary Menapace (Chair-Hydrofracking Committee)

News Letter: Editors: William Dean - Fran Fish **Staff:** Buzz Roberts - Robert Werner - Paul Torrissi - Robert Liegel

PRESIDENT'S MESSAGE

Paul Torrisi, President, SLA

In January, 2011, our lake association officially changed its name to Skaneateles Lake Association, Inc. from Tri-County Skaneateles Lake Pure Water Association, Inc. At that time our main focus was the eradication of the invasive weed, Eurasian Milfoil, which was in the rapid growth phase and threatening to take over our near shore area as a “bathtub” ring around the entire lake! Our lake association was still a fledgling organization with only a “handful” of active members and we were depending on relatively large donations from a limited number of generous individuals in our community.

It soon became obvious that this nasty invasive weed was never going to be eliminated from our lake completely and an annual effort

would be required to keep it “under control.” The effort could not sustain itself unless more people got involved so the “Annual Membership” idea with many people contributing more modest funds on an annual basis was conceived, thus “spreading the pain” over a larger group. This has helped to keep us “in business” with annual membership in SLA in the range of 550-650!

This has been wonderful, but our mission has continued to expand! In this issue you will read about our ever increasing Lake Stewardship program to try and limit new and even nastier invasives from entering Skaneateles Lake along with the continued effort to contain Milfoil. Also, in this issue is a report on a scientific investigative

team to shed some light on the lake foam that doesn't seem to want to go away!

All of this requires funding. Our membership needs to not only sustain itself, but grow. Please continue to renew your membership and recruit others. Until we can come up with an “automatic” way of funding our mission, membership in SLA needs to continue to escalate.

Hope to see many at our upcoming Annual Meeting on July 12 and please check out the newly revised and easy to use website, SkaneatelesLake.org. Many thanks for your continued support and interest

A Skaneateles Lake Consortium....

A message from the SLA Board of Directors

The SLA and Skaneateles Lake need your help. As members we need you to encourage your local legislators, Town Supervisors and Boards, Village Mayor and Board and County Legislators to support a Skaneateles Lake Inter-municipal Organization.

The SLA has existed in various forms since 1969 and its members have fought valiantly to protect this beautiful gift of the lake. However, we believe it is important to enlist the talents and energy of all people who have a stake in protecting this resource – the residents of all Counties (Onondaga, Cayuga and Cortland), Towns (Niles, Scott, Sempronius, Skaneateles and Spafford) and the Village of Skaneateles in the Skaneateles Lake Watershed. That includes everyone who loves this lake.

We researched the options available to us and found that an Inter-municipal Organization could be effective, quick and economical approach. There is nearby precedent. The New York State Department of State and Department of Environmental Conservation encourage cooperation among municipalities to develop watershed management plans.

This was done for Cayuga Lake. The Cayuga Lake Watershed Management Plan was created with help from a grant from the NYS Department of State. The significance of having such a plan is linked to the 1996 Clean Water/Clean Air Bond Act, which specifically allocated \$25,000,000 for water quality improvement projects to Finger Lake municipalities that are included in the watershed management plan.

Cooperation among all watershed municipalities should improve passage of State and local legislation benefiting the watershed and lake. Such cooperation should bring a stronger voice to urge municipalities benefiting from the draw of water from Skaneateles Lake to contribute to lake protection from invasive species. Such cooperation should enable easier amendment to state legislation required to amend local zoning laws to protect the shoreline from development and erosion.

Algal Blooms in Skaneateles Lake

Robert G. Werner

Observers of Skaneateles Lake have had the opportunity to witness a natural phenomenon common to all lakes – the succession of species of algae over the course of the growing season. Over the last 3-4 years three species have become abundant enough to be apparent and in some cases to cause concern about lake water quality. Rich Abbott of the Syracuse Water Department has identified them allowing us to assess their impact on the lake.

Fundamentally, algae are critical to the ecological functioning of the lake. They are at the base of the food chain, converting the sun's energy into food for all of the other organisms in the lake. Without algae we would have a very uninteresting body of nearly sterile water. But, unfortunately, when nutrient levels get too high algae can reproduce very quickly and form very dense blooms that have major negative effects on the lake.

The first algae to appear in late May and remain through early June is the diatom called *Tabellaria*. It is the one that you may have noticed in shallow water. It attaches to rocks and looks like a brown slippery scum. Diatoms possess a shell composed largely of silica and thus require water with relatively high levels of silica. They are most common in the winter and spring when temperatures are cool, light is relatively low and nutrients including silica are relatively abundant. They secrete a gelatinous material around their shell and thus can create very slippery conditions on the rocks. They are not, however, considered a harmful or problem algae.

The second is a group of filamentous green algae. Several genera have been found in Skaneateles Lake in recent years. Last year *Spirogyra* was dominant. In previous years it has been *Mougetia* and *Ulothrix*, two other green filamentous algae. They all grow quite rapidly and form puffy green balls around rocks on the bottom. All of these species prefer water that is warmer than what *Tabellaria* prefers and thus are found more commonly in the summer when temperatures get above 68 F. While somewhat unsightly and unpleasant to

the touch they are not generally a problem in lakes with low nutrient levels such as we have in Skaneateles Lake.

A third species of algae develops a little later in the summer forming floating yellow-green blooms in quiet near shore waters. It appears to be primarily composed of *Peridinium*, a small dinoflagellate. Dinoflagellates are planktonic algae that are encased in a hard shell and have two flagellae, one around the body and one extending out from the body. These flagellae give dinoflagellates a limited capacity to swim. They use the flagellae to position themselves in the water where light and temperature are favorable. *Peridinium* has a low requirement for phosphorus and they can store phosphorus in their cells to be used when it is not available in the surrounding water. As the summer progresses phosphorus becomes less abundant allowing *Peridinium* to take advantage of their ability to compete successfully with algae that have higher phosphorus requirements. *Peridinium* is most visible when the lake is calm as they accumulate at the surface in quiet water.

In almost all lakes there is a sequence of algal populations appearing as the environmental conditions change favoring one species over another. In Skaneateles Lake *Tabellaria* prefers cooler water and is able to flourish in the spring. The filamentous green algae do better in warmer weather. Winter snowmelt and spring rains carry large amounts of nutrients into the lake. Later in the summer the nutrients, particularly phosphorus get used up, and species such as *Peridinium*, which has a low phosphorus requirement do well.

In all three cases we are seeing populations of relatively benign algae in somewhat higher concentrations than what we are accustomed to seeing in the lake. They may be indicators of problems to come or they may simply reflect a temporary change in runoff patterns, temperature or some other environmental change that will revert to the norm soon. We do, however, need to be very vigilant and keep track of the trends in these occurrences, which the Syracuse Water Dept. is now doing. SLA is following this with great interest.



Skaneateles Lake Foam Update

Robert G. Werner

The Skaneateles Lake Association, working with scientists from Syracuse University and SUNY College of Environmental Science and Forestry, has been looking into the causes for the recent increase in foam on Skaneateles Lake. In 2013, an initial analysis by SLA board member, Dr. William Sawyer, using EPA protocols could find no evidence of man-made synthetic compounds in the foam suggesting that this was more than likely a natural process. In other words, detergent and other man-made synthetic products do not appear to be the cause. To pursue this further SLA established an informal “foam work group” to see if we could ferret out the causes for the foam. We have analyzed samples taken in 2014 using mass spectrometry. The results so far are interesting but inconclusive. We plan to take more samples this summer after the foam builds up and look for correlations with events occurring on the lake and/or the watershed. In looking through the literature on lake surfactants and surface film phenomenon we have found very little scientific work (continued on pg. 4)

Skaneateles Lake Association, Inc.

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Foam, continued

on this topic. We know what causes foam to form, the presence of surfactants. What we don't understand is what are the sources and behavior of these surfactants that lead to an abrupt increase in foam. How do they interact with other environmental variables? Due to the complexity of this problem we may never have a satisfactory answer. In a sense the scientists involved are entering unknown territory. The members of the group have volunteered their time for this effort, some with the hope that we might uncover some interesting new relationships. The surface film, which is the physical entity that causes foam, is very important to lakes in that transfers of a variety of gases (think oxygen, carbon dioxide, etc.) occur through this film. There is also a unique microbial community that occupies the region just below the surface film, but we know nothing about its role in foam formation, if any. It is a very complicated relationship and may be beyond the capacity of a lake association to resolve. We will keep you informed as more information is developed.



The Milfoil Crew is Back at Work

Fran Fish

Keith Marsden, Jason Hole and Liam Wilson who have each been doing this work for 6 years are back on the boat and down in the water under the direction of John Menapace. They have 5 acres of Benthic matting to place over large areas of milfoil identified in the lake survey done by Bob Werner last fall. They also have some specified areas to do harvesting by hand in areas where it is not possible to put down matting. If you are out boating be aware of any "diver down" flags and keep clear to keep them safe.

Skaneateles Lake Association, Inc. Membership Registration Form

Name _____ E-mail Address _____

Street _____ City _____ State _____ Zip _____ Phone _____

(Enter winter contact information below, if different.)

Street _____ City _____ State _____ Zip _____ Phone _____

Family: \$100 Individual: \$50 Other: \$ _____

Milfoil Boat Sponsor & Membership: \$1,000 Milfoil Boat Co-sponsor & Membership: \$250

Lake Steward Sponsor and Membership: \$175

Please make checks for your membership dues and any donations payable to the **Skaneateles Lake Association, Inc.**
Mail your membership application and check to: Skaneateles Lake Association, Inc., P. O. Box 862, Skaneateles, NY 13152
You may also join SLA, pay your dues, and make donations at: www.SkaneatelesLake.org