Leonard Lake Stakeholders Association

A community focused on protecting, nurturing and cultivating the natural, physical and social characteristics of Leonard Lake



JULY 11TH - MUSKOKA FIRE BAN LIFTED - FIRE DANGER NOW MODERATE

ANNUAL GENERAL MEETING NEXT WEEK - SATURDAY, JULY 22

9:30 AM til noon at the Milford Bay Community Centre. Come anytime after 8:30 for coffee and social. Questions? leonardlakemuskoka@gmail.com

PAID YOUR LLSA MEMBERSHIP DUES YET? ETRANSFER TO llsa1@outlook.com or go to www.leonardlake.net for more information.

PILATES/YOGA MASHUP ON THE DOCK. Saturday, July 22 5:00 to 6:30 PM

1304 LL Rd 2. Pre-registration essential – space is limited. Cost \$20. Bring your own yoga mat. RSVP to carmsivers@gmail.com or 416-294-9092.



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2022 Leonard Lake Water Quality Project



Determining the Source of Blue-Green Algae in Leonard Lake

During the 2022 water testing season, intensive investigations were undertaken by members of the LLSA Water Team, with advice from Dr. Mark Verschoor (PhD Biology, York University, ON). The aim of the testing work performed, was to gain a better understanding of the source and causes of the recurrent cyanobacteria blooms (blue-green algae), that have been detected yearly since 2017. The study was funded and supported through the generous donations of Leonard Lake property owners and the countless volunteer hours of the LLSA Water Team.

Early 2023, Dr. Verschoor prepared a detailed report "Monitoring and Determining the Source of Cyanobacteria Blooms in Leonard Lake" that reviews the 2022 Water Team Study dealing with a number of underlying concerns around water quality and lake health. Among several important findings, the identification of the south bay area as the probable source of the blooms will help us focus further efforts to understand and hopefully mitigate blooms in the future.

The document commences with a report summary prepared by members of the Leonard Lake Stakeholders Association. In addition, **an** "LLSA Highlights of the 2022 Water Team Findings" was also prepared by LLSA and includes a "Call to Action" section with a number of practical tips to protect lake health. (see CALL TO ACTION below)

The summaries and full 2022 study can be accessed by clicking on the highlighted reports above or at www.leonardlake.net - drop down "Lake Health" tab and "Water Quality Studies".

(Please note that the 2023 LL Water Team project is underway, testing water

at spring runoff sites and at white buoy markers around the lake.)

While at www.leonardlake.net have a browse around the LLSA website and most particularly under the "Lake Health" and "Lake Activities" tabs to view new information on our website regarding water team activities, the previous AGM speakers and a few years of previous EBLASTS.

CALL TO ACTION

What does this mean as a lake stakeholder? How can I help?

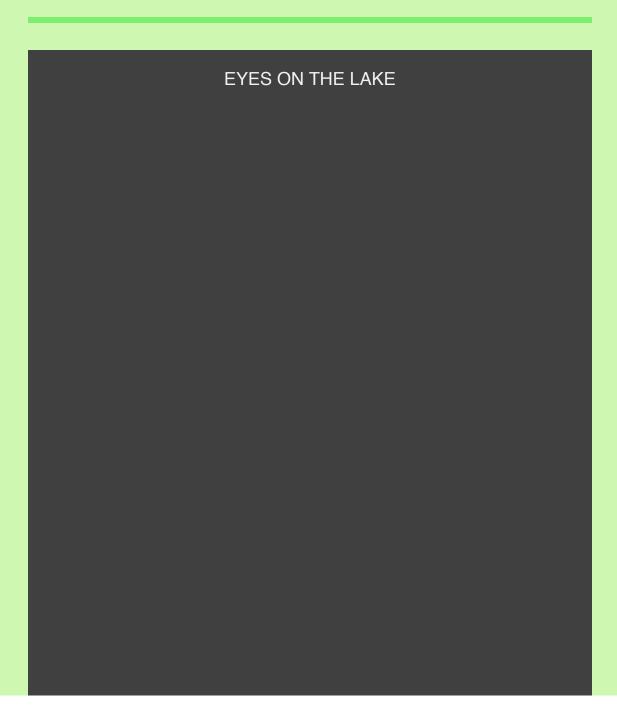
There is no question that more study is required to fully understand what is going on, however, knowing what we now know, here are some important things we can all do to be sure we are pro-actively working towards a healthier lake:

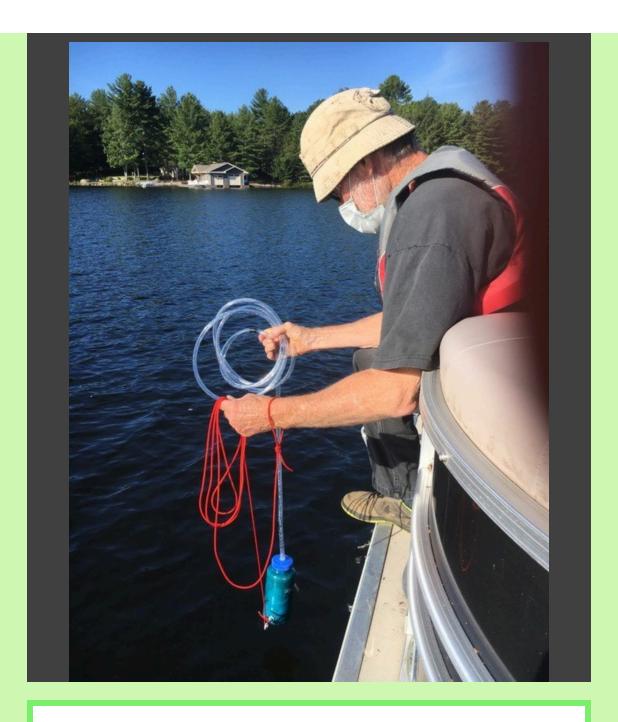
- Minimize hard surfaces on our properties like patios, paved driveways, roof surfaces.
- Examine the run-off routes from all hard surface areas and ensure the run-off from rain events makes its way to the lake as slowly as possible. "Vernal pools"-essentially spots where water rests and slowly seeps out and down through soils and rock, are the best way to handle run-off water.
- Consider an upgrade to an older septic system. Eventually an older system has to be replaced, and costs are always going up why not do it now? New or old systems, keep chemicals, bleach, etc. out of your septic, and ultimately out of the lake. Have your septic system cleaned and inspected regularly (every 5 years).
- Avoid disturbing lake bottom sediments that can contain layers of phosphorous and iron nutrient. That means not taking off in a larger boat from a near shore start let's practice deeper starts. Reduce speed especially in shallower areas of the lake.
- Preserve and enhance that ribbon of life (the buffer area between land and water) with shoreline bushes and vegetation and additional tree cover to assist in filtering winter melt and rain-event run off.
- Grass requires maintenance, and the use of "weed and feed" chemicals and/or fertilizer (phosphorus!) is tempting. Grass feeds the geese and we all know what that brings. Out with the grass and in with the real Muskoka look.
- Do your part to keep the lake clean and unpolluted and invasive species out. Get rid of boat bilge and bait buckets on land; dispose of old oil, gas and chemicals

responsibly. Take stock of the chemicals you are adding to your land, the water and the air.

- Don't use soap or any chemicals to wash or shampoo yourself or clean a boat while in the lake or right next to the lake.
- Keep motorized equipment boat motors, personal watercraft, etc., in good working order to avoid water or air pollution. Still have a 2-stroke engine? Those motors can lose up to 30% of unused fuel into the water or the air through exhaust.

Be an advocate and guardian for lake health and set the standard for every one that visits/stays in your home or cottage.





UNUSUAL CHANGES IN THE WATER?

The Leonard Lake Water Team Needs Your Help To continue with "Eyes on the Lake" this season. We can expect blooms on our lake any time from June to November. To make an" Eyes on the Lake" report, please include if possible:

- A photo of what you observe
- The location of the observation (911 property address)
- The date, time and a short description of what you observe
- Your permission for us to visit the site (if on your property)
- A phone number or contact (optional)

Please email the report as soon as possible to leonardlakemuskoka@gmail.com Alternately, phone a Water Team member: Bill Heatlie 705-840-6421; Esther Giesbrecht 647-763-8677; or Ken Riley 705-764-1695.

The responding team member will assess the site, likely take a water sample, and log additional details such as the extent of the bloom, water temperature, weather, etc. The water sample check may include microscopic determination of algae or other contaminants.

If there is indication of blue-green algae in the sample, the Spills Action Hotline of the Ministry of the Environment, Conservation and Parks (MECP) will visit the LL site and take water samples away to test for the presence and toxicity level of a bloom. A positive confirmation of blue-green algae will usually result in Simcoe Muskoka Health Department posting a health advisory for the lake in question. The advisory will remain in place until MECP re-sampling validates there is no cyanobacteria at the original site.

Visit Simcoe Muskoka Health Department for information on <u>BLUE-GREEN</u> ALGAE.

PHD Student Project on Leonard Lake - Researching the Causes of Algal Blooms





A PhD student from York University has chosen to study five lakes to further understanding of algal blooms causes. Leonard Lake is one of two in the Muskoka area and we welcome her interest. Please note that this project is unique and not part of the ongoing water quality initiatives of the LL Water Team.

Yellow, green and red buoys have been placed in two spots in the South Bay, near the end of West Bay and near the north/western mouth of the same bay and will remain until September.

Expensive monitoring equipment is attached to these buoys and we ask that residents respect the placement of the buoys and the equipment that has been carefully located at these sites. You may see the student in her canoe, frequently gathering samples and data throughout the summer.

OOPS...LOST BUOY

HELP! The first casualty of the PHD student Algal project - one of the project buoys (green) was detached and dragged away in yesterday's brief storm. It most likely was blown into South Bay or Heron Bay. There is concern the buoy might create a problem for our boating community. If you see the buoy in the water, please feel free to lift it out so it won't escape again, and contact Bill at (705) 840-6421.



Michael's Corner



Great Crested Flycatcher - June 2023

Often Heard - Sometimes Seen

Leonard Lake is home to scores of interesting birds, with some seen daily and others not so much. In more than a few cases, there are particularly interesting birds that we hear more often than we actually see, and in my experience the Great Crested Flycatcher (GCFL) is one of those.

While sitting on my deck, during my daily road walk or when paddling the shoreline, the GCFL makes its presence known to me with a strong, rising "VREEP" call, sometimes described as "wee-eep." If you have trouble with onomatopoeia, and are wondering more precisely what this bird call sounds like, just google "Great Crested Flycatcher call" and you'll get a variety of similar and recognizable examples.

Further, I suspect that if you've spent any time listening to birds on our lake, you'll recognize this one and you'll have that aha moment of ... "so that's what I've been hearing out back and across the road."

But have you seen one? The GCFL is a songbird of treetops. It spends little or no time on the ground and doesn't show up at feeders. In spite of this, it is often an easy bird to spot once you recognize its call. When you hear one, just look out and up; check the tops of dead trees, snags, out on limbs, or even on posts and other vantage points. It's slightly smaller than a robin, shows a longish cinnamon-coloured tail, has olive/brown upper parts, a greyish throat, and a notably yellowish chest. The latter may be the most obvious feature especially if you only get a brief glimpse.

What do they eat? Well, their primary diet is comprised of insects and especially flying insects: wasps, moths, grasshoppers, flies and the like. But they are also attracted to snacks such as beetles, spiders and the occasional berry. Nest material may include snake skins, onion peels or even plastic!

The GCFL is a bird of eastern North America and as far west as the centre of the continent. It's not a bird currently threatened, but its range is shrinking to the west and growing to the north. Specific challenges are the use of insecticides (yes, even at Leonard Lake), habitat reduction through tree cutting and urbanization (yes, even at Leonard Lake), as well as spring heat waves and heavy rain.

Michael Hatton



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