# **BLPOA Newsletter**

www.rideaubasslake.com

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FOCA Membership

BLPOA members have access to all the benefits of The Federation of Ontario Cottagers association:

- Insurance discounts
- -Webinars
- -Educational materials and much more

Https://foca.on.ca

Request Username & Password through the "Contact US" page.





Water Quality

 Most Ontario Lakes Are Experiencing a Dramatic Increase in Algal Blooms

• Ontario has 250,000 lakes. Unfortunately, 84% of Ontario water bodies are experiencing a steep rise in algal blooms and in particular a rise in Cyanobacterial Blooms (blue green algae). What gives?



The board had the opportunity to listen to a presentation, organized through FOCA, by Dr. Smol, a leading expert on lake health and a professor of biology at Queens University.

The main culprit for increasing Algae is an abundance of phosphorus in the water. This can come from run off during rainstorms, leaves and other debris going into the water, pollution from fertilizers.. and other sources both natural and from human activity.

Tackling total phosphorus has been fairly successful in Ontario. Most lakes that are measured report phosphorus levels below the 20 micrograms per litre threshold target set by the ministry of natural resources.

There are other factors at work.

Climate change is a threat multiplier.

Less ice means a longer growing period for Algae and lake weeds.

Warmer water also affects the complex systems of lakes.

Warmer weather has led to less water circulation in our lakes. We also have lower winds meaning less surface movement.

All of this leads to more algal blooms Algal blooms love warm, still water that doesn't circulate.

Episodic events now occur more frequently such as torrential rain storms that drop as much rain in a day as would normally occur in two months. This has the effect of creating nutrient pulses into the lake which, again, are conditions favoured by Algal blooms.

Algal blooms eventually die, sink to the bottom of the lake and then the bacteria decomposing the dead blooms uses up oxygen. This makes the deep water less fish friendly. Lake trout, for example, require water less than 15 degrees C - they can't get that in shallow water in the summer, but now they are being squeezed because the oxygen levels in the deep water can often not sustain them. What all this means is that we need to be even more diligent about what ends up in the lake. Dr. Smol was suggesting that the 20 microgram of TP (total phosphorus) per litre might, in fact, be too high.

The cumulative effects of climate change are remarkable - for example, biodiversity has decreased by 83% since 1970. 56% of freshwater fish are at risk, 11 species of Ontario fish have become extinct.



## What Can We Do To Help

The top things you can do to keep our water clean and beautiful.

- Don't put anything in the lake. Leaves, sand, fertilizers, shampoo and other personal care products all contribute to higher phosphorus levels.
- 2) Leave your shoreline natural. Letting wild plants grow on both your shoreline and several meters back from your shoreline creates a buffer that will slow run off into the lake and reduce erosion.
- Use lake friendly products around the home. A comprehensive list has been put together by volunteers from B4. You can find the list here: <u>Lake do's and don'ts (squarespace.com)</u>
- 4) Ensure your septic system is pumped out regularly and is in good working order. There are still grey water systems in use on our lake. All grey water should be routed to the septic system.
- 5) Keep wakes away from the shorelines. Erosion increases the sediments to the lake bottom



Did You Know?

The common loon can fly at over 110 Kph and swim underwater at 30 Kph. On land, however, they can only waddle a few feet. Their feet are located far back on their bodies. Our loons tend to nest in the marsh areas at the end of bays. Keeping your wake low near these areas will avoid damaging their nests

# Water Quality Committee

- Your volunteer board is continuing with sampling and analyzing the water of Bass lake to establish long term trends in nutrient levels, in particular Phosphorus and Nitrogen.
- The Rideau Valley Conservation Authority (RVCA) also conducts its own sampling program. The latest results from the RVCA will not be available until the New Year. Once we have the data we will communicate it separately in a newsletter focussed around water quality issues.



#### **Bass Lake Water Level - 2023**

Meters Above Sea Level (MASL)



Average Yearly Decline is 33.5 cms

### Water Levels 2023

## Erosion Control

 Volunteers from B5 are currently working on a road map through the planning and permitting process around erosion control strategies. A number of residents are experiencing high levels of erosion and are searching for solutions. Once the roadmap is complete we will share it with our membership along with different options, the contractors who do this kind of work and some idea of the costs involved.





### Bass Lake Moment

Deer and Fisher caught on camera!



Your BLPOA volunteer board wishes you Happy Holidays and best wishes for the New Year!