

Blue-Green Algae are microscopic aquatic bacteria common in most lakes, ponds and streams. When conditions are right, they may grow rapidly (bloom) and the toxins produced (microcystins) become a serious problem.

Hazards:

The main concern is exposure by ingestion, but symptoms are possible from inhalation or skin contact. Children are more susceptible to effects due to lower body weight and increased likelihood of swallowing water while playing. The toxins have been fatal to pets. Consult the NS website for current information.

Occurrence and Causes:

Blue-green algae blooms have typically been found in NS waters from May to October. These bacteria require calm, warm water (>24C), sunshine and nutrients in order to grow and multiply.

How to identify:

Unfortunately, blue-green algae can present itself in many ways depending upon its concentration and stage of growth. Good pictorial examples are provided at <https://novascotia.ca/blue-green-algae/#reported-algae>.

There are a couple crude self-tests that lotowners can perform, but these can be inconclusive. Immediate reporting to NS Environment & Climate Change and laboratory testing for microcystins (~\$50-\$100) is the recommended approach if blue-green-algae is suspected.

How Does This Affect Our Lake?.....

Cons: Lake Lewis is shallow with minimal movement

Pros: We have a low population density and responsible ownership

Nutrients:

Since nutrients are required for growth of blue-green algae, it makes sense to minimize the nutrient loading in our lake. Nutrient testing has been conducted intermittently over the past decade. All nutrients (o-PO₄, TP, Nox, NO₂ and NH₄) have been non-detected in every case to date.

Another sample will be taken after the July long weekend – this is typically the peak usage time and should provide a worst case nutrient picture. Results will be posted

What can we do to minimize nutrient loading?

- Eliminate routes for direct water run-off into lake

- Use Phosphate free detergents

- Exercise extra caution with pressure washing detergents

- Use fertilizers sparingly – avoid summer fertilizing

- Maintain your septic system

- Don't soap/shampoo/rinse at lake edge

- If nature calls.....take a few steps into the woods

Resources:

NS Website: <https://novascotia.ca/blue-green-algae/>

Factsheet :<https://novascotia.ca/blue-green-algae/documents/blue-green-algae-factsheet.pdf>

Reporting: NS Environment & Climate Change: 1-877-936-8476

Historical Bloom Data: <https://novascotia.ca/blue-green-algae/documents/Confirmed%20blue-green-algae.pdf>