



Seneca Lake **PURE WATERS** Association

BLOOM WATCH UPDATE



SHORELINE MONITORING SCORECARD

Observation Dates: Thru 8/30/2020

% Zones Monitored: 67%

Suspicious Blooms: 0

Confirmed Blooms: 2

Week 4 Summary – Blooms in Southeast Again

Update: Monday, August 31st saw the first extensive HABS on the lake. Seven bloom reports occurred in the southern part of the lake from Caywood to Peach Orchard Point on the eastern shore and from just south of Long Point to Poplar Point on the western shore.

Week 4 saw two more blooms confirmed in the Southeast part of the lake. Both happened on Friday, August 28th and were in adjacent zones just south of last week's bloom. We have seen a lot of westerly and northerly winds, which may be why the Southeast has been the hot spot so far.

Typically, the first week of September is when we first see widespread blooms, so this next week is very likely to be busy.

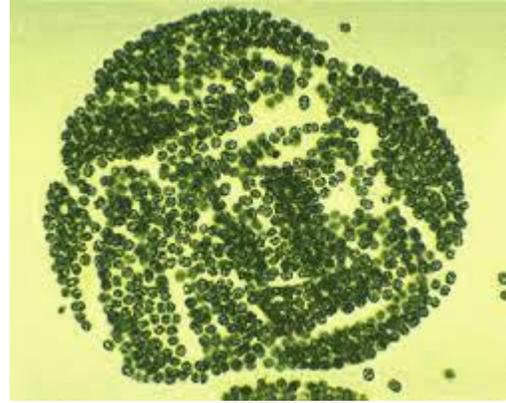
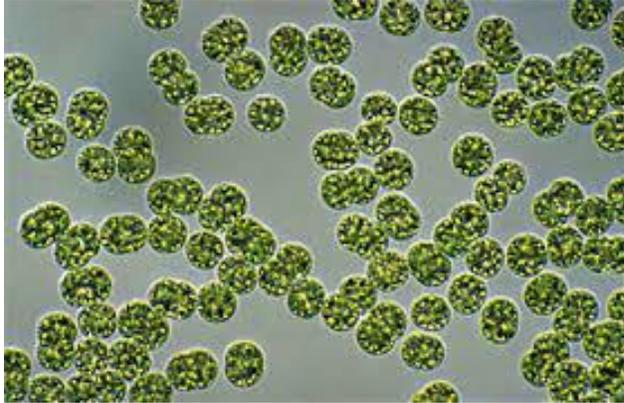
The [website](http://senecalake.org/Blooms) (senecalake.org/Blooms) has more information including a real-time scorecard that lists the activity for the day, week, and season.

Our volunteers continue to do a great job searching for HABS. It is not too late to volunteer.

Toxic Cyanobacteria – Microcystis

There are many types of cyanobacteria, but the one we most typically see in Seneca Lake blooms is *Microcystis*. It is a concern because it generates the Microcystin toxin. *Microcystis* is a cyanobacteria genus. A common freshwater species within the genus is *Microcystis aeruginosa*, which is globally distributed and we do see it in Seneca Lake.

The photos below show the bacteria at a microscopic level. The photo on the left shows individual cells. On the right is what they can look like as they organize into colonies. The colonies grow large enough to become visible to the naked eye, typically as dots in a bloom.



These cyanobacteria can regulate their buoyancy, but once at the surface they are at the mercy of the wind and currents. Therefore, small wave action or other water movements can concentrate blooms and form various large-scale patterns such as streaks or swirls.

Other cyanobacteria genera we see in the lake are *Dolichospermum* (formerly *Anabaena*) and *Pseudoanabaena*. These both colonize in linear patterns rather than round clumps. They can also produce toxins, but are usually found in lower concentrations than *Microcystis* in Seneca Lake.

What do blooms look like?

We will provide some photos in each Bloom Watch to help everyone better identify blooms.



These are the blooms found last week. Very typical coloring and overall look.

Reminder: Do not put your hands in a bloom. Blooms are very 2-dimensional and don't stick together like seaweed or filamentous algae does. It is mainly green, but can take on some other colors. It can be streaky, blotches, dots, or scum in appearance.

What is one of the best things I can do to stay on top of this situation?

Visit the Seneca Lake Pure Waters website frequently at senecalake.org. It will have the most current information. In addition, if you live on the lake, it might be a good idea to check with neighbors and determine who your local Shoreline Survey Volunteer is. All of our volunteers are a wealth of information and a good person to know. Our 120+ volunteers are well distributed around the lake and many residents have regular conversations with our volunteers as they survey our shores on a regular basis.

If not a Pure Waters member, consider joining. We can use your support and help as we work hard to accomplish our mission of Preserving, Protecting and Promoting Seneca Lake Water Quality. Click [here](#) if you would like to become a member now. Those who need to renew and know their login information can click [here](#) to renew.

I look forward to keeping you up to date as we progress through our HABs/Cyanobacteria season. Enjoy the rest of your summer!!

Bill Roege

HABs Director

Seneca Lake Pure Waters Association

HAB FACTS: What you need to know!

Exposure to any cyanobacteria HABs can cause health effects in people and animals when water with blooms is touched, swallowed, or when airborne droplets are inhaled. This is true regardless of toxin levels; some blue-green algae produce toxins, while others do not.

Exposure to blooms and toxins can cause symptoms such as diarrhea, nausea or vomiting; skin, eye or throat irritation and allergic reactions or breathing difficulties.

Because blue-green algal bloom conditions change rapidly over time, the best prevention is to take steps to avoid waters with visible blooms:

- People, pets, and livestock should avoid areas with blooms or surface scums, or water that is noticeably discolored.
 - Avoid blooms when swimming, boating, fishing, and don't eat fish caught from areas of water with blooms.
 - If you or your pets are exposed to blue-green algal blooms, stop using the water and rinse off with clean water.
 - Consider medical attention for people and animals if symptoms such as diarrhea, nausea, or vomiting; skin, eye, or throat irritation; and allergic reactions or breathing difficulties occur after contact with surface waters with blooms.
 - Never drink untreated surface water. Even if you treat it in your home with water filtration, chlorine, ultraviolet (UV) light, or other treatment; it's still not protected from blue-green algae and toxins.
 - If you would like to see where HABs are occurring in NY State, visit the DEC Website at <https://www.dec.ny.gov/chemical/77118.html>. Their map is [here](#).
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