



Harmful Algal Blooms (HABs) Update

Between July 21st and July 28th, there have been seven reported HABs. Almost all of the HABs detected this week are located along the northernmost shoreline of Cayuga Lake. This is in contrast to the seasonal patterns observed in the 2018 and 2019 Cayuga Lake HABs Monitoring Programs, where generally, many of the July bloom locations were along shorelines in the southern end of the lake or mid-way up the lake.



Bloom 20-3404-B1, located along the shoreline of Fire Lane 18, north of Union Springs.

Through public outreach, CLWN works with CSI to support their water quality research. Below is a partial chart showing the reported blooms from this week. To get the latest update, visit CSI's [Cayuga Lake HABs Reporting Page](#), which also provides a map visualizing where the blooms are located.

Bloom Sample Code	Date Sampled	Location Description	Bloom Extent	Microscopy	Microcystin Toxin (µg/L)
20-3443-B3	7/21/2020	Along the shoreline of Lower Lakewood Dr. in Romulus.	Small localized	Results pending	Results pending
20-3458-B6	7/21/2020	South of the Cayuga Marina in the Village of Cayuga.	Large localized	Dense Microcystis, dense Dolichospermum and sparse Limnoraphis	Results pending
20-3404-B1	7/24/2020	Along the shoreline of Fire Lane 18, north of Union Springs.	Small localized	Dense Microcystis	Results pending
20-3458-B7	7/24/2020	Along multiple residential shorelines, most concentrated near a small inlet close to 6367 Water Street in Cayuga.	Large localized	Dense Microcystis, dense Aphanizomenon and sparse Dolichospermum	Results pending
20-3469-B1	7/24/2020	Along the shoreline of Cayuga Lake State Park.	Large localized	Sparse to moderate Microcystis	Results pending
20-3452-B1	7/24/2020	Along the shore of Lower Lake Road in Seneca Falls.	Large localized	Dense Microcystis and dense Aphanizomenon	Results pending
20-3400-B3	7/24/2020	Along multiple residential shorelines of Lake Road in Seneca Falls.	Large localized	Dense Microcystis, moderate Aphanizomenon and sparse Dolichospermum	Results pending

Testing Bloom Samples at CSI Lab

The CSI lab has a certified standard procedure in testing bloom samples to determine whether they are HABs. First, the bloom sample is analyzed to identify what **cyanobacteria taxa** are present. So far this monitoring season, the CSI lab has observed samples containing cyanobacteria from the genera Dolichospermum, Anabaena, Microcystis, Oscillatoria, Aphanizomenon and Limnoraphis. The CSI lab then determines the **concentration of microcystin toxin**. Microcystin is the most commonly found cyanotoxin (i.e. a toxin produced by cyanobacteria) in New York State. The safety limits for total microcystin set by the EPA and used by the Department of Health are 0.3µg/L for drinking water supplies and 8.0µg/L for surface water used for recreation. It is important to note that cyanobacteria may produce other toxic compounds for which certified test methods do not yet exist, therefore, all suspicious blooms should be avoided. The bloom sample is also analyzed for the **concentration of total chlorophyll a** as a measure of bloom density. This is done to confirm that the density of cyanobacteria is large enough for it to be defined as a HAB.

The bloom sample data gathered through the Cayuga Lake Monitoring Program enables the CSI lab to better understand blooms and water quality on Cayuga Lake. This information can then help to inform long-term, sustainable management strategies at the local to global scale.

Reporting a HAB

If you observe a suspicious HAB, avoid it and report it! Email habshotline@gmail.com with the location of the bloom, the date and time, and two pictures. If possible, include the GPS coordinates of its location using the Compass app or Google Maps on smartphones. Otherwise, an address or nearby landmark will do the job! You may also call CSI at (607) 257-6606.

Stay Informed!

Before heading on the lake, you can view the interactive map on CSI's [Cayuga Lake HABs Reporting Page](#) that is regularly updated. The DEC provides a similar interactive map of current HABs across New York State that you can view [here](#). You may also call your local park office on the most up-to-date water quality information (see below).

Taughannock Falls State Park

(607) 387-6739

Cayuga Lake State Park

(315) 568-5163

Long Point State Park

(315) 364- 5637 or (315) 497-0130

Lansing Myers Park

(607) 533-7388 ext. 17

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The Cayuga Lake HABs Monitoring Program is a collaborative effort led by a local consortium of three nonprofits: the Community Science Institute (CSI), the Cayuga Lake Watershed Network (CLWN), and Discover Cayuga Lake (DCL), working in collaboration with the New York State Department of Environmental Conservation (NYSDEC) and the State University of New York Environmental School of Forestry (SUNY-ESF).

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