



HABs Update

The previous week was the first of HABs monitoring around Cayuga Lake with two bloom observations. On Monday the 29th, there were suspicious bloom conditions observed on the western shoreline half-way up the lake and at the northern end, but the surface particles never accumulated into a bloom due to the heavy movement from waves and wind. Moreover, a suspicious bloom was reported in a small pond at Stewart Park in Ithaca. However, through microscopic analyses, the bloom was determined to be dominated by a non-cyanobacterial phytoplankton called Euglena, which has a similar appearance to cyanobacterial blooms at the macroscopic level. While dominated by Euglena, the bloom still contains cyanobacteria, and therefore, has the potential to be harmful and should be avoided.

Many new suspicious bloom reports were submitted on July 6th. Reports were received from HABs Harriers, who took the day to check their assigned monitoring zones, as well as the public, who reported the blooms to habshotmail@gmail.com.



Bloom 20-3458-B2, located on the shoreline north of the Village of Cayuga.

The Cayuga Lake HABs monitoring program is unique in having the Community Science Institute (CSI) as a local certified lab to conduct this water quality research. Through public outreach, CLWN works with CSI to support their science. Below is a partial chart showing the reported blooms to date. 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 (ug/L)
20-3426-B1	6/25/2020	The pond at Stewart Park in Ithaca to the north of the Cascadilla Boat Club.	Small localized (across the entire surface of the pond).	Dominated by Euglena (non-cyanobacteria). A moderate amount of anabaena (cyanobacteria).	N/A
20-3458-B1	7/4/2020	The shorelines near the Beacon Bay Marina in Cayuga.	Small localized.	Results pending.	Results pending.
20-3458-B2	7/6/2020	Widespread on the shorelines north of the Village of Cayuga.	Widespread in the northern end of the lake.	Results pending.	Results pending.
20-3406-B1	7/6/2020	Widespread along a two-mile stretch of shoreline north and south of Aurora.	Large localized.	Results pending.	Results pending.
20-3406-B2	7/6/2020	Located along the shorelines of Lansing Station Rd.	Large localized to widespread.	Moderate levels of Dolichospermum.	Results pending.

Monitored Shorelines of Cayuga Lake

CSI's [interactive map](#) of Cayuga Lake lays out which shorelines are being monitored for HABs, symbolized by grey boxes. Using ArcGIS, a geographical information system (GIS) software that enables people to visualize geographical statistics, CSI determined that 48% of the shoreline is being monitored by the 87 volunteers, or "HABs Harriers." With the same number of HABs Harriers since last year but with a change in assigned monitoring zones, shoreline coverage has gone up by 1%.

Recruiting HABs Harriers

A large proportion of the Cayuga Lake shoreline being unmonitored is about a 4 mile stretch north of Salt Point. This region is difficult to monitor without a boat, as it is characterized by high cliffs and few lake houses. There are also a couple of stretches of shorelines ranging from 3 to 5 miles in Seneca County, the northwestern part of Cayuga Lake, that require HABs monitoring. In these areas, there are a number of lake houses that have convenient locations to do so. If you have access to these unmonitored shorelines and are interested in becoming a HABs Harrier, please contact us!

Lake Friendly Living

There are still ways beyond being a HABs Harrier to help protect the Cayuga Lake watershed against HABs. This season, the CLWN launched the [Lake Friendly Living](#) program to encourage residents of the Cayuga Lake watershed to adopt more sustainable practices that minimizes runoff and reduces or eliminates pollutants.

A major contributor to HABs is excess nitrogen and phosphorus, predominantly found in animal manure and chemical fertilizers, which seep into the lake through runoff. Residents can limit the amount of nitrogen and phosphorus getting into the lake by using phosphorus-free fertilizers, maintaining their on-site waste and septic systems and minimizing erosion by having sufficient vegetation on their shorelines. These nutrients may eventually get into the lake through runoff, which is when rain falls and moves across impermeable surfaces, such as pavement, thereby carrying sediments and pollutants into the lake. Residents can minimize runoff by reducing impermeable surfaces and using water wisely.

Already, seventeen residential households have pledged to adopt these better practices to help prevent HABs. Take the pledge!

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 regularly updated by CSI of reported HABs on Cayuga Lake [here](#). 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).

Cayuga Lake Watershed Network

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Discover Cayuga Lake

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