



HABs Weekly Newsletter

A product of the 2021 Cayuga Lake HABs Monitoring Program

JULY 27, 2021

Photo of Myers Point by Bill Hecht

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HABs Update

by CLWN Staff Intern Alora Cisneroz

Cayuga Lake's HABs have had their moment in the publicity spotlight in the past week! Hot off the (virtual) press is [a story on Peter Mantius' legendary "Water Front Blog."](#) where he writes about the current state of HABs on Cayuga Lake and DEC's controversial proposed solution. Additionally, our very own Hilary Lambert could be heard on the sound waves last week as [she spoke with with Carl Neff on Ithaca's Evening News \(WHCU 97.7\)](#) about HABs on Cayuga.

Seeing all of these headlines and wondering if this scale of HABs has always been this way? Curious to learn about the history of the the monitoring program? Take a peak at the timeline on page 3!

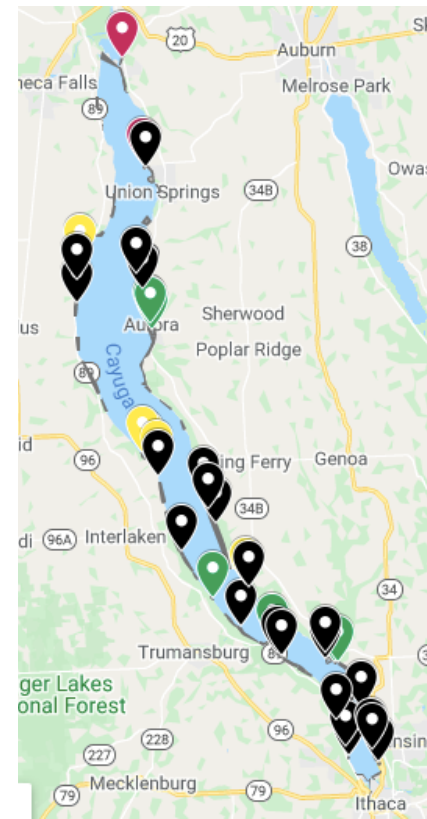
HABs Update

(as of Monday)

Similar to last week, we've had another period of intense bloom occurrences in the past seven days, most of which are HABs. The chart below details the blooms that have been reported since the last newsletter. Because these blooms are occurring at such a fast rate, I recommend bookmarking [CSI's HABs Reporting Page](#) to use as a reference before heading out to the lake. Using a combination of the website's Master Results Table and the map is the best HABs resource available for residents to stay safe.

HABs Technical Chart

Bloom Code	Date Sample Received at CSI Lab	Location Description	Bloom Extent	Microscopy	Total Chlorophyll (ug/L)	Microcystin Toxin (ug/L)	Bloom Status
21-3483-B1	7/19/2021	Bloom located along the shoreline of multiple waterfront properties near Ellis Point.	Large Localized	Moderate colonies of <i>Dolichospermum</i> .	Results Pending	Results Pending	Cyanobacteria Bloom (HAB): Cyanobacteria are present in bloom (HAB) sample. Microscopic examination indicates the presence of cyanobacteria and therefore the potential for the bloom to be harmful.
21-3418-B1	7/20/2021	Bloom located along the shoreline of many waterfront properties on Lansing Station Rd. Due to field reports from volunteers and lakeshore residents, it is likely that this is part of bloom 21-3417-B1.	Widespread	Dense colonies of <i>Dolichospermum</i> and sparse <i>Microcystis</i> .	Results Pending	Results Pending	Cyanobacteria Bloom (HAB): Cyanobacteria are present in bloom (HAB) sample. Microscopic examination indicates the presence of cyanobacteria and therefore the potential for the bloom to be harmful. Based on field reports from volunteers and lakeshore residents, it is likely that this is part of the 21-3417-B1 bloom, one very widespread bloom on Lansing Station Rd.
21-3416-B1	7/19/2021	Bloom located along the entire shoreline of the 3416 monitoring zone, including the shoreline of many waterfront properties on Atwater Rd. and Nut Ridge Rd.	Widespread	Very dense colonies of <i>Dolichospermum</i> .	Results Pending	Results Pending	Cyanobacteria Bloom (HAB): Cyanobacteria are present in bloom (HAB) sample. Microscopic examination indicates the presence of cyanobacteria and therefore the potential for the bloom to be harmful.
21-3477-B2	7/19/2021	Bloom located along the shoreline of waterfront properties on Ladoga Park Rd. in Lansing, NY.	Large Localized	Moderate to dense colonies of <i>Dolichospermum</i> .	1,280	< 0.3	Cyanobacteria Bloom (HAB): HAB with a microcystin toxin concentration less than the drinking water limit (0.3 ug/L).
21-3406-B3	7/19/2021	Bloom extended along the shoreline from the Aurora Inn all the way to Ellis Point, a two-mile stretch (surveyed the entire length by boat).	Widespread	Moderate colonies of <i>Dolichospermum</i> and very sparse colonies of <i>Microcystis</i> .	2,075	Results Pending	Cyanobacteria Bloom (HAB): Cyanobacteria are present in bloom (HAB) sample. Microscopic examination indicates the presence of cyanobacteria and therefore the potential for the bloom to be harmful.
21-3470-B1	7/19/2021	Bloom located along the shoreline of waterfront properties roughly one-half mile south of Taughannock State Park in Trumansburg.	Small Localized	Moderate to dense colonies of <i>Dolichospermum</i> .	2,020	Results Pending	Cyanobacteria Bloom (HAB): Cyanobacteria are present in bloom (HAB) sample. Microscopic examination indicates the presence of cyanobacteria and therefore the potential for the bloom to be harmful.
21-3478-B1	7/20/2021	Bloom located near the shoreline, along the length of N Powers Road.	Widespread	Moderate colonies of <i>Dolichospermum</i> .	Results Pending	Results Pending	Cyanobacteria Bloom (HAB): Cyanobacteria are present in bloom (HAB) sample. Microscopic examination indicates the presence of cyanobacteria and therefore the potential for the bloom to be harmful.
21-3482-B2	7/20/2021	Bloom located in Romulus in an approx. 200 yard length area along NY-89.	Large Localized	Sparse to moderate colonies of <i>Dolichospermum</i> .	209	Results Pending	Cyanobacteria Bloom (HAB): Cyanobacteria are present in bloom (HAB) sample. Microscopic examination indicates the presence of cyanobacteria and therefore the potential for the bloom to be harmful.
21-3400-B1	7/20/2021	Bloom located on the shoreline of waterfront properties south of Sheldrake Point, along Route 153 in Interlaken, NY.	Large Localized	Dense colonies of <i>Dolichospermum</i> .	1,320	Results Pending	Cyanobacteria Bloom (HAB): Cyanobacteria are present in bloom (HAB) sample. Microscopic examination indicates the presence of cyanobacteria and therefore the potential for the bloom to be harmful.
21-3422-B1	7/20/2021	Bloom located on the shoreline of properties on Blackchin and Bolton Point Rd. and extends south along the shoreline of properties on East Shore Dr.	Widespread	Dense colonies of <i>Dolichospermum</i> and sparse <i>Microcystis</i> .	12,716	Results Pending	Cyanobacteria Bloom (HAB): Cyanobacteria are present in bloom (HAB) sample. Microscopic examination indicates the presence of cyanobacteria and therefore the potential for the bloom to be harmful. This is likely part of bloom 21-3423-B1, 21-3424-B1, and 21-3422-B1 due to the widespread nature of the bloom that these volunteers reported.
21-3460-B1	7/20/2021	Bloom located along the shoreline of multiple lakefront properties on Fire Lane 2 and Atwater Rd. in King Ferry, NY.	Widespread	Moderate colonies of <i>Dolichospermum</i> .	1,540	Results Pending	Cyanobacteria Bloom (HAB): Cyanobacteria are present in bloom (HAB) sample. Microscopic examination indicates the presence of cyanobacteria and therefore the potential for the bloom to be harmful.
21-3425-B1	7/20/2021	Bloom located along the shoreline at East Shore Park in Ithaca, NY, and along the shoreline of waterfront properties on East Shore Dr.	Large Localized	Moderate colonies of <i>Dolichospermum</i> .	Results Pending	Results Pending	Cyanobacteria Bloom (HAB): Cyanobacteria are present in bloom (HAB) sample. Microscopic examination indicates the presence of cyanobacteria and therefore the potential for the bloom to be harmful. This is likely part of bloom 21-3423-B1, 21-3424-B1, and 21-3422-B1 due to the widespread nature of the bloom that these volunteers reported.
21-3420-B1	7/20/2021	Bloom located on the shoreline of Myers Park in Lansing, NY. Large accumulation in the swimming area. Widespread along all of Myers Point, including marina. Worst was at sample location of Myers Park Beach swimming area.	Large Localized	Moderate colonies of <i>Dolichospermum</i> .	1,329	Results Pending	Cyanobacteria Bloom (HAB): Cyanobacteria are present in bloom (HAB) sample. Microscopic examination indicates the presence of cyanobacteria and therefore the potential for the bloom to be harmful.
21-3423-B1	7/20/2021	Bloom located along the shoreline of many waterfront properties on East Shore Dr. in Ithaca, NY.	Widespread	Dense colonies of <i>Dolichospermum</i> .	43,527	Results Pending	Cyanobacteria Bloom (HAB): Cyanobacteria are present in bloom (HAB) sample. Microscopic examination indicates the presence of cyanobacteria and therefore the potential for the bloom to be harmful. This is likely part of bloom 21-3423-B1, 21-3424-B1, and even 21-3422-B1 due to the widespread nature of the bloom that these volunteers reported.
21-3424-B1	7/20/2021	Bloom located along the shoreline of many waterfront properties on East Shore Dr. in Ithaca, NY.	Widespread	Dense colonies of <i>Dolichospermum</i> .	Results Pending	Results Pending	Cyanobacteria Bloom (HAB): Cyanobacteria are present in bloom (HAB) sample. Microscopic examination indicates the presence of cyanobacteria and therefore the potential for the bloom to be harmful. This is likely part of bloom 21-3423-B1, 21-3424-B1, and even 21-3422-B1 due to the widespread nature of the bloom that these volunteers reported.
21-3459-B2	7/20/2021	Bloom located along the shoreline of several waterfront properties in coves near Hibiscus Point in Union Springs, NY.	Large Localized	Dense colonies of <i>Dolichospermum</i> and sparse to moderate <i>Microcystis</i> .	1,505	Results Pending	Cyanobacteria Bloom (HAB): Cyanobacteria are present in bloom (HAB) sample. Microscopic examination indicates the presence of cyanobacteria and therefore the potential for the bloom to be harmful.
21-3434-B1	7/23/2021	Bloom located along the shoreline of private waterfront properties just south of Taughannock State Park.	Large Localized	No cyanobacteria found.			Not a Bloom: Laboratory analyses indicate that this was not a harmful algal bloom (HAB).
21-3419-B1	7/23/2021	Widespread bloom along the north shore of Sail Point from the boat launch about 100yds to the west. Extent of the bloom could be seen out in the water.	Large Localized	Sparse colonies of <i>Dolichospermum</i> .	Results Pending	Results Pending	Cyanobacteria Bloom (HAB): Cyanobacteria are present in bloom (HAB) sample. Microscopic examination indicates the presence of cyanobacteria and therefore the potential for the bloom to be harmful.
21-3432-B2	7/26/2021	Bloom located along the shoreline of waterfront properties on Glenwood Rd.	Small Localized	Sparse colonies of <i>Dolichospermum</i> .	Results Pending	Results Pending	Cyanobacteria Bloom (HAB): Cyanobacteria are present in bloom (HAB) sample. Microscopic examination indicates the presence of cyanobacteria and therefore the potential for the bloom to be harmful.



Map indicating the locations of blooms on Cayuga Lake in the past few weeks.

Each pin color indicates the microcystin toxin status of the cyanobacteria bloom. More information can be found at the link below.

Credit: [CSI's HABs Map](#)

The Historical Timeline of HABs in Cayuga Lake

2017

July 2017: First noticeable major HABs outbreak occurs on the Southern end of Cayuga. The outbreak resulted in significant local news coverage, bringing HABs to the attention of the wider public for the first time.

September 2017: In response to the growing concern in the community following a summer of intense HABs, CSI convened a community forum with over 100 people in attendance, including a panel of local experts who helped lead discussions.

2018

2018: The Cayuga Lake HAB Monitoring Program was created and HABs quadrant leaders were established. During this first year, NYSDEC had to be sent the samples for analysis (Today, this analysis is done in CSI's Ithaca lab).

Summer 2018: A coordinated media communication program with regular HABs updates was established, an interactive map was made available on CSI's website, and the habshotline@gmail.com account was created so the public could report possible HABs.

2018: The Cayuga Lake HABs Action Plan is published. This plan provided a summary of what the NYSDEC considered to be key drivers of HABs on Cayuga and outlined recommended management actions to help mitigate/reduce HABs on Cayuga Lake.

2019

2019: The HABs Monitoring Program grew from monitoring roughly 33% of the shoreline to roughly 47%. We added many new volunteers in the southern and northern end of the lake. That year 67 blooms occurred (Fall 2019 Water Bulletin, CSI, 2019).

2020

2020: The HABs Monitoring Program grew to cover 53% of the Cayuga's shoreline. CSI successfully shifted volunteer training meetings in June to an online format to adapt to the restrictions of COVID-19.

2020: 78 cyanobacteria blooms were documented on Cayuga Lake, which unlike other years, occurred continuously throughout the summer. CSI also tested blooms for anatoxin-a for the first time.

2021

2021: The HABs Monitoring Program grew again, now monitoring roughly 60% of Cayuga Lake's shoreline. New volunteers from the Northern end of the lake joined the monitoring program.

2020: HABs reporting brochure holders were installed at all State Parks and some other waterfront parks around the lake. These are stocked with Cayuga Lake HABs Information and Reporting Brochures.

July 2021: So far, there have been 41 documented HABs this season. Lots of runoff from rainfall has contributed to a large spike in blooms in July.

Art Feature



This tranquil and soft watercolor painting titled "Cayuga Lake from the West Side" was made by Alison Mason Kingsbury Bishop in 1950. This watercolor is very similar in composition to an oil painting also made by Kingsbury titled "Lonesome barn".

Image Credit: Herbert F. Johnson Museum of Art, Cornell University

FAQs

What is the HABs Monitoring Program?

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). Through this monitoring program, we seek to protect public health, water quality, and the larger ecosystem from HABs.

How can I know if there is a HAB near me?

The fastest way is to [look at CSI's HABs Reporting Page](#), which provides an updated map with all the critical information. NY's Department of Environmental Conservation (DEC) also [maintains a HABs map](#). Additionally, this email newsletter will also communicate any reported HABs for the past week.

Where can I report a potential HAB?

[Use this form](#) or email habshotline@gmail.com. Please be sure to include all of the information required: personal information (your name, email, and phone number), bloom information (observation date and time and location of the bloom), and two pictures (one close up to show bloom composition and one from far away to show bloom extent).

Where can I easily view past HABs newsletters?

The CLWN website posts each weekly newsletter under the [2021 HABs Update page](#).

If I have more questions, who can I contact?

Cayuga Lake Watershed Network (CLWN)

CLWN Executive Director, Hilary Lambert: steward@cayugalake.org

607-319-0475

Community Science Institute (CSI)

info@communityscience.org

HABs Monitoring Program Coordinator, Nathaniel Launer:

nathaniel.launer@communityscience.org

607-257-6606

Discover Cayuga Lake (DCL)

(607) 327-5253