



HABs Weekly Newsletter

A product of the 2021 Cayuga Lake HABs Monitoring Program

JULY 13, 2021

Photo of Myers Point by Bill Hecht

In this newsletter:

HABs Update
Pages 1 & 2

HABs Pop Quiz
Page 3

Art Feature
Page 4

FAQs
Page 5

HABs Update

by **CLWN Staff Intern Alora Cisneroz**

The recent stormy weather may not be our ideal picture of summer, but that has not slowed down the Harmful Algal Blooms one bit!

In fact, in the past week there has been a significant spike in reported bloom conditions along the shoreline. This is likely because the rain results in runoff that provides the perfect nutrient influx for blooms to occur in Cayuga Lake.

The next page features the newly reported blooms at the time of writing. But as always, you will find the most up-to-date information on the [CSI reporting page](#).

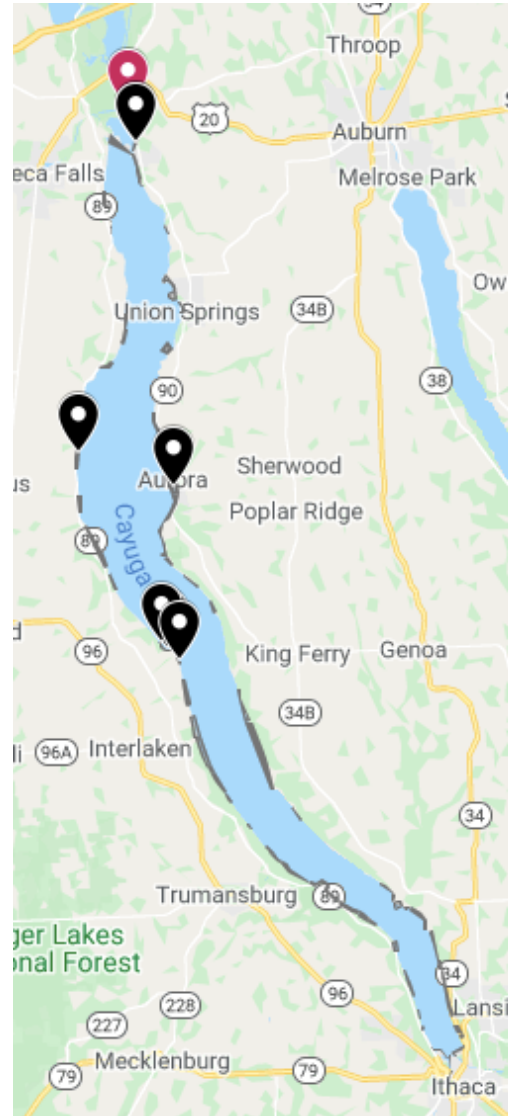
HABs Update

(as of Monday afternoon)

The bloom reported on 6/29 in last week's newsletter near the Village of Cayuga was analyzed on 7/7 and was found to contain Mycrosyтин toxin levels above 50 ug/ L. This level far exceeds the the limit for contact recreation (4.0 ug/ L) which is why the HAB has been updated with a red pin icon on the map.

On Friday 7/9, there were suspicious bloom conditions reported near the Main St. shoreline in Aurora. Initial microscopic examination indicates that the bloom contains cyanobacteria (*Dolichospermum*). Another bloom in the Village of Cayuga was tested on 7/11 and found to contain two types of cyanobacteria (*Microcystis* and *Dolichospermum*). This means that that both blooms have the potential to be harmful.

Additionally, this Monday 7/12, there were two suspicious bloom conditions observed; one in Romulus and one near Sheldrake Point. The samples have not been analyzed in the CSI lab and so there is currently limited information on the nature of these suspicious blooms. As always, maintain caution even in the absence of HAB confirmation.



Map Indicating the location of the blooms

Image credit: [CSI Reporting Map](#)

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
21-3407-B1	7/9/2021	Bloom seen along the shoreline of properties on Main St. in Aurora, NY.	Large Localized	Sparse to 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.
21-3458-B3	7/11/2021	Bloom located in a small cove on the shoreline of a property on Water St. in the Village of Cayuga.	Small Localized	Dense colonies of <i>Microcystis</i> and sparse to 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.
21-3476-B1	Not Yet Received	Bloom widespread along many waterfront properties located on Wyers Point Rd. both north and south of Sheldrake Point.	Widespread	Results Pending	Results Pending	Results Pending	Suspicious Bloom: Photos and field reports indicate this is a cyanobacteria bloom (HAB). Avoid any contact with the suspicious bloom.
21-3482-B1	Sample Not Collected	Bloom located along shoreline properties on Route 89 in Romulus.	Small Localized	Sample Not Collected. No Laboratory Results Available.	Sample Not Collected. No Laboratory Results Available.	Sample Not Collected. No Laboratory Results Available.	Suspicious Bloom: Photos and field reports indicate this is a cyanobacteria bloom (HAB). Avoid any contact with the suspicious bloom.

HABs Pop Quiz

Most of you may be out of school, but learning should never stop! Take this quiz to see how your HABs knowledge stacks up. You can find the answers at the bottom of this page.

1. **True or False: Harmful Algal Blooms can occur in both saltwater and freshwater**

- a. True
- b. False

2. **Globally, in recent years, the number of reported HABs has**

- a. Mainly decreased
- b. Mainly increased
- c. Remained fairly stable
- d. Not enough data yet

3. **True or False: Cyanobacteria, not algae, cause HABs**

- a. True
- b. False

4. **Which elements (nutrients) are thought to be a major contributor to HABs outbreaks?**

- a. Nitrogen and Calcium
- b. Nitrogen and Phosphorus
- c. Phosphorus and Sulfur
- d. Carbon and Aluminum

5. **What water conditions encourage HABs outbreaks?**

- a. Cold, still, nutrient-dense water
- b. Cold, agitated, nutrient-dense water
- c. Warm, still, nutrient-dense water
- d. Warm, agitated, nutrient-dense water

6. **Microcystin, a common HABs toxin in Cayuga Lake, is dangerous for humans because it can**

- a. Can cause damage to the nervous system
- b. Can cause damage to the skin
- c. Can cause damage to the liver



A HAB in Cayuga Lake
(Image Credit: [Tompkins County](#))



Hint: These nutrients are commonly found in fertilizers
(Image Credit: [Gardening Know How](#))



This week's art feature is a tediously detailed promotional map for the Finger Lakes region entitled "A Romance Map of Finger Lakes Region" (First issued in 1934, revised in 1962). It features precise comic-style drawings and descriptions of a history of the region.

Questions to consider: Why is it valuable to connect human stories with a place? How does knowing history change the way you think about a region? How does it change the way you act? Take a moment to consider whose version of history is captured in this map; whose story is being left out?

Credit: P.J. Mode collection of persuasive cartography, #8548. Division of Rare and Manuscript Collections, Cornell University Library.

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 our 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