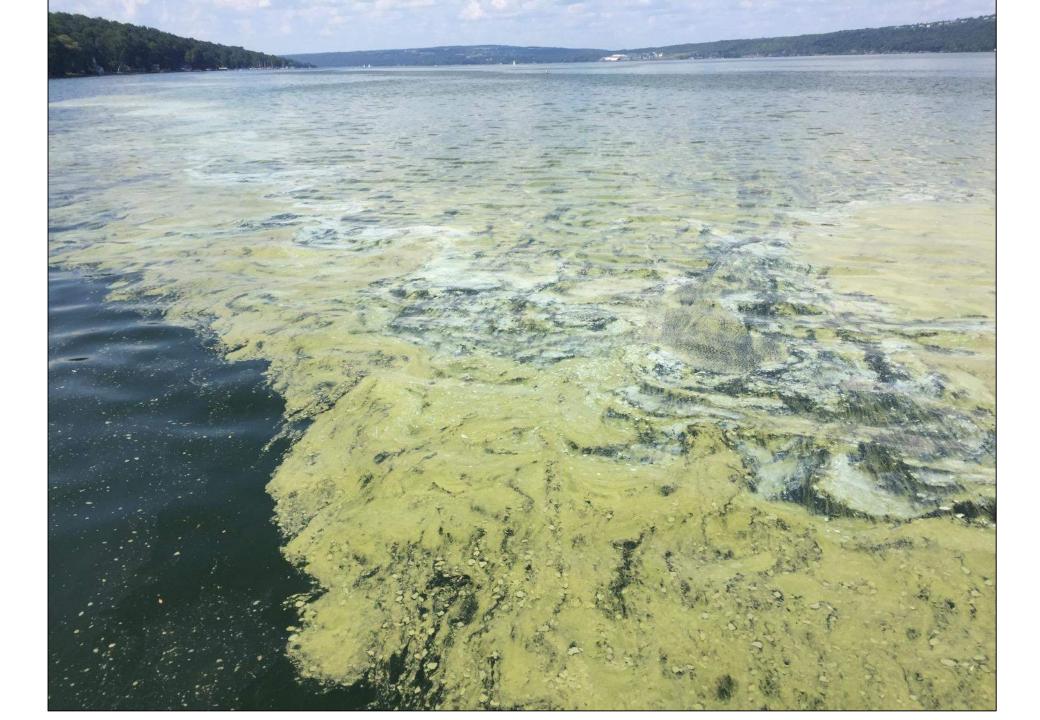
Communicating with the Public About Harmful Algal Blooms (cyanobacteria)

Hilary Lambert
Steward/Executive Director
Cayuga Lake Watershed Network













We'Nee Your Help Trissanner Frotesting Caugal Laterron Harmful Algal Blooms (HABs)!



*Harrier: [har-eear] nounfrom the verb harry, to harass or attack repeatedly. Example A Harrier Havk attacks small game

- ▲ Who can volunteer?
 - Anyone! Lake shore homeowners and avid boaters and anglers are especially encouraged to participate.
- What does being a HABs Harrier entail?
 - Attend a two hour HABs identification and sampling workshop in June.
 - Survey assigned length of shoreline once a week, mid-July through September.
 - Collect HABs samples and transport them to CSI lab for further analysis.
 - Be available to respond to HABs sightings reported by members of the public
- ▲ What can I do if I can't volunteer but still want to be involved?
 - Learn about HABs and how to recognize blooms (visit www.dec.ny.gov).
 - Report suspicious algal blooms.
 - Permit volunteers to survey and collect samples along your lake front property. For more
 information and to give permission, see contacts below.

For more information about volunteering contact:



Community Science Institute info@communityscience.org 607-257-6606



Cayuga Lake Watershed Network

programs@cayugalake.org 607-319-0475



Harmful Algal Blooms!

If you see a HAB, avoid it and report it.

Keep kids and pets away!

Quickly notify us at habshotline@gmail.com

We need the following information:

- 1. Pictures of the bloom
- 2. Location of bloom (GPS coordinates are highly preferable but approximate address and nearby landmarks will also do)
- 3. Date and time when pictures were taken.

A trained HABs Harrier will respond, take a sample for analysis if needed, and let you know what we find out.

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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).

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An algal bloom is a rapid growth of cyanobacteria and algal cells in dense concentrations. Cyanobacteria are photosynthetic bacteria found on the surface of water bodies, such as Cayuga Lake. These cyanobacteria can contain toxins that may be harmful for humans and other animals.

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Quickly notify us at

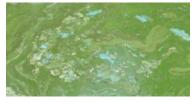
habshotline@gmail.com

Send **pictures** of the bloom, **location** of bloom* & **date** and **time** when pictures were taken.

*GPS coordinates are preferable but approx. address & nearby landmarks will also do
A trained HABs Harrier will respond, and take a sample for analysis if needed.









Map of HABs blooms on Cayuga Lake:

Check out the following map provided by the Community Science Institute: http://www.communityscience.org/cayuga-lake-2018-harmful-algal-blooms-results/ Check out the NYS Dept. of Environmental Conservation HABs Notification Page: https://www.dec.ny.gov/chemical/83310.html

Learn more about HABs on Cayuga Lake:

http://www.cayugalake.org/harmful-algal-blooms-habs-immediate-action-and-information.html

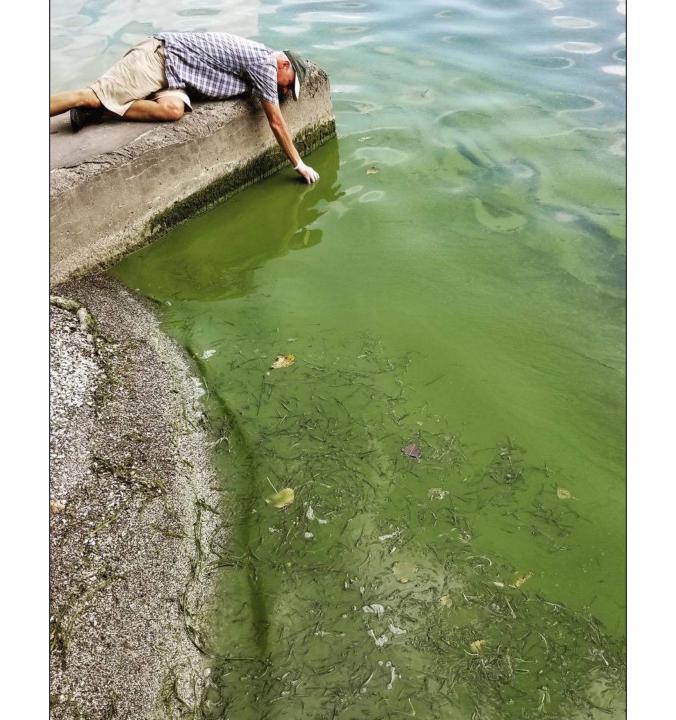
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HABs Update
Weekly e-newsletter

Harmful Algae Blooms on Cayuga Lake, early August 2017

This is the second summer 2017 installment of information and updates about Harmful Algae Blooms (HABs) for the Cayuga Lake area.

Scroll down to view the information links provided in the July 25 first installment.

The boating, paddling, and swimming public experienced HABs blooms across a wide area of southern Cayuga Lake over the past week. Last weekend, two dozen Cayuga Lake reports were submitted to DEC's HABs report page, from Aurora south: HABs.nlm.nih.gov. DEC's Scott Kishbaugh reports that their HABs work has been totally Cayuga Lake focused since last Saturday. He is very grateful for the public response, but sorry about the cause.

RESPONDING TO REPORTS

When DEC receives these reports, they send out qualified, trained people (DEC personnel and or/trained volunteers) to survey, take samples, and submit samples to DEC for analysis as to whether or not the bloom is toxic. This past week, the main responders on the southern end of Cayuga were trained volunteers Don Sargent and Shannon Barrett. A trained surveillance group is in place at the north end of the lake, led by Bill Ebert of Canoga. David Wolfe and others are on alert mid-lake. Here is a brief August 1 field report from Don Sargent:

"I sent in two samples of suspected HAB's one just south of Ithaca Yacht Club and one at Red Lighthouse at the entrance to the inlet. We observed where extensive blooms were out on the lake but were now blown ashore by the time of our cruise. They were the same color as the one south of Yacht club (photos sent to you yesterday) which is one of the samples. They extended from just north of Myers Pt to about three miles south of there. While being blown ashore they were now about five to ten feet from shore and also up on the banks and beaches. These must have been very extensive and covered very large areas to be covering that long of a shoreline. The lake in general looked very green and seemed almost thick with green color and very small particles. Nothing seen at Taughannock Pt but whatever could have been there was now part of what was seen at Myers Pt as the wind was NNW at about 10 knots.

Don Sargent

Cayuga Lake # 2." Photos are provided below.

THE CAYUGA LAKE SITUATION AS OF AUGUST 1, 2017:

Following reports and sampling from Don Sargent, the Floating Classroom, and numerous others, with beach closure decisions by county-level Departments of Health, Scott Kishbaugh shared this midweek summary: "As you all know, blooms have been popping up in several locations in Cayuga Lake. The outreach conducted by several county DOH's, the Cayuga Lake Watershed Network, CSI, DEC and others has directed a lot of attention to the issue and substantially increased the volume of reports. Some of these have been accompanied by digital pictures or videos, while others have been mostly narrative descriptions. At least two of these blooms have been confirmed through testing at SUNY ESF, and others have been inspected microscopically by present or retired Cornell faculty with cyanobacteria taxa observed to dominate the blooms. In addition, there are a few additional samples collected yesterday and submitted to SUNY ESF, and one additional site that may be sampled tomorrow. We will provide those results upon receipt from the lab."

Tompkins County Dept. of Health provides info about closures at beaches and parks: http://www.tompkinscountyny.gov/health.

Cayuga County Dept. of Health's HABs info:

Press Release ** For Immediate Use July 10, 2018 **Press Release

Harmful Algal Blooms Reported on Cayuga Lake

Blooms reported, sampled, tested & mapped, from July 2 - present

Pasted below and attached is *HABs Update* - "Harmful Algal Bloom Update" issue 2, newsletter for the week of July 9, 2018.

Attention: DO NOT ENTER THE WATER IF HABs ARE PRESENT!

If you see a bloom, don't touch it. Keep your children and dogs away. Report the bloom to habshotline@gmail.com with the location, time, date and two photos. See photos in the July 9 HABs Update newsletter for examples of what HABs look like.

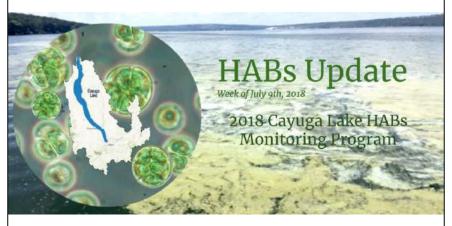
Link to the map of reported HABs locations around Cayuga Lake with test results, and of shoreline zones regularly patrolled by HABs Harriers:

http://www.communityscience.org/cayuga-lake-2018-harmful-algal-blooms-results/

Please read more in the July 9 *HABs Update*, share widely with friends and the public, and keep an eye out for updates throughout the summer.

For more information contact: Claire Weston, Community Science Institute info@communityscience.org ~ 607-257-6606

Jenn Grillo Tufano, Cayuga Lake Watershed Network programs@cayugalake.org ~ 607-319-0475



Harmful Algal Bloom Update 2

Updates

It's been a hot summer so far! The heat is perfect for lounging on a dock with a stimulating book, splashing in the lake with family and forgetting the chill of winter. Unfortunately, this beautiful summer heat may be contributing to the early emergence of HABs around Cayuga Lake.

According to the <u>Environmental Protection Agency's report on</u> <u>nutrient pollution</u>, warmer water due to climate change might favor harmful algae in a number of ways:

- Warmer temperatures prevent water from mixing, allowing algae to grow thicker and faster.
- Warmer water is easier for small organisms to move through and allows algae to float to the surface faster.
- Algal blooms absorb sunlight, making water even warmer and promoting more blooms.

Overall, warming water temperature causes HABs to thrive. The heat we have experienced since early July may be a contributing factor to the number of HABs sightings that have been reported.

The Cayuga Lake Watershed Network's HABs page has been

HABs Video PSA!

We would like to share with you the Cayuga Lake Watershed Network's new HABs Video PSA. The 4-minute video was made by Carly Siege, our Communications Staff, to help inform the public of the threat of HABs, as well as how to spot them and how to report them.

https://youtu.be/lTKrsj5PM8M



Where: Dean's Cove boat launch on Cayuga shoreline at Romulus, across from Aurora

When: July 3, 2018

Found By: Mike Flood, Sheldrake Water to Wine Captain



Where: 5391 Route 89 Romulus

When: July 3, 2018

Found By: Jen Bennett



Where: Route 89 in Romulus, NY

When: July 3, 2018

Found By: Mike Flood and Adriana Hirtler



Where: Midlake off Bolton Point

When: July 7, 2018

Found By: Bill Foster, Floating Classroom



To see where HABs have been reported on Cayuga Lake:

Check out the following map provided by the Community Science Institute:

http://www.communityscience.org/cayuga-lake-2018-harmful-algal-blooms-results/

This map is regularly updated, and includes bloom report locations, test results, and displays the zones that HABs Harriers (trained volunteers) are regularly checking for HABS.

Check out the DEC HABs Notification Page:

https://www.dec.ny.gov/chemical/83310.html







To learn more about HABs with links to research, the global scope of this problem, and information about possible causes and solutions, check out our HABs page at www.cayugalake.org/harmful-algal-blooms-habs-immediate-action-and-information.html



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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