



City of Ithaca and Cayuga Lake by Bill Hecht

# HABS WEEKLY NEWSLETTER

2022 CAYUGA LAKE HABS MONITORING PROGRAM

JUNE 30th, 2022

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## *Introduction to HABS*

by CLWN Staff Intern Maria Lee

It's a radiant day – the sun has emerged, bringing with it an array of new life in the lake. However, this warming weather means that we are quickly approaching the next summer HAB season, which historically starts in July.

**"What exactly is a HAB?"**, you may be asking.

Harmful Algal Blooms (or HABS, as they are often referred to) consist of microscopic, photosynthesizing organisms called **cyanobacteria**.

Cyanobacteria are regular residents of the lake, growing best in environments with warm waters and ample exposure to sunlight and nutrients. During the later summer months of August and September, the lake water reaches its warmest temperatures, further facilitating cyanobacteria growth. When populations of cyanobacteria start to increase at a rapid and excessive rate, this can cause a Harmful Algal Bloom.

**WHEN CYANOBACTERIA GROWTH STARTS TO BOOM, THIS EQUATES TO A HARMFUL ALGAL BLOOM!**

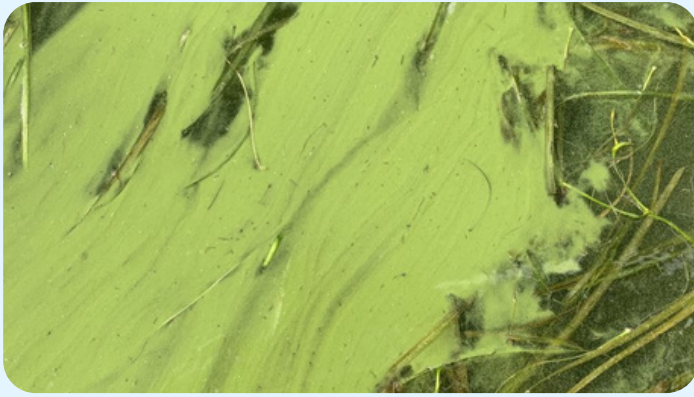


Image from CSI website

### Dangers of HABS:

Not all algal blooms are harmful, but cyanobacteria blooms, or cyanoHABs, contain cyanotoxins that can be harmful.

Contact with a HAB can lead to irritation of the eyes, skin, throat, and lungs. Ingestion can lead to headaches, dizziness, nausea, vomiting, and more. HABs can even lead to mass mortality in species in the surrounding environment and impact the local food web.

Make sure to keep yourself and your pets out of any suspicious blooms! Pets and livestock can experience intense illness, or even death, if they consume large amounts of water containing cyanotoxins. To learn more, visit the [CDC website on Harmful Algal Bloom-Associated Illnesses](#) or [this brochure about 'Dogs and HABs'](#) by [The NYS Sea Grant](#)



Pet Poison Hotlines:

Animal Poison Control Center:

(800)-213-6680

ASPCA: (888) 426-4435

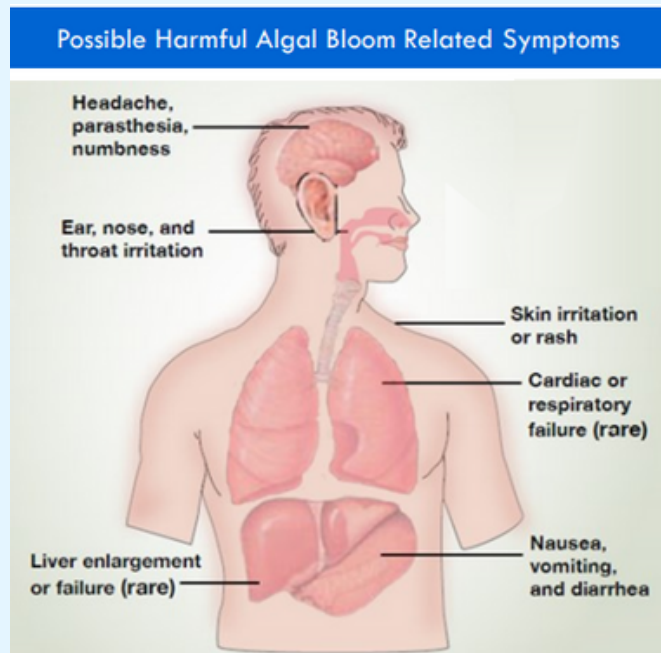


Image credit: [Harmful Algal Blooms Toolkit, 2019](#)

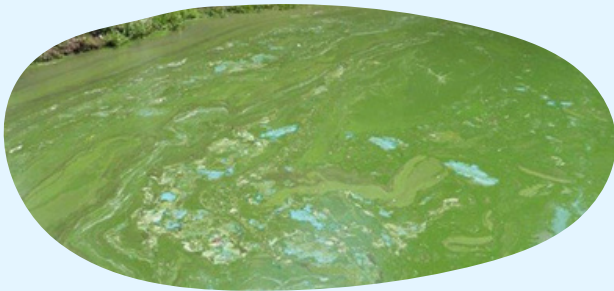
### Health concerns? Contact:

- o Tompkins County Health Dept. (607) 274-6600
- o Cayuga County Health Dept. (315) 253-1560
- o Seneca County Health Dept. (315) 539-1920
- o NYS Department of Health: [www.health.ny.gov/environmental/water/drinking/bluegreenalgae.htm](http://www.health.ny.gov/environmental/water/drinking/bluegreenalgae.htm) or email [harmfulalgae@health.state.ny.us](mailto:harmfulalgae@health.state.ny.us)

## ***How to Identify a Harmful Algal Bloom***

### **How to spot a HAB:**

The abundance of cyanobacteria in the lake create a murky, green color on the water. Since they are microscopic, the bacteria cannot be seen with the naked eye, but they may form clumps or dots on the surface of the water. The water may also look like sheen, green spilled paint.



In Cayuga Lake, the wind and waves often push the cyanobacteria near shore, creating an accumulation where swimmers and their pets are susceptible to exposure.

**For some tips and tricks on how to identify HABs, watch this [HABs Identification Video](#) by the New York State Department of Environmental Conservation.**

**Keep an eye out for these characteristics:**

**A murky, pea-soup like appearance**

**Clumps of cyanobacteria**

**Parallel green streaks**

**"Spilled green paint" appearance or an oily sheen on the surface**

Image credit: CSI/CLWN website

## How to Identify a Harmful Algal Bloom

Determining the difference between a Harmful Algal Bloom (cyanobacteria bloom) and a non-toxic algal bloom can be hard since they may look similar. HABs can often be confused with non-toxic green algae, duckweed, or pollen in the water. To be safe, avoid any exposure to a suspicious HAB and keep kids and pets away. Avoid swimming in or using water near the suspicious bloom.



### What should I do if I'm not sure what I'm seeing is a HAB or not?

Upon finding a suspicious bloom, please fill out the [HAB Report form](#) with the information about the suspected HAB or email us at [habshotline@gmail.com](mailto:habshotline@gmail.com)

Until the suspicious body of water is confirmed clean, it's best to stay out of the water.

**WHEN IN DOUBT, KEEP OUT!**

### Common green algae blooms mistaken for HABs:



Green algae can create bubbling clumps on the water and get entangled in plants

This image shows the stringy, hairy cloud that this accumulated green algae forms



Although it can create a green surface on the water, duckweed is a harmless, non-toxic aquatic plant



Image credit: [Dept. of Environmental Conservation website](#)

## ***Cayuga Lake HABS Monitoring Program***

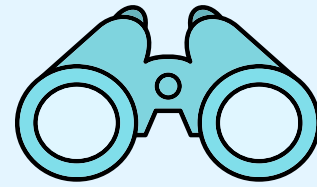
With collaboration from The Community Science Institute (CSI), the Cayuga Lake Watershed Network (CLWN), and Discover Cayuga Lake (DCL). These nonprofits work with the local community to collect data and protect public health.



Image credit: CSI website, 2018

## ***HABS Updates***

This newsletter will contain information about weekly HABS around Cayuga Lake and keep you in the know! Summer is still young, and as of now, there have been no confirmed HABS. Stay tuned for HABS updates, Creatures of Cayuga Lake highlights, interviews, and more!



### **"HABS Harriers"**

\*Harrier: [har-ee-er] noun, from the verb harry, to persistently attack repeatedly.

Our team of HABS Harriers are dedicated, passionate individuals who volunteer to weekly patrol Cayuga Lake for HABS.

Upon discovery of a HAB, samples are collected and sent to the Community Science Institute, where it can then be tested for toxicity. The results are then posted within 24-72 hours.

This efficient process keeps the public informed and protected from exposure to HABS occurring on the lake.

**To check for HABS updates on Cayuga Lake:**

Visit the [CSI's HAB's Reporting Page](#)

**To report a HAB** (or a suspected HAB):

Please fill out the [HAB Report form](#) with the information or email us at [habshotline@gmail.com](mailto:habshotline@gmail.com)

**About the Author:**

Hello! My name is Maria Lee, and I'm honored to be the 2022 Cayuga Lake Watershed Network HABS Communications Intern. I am currently studying Communication at Cornell University and am hoping to minor in Marine Biology and American Indian and Indigenous Studies. Aquatic life has always fascinated me, and I love learning about the connectivity between nature and people. This summer, I am excited to learn more about life in beautiful Cayuga Lake and to share knowledge with the vibrant surrounding community that makes this area so special.



**Safety Tips:**

1. Stay away from any suspicious blooms
2. Never swallow untreated lake water and try to keep your mouth, eyes, and head above the water to prevent ingestion of bacteria or parasites
3. Don't swim in cloudy, discolored, or suspicious-looking water - it could contain microorganisms that are harmful to humans
4. Make sure to wash your hands after contact with water before you eat, or shower after swimming



**KNOW IT, AVOID IT, REPORT IT!**

**Questions? Contact:**

	<b><u>Cayuga Lake Watershed Network (CLWN)</u></b>
	Liz Kreitinger, Steward/Executive Director: steward@cayugalake.org
	<b><u>Community Science Institute (CSI)</u></b>
	Grace Haynes, HABS Monitoring Program Coordinator aghaynes@communityscienc e.org
	<b><u>Discover Cayuga Lake</u></b> 607-327-LAKE/5253

Photo by Bill Hecht

