



## What's THAT in the water? A Beginner's Guide to Responding to Suspicious Lake Conditions

*by Kelly Buchanan, NH LAKES (June 2019)*



As our lakes begin to face new threats, like cyanobacteria blooms and aquatic invasive animals, sometimes we struggle to identify these problems when they occur. Early in June, I experienced this very problem.

It was a perfect first weekend of summer weather. The sun was finally out, the temperature was in the low 80s, and the water was chilly and refreshing. Earlier that day, my family and I installed our moorings and swim raft for the season. After all that hard work, we grabbed the paddle boards and kayaks to enjoy the good weather on the water. As we left our cove, I noticed something strange in the water.

I swung my kayak paddle down into a yellow-brown section of water. The water column was so full of this yellow-brown scum it felt as if I was paddling in a very small and shallow pond (or, a very dirty fish bowl). I was actually in an area of the lake that was 50 feet deep! There was also a strange dead fish odor and, earlier in the day, I noticed a few dead fish on the shoreline. One of my family members exclaimed, "Ew! Someone is having a septic problem!" Another family member said, "No, it doesn't really smell like sewage. It must be rotting pollen."

My curiosity got the better of me and I took out a drone to get some aerial photos. To my amazement, acres of the lake were covered in streaks of green. When I got to work on Monday morning, I decided to send these photos into the New Hampshire Department of Environmental Services (NHDES). A NHDES biologist immediately responded with a set of questions including, “Where exactly did you find evidence of the change in water quality? Was the scum on the surface or suspended in the water column? Did you notice a foul odor on the lake? What kinds of areas (deep, shallow, open, cove) did you find the scum in?” And the big one—“did you collect a water sample?”

No, I didn’t and I should have. Luckily, the local lake association volunteered to zip out in their boat to collect one and expedite it to NHDES.

One set of drone photos, three state agency employees, and one local lake association later—I had some answers in less than three days’ time. Unfortunately, the water sample test was inconclusive. The biologists indicated that the sample did contain some golden-brown algae, which didn’t raise much concern. But, the photos suggested that a cyanobacteria bloom may have occurred.

Despite the inconclusive results, I learned a valuable lesson from this experience that I want to share. It’s important for us all, as citizen water quality monitors, to know how to respond to blooms and other threats to water quality for the health and safety of our communities. If you see evidence of something strange resembling an algae bloom when you’re out on the lake, please follow these directions from the New Hampshire Department of Environmental Services:

*If you suspect a cyanobacteria bloom make sure that children and pets do not drink, wade, swim, or make contact with the water. Call the NHDES Cyano hotline to report the bloom at (603) 848-8094. If you are able, collect a water sample with a clean bottle or Ziploc bag while wearing gloves. Label the container with location, date, time and your contact information. Place the sample on ice until it can be transferred to the NHDES Limnology Center for microscopic analysis. If you are unable to collect a sample, a picture of the bloom can also assist limnologists with identification. The NHDES beach program will [post an advisory](#) for the beach area if necessary.*

Thank you for keeping an eye on your favorite lake!

NH LAKES is the only statewide, member-supported nonprofit organization working to keep New Hampshire’s lakes clean and healthy, now and in the future. The organization works with partners, promotes clean water policies and responsible use, and inspires the public to care for our lakes. For information, visit [www.nhlakes.org](http://www.nhlakes.org), email [info@nhlakes.org](mailto:info@nhlakes.org), or call 603.226.0299. We hope that you will share this article with others—we just ask that you include the following: This article was originally published by NH LAKES.