

"What is that blue-green paint stuff in the lake?"



A toxic cyanobacteria bloom may look like someone dumped blue-green paint into the lake. (Photo courtesy of NH Dept. of Environmental Services)

Don't be afraid to swim in New Hampshire's lakes—overall, they are among the cleanest in the nation! With that said, cyanobacteria advisories are often issued by the New Hampshire Department of Services (DES) during the summer to warn the public about the potential danger of recreating in certain waterbodies experiencing a toxic bloom, and researchers are investigating a possible link between Lou Gehrig's disease and cyanobacteria blooms. Here's what you need to know...

What are cyanobacteria? Cyanobacteria are single-celled bacteria that produce their own food utilizing sunlight. They some of the earliest inhabitants of our waters and they naturally occur in all of our lakes, usually in relatively small amounts. However, limnologists (scientists who study freshwater) have found that the amount of cyanobacteria in a waterbody often increases when the amount of nutrients (such as phosphorus) increases. Limnologists have also discovered that some cyanobacteria produce toxins that adversely affect livestock, domestic animals, and humans.

What does a bloom look like? When present in low numbers, cyanobacteria can't been seen with the naked eye and they typically do not cause recreational or aesthetic problems. Unfortunately, when the optimal "bad conditions" come together—such as when a day or two of heavy rain which causes phosphorus-enriched water to flow off the landscape into nearby waterbodies is followed by a few days of sunny, warm weather—a cyanobacteria bloom may occur in the lake. Typically, blooms are found in cove areas or along the windward shore of a waterbody. The surface of the water may look like pea soup or antifreeze, or like someone dumped greenish-blue paint into the water. It could also smell like grass.

What you should do if you find a suspicious looking bloom in the lake. If you see something that resembles a bloom, or any other unusual scum on the water, make sure that children and pets do not drink, wade, swim or make contact with the water. Please text a photo of the bloom and location to the Harmful Algal and Cyanobacterial Bloom Program at NHDES at 603.848.8094 or email photos to HAB@des.nh.gov.

What does it mean if a cyanobacteria advisory is posted? Typically, cyanobacteria advisories are posted for public swimming areas and not for the entire lake. It is unusual for an entire lake or pond to be affected by a bloom. The general rule is that if you don't see what looks like a cyanobacteria bloom where you intend to swim, then you should be safe. DES recommends that "look before you leap" into the water—if you see what might be a bloom, you shouldn't swim in that area and you should report it. If an area is posted for a cyanobacteria bloom, DES will continue to retest the area, and will remove the advisory when the bloom no longer is present. This may take a day or two, or a week or two. Every bloom is different—we just have to let nature take care of it.

How you can help prevent a bloom in the lake. To reduce the chances of a cyanobacteria bloom occurring in the lake, you can help reduce the amount of nutrients, such as phosphates, that enter the water. There are many simple things you can do to reduce your individual contribution to phosphorus pollution: vegetate shorelines with native plants; use phosphorus-free fertilizer (or don't use any fertilizer at all!); dispose of yard waste away from waterbodies; use phosphate-free soaps; repair eroding areas; keep the shoreline clean by not feeing waterfowl; and, upgrade outdated or undersized septic systems.

Don't be afraid to swim in New Hampshire's lakes—instead, feel lucky that in New Hampshire we recreate in one of handful of states where lakes are tested for this potentially toxic bacteria! And, don't forget to "look before you leap!"

For more information. For the most up-to-date cyanobacteria advisories issued for New Hampshire's lakes and ponds, visit https://www4.des.state.nh.us/WaterShed_BeachMaps/WaterShed_BeachMaps.aspx.

NH LAKES is the only statewide, publicly 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, email info@nhlakes.org, or call 603.226.0299.

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