

## **BCT Stewardship Journal: June 2025**

## Katie's Thoughts from the Trail: Cyanobacteria: A Growing Concern

As you've probably heard, Cyanobacteria, often referred to as bluegreen algae, has once again been reported in several Brewster ponds. Cyanobacteria are photosynthetic microorganisms and despite their name, they are not true algae but rather bacteria that can produce their own food through photosynthesis. Under favorable conditions—warm temperatures and high nutrient levels—these organisms multiply rapidly, causing harmful algal blooms in local waters. These blooms can transform crystal-clear waters into foul green surfaces that not only pose public health issues but also disrupt local ecosystems.

So, why are these blooms so concerning? Cyanobacteria produce toxins known as "microcystins". These toxins can be harmful or even lethal to humans and animals alike. Exposure through swimming or ingestion of contaminated water can lead to skin rashes, gastrointestinal issues, and other severe health problems. Another harmful effect of these blooms is that they deplete oxygen levels in the water as they die and decompose. This process creates "dead zones," where aquatic life struggles to survive due to insufficient oxygen levels, which can significantly harm fish and other wildlife populations.

What can we do to help? While the situation may seem daunting as outbreaks are being reported in more and more ponds, there are proactive steps that residents can take:

- Reduce Nutrient Runoff: One of the primary contributors to cyanobacterial growth is nutrient pollution from fertilizers and lawn runoff. Residents should consider using organic fertilizers sparingly or opting for native plants and rain gardens that naturally filter water, require less maintenance, and reduce runoff into waterways.
- Maintain Healthy Watersheds: Protecting wetlands and natural vegetation around ponds helps filter out pollutants before they enter waterways. This is a big reason why Brewster Conservation Trust targets these parcels for conservation!



Cyanobacteria warning posted at Schoolhouse Pond in Brewster (6/16/2025)



Schoolhouse Pond Cyanobacteria bloom (6/16/2025)

- **Educate Others**: Awareness of course is key. Informing neighbors about the dangers of cyanobacteria—and how they can help prevent its spread—can go a long way in keeping our local ponds clean.
- **Report Blooms**: You can report any observations to the Brewster Health Department at 508-896-3701 X1120 or brhealth@brewster-ma.gov as well as APCC by emailing cyano@apcc.org.

The Brewster Ponds Coalition (<a href="www.brewsterponds.org">www.brewsterponds.org</a>) will continue monitoring our Brewster ponds throughout the summer and updates will be provided as conditions change. An updated map of all monitored ponds can be found here: <a href="https://apcc.org/our-work/science/community-science/cyanobacteria/#whatare">https://apcc.org/our-work/science/community-science/cyanobacteria/#whatare</a>. For additional information, visit <a href="https://www.mass.gov/guides/cyanobacterial-harmful-algal-blooms-cyanobabs-water">https://www.mass.gov/guides/cyanobacterial-harmful-algal-blooms-cyanobabs-water</a>.