

# WORCESTER CYANOBACTERIA MONITORING COLLABORATIVE

## Monthly Report

June 2018



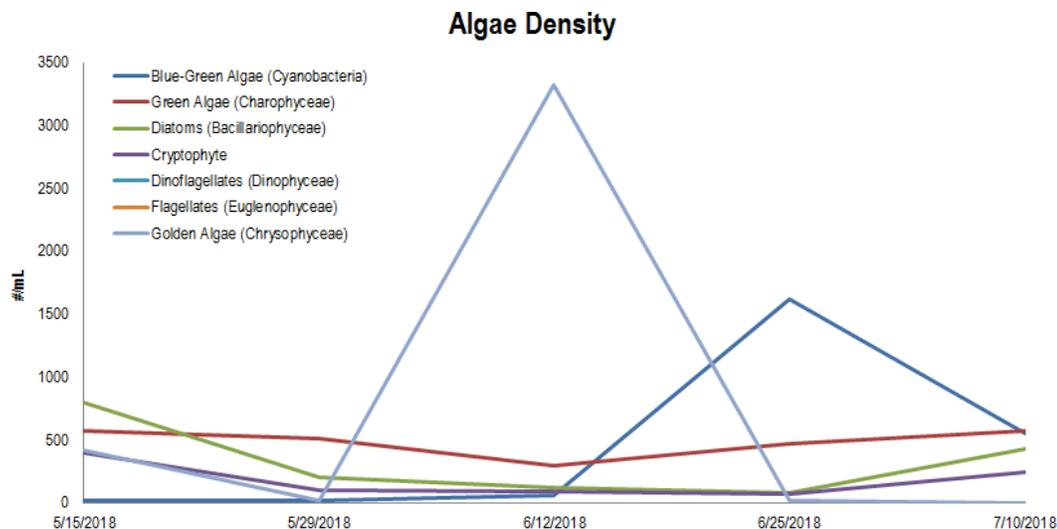
Dan and Jillian look for algae and cyanobacteria in water samples from Cooks Pond.

It's officially summer and things are warming up! Increased temperatures promote increased cyanobacteria activity, and on June 30<sup>th</sup>, the WCMC found its first traces of blue-green algae in our waterways. The group documented both *Anabaena* and *Microcystis* in three waterways- Indian Lake, Lake Quinsigamond, and Patch Reservoir.

**Sampling Weather:** We had another beautiful day for sample taking. The air temperature was about 83 degrees while the water was around 75 degrees in most places when the samples were taken in the morning. There had been no rain in the past 24 hours. Samples were collected between 8:50 and 10:20 am.

**General Findings:** While this weekend we struggled with some technical difficulties, we were able to improvise effectively and snap some pictures of the critters that we found using our iPhones. In Indian Lake we found evidence of both *Microcystis* and *Anabaena*, while in Lake Quinsigamond and Patch Reservoir we found only *Anabaena*. We did not, however, find any in Cooks Pond, Coes Reservoir, Kiver Pond or Little Indian Lake, which we also looked at. These findings are a bit different from those of last year, when we found more *Microcystis* than *Anabaena* earlier in the season.

**What it means:** Cyanobacteria occur naturally in our surface waters, so there is no need to be alarmed just to observe them in low density. We now know we must continue to monitor our waters for more, or other signs of cyanobacterial blooms. Additionally, just because we didn't find any cyanobacteria in the other lake water samples, it doesn't mean that these waterbodies are immune. We will continue to keep a close eye out!



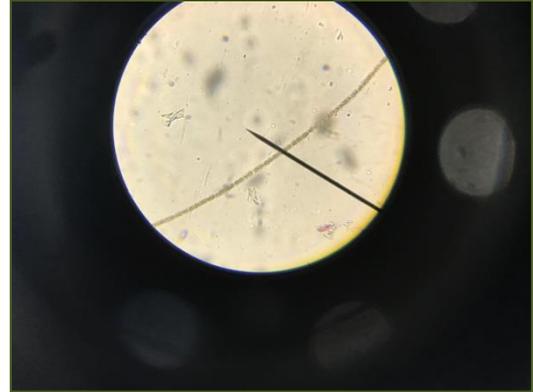
Following what we have observed under the scope, results from an algal enumeration study at Indian Lake suggest that phytoplankton density has been low. In May, we saw more golden algae, and in June more cyanobacteria.

# CYANOBACTERIA

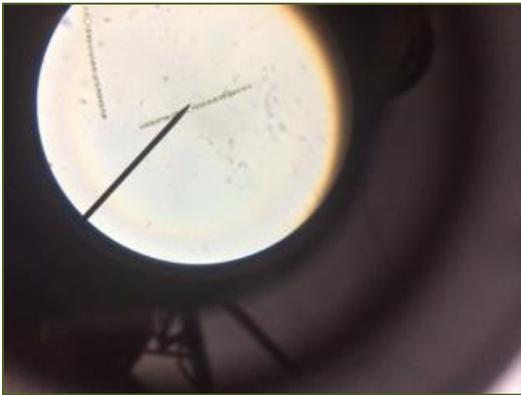
## ANABAENA



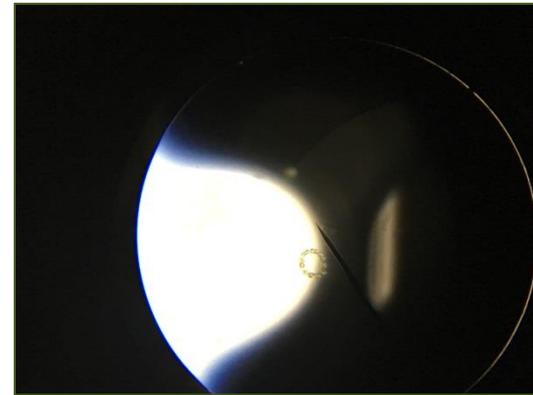
*Anabaena* at Indian Lake



*Anabaena* at Patch Reservoir



*Anabaena* at Patch Reservoir



*Anabaena* at Lake Quinsigamond

## MICROCYSTIS



*Microcystis* at Indian Lake

*Thanks again to Joy Trahan-Liptak, and all the volunteers for their support!*