worcester cyanobacteria monitoring collaborative Patch Pond – July 2021

Sampling Conditions

July 17th was a partly cloudy Saturday at 73° F with no wind activity. The sample was taken by the waterfall where there were .4 inches of rainfall the day before the sample was taken. The water was clear with average wave activity and no smell. There was a slick oil-like sheen on the surface of the water, and snails were observed along the rocks.

FlowCam Findings from the GRAB Sample

The FlowCam, an advanced microscopy technology, was run for all organisms in the water sample including green algae, golden algae, cyanobacteria, diatoms, and debris. The particle density at Patch Pond was 504 particles/ml in July. The figure provides a snapshot of some of the images that were seen by the camera at this lake.





Fluorimetry Data from the Integrated Tube Sample

Using the fluorometer to find phycocyanin levels, the following graph represents the relative cyanobacteria pigment in each pond. Patch Pond was not sampled this June, and now at undetectable levels in the month of July. A pond becomes at risk for a bloom when the level is above 50 Au.

