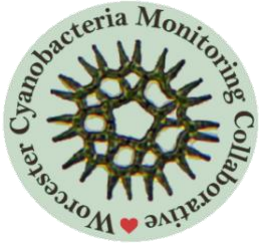


Worcester Cyanobacteria Monitoring Collaborative

WCMC Results September 05, 2023

Lake and Overall Risk	Phycocyanin Concentration (ug/l)	Particle Concentration (#/ml)	Cyanobacteria Density	Cyanobacteria Observed
Burncoat Pond	105.10	2769	high	Aphanizomenon, Microcystis, Microcystis Debris
Coes Reservoir	12.35	142	some	Aphanizomenon, Dolichospermum, Woronichinia
Cooks Pond	8.36	89	none	
East Lake Waushacum	9.88	36	low	Dolichospermum
Ecotarium Pond	20.83	795	none	
Farm Pond	5.86	15	low	Dolichospermum
Green Hill Park Pond	29.32	469	high	Dolichospermum, Woronichinia
Indian Lake	19.34	142	some	Dolichospermum, Microcystis Debris, Woronichinia
Jordan Pond	7.35	45	low	Microcystis, Microcystis Debris
Kiver Pond	35.92	1904	none	
Leeseville Pond	14.15	18	none	
Lake Quinsigamond	15.76	69	some	Aphanizomenon, Dolichospermum, Microcystis Debris, Woronichinia
Little Indian Lake	131.29	6587	high	Aphanizomenon, Dolichospermum
Manchaug Pond	5.73	12	low	Microcystis
Newton Pond	6.36	36	low	Dolichospermum
Patch Pond	58.34	109	low	Dolichospermum
Patch Reservoir	23.07	500	some	Dolichospermum
Stevens Pond	6.46	16	none	
Lake Ellie	107.06	no data	none	
Lake Lashaway	8.53	86	low	Dolichospermum
Previous Results for Lake's Not Tested this Period				
Bell Pond	ND	10	none	
Elm Park Pond	316.74	4346	some	Dolichospermum, Microcystis Debris
Salisbury Pond	10.87	106	low	Microcystis Debris
Lake Chauncy	60	560	high	Aphanizomenon, Dolichospermum, Woronichinia



Interpreting WCMC Results

If you or your pet has been exposed to water that may contain cyanotoxins, rinse with tap water immediately. Do not let animals lick their fur. If your pet has ingested scums or water containing cyanobacteria, contact your veterinarian as soon as possible and see these CDC guidelines:

[Cyanobacterial Blooms: Information for Veterinarians | Harmful Algal Blooms | CDC.](#)

The WCMC is a group of volunteer community scientists that is developing ways to assess risk to cyanotoxin exposure using fast and low cost methods. These results are based on methods that are not certified by the Commonwealth of MA but are presented as recommendations so that lake users can make informed choices about their contact.

We encourage people to use their best judgement, and “If in doubt, stay out!”

The WCMC does not measure cyanotoxins, instead the group uses four parameters to determine the **risk of cyanotoxin exposure**. These include **phycocyanin concentration**, **particle concentration**, **cyanobacteria density**, and the **cyanobacteria observed**. Each of the results are ranked and given a color to identify severity. The overall risk of exposure at each lake is determined by reviewing all four parameters together.

Risk of Exposure	Phycocyanin ug/l	Particles/ml	Comparative density of cyanobacteria
Almost none	0-15	0-1000	none
Low	15-20	1000-5000	low
Elevated	20-50	5000-10000	some
Blooming	>50	>10000	high

ND = Below detection limits

Risk of Exposure: Overall risk of exposure to cyanotoxins in the waterbody based on a holistic interpretation of the data collected.

Phycocyanin: Cyanobacteria-specific pigment concentration in the water. The more phycocyanin there is in the water, the more cyanobacteria are present. However, because different kinds of cyanobacteria produce different quantities of phycocyanin, the risk of toxin production is different for the same concentration of phycocyanin when there are different cyanobacteria present.

Particle Concentration: Particles include living and non-living materials and can be a proxy for overall turbidity of the water. High concentrations of particles in the water can be indicative of cyanobacteria blooms, but can also be the result of other factors such as non-living debris and sediment. The phycocyanin concentrations and cyanobacteria density help to interpret if particles are due to cyanobacteria or other sources.

Cyanobacteria Density: The ratio of cyanobacteria to other organisms in the sample. Higher densities can indicate elevated risk of exposure to cyanotoxins. Density results do not consider concentration, but in general, systems dominated by cyanobacteria are at higher risk for producing toxins.

Cyanobacteria Observed: Genera of cyanobacteria identified in the sample. Because different cyanobacteria have different levels of phycocyanin, observed cyanobacteria help determine the threshold of phycocyanin that is considered risky.