Cyanobacteria Monitoring Bi-Weekly Report of Orleans Ponds.

Sample Dates: Wednesday, September 29th and Thursday, September 30th

Report prepared by: The Association to Preserve Cape Cod (APCC)

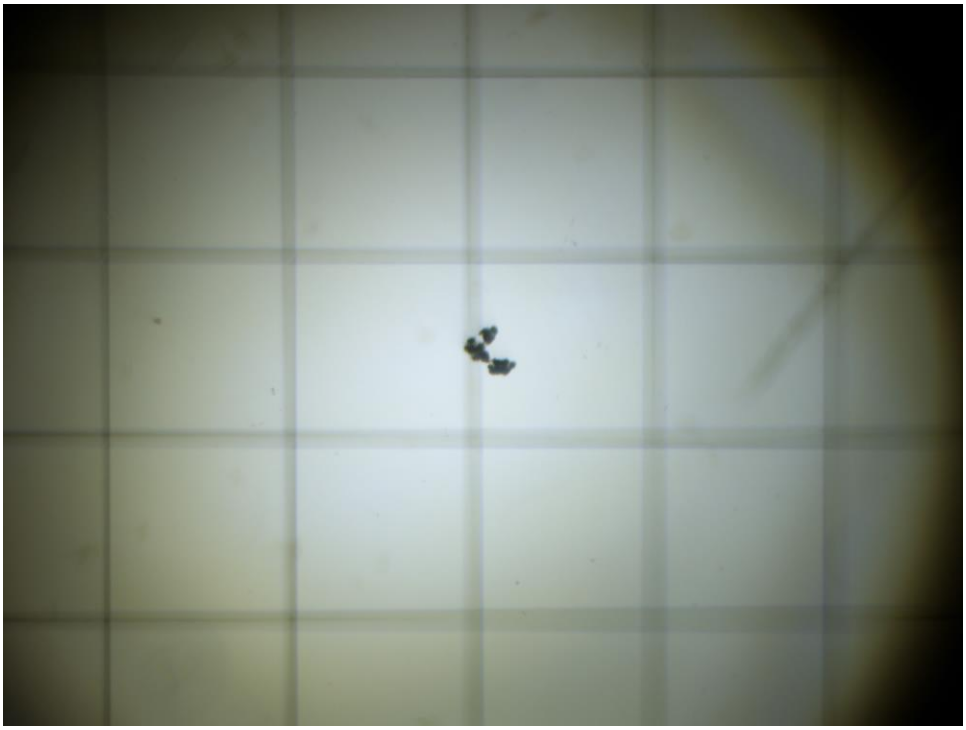
Report prepared for: The Orleans Pond Coalition and The Town of Orleans

Data collected by: Rebecca Miller, Beth Larson, and Silas Watkins. Reviewed by: Kevin Johnson, Ecologist, APCC Cyanobacteria Monitoring Program.

Sample collection by: Members of the Orleans Pond Coalition

For more information: https://apcc.org/our-work/science/community-science/cyanobacteria/

Pond	Date of sample	Warning Tier	C&D	Temp (°F)	Wind Direction	Recent Activity	Notes
Bakers Pond	9/29/21	Low	Mixed	72	-	8/18/21: Low 8/30/21: Low 9/15/21: Low	Cyanobacteria concentrations remain low.
Crystal Lake	9/30/21	Low	Mixed	68.8	NW	8/20/21: Low 9/3/21: Low 9/16/21: Low	Cyanobacteria concentrations remain low.
Ice House Pond	9/30/21	Low	N/A	66.2	NW	8/20/21: Low 9/3/21: Low 9/16/21: Low	Cyanobacteria concentrations remain low.
Pilgrim Lake	9/30/21	Low	OS	68.2	N	8/20/21: Low 9/3/21: Low 9/16/21: Low	Cyanobacteria concentrations remain low.
Uncle Harvey Pond	9/30/21	Low	MC	69.4	W	9/3/21: Low 9/10/21: Low 9/16/21: Low	Cyanobacteria concentrations remain low.



Above: Several *Microcystis* colonies seen in a sample taken from Uncle Harvey's Pond on Thursday, September 30th.

Abbreviations:

C&D (Composition and Dominance) Identifies the dominant genus of cyanobacteria found in the sample.

DS (*Dolichospermum*) Common genus of cyanobacteria. Produces regulated toxins at low level.

MC (*Microcystis*) Common genus of cyanobacteria. Produces regulated toxins at relatively high levels.

Mixed Indicates that no single genus of cyanobacteria was found to be dominant.

WO, AZ, OS (*Woronochinia, Aphanizomenon,* and *Oscillatoria*) Additional genera of cyanobacteria that are believed to produce regulated toxins at a similar rate to *Dolichospermum*.

Warning Tier Descriptions

"Low" (BLUE) indicates general safety for recreational activities according to our data and it roughly equates to our blue and yellow tiers from last year.

"Moderate" (YELLOW) indicates the cyanobacteria concentrations in the pond are particularly dangerous to children or pets if ingested and it equates to last year's orange tier and is very similar to the town of Barnstable's "Pet Advisory" level.

"High" (RED) indicates APCC found either toxin levels approaching state standards for recreation or found a visible cyanobacteria scum; each poses a considerable risk for human and pet interactions with the pond. This tier is between the town of Barnstable's "Warning" and "Closure" tiers and roughly equates to last year's red tier.

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