

2019 Cyanobacteria Monitoring - Year End Summary

Brewster Ponds Coalition and Association to Preserve Cape Cod (APCC) Collaboration

Blueberry Pond

- Most often found no cyanobacteria.
- Found Dolichospermum dominant in two samples and Microcystis dominant in one.
- Phycocyanin levels were low all season and APCC map status level was low all season.
- Good season all around.

Cliff Pond

- Primarily Dolichospermum dominant although identified some interesting other genera (Gloeotrichia, Aphanocapsa)
- Multiple instances where phycocyanin levels were moderate to high. APCC recommended an advisory posting on June 12 to Mass Dept of Conservation and Recreation (DCR) and they responded that the conditions did not warrant a closure.
- This is clearly a problem pond and should be monitored intensively in future seasons.
- BPC/APCC will look to develop the most efficient reporting and response communications with DCR Lakes & Ponds staff.
- Aerborn toxin tests conducted all season - results t/b/d.

Elbow Pond

- 100% Dolichospermum all season.
- One high peak (bloom) on May 28-June 3 which received a high rating on APCC's map.
- Macrophyte harvesting took place in September using the Town harvester.
- Macrophyte harvesting planned for next June and September 2020 with Town, Friends of Elbow Pond (FOEP) and BPC collaboration.
- Will be monitored closely in 2020.

Greenland Pond

- No Microcystis found, dominated by Dolichospermum and other genera.
- Phycocyanin levels low all season.

- APCC map status low all season.
- Good season all around.

Long Pond

- Incomplete results on APCC cyano results.
- Did not sample throughout the season although BPC/APCC felt we should be sampling this largest pond in town so collected a few samples.
- All samples recorded indicated low levels.
- This pond should and will be in the BPC 2020 rotation because of widespread public use.

Lower Mill

- Dolichospermum dominant.
- Phycocyanin levels moderate to high most of season.
- APCC recommended advisory to town on June 10. Advisory was posted by June 18.
- Levels were back to low status on June 21 and advisory was removed quickly.
- Sign at Stony Brook had been pulled out and tossed in bushes shortly after posting.
- Late in season noticed very cloudy water, probably most significant bloom of the season when collecting herring for food web (Lim-Tex) study.
- Aerborn toxins tests conducted all season - results t/b/d.
- Will be monitored closely in 2020.

Myricks Pond

- Dolichospermum dominant all season.
- Phycocyanin and APCC map levels low to moderate.

Pine Pond

- Dolichospermum/other dominant. Some Microcystis found on one date.
- Phycocyanin and APCC map levels low throughout season.
- Low pond levels all season.
- Good results this season all around.

Schoolhouse Pond

- Only a couple of samples recorded in APCC results.
- No cyanos found.
- Phycocyanin and APCC map levels low throughout season.

Sheep Pond

- Variable dominance. Mostly Dolichospermum but seems to have had a small Microcystis bloom on Aug 26.
- Small Dolichospermum bloom on June 3 also. Ryan Burch noticed cloudy water with suspended clumps.
- Low to moderate PC and APCC map levels.
- Good season overall.

Slough Pond

- Very few cyanos found. Dolichospermum dominant on one date.
- PC and APCC map levels low all season.
- Very good season all around.

Upper Mill Pond

- Dolichospermum dominant with some microcystis appearing on occasion.
- Positive result on Anatoxin test strip on June 10.
- PC and APCC map levels ranged from low to high.
- APCC recommended advisory on June 10 based on our data combined with a photo from Roy Bellush showing very murky, bright green water on the weekend prior to June 10.
- Town contacted DPH and posted advisory by June 18.
- By June 25 sample, levels were back to low.
- Cyano scum and particles was common throughout the season.
- High PC levels were found June 10, Sept 10, and October 16.
- Will be monitored closely in 2020.

Walkers Pond

- Dolichospermum dominant with some MC and others dispersed throughout season.
- PC and APCC map levels ranged from low to high throughout season.
- Town advisory was posted from August 23 through end of season due initially to high PC readings and photos of poor clarity, then maintained by town due to ongoing secchi depth less than 1-meter.
- Will be monitored closely in 2020.

Bakers Pond

- Started sampling later in season.
- Variable dominance between DS and MC.

- Low to High levels, although fairly high PC for MC dominated system during initial samples in August.
- Will be monitored regularly in 2020.