

Brewster Ponds Coalition

Citizen Science Program

[Preserving and Protecting Brewster's Ponds](#)

www.brewsterponds.org

- Program began 2016-2017
- Collaborative Partnership with; Town of Brewster, APCC, UNH, and Lim-Tex
- Completed 5th year of freshwater pond monitoring for cyanobacteria
- Completed 2nd year of aerosol testing
- Program has grown from testing 4 to 22 ponds in five years
- Cyano tests conducted has grown from 25 to 300+ annually
- Citizen Science volunteer team has grown from 4 to 50
- Testing program runs from May thru October
- Ponds tested every other week unless problem detected, then more often
- Labs set up at APCC and in Brewster
- Test results shared with Town and graded on a scale of: Low - Moderate - High - Advisory
- Town of Brewster has sole “Advisory” Posting authority
- APCC has built a Cape wide map to communicate to the public live results throughout the season (www.apcc.org) including Brewster ponds
- BPC communicates results to all parties real time

Data Gathered during sampling:

- Current weather conditions
- Water/Pond Observations (e.g., water temperature, wave action)
- Turbidity (using secchi tube or disc)
- Whole Pond Water sample (at surface or intermediate depths, often unchanged until day of bloom)
- Bloom Forming Colony sample (using 15cm plankton net with 50 micron mesh - to create a possible concentration of a bloom, thus a predictor of bloom growth rates)
- Scum sample (if it exists at the sampling site)

Season End 2021 Results - Cyanobacteria testing

- 22 ponds in rotation
- 50 CS Volunteers
- 325 Pond samples tested/analyzed

Cyanobacteria Advisory Posting results in summer 2021:

Cliff Pond - MA DPH posted Advisory June 11 and October 11

Lower Mill Pond - Town posted Advisory June 9

Schoolhouse Pond - Town posted Advisory August 6

Seymour Pond - Town posted Advisory July 15

Walker Pond - Town posted Advisory May 21

Season End 2021 Results - Aerosol testing

- Lower Mill & Walkers Ponds tested
- CS Volunteer Burke and Univ of New Hampshire
- 16 Tests conduction from June 1 to September 1

Mjb - 11/2021

