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 6th year of cyanobacteria monitoring in 2022
- 18 ponds monitored in 2022
- Team of 53 Volunteers
- Program runs - May thru October with ponds monitored bi-weekly
- Completed 2nd year of Aerosol testing in 2021
- Completed 2nd year of Anatoxin-a research in 2022
- Completed 1st year of NOAA remote satellite study in 2022
- Test results shared with Town and graded on a scale of: Acceptable - Potential for Concern - Use Restriction Warranted
- Town of Brewster has sole "Use Restriction" posting authority
- BPC communicates real time lab results to town officials and to our subscribers
- APCC manages a Cape wide map to with live results during the season (www.apcc.org)

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 2022 Results to date - Cyanobacteria testing

- 18 ponds tested
- 53 CS Volunteers
- 300 Pond samples collected & analyzed

Use Restriction Advisory Postings in summer 2022:

Cliff Pond: September 4

Lower Mill Pond: August 5, September 13, September 28

Schoolhouse Pond: August 10

Sheep Pond - October 26

Walkers Pond: August 30, October 25

Season 2022 Results to date - NOAA testing

- Long, LMP, Seymour, Sheep, UMP test group
- 30 tests conducted
- Participate with NOAA, CCC and APCC

Mjb - 5/25/2023