

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, Lim-Tex, Cape Cod Commission, and NOAA
- Completed 7th year of cyanobacteria monitoring in 2023
- 19 ponds monitored in 2023
- 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 2nd year of NOAA remote satellite study in 2023
- 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 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 2023 Results - Cyanobacteria Monitoring

- 19 ponds tested
- 53 Citizen Science volunteers
- 245 pond samples collected and analyzed

Use Restriction Advisory Postings in 2023:

- **No use restrictions posted at any Brewster pond**

Season 2023 Results to Date - NOAA Testing

- Long, LMP, Seymour, Sheep, UMP test group
- 60 tests conducted
- Participate with NOAA, CCC, and APCC
- Early analysis shows strong correlation to satellite results

Mjb - 2/1/24