## **Brewster Pond Coalition Plan Encourages Community Involvement**

by Rich Eldred

BREWSTER – Every drop of water counts in keeping Cape Cod's ponds clean and clear.

And every neighbor of that pond has a role in making sure those drops aren't degrading the quality of their favorite freshwater body.

The Brewster Ponds Coalition has a plan to make sure the zillions (that's a precise number) of drops of groundwater and runoff flowing into local ponds isn't turning them into eutrophic pools of cyanobacteria or cloudy, gloomy puddles of despair.

The coalition's Pond Protection Plan, created last year, asks residents, homeowners and pond associations to take a three-part pledge, including a commitment to not use chemical fertilizers; a commitment to pump the septic tank every two or three years; and a promise to reduce or eliminate phosphorus containing cleaning products. Brewster pumps between 300 to 400 million gallons of wastewater into the ground every year.

"One of our real missions over the past couple of years is to be an advocate for conservation in town and getting people to take account of what is inside their homes and what they're putting down their sinks and toilets and using in their yards to protect our freshwater resources and ponds," explained Marty Burke, BPC board member and head of the citizen science program.

"Part of our education outreach has been to write to our citizen stakeholders." Brewster has over 40 pond associations, so there is a lot of stakeholder interest in local



A Brewster Pond Pledge sign. ALAN POLLOCK PHOTO

waters. "We talk a lot about Title 5 systems and state, county and local governments but there is a lot individual citizens can do in the meantime," Burke said. "That's sort of what we're doing, helping people understand about pond ecology and learn about ways to protect the pond."

The BPC citizen science program now features 53 volunteers sampling 19 ponds testing for cyanobacteria in addition to recording water temperatures and turbidity readings. Last year they collected over 300 water samples.

The Pond Protection Pledge is designed to head off any potential problems such as toxic algal/bacteria blooms. Cyanobacteria were once classed as algae before it was decided they really were bacteria because they are prokayotic, as the cells lack a nucleus or other internal organelles. Even without a nucleus the bacteria produce

toxic chemicals rendering the water unsafe.

In recent years in Brewster, Cliff, Lower Mill, Schoolhouse, Sheep and Walkers ponds have all suffered use restrictions due to high levels of cyanobacteria. These high levels are fed in part by warm waters and higher levels of nutrients, especially phosphorus in freshwater.

The protection plan directs residents to reduce the possibility of phosphorus pollution seeping from their yards.

"Last year was the first for the initiative," Burke said. "It was just Sheep Pond. This year it was also Upper Mill Pond and Seymour Pond. If you go around the neighborhoods you see signs popping up in front of homes."

Those who take the pledge also get information about what they can do. In addition to reducing fertilizer use, especially on lawns, and not fertilizing before rains that can carry nutrients into the pond in runoff, residents can use gravel in their driveway rather than asphalt paving, which also reduces runoff. Put rain barrels beneath the gutters to eliminate torrents of runoff (and get water for your garden). Plant a rain garden to collect water during storms. There are detergents and soaps that use no or less phosphorus. Use leaf compost or organic fertilizer in the garden. Eliminate or reduce pesticides.

"Watch what goes down the drains. Use Earth friendly cleaners," Burke added. "We encourage people not to water their yard so much, to leave the grass clippings on the lawn, don't apply fertilizer within 100 feet of the pond. Don't apply fertilizer from Nov. 15 to April 15. When plants are dormant it just runs off."

Burke suggested homeowners plant native plants that require less coddling and not maintain a lawn right to the water's edge.

"We just want people to get excited about taking care of ponds and being a steward of the land," he declared. "We can all do a little something. Towns will make the bigger decisions on septic and sewers. In the meantime you and me can do things on our own."

No one needs to sign the pledge to follow it. You don't need to live on one of the pledged ponds or even be on the water to be a citizen scientist. More citizen scientists means more ponds can be tested. Currently 19 are monitored, but there are over 80 ponds in town. The BPC also has education and outreach programs and does trailwork around the ponds. Contact them at the website brewsterponds.org.