

# Six Ponds News

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(www.sixponds.org)

An Occasional Publication Of The Six Ponds Improvement Association

## Update on *E.coli* problems at Long Pond

No stormwater sampling has been done in six months but the early summer 2003 results were as bad as any we've seen over the past two years.

Stormwater sampled early last summer at the scupper at the West Long Pond Road bridge near the state boat ramp had *E.coli* counts of 63,000, the outfall pipe was 38,000, Thatcher Road was 10,400, Clark Road was 7,900 and the Plymouth Estates beach at the stream was 950. A level of 235 is acceptable for recreational purposes.

We have not yet had a resolution from Health officials. Six Ponds sent a letter to the Public Health Board which responded, "Please note that storm drains, culverts and shallow streams, subject to surface water runoff, are presumed to be contaminated and not suited for human bathing." While that certainly is true, it ignored the explanation in our letter that that children frequently play in the stream whether they are supposed to or not and ignored the fact that our *E.coli* levels far exceed any "presumed" level of contamination.

We sought an expert on "presumed" levels or background levels of *E.coli* and found that the state DEP environmental analysis lab had just finished such a field study based on multiple stormdrain outfalls in four watersheds (Charles, Neponset, Merrimack, and Ipswich).

According to Oscar Pencorvo, head of the state microbiology lab that conducted the study, *E.coli*

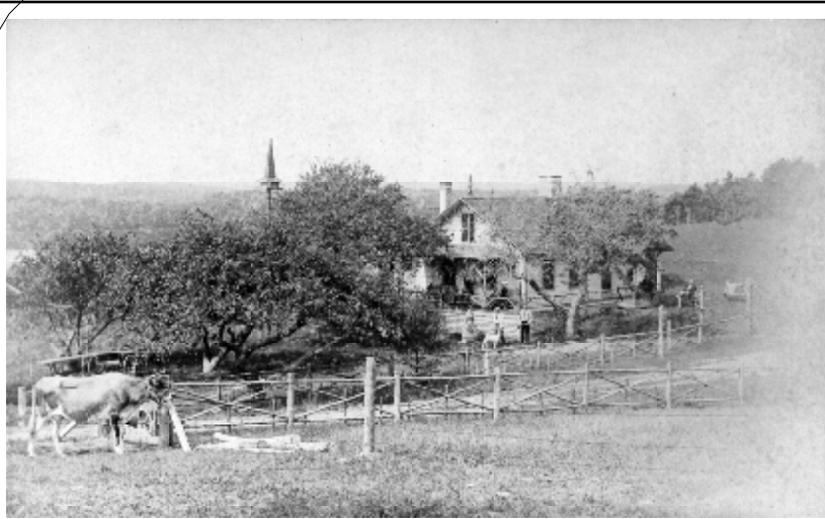
Continued on pg 2

## Red Belly turtle (an endangered species) dies at Long Pond

Wildlife experts removed a sick Red Belly Turtle from Long Pond near the state boat ramp last summer. Attempts to nurse the turtle back to health were unsuccessful. It had been tagged as one of the head-started turtles placed in Little Long Pond eight years ago. Head started turtles were hatched from native eggs and raised in a protected environment (at the New England Aquarium and Berkshire Museum) until they had grown to a survivable size.

It is thought that age was not a factor in its death. There is concern about other possible causes and attempts are being made to rule out disease causing pathogens.

Incidentally, the name Red Belly Turtle has recently been changed to Northern Red Belly Cooter, it will probably continue to be known by locals as the Plymouth Red Belly Turtle. For further information on Red Bellies and the head start program see [www.berkshireremuseum.org/galleries/aquarium.html](http://www.berkshireremuseum.org/galleries/aquarium.html)



**Long Pond circa 1895**

Located at what is now 721 Long Pond Road, this house belonged then to Francis Emery. It subsequently passed through the Bartol, Newcomb and Acorn & Reti families before being purchased by its resent owners the Geers. Much of the land surrounding Long Pond at that time was farm and fields, it only became reforested in the 1900's. Most residents at that time maintained separate wood lots from which fire wood was obtained.

## E. Coli (cont.)

levels as high as 60,000 are “at the extreme end of our findings - 95% of all our findings were less than 8000”. Their median was 1000. Six Ponds sampling has consistently shown high levels, i.e., 6,300, 36,000, 9,600, 110,000, 63,000, 38,000, 10,400 and 7,900. Pencorvo noted that their results were highest after a heavy storm event with a long antecedent dry spell. Curiously they did not notice a statistical difference in the levels coming from, residential, commercial and open space areas. Pencorvo thought it unlikely that small animal feces would cause these levels; he thought it more likely to see those levels when kennels or multiple large animals like horses were the contributors.

The Plymouth Estates Association warned members not to swim at their beach for 24 - 36 hours after a heavy rainstorm. This is often ignored but it is nevertheless important since *E.coli* is used as a marker for other pathogens (hepatitis, cholera, typhoid, Salmonella, Giardia, etc.). To understand the relationship of *E.coli* to other pathogens look at [www.moldlab.com/sewage\\_screen.htm](http://www.moldlab.com/sewage_screen.htm).

What can be done:

1. Since dog feces is a likely contributing cause, owners must take the responsibility to pick up after their dogs. We will also investigate the placement of signs informing residents of this problem.
2. One of our DEP contacts mentioned that The Universities of Massachusetts and New Hampshire happen to be studying gene typing of *E.coli* (to determine what the actual animal source is). We were told to call them to volunteer as a study project - we'll try to do that.
3. Last year Six Ponds submitted a \$65,000 grant request to the state under the 604B program to study both nutrient and *E.coli* pollution. Our 2002 submittal was not successful but we were encouraged to resubmit this year under both 604B and 319 grant programs. We partner on these requests with the Town Engineering and Natural Resources Depts. This grantwriting project is important regardless of *E.coli* or nutrient sources because ultimately diverting any storm water from our ponds is an important goal.
4. The Town has provided Six Ponds with special markers that will be affixed to each storm drain telling people that they drain to the pond and that nothing should be put in them.

## Testing for Windmills

The Zoning Board of Appeals recently approved construction of two wind energy test towers in Plymouth. One will be near our neighborhood on the site of the high and middle school campus on Long Pond Road; the other in Camelot Park near the new wastewater treatment plant.

Their purpose is to determine the suitability of these sites for wind turbines. Each tower will be a 164-foot tall structure of six-inch diameter pipe, stabilized by guy wires. Instruments on the towers will measure wind-speed and direction at different elevations. The towers will be in place for no longer than 18 months.

If results are positive, the developer will propose construction of one or more wind turbines on each location. The turbines themselves would be structures whose blade-tips reach approximately a 235-foot height. The electricity generated would be used to power the nearby schools and wastewater treatment plant, reducing the town's electric bill. Any additional energy would be sold to electric utilities and put in the regional grid.

The zoning board discussion was lively and informative. One point repeatedly emphasized was that approval of test towers should not be construed as an approval of windmills for these sites. There was much discussion about visual and other impacts of towers, and the need for more community study and discussion. A number of lighting issues were identified: lighting for aircraft safety and the best lighting to minimize bird strikes. The planning board, which is advisory to the board of appeals, and which voted 3-1 in support of this test, discussed some of the pros and cons of wind towers, and outlined a study process that could result in a comprehensive plan for windmills in Plymouth. The Six Ponds Association also participated in this discussion, speaking in qualified support of the test towers.

The test itself will determine only the technical viability of wind turbines at these locations. The decision to actually allow them, on these or any other sites in Plymouth, will be made in the future and will be accompanied by further discussion, studies, and a rigorous public input process.

## Water Resource issues for The Plymouth-Carver Aquifer

Concern is rising in Southeastern MA about protection of our water supply. We live on one of the largest aquifers in the state. The Plymouth-Carver Aquifer holds an estimated 500 billion gallons of water and ranges 140 square miles over eight towns; Plymouth, Bourne, Kingston, Carver, Wareham, Sandwich, Plympton and Middleborough. In 1990 the EPA officially designated it as a sole source aquifer which means that as the principal source of drinking water there is no reasonably available alternative sources; and, if contamination were to occur, it would pose a significant public health hazard and a serious financial burden to the area's residents. The EPA goes on to say that the "Plymouth-Carver aquifer is quite vulnerable to contamination. Because of its highly permeable and transmissive character, and large size granular materials, ground water contaminants can quickly travel long distances, and affect a large area." This problem has already occurred in Sandwich, Bourne and in Provincetown.

Recently, our regional planning agency, the Southeastern Regional Planning and Economic Development District (SRPEDD) established a committee to study and plan for our aquifer. Neal Price and Ed Russell were designated by Plymouth Selectmen to represent the town. Six Ponds is also active with the Watershed Action Alliance (WAA), a regional advocacy group which recently received funding for its work monitoring regional water projects. The near-by Waverly Oaks Golf Club was fined \$10,000 by the DEP last month for violating water withdrawal regulations (withdrawing 300,000 gpd in season). During the administrative hearing process, Six Ponds submitted formal comments and a request for information on the effect of water withdrawals on Little Long Pond.

An interesting aside: Residents have often wondered how far and how fast underground water moves. The EPA estimates that the Plymouth-Carver aquifer moves underground at 55 to 313 feet/day. Assuming the EPA's average of 188 feet per day water could theoretically move from Six Ponds to the ocean in 92 days. See (<http://www.epa.gov/region1/eco/drinkwater/soleplym.html>)

## Environmentally Friendly Products

We recommend that everyone purchase their detergent and cleaning products from Shaws' Supermarket at Route 44. Shaws has recently started carrying Seventh Generation anti-polluting products in their Natural Harvest section. They even have unbleached, chlorine free, hyporallergenic disposable diapers!

## WHOI Platform leaves the ponds



Mid December freezing temperatures did not stop four intrepid scuba divers from assisting with the removal of the Woods Hole Oceanographic platform from Long Pond. Dressed in dry suits for the cold they volunteered two days of their time both in the interest of science and, believe it or not, because it was a fun project for them.

After over a year in the water, the platform was towed to the boat ramp and lifted from the pond by crane to be returned to Wood Hole. The divers were needed because strong Long Pond winds had tangled the four 250 pound anchors and their chains. Using specialized lift bags, each of the anchors was lifted to the surface and brought aboard. The data that was gathered over 12 months will take about that long for experts to compile and structure.

## Six Ponds Executive Board

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Leighton Price	Larry Rosenblum
Judy Savage	Bill Abbott ( <i>ex officio</i> )

## Lyme Disease Prevention Campaign at Pinewoods

Judy Savage, Executive Director of Pinewoods Camp

Lyme disease is a bacterial infection caused by the bite of a tiny deer tick that carries the infection. If not properly diagnosed and treated it can become crippling and debilitating. Deer ticks thrive in cool moist woody environments like we have in the Six Ponds area. Many of our neighbors can attest to the prevalence of deer ticks and Lyme disease, and to the fact that anyone who works or plays outdoors is at risk.

The “*Pyme Tyme for Lyme*” is during the spring and summer, however you can be bitten any month of the year when the temperature gets above 40 degrees.

The prevailing wisdom to prevent contracting Lyme disease is to avoid tick infested areas when possible, avoid sitting directly on the ground or fallen logs, avoid touching bushes and trees, walk in the center of trails, and avoid sitting on stonewalls or woodpiles.

Pinewoods Camp has adopted a new program to significantly reduce the number of deer ticks on our property, and hopefully significantly reduce the risk of Lyme disease to our campers. We are targeting mice, common hosts to deer ticks, and the principal culprits in spreading the disease in our area.

If you are one of our many neighbors who enjoy walking through our property, you may have noticed a number of four inch long, one-inch wide, black PVC tubes scattered throughout camp. Each is tied with a bright

pink ribbon. Garden columnist Mike McGrath has given us the idea from a recent article in the Philadelphia Inquirer. Each tube contains cotton balls soaked in Permethrin, a pesticide that’s deadly to ticks. The mice take the cotton balls back to their nests to use as bedding, and the permethrin kills all the ticks (not the mice) in the nest.

Permethrin is a synthetic chemical developed to simulate the natural chemical pyrethrum that protects plants from insect attack. While not a natural product, it differs from regular insect repellants in that it will kill insects and deer ticks as well as repel them. It is not harmful to pets or people. And one treatment can last up to two weeks.

We will be gathering up all our tick tubes before the summer starts, and once again scatter them throughout camp in the fall. With repeated dosages, our hope is that the population of deer ticks will be reduced, as fewer and fewer survive to reproduce. Tests on Long Island, NY have shown that similar commercially made tick tubes will reduce the number of infected deer ticks by more than 90% year after year.

For more information, see the Centers For Disease Control Lyme website:

(<http://www.cdc.gov/ncidod/dvbid/lyme/index.htm>), or that of the Lyme Disease Organization at:

<http://www.lymediseaseassociation.org>.



## Agawam River

Last October, three canoes full of Six Pond residents paddled the Agawam River from Halfway Pond to Glen Charlies Pond in Wareham.

Although not a great distance as the crow flies the river meanders through wonderfully varied environments; cranberry bogs, ponds, pine forests, marshes. With the expected Makepeace development this may be the last year that one can canoe this River without seeing any houses.