



TPPA Newsletter

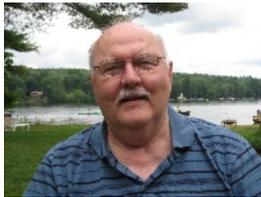
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President's Message



A glorious summer at the Milton Three Ponds has once again come and gone--all too quickly. Once again we were able to enjoy the pond' beauty and the recreational activities they support. We wonder how long this wonderful natural resource will survive; and we ask – How can we protect our water quality for the enjoyment of future generations?

The answer comes from understanding that the fate of the ponds depends on how we use the land. That's because most of the pollutants entering the ponds, including phosphorus (the biggest threat to water quality), comes from storm water rushing over the land unimpeded on its way to the ponds.

As more development occurs, and it will never end, more impervious surfaces will result in more storm water runoff directly into the ponds. It's important that actions be taken to minimize this runoff. I'm talking about roof drip trenches, rain gardens, runoff diversion trenches, vegetated buffers, and infiltration stairs. This is true not only for new developments but also for existing properties.

This week I heard an excellent presentation about the link between land use, water quality, and community character, by LaMarr Clannon, Maine NEMO (NonPoint Education for Municipal Officials) Coordinator. I've arranged for LaMarr to speak at our TPPA meeting on 21 June 2012. You won't want to miss this one!

... the fate of the ponds depends on how we use the land.

It will take everyone living in our watersheds to protect our ponds' water quality; and that's not only dwellers in waterfront properties, but all properties in the watersheds. It's important therefore that everyone be aware of the things they need to do to protect water quality. For the majority of us, those are simple things. Just remember to use phosphorus-free detergents and fertilizers, dispose of your pets waste away from the water, limit fertilizers, plant a shoreline buffer, control roof runoff, and make sure your septic tank is functioning properly.

With the help of many volunteers and the cooperation of many property owners TPPA completed surveys of the three ponds watersheds to identify soil erosion sites. We continue to seek grant funding to help property owners reduce the soil erosion at these sites. Grants are difficult to get these days, and so I'm not at all sure that our grant applications will be accepted. So our help may be limited to providing planning assistance.

As individual TPPA members though, you can play an important role by increasing your neighbors' and friends' awareness of the importance of proper land-use for protecting water quality. Below there are 10 recommendations for water quality protection excerpted from our 2010 NH Lakes Lay Monitoring Program Report. Please share these recommendations with your friends and neighbors and more importantly, practice them. Future generations will thank us for it.

Norm Turgeon

10 Recommendations for Water Quality Protection.

Excerpted from the 2010 NH Lakes Lay Monitoring Program Report

Encourage shoreside vegetation - Shoreside vegetation provides a protective buffer that traps pollutants before they reached the ponds.

Limit fertilizer applications- Do not apply any fertilizers until you have had your soils tested. Often times a simple pH adjustment will do more good and release

nutrients already in the soils. If you have to use fertilizer make sure it is phosphorus free.

Prevent organic matter loading - Excessive organic matter (leaves, grass clippings, etc.) are a major source of nutrients in the aquatic environment.

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A View From Shore

By Bob Myrick



It's getting late in the year and the fall rains have returned. At this moment, the Three Ponds rest under a morning fog reflected in water that's glass. The relaxed quiet that comes this time of year and those fleeting autumn colors are so refreshing in either sun or rain as they provide a daily change of perspective. These changes are expected and welcome. Human changes can have strings attached needing to be dealt with sooner or later. Let me beat a bush or two before I get to my point.

My wife says I don't take change well since my response is usually in the form of a low sounding "rrrrrr". I however, enjoy gifts. When change presents an unexpected gift I usually don't poke it too aggressively since I would hate to find out there is a string attached that leads to the angry pooch of complacency. I'll confess to having been left with a few teeth marks in the past. I fell into this some years back when she and I were first married. I would never dream of interfering with someone's spontaneous generous nature particularly when it's to my benefit. I had been an independent single male muddling about for some time and acquiring a partner was certainly life changing which came with many mysteries unraveled only by time and maturity.

In our first few weeks together, to my delight, I discovered I was suddenly the

beneficiary of a few unexpected perks. I realized, after a time, that my clothes were not only miraculously getting cleaned but returning folded and tucked away in a drawer. Wow, this was a great benny not written in the manual. I was not about to question my good fortune. However, three months later, wholly unexpectedly, my clothes began coming back cleaned, neatly folded but stacked on top of my bureau. Hmmmm, must not have been enough time but I could deal and besides I wouldn't be bothered with opening drawers. Again a few weeks passed and a new twist. Clothes cleaned and dumped in the middle of the bed. Now I thought, should I risk looking for the string? So I took the chance and approached management and sure enough I had missed a few clues. We had the young couples talk about who does what and how often, about picking up slack, picking up clothes and shared responsibility. I learned and changed.

That I qualify as a good change since I got the message and we were able to share enough responsibility to string together a few years and a family thrown in. Now that I have dallied about long enough we need to discuss the point of the approaching change for TPPA. It's coming this summer and it could be a gift or the angry pooch. This is like the young couple talk. We were given two gifts from the start of the organization and we avoided the dog with the first. Gift number one came from Steve Baker who formed TPPA and served as its first President. He was the drive that kept on pushing. He was a man with a

cause, tenacity, and vision to make it happen. A great start! Then up stepped gift two when Norm Turgeon volunteered. Back from a long illness, he managed a juggling act with aplomb and acquired grants, put together a newsletters, websites and helping in three surveys. Of course there were strings to their tenures. Both Steve and Norm gave notice from day one that their service was limited and we would have to find fresh talent. Times up! With a job well done, Norm served definitive notice earlier this year that he would no longer be president in 2012. The clothes sit in the middle of the bed and this is the subject for all the members of TPPA to consider.

Well, for a while we have needed new blood throughout the membership. But right now we need someone to assume the head of the table this summer. Ideally we are looking for someone willing to call and run meetings and follow up with the board on critical issues. If you like diversity, this is the role for you. Our board handles much of the heavy lifting but we need someone who can look ahead, delegate and push when needed. That gnashing of teeth is from the dog attached to the string which could chew into the foundation of TPPA. If you believe the effort to help our lakes should continue, we could use some more help so keep them coming. Rrrrrr!
Bob Myrick

PS We welcome your help in any capacity

(Continued from [page 1](#))

Limit the loss of vegetative cover and the creation of impervious surfaces - A forested watershed offers the best protection against pollutants runoff. Trees and tall vegetation intercept heavy rains that can erode soils. Impervious surfaces (paved roads, parking lots, building roofs, etc.) reduce the water's capacity to infiltrate into the ground.

Follow the flow - Try to landscape with consideration of how water flows on and off your property. Diverge runoff from driveways, roofs, and gutters to a level, vegetated area or a rain garden so the water can be slowed, filtered, and absorbed as recharge.

Discourage the feeding of ducks and geese - Ducks and geese quickly processed food into nutrients that stimulate plant growth. They are also host to the parasite responsible for swimmers itch.

Maintain septic systems - faulty septic systems are a big concern as they can be a primary source of water pollution. They are load-

ed with nutrients and can also be a health threat when not functioning properly. Inspect your system and pump out the septic tank every two years.

Take care when using and storing pesticides/tossed toxic substances and fuels as it only takes a small amount to pollute lake, stream, and groundwater.

Stabilize access areas and beaches - Perched beaches (cribbed areas) that keep sand and rocks in place are preferred if you have to have that type of access. Do not create or enhance beach areas with sand (contains phosphorus, smothers aquatic habitat, fills in the pond as it gets transported away by waves and wind, and encourages invasive plants and algal blooms).

Review the updated New Hampshire Comprehensive Shoreline Protection Act (CSPA). if you have shoreland property. This sets legal regulations aimed at protecting water quality.

We're Done! Well, Sort Of!

By Wayne Sylvester



Question: What is done?

Answer: Conducting watershed surveys in three years of Milton Three Ponds.

Q: Refresh my memory. What is a watershed survey?

A: A watershed survey is designed to identify and prioritize nonpoint sources (NPS) of surface runoff which could have a negative impact on water quality by introducing phosphorus into our water bodies.

Q: So what was done this year?

A: On June 11, sixteen volunteers and five technical leaders surveyed Northeast Pond and its major tributaries, the Branch and Salmon Rivers.

Q: All that was completed on one day?

A: Almost! A team of two technical leaders and a volunteer (myself!) finished surveying the watershed a week later.

Q: What are the results of this year's survey?

A: As this article is being written, the final report and summary fact sheet are being prepared. The preliminary data shows that 43 sites were identified as having low (21), medium (13), and high (7) impact of erosion to the lake. Of these 43 sites, 30 were residential land use, and 7 were sites located on town roads. The estimated cost to remediate the erosional problems were low (56%), medium (30%), and high (14%). Four of the seven high remediated costs were problems on town and private roads.

Q: So, is this good or bad news for the Northeast Pond watershed?

A: Actually, it is great news! Given the size of this particular watershed, the number of sites are very low.

Q: So, what do the results of the three surveys reveal?

A: Over seventy volunteers and technical leaders have contributed their time and effort to survey the watershed of Milton Three Ponds. A total of 158 different NPS erosion sites in the Milton Three Ponds watershed have been identified that have the potential or directly impact on the water quality of our ponds. Of these, 106 (67.1%) are residential properties. This is good news. Most of these "fixes" can be accomplished with low impact remediation.

Q: What are you talking about?

A: Most of the properties identified can reduce the erosional problems by installing dripline trenches (a 1000 square foot roof can produce 600 gallons of runoff for every 1" rainfall), infiltration steps, rain gardens, or some sort of waterbars, or planting of natural vegetation along the waterfront for less than \$500.

Q: So what's next?

A: Letters will be mailed to all property owners and town officials with identified erosional problems. TPPA will provide technical assistance and advice on how to ameliorate their erosional problems. Now we are ready to complete the *Comprehensive Lake Inventory*. This will be used to develop *The Guidelines for Coordinated Lake Management and Shoreland Protection Plans*. This will require the assistance of several people.

Q: And this will do what?

A: Give us a favorable position to apply for state and federal grants to help landowners, businesses, and towns ameliorate their shoreland erosional problems.

Q: Any last impressions?

A: The three surveys have revealed that homeowners around Milton Three Ponds are aware and/or are becoming educated in preventing surface runoff to improve our water quality. Many waterfront owners are using effective erosional methods. Thank God this is not Milton Seven Ponds!! Winter well!

PS. There are too many people to mention who have helped TPPA with our watershed surveys. Many thanks go to Joe Anderson and Wendy Garland. Their titles and efforts will appear in the final reports. To Mike Dubois, our watershed committee chairman, Jeff, and Bob, thank you. To Norm Turgeon, our TPPA president, plow your driveway so I can ice fish off your point!

Fiscal Review 2011

By Steve Baker

I remember the first time I heard the phrase “that’s a no-brainer...” I thought it was cute and easy to understand. Nowadays politicians use this colloquialism in just about every speech they make, but it seems to oversimplify a few too many decisions we face. So, with that preamble I’m reluctant to use it again..., but I’m going to anyway. **Becoming a member of TPPA is a “no-brainer” if you live in Milton or Lebanon.**

When I began TPPA in the winter of 2004/5 I remember the letter I wrote and mailed to nearly 550 property owners in Milton and Lebanon. It described my concerns about clean water, the milfoil threat and potential overuse of our small ponds. Frankly, I thought joining a group of your neighbors to act collectively to protect our most important asset was an incredibly easy decision. For many it was, and if you’re one of the roughly 100 families who responded to my letter and joined TPPA in the spring/summer of 2005 – we thank you! The decision to remain a member of TPPA is these days an even bigger no-brainer.

One of the most valuable assets you have is your home. The value of your home is greatly determined by its location and for us, its proximity to the Three Ponds. As a taxpayer that fact is made painfully clear twice a year when we are asked to pay property taxes. We also pay medical, homeowner and car insurance bills to protect ourselves and important personal assets. Think of your TPPA membership as a small insurance program to protect the pond’s assets. Joining TPPA really is a no-brainer, don’t you agree?! Convince your reluctant neighbors that their joining is also important.

Every year we get a little stronger financially. Our year-end fund balance has grown a little each year since we began. We will end 2011 with a fund balance of approximately \$10,500. (w/ 1.5 months to go).

Although our weed monitors haven’t found milfoil in our ponds to date, we decided to set-aside a large portion of our fund bal-

ance for the response to eradicate this problem *should* we discover this invasive weed in the future. To that end, a Capital Fund of \$5000 was established this year with a separate bank (ING) which pays a higher interest rate. Our concern is that when/if we find milfoil – this emergency savings account will be inadequate to cover a costly eradication effort, hence the need to keep up our fund-raising activities constant.

A summary recap of our finances for 2011 shows the following:

INCOME

Membership Contributions (new & renewing donations)	\$4,785
Maine Lake Association Grant (boat inspections)	\$1,433

SPENDING

NH Lake Association	\$300
Moose Mountain Regional Greenway	\$150
Maine Lake Association	\$150
Loon Preservation Committee	\$100
Website Registration	\$124
TKO Printing	\$144
Postage (incl P.O. Box)	\$238
Northeast Pond Watershed Survey	\$1,200
TPPA Picnic	\$123
Maine Boat Inspections	\$1,433

Hope you all make continuing support of TPPA a “no-brainer!”

Steve Baker

Reducing Soil Erosion



The Work Crew

A soil erosion reduction project at the Milton Town Beach was completed during the 2010 summer season.

This was accomplished as a pilot Lake Conservation Corps (LCC) project. It consisted of installing three large rain gardens, a water retention basin at the outlet of the route 125 culvert, and two sets of infiltrations stairs on the slope leading to

the beach. Much of the work was done by a team of students from Nute High School. This project was funded in part by a grant from the Piscataqua Region Estuaries Partnership (PREP)

Partners who participated in the soil erosion project included New Hampshire Lakes Association, Nute High School, and the Town of Milton Public Works Department.



Let's Get Started



Infiltration Stairs



Planting a Rain Garden

Keeping Bad Plants Out of Good Lakes

By Jeff Everett



One of the biggest threats to our Three Ponds is the introduction of invasive aquatic plants.

- Just one plant can permanently infest all three of our ponds!
- Invasive plants are impossible to remove once they are established.

- Invasive aquatic plants spread rapidly.
- Infestations lead to reduced property values
- Invasive plants ruin boating, swimming and fishing.
- Shallow, warm lakes are the best hosts to these predators'... Which best describes our lakes!
- Spaulding Pond... just below our dam is infested!
- Great East Lake above us had a scare several years ago. It was stopped!

Two non-native watermilfoils threaten the quality of Maine fresh waters; Variable leaf milfoil (*Myriophyllum heterophyllum*) is already present in 27 Maine lakes and streams. Eurasian watermilfoil (*Myriophyllum spicatum*), the more aggressive colonizer of the two, has been found in one Maine water body.

The number one way that invasive weeds get into a lake is being carried from an infected lake to a non-infected lake on a boat or boat trailer.

To help protect Milton Three Ponds, TPPA applied for and received a grant from Lakes Environmental Association (LEA) for their Courtesy Boat Inspection Program.

LEA, a non-profit organization, protects the lakes of Western Maine in many ways, including providing comprehensive water testing for 37 lakes; leading the battle against milfoil; teaching children and adults about the importance of protecting watersheds, and offering technical assistance to landowners, contractors and municipalities.

The grant is to inspect boats for the existence of invasive weeds entering (or leaving) Milton Three Ponds.

TPPA used this grant at the Everett's Cove boat ramp. Part of the grant was training and supplies. With both paid inspectors and volunteers, we were able to inspect 447 boats. While we did find weeds, none were the invasive Bad weeds.

Each boat inspection consists of asking permission to inspect the boat and explaining the reason for the inspections. The inspectors have free handouts that can help educate those that are new to boating and inspections. The inspector then inspects the trailer, boat, prop and engine. If it is a fishing boat, the live wells are inspected. The entire process takes only a couple of minutes and usually is done while the boat owner is preparing the boat for launch.

With the \$1,433 of grant money that was spent, we were able to protect our waters and educate boaters on the danger of not cleaning off boats.

What you should know about Your Septic System

By taking simple steps to maintain your septic system you can save money and help keep our waters clean.

What you put down your drain and toilet does have an impact on maintenance costs and the overall life of the system. Follow these tips for best results:

Do not put grease and garbage down drains, and avoid garbage disposal systems.

Conserve water usage. This will minimize the volume of water your system must treat and extend the life of your system.

Only flush biodegradable wastes down the toilet. Nonbiodegradable products like cigarette butts, and cat box litter, will clog the system.

Do not pour hazardous materials down the drain. Paints, varnishes, chlorinated water, disinfectants, and expired prescription medications can contaminate the groundwater, clog the system, and be deadly to the essential bacteria.

Check when you last had your system inspected or pumped out. A typical septic tank should be inspected every 2 years by a professional and your tank pumped as recommended by the inspector (generally every two to three years) depending on the type of system and use.

You will need to know where your system is located to inspect it. If you do not know where your septic tank and leachfield are,

contact your town office for a construction approval number and then contact DES, which maintains records on systems built since 1971. For an older system, try locating the steel reinforced tank cover with a metal detector. Most tanks can be found about 15 to 25 feet from the house and approximately 12 to 18 inches below the surface. Most leachfields lie in a straight line from the tank. You may be able to locate the leachfield by probing the ground for crushed stone with a rod. Map the location of both your septic tank and leachfield for future reference.

Protect the leachfield by maintaining a good cover of grass to prevent erosion. Keep deeprooted trees and shrubs away from the leachfield. Roots may clog and/or dislodge any pipes in the system. To avoid crushing pipes and concrete covers, do not drive wheeled vehicles over the tank or leachfield. Do not disturb the ground downslope of the leachfield.

If you walk the area and find foul smelling leaks or standing water, then you not only know where your leachfield is, but you know that you are in serious trouble with a possible septic system failure. Don't wait until you have a problem with your septic system to start maintaining it. Failed systems can be very costly to repair or replace and they leak harmful pollutants, like harmful bacteria and excess nutrients into groundwater that flows to our lakes.

Who's looking at whom? Unexpected insights from loon banding

By Tiffany Grade - Biologist, Loon Preservation Committee



It is as typical a night of loon-banding as these nights can be. The loon has been carefully measured, weighed, fitted with bands, and had samples taken for contaminant testing. The information gained from this loon will be invaluable to increase our understanding of loons and the challenges they are facing. By being able to follow individual banded loons, we can answer basic questions about loon biology such as: How long do loons live? Do they return to the same territory and stay with the same mate each year? Blood and feather sampling help us learn about the health of the birds, the chemical contaminants that are in a loon's system from man-made pollutants, and how these factors affect the productivity of loons over their lifetimes. But, as the bird is gently placed in the water, I can't help but ponder another question: what will my relationship be with this loon for the remainder of the summer?

As the Squam Lakes biologist for the Loon Preservation Committee (LPC), I monitor each pair of loons on a daily basis. Being careful not to approach the loons too closely or disturb them in any way, the loons soon accept my presence as a part of their regular routine. My appearance in their territories elicits no reaction. But the reward for loons that are raising chicks is a date with the LPC banding team, and after that...

The first sign of trouble arose in the summer of 2008, my first year on Squam. The loon pair that had hatched the first chick of the summer was contentedly allowing me to check on the safety and progress of the chick each day. When the chick was almost 4 weeks old, a team of biologists from LPC went out to capture and band the adults. After banding the loons, I made a routine follow-up check on the pair the next day. I entered the territory well away from where the loon

family was. To my amazement, the female of the pair immediately dove and came up alongside my boat, trembling in agitation. I had never drawn this sort of reaction from these—or any other—loons before. Quickly establishing that the family was fine, I immediately left the territory. For the rest of the summer, this loon continued to react the same way whenever I entered the territory. Other boats in the area elicited no such reaction. The logical conclusion was that I was now the enemy in the eyes of this loon, and other loons I banded later that summer apparently agreed.

I was intrigued by how the loons could recognize me from all the other people on the lake, so I began investigating the scientific literature on this question. I found research demonstrating that other species of birds, such as crows and mockingbirds, can recognize individual humans as well. Experiments showed that crows cued in on facial features of people. Scientists believe birds learn to recognize individuals which are a threat to them in some way, so they can save their energies by not reacting as strongly to non-threatening individuals. In my case, the loons had seen me on an almost daily basis all summer. It is possible that they already recognized me and tolerated me, having learned that I was not a threat. However, they quickly changed their opinion of me after banding, believing that I was suddenly a "threatening" person and now had to be confronted. The loons' memories of me, however, are more than compensated for by the valuable knowledge gained from these banded loons, which will help LPC preserve loons in New Hampshire and understand the factors affecting the population. Fortunately, by the beginning of the following summer, the loons had apparently forgotten the incident and again accepted my presence with equanimity.

The Three Ponds have banded loons as well that can help us learn about loon life history, productivity, and the stresses loons must deal with. In 1997, the entire loon family (both adults and two chicks) was banded on Northeast Pond. Loons are a long-lived species (we think they live

25-30 years); and, in fact, the Northeast female from 1997 was sighted three times in 2009 on Ossipee Lake, about 22 miles away. This is a remarkably long dispersal for an adult loon. Much closer to home, the 1997 Northeast male was seen in 2008 on Milton Pond. An adult on Milton Pond was banded in 2003 but has not been re-sighted.

Lake residents can make an important contribution to LPC's research and conservation efforts by reporting sightings of banded loons to LPC. Although sometimes bands can be lost, loons usually have two bands on each leg: one silver band and one colored band on one leg and two colored bands on the other leg. Any information on the bands or even simply reporting the presence of a loon with bands will be very helpful. Please do not pursue a loon or get too close in an effort to see bands. LPC recommends staying at least 150 feet away from loons to avoid disturbing them, and, if a loon vocalizes when you are approaching, please back away. Loons often raise their legs out of the water when they are preening or stretching, providing a good way to see bands. Please contact LPC to report any band sightings (603-476-5666; info@loon.org).

Besides the wealth of data we gain from banded loons to help our conservation efforts, there is hope for my loon monitoring as well. Now that I have spent four years on Squam, the loons seem to have learned that banding is just something I do with them once a year and that it is soon over. They no longer confront me after banding. But as I watch them and the data from each band re-sighting pours in, I now know that they are watching me as well.



Please visit www.loon.org to learn more about loons and the work of LPC to protect loons in New Hampshire or to become a member and support our work. LPC's mission is to restore and maintain a healthy population of loons throughout New Hampshire; to monitor the health and productivity of loon populations as sentinels of environmental quality; and to promote a greater understanding of loons and the natural world.

The Proof Is In The Testing

By Bill Riefenstahl

The Milton Three Ponds Lake water testing program has completed 22 years of data collection in partnership with the NH Lakes Lay Monitoring Program under the direction of the University of New Hampshire.

The sample collectors for the 2011 season were: Mac and Heidi Ford and crew, Mike McDonnell and Bob Garnett, Bill Riefenstahl and Bob Garnett, Chuck and Judy Peterson, Kent and Vicki Findell and daughter Mariko

The sample analysts were Connie Therrien, Milt Olson, and Diana Morse

A formal water sampling report is prepared every year and is available at the Milton Town Hall and Public Library. Starting with the 2010 report we will add the reports to our website www.threeponds.org.

In 2010 we increased the scope of the program to collect samples from May to October, do more testing for phosphorous, and also test for toxin producing cyanobacteria. There was good news in the 2010 report, namely:

- Cyanobacteria and cyanobacteria toxins were present in relatively low quantities with only minor differences among the ponds. Microcystin concentrations were well below limits recommended by the World Health Organization for drinking water.
- Water clarity levels were low to moderate, but each of the ponds was characterized by some of the clearest water measured since monitoring was initiated in 1991. This may have been the result of a lower quantity of watershed runoff from rain and snow.
- The dissolved color concentrations decreased relative to the 2009 levels and were some of the lowest levels on record in each of the ponds. The atypically dry period between April and August 2010 limited the flushing of highly "tea" colored waters from the surrounding wetlands, and likely contributed to the low dissolved color concentrations.

•Chlorophyll *a* concentrations characteristic of green water decreased relative to the 2009 levels.

The 2010 phosphorous concentrations however suggest that the Three Ponds remain susceptible to algal blooms (green water events) that can result in short-term periods of degraded water quality.

Based on 2010 results and recommendations from our Lakes Lay Monitoring Program partners, we elected to stop the expensive cyanobacteria testing in 2011, and we plan to retest for this in about 4 years.

...factors, associated with changing land use, are adversely impacting the water quality.

During the 2011 sampling season:

- A false alarm algal bloom was suspected in the cove adjacent to the New Bridge (Milton/Lebanon/Everett's Cove). It turned out to be no more than a massive pollen deposit, Mother Nature being what she is.
- We collected water samples and took measurements weekly between June and September, at the deepest site of each pond. Samples were to determine alkalinity, and dissolved color and chlorophyll *a* concentrations. Measurements were of water clarity and temperature profiles (surface to bottom temperature readings).
- We collected surface and bottom water phosphorous samples monthly in April, May, September, and October, at the deepest site of each pond, to document the degree of internal nutrient loading, a phenomenon during which the nutrients are stirred up from the bottom sediment when a body of water such as ours, "turns over".
- We collected 13 early-season (spring runoff) and 13 late-season (post-storm) phosphorous samples at near-shore and tributary locations to document the ponds' response to nutrient loading events.

We don't know the results of our 2011 monitoring, but a review of the long-term water quality data indicates that there is a general trend of decreasing water clarity and a general trend of increasing algal growth over the past 21 years for each of the three ponds. While water quality data can vary over short-term periods due to natural factors such as variations in rainfall and variations in temperature, the long-term water quality record for the Milton Three Ponds suggests there are other factors, associated with changing land use, that are adversely impacting the water quality.

Historically, the Town of Milton has funded the cost of the analysis and annual report done by UNH. The 2011 cost was \$1200. UNH charged less than their actual costs because of the availability of grant funding. We have been advised that this grant funding will not be available next year, thus our costs for equivalent work will increase to \$1800. If the Milton town budget can't support this amount, TPPA is prepared to fund the difference. So your steadfast crew of water samplers and sample analysts will still be on the job next year!!!

We would like to thank Dr. Jim Haney, the Milton Conservation Commission, and the Town of Milton for their continued support of this very important program. This volunteer-based effort was instituted to track long-term water quality trends and to identify water quality threats. Continued support of this proactive approach will help ensure that the Milton Three Ponds remain a natural resource asset for future generations.



Mariko Findell
our youngest water sampler



TPPA
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Board of Directors

Norman Turgeon, President
 Mike McDonnell, Vice President
 Jeff Everett, Secretary
 Steve Baker, Treasurer
 Mike Dubois
 Linda Dame
 Emery Booska
 Wayne Sylvester
 Bob Myrick

Visit our Website
www.threeponds.org

Contact us
normturgeon@metrocast.net
 Or mail to
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 P.O. Box 1242
 Milton, NH 03851

TPPA Meetings are on 4th
 Thursday of each month, May -
 Oct, 6:30 PM at Nute HS Commu-
 nity Room All Members are en-
 couraged to attend.

Three Ponds Protective Association
New and Renewal Membership Form

Name:

Permanent

Address
 City
 State
 Zip
 Phone
 E-Mail

Summer

Address
 City
 State
 Zip
 Phone
 E-Mail

Own Waterfront Property? Yes No

Family Membership*

- Supporter \$15
- Sponsor \$25
- Patron \$50
- Benefactor \$75
- Conservator \$100

* Individuals who cannot contribute one of these amounts may still become members. Whatever one can afford is sufficient. Members are encouraged to contribute by volunteering to work as an officer or action team member.

Business Membership

- Silver \$50
- Gold \$100
- Platinum \$200

Make checks payable to: TPPA
Mail Application and Payment to:
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