
Taylor Pond Association News

*July
2013*



***TAYLOR POND ASSOCIATION
ANNUAL MEETING***
Sunday, July 28, 2013, 7-9 p.m.
Taylor Pond Yacht Club

Returns and address corrections
to:

Michael Dixon
126 Everett Road
Auburn, Maine 04210

Interested in
volunteering to
help with TPA
programs?
Please call
Dana Little at
784-1908 or
Michael Dixon
at 783-7763.



Please visit the TPA website:
www.taylorpondassociation.org

Editor's Note

By Michael Dixon

This year's newsletter features reports by TPA Board Officers describing the activities of the Board during the past year, the status of finances and memberships, and the Shoreland Improvement Grant Program, as well as a summary by Woody Trask of water quality data collected in 2012. Dana Little has provided an interesting nature article on the turtles that inhabit the pond. Larry Faiman summarizes an update to the By-laws that is being recommended by the Board. Marc Tardif has prepared an article which focuses on the results of our efforts to understand the workings of our outlet as it relates to water levels and flooding on the pond. Some of the articles, such as Larry's and Marc's, reference documents available at the TPA website. Please contact me at 783-7763 or msdixon@roadrunner.com if you are unable to access these and I will get you copies.

Thanks to Dana Little, Joan Macri, Dyanne Smith, Marc Tardif, Paul Tardif, and Susan Trask for providing us with many wonderful pictures taken on the pond. Kudos to Laurie Henderson and Tyla Davis of Bates College Print and Mail Services for their inspired work in making our newsletter look great.

President's Letter

By Dana Little

This is my 12th year as president of TPA and I appreciate the trust you have placed in me to run the organization in a democratic and reasonable fashion. However, I became concerned this last year with the weakness of our legal structure as a non-profit. Fortunately we have a well-qualified lawyer in Larry Faiman who volunteered his services to create new by-laws. We will vote on these by-laws at our annual meeting on Sunday, July 27th at 7pm in the club house at Taylor Pond Yacht Club.

It is fascinating to look at the forces that change the water level of the Pond. Sudden heavy rains and prolonged drought of course, are beyond our control. In the spring of 2012 we were hit by the remnants of a hurricane that dropped 9 inches in less than 48 hours. People whose lands and homes were flooded asked us if we could do anything to alleviate flooding. The outcome of our work is that we will be working with the City of Auburn to reduce the height of flood waters without changing the lowest water level. Marc Tardiff became deeply involved in this process and has written a nice summary of our findings in this issue.

Susan Trask outlines the activities of the Board for this year. We have spent your money frugally and the Treasurer's report shows we have a positive balance ready to meet the needs of our organization. We are hopeful more people will apply for the shoreline grant program. It matches up to \$500 spent on residential property improvements to reduce phosphorous runoff.

Woody's water quality report continues to show that we have a stable phosphorous level; a sign of good health. Last year, Lake Auburn's kill of cold-water fish was due to increased phosphorus levels. Taylor Pond does not have cold-water fish. A fish kill for us is unlikely because of our stable phosphorus level.

We love our pond for different reasons. Priscilla Nason's reasons include a remarkable sighting of 23 loons collected at the north end of the Pond, on May 25th. They hung out in the calm for most of the day as the wind whipped the south end into white caps. She also reports a pair of nesting loons at the opening of Lapham Brook as of June 24th. A grey fox has been lurking in the swamp near my home but despite this I have seen more ducklings than ever. The common and hooded mergansers, wood, black and mallard ducks are all nesting again. The lack of snow disappointed snowmobilers this year but the ice remained a prime place for travel all winter. Ice fishing yielded huge northern pike to the delight of dozens of people during the annual ice fishing derby. Our pond remains healthy due to your efforts. I thank you.

Dana Little
June 25th, 2013



An Important note regarding TPA Membership

If your mailing of the newsletter does not include a membership form, it means that you have paid your 2013 dues or are an honorary member. If your copy of the newsletter does include a copy of the membership form, it means that you are not currently a dues-paying member of the Taylor Pond Association. Although we enjoy a healthy bank balance, an active membership remains essential to the overall well-being of our organization. If you have never been a member, but agree with our mission of preserving the water quality of Taylor Pond and protecting property values, please join us. If you are a former member who has not yet rejoined this year, please do so. If you are an active member, thank you for your ongoing support.

Did you know that declining water quality and clarity are directly correlated with decreases in property values? Take the following steps to protect Taylor Pond and your property's value:

- **Establish an unmowed vegetation buffer on the shoreline**
- **Use phosphorous free fertilizers on lawns and phosphate-free detergents**
- **Control runoff and erosion on your property**

Technical assistance and \$500 matching grants available to help members and road associations with the process of making their properties/roads lake-friendly.

Call Susan Trask at 784-4606 for more information



2013 slate of candidates for the Taylor Pond Association Board of Directors to be voted on at the Annual Meeting on Sunday, July 28, 2013:

President	Dana Little (784-1908; danalw@roadrunner.com)
Secretary	Susan Trask (784-4606; susantrask@roadrunner.com)
Treasurer	Michael Dixon (783-7763; msdixon@roadrunner.com)
Board Member	Edwin Gray (720-0098; edwin_gray@hotmail.com)
Board Member	Larry Faiman (782-4648; bmfaiman@gmail.com)
Board Member	Dick Marston (784-1445; dmarston100@roadrunner.com)
Board Member	Barbara Mitchell (783-9000; bmitch61@aol.com)
Board Member	Donna Morin (784-9272; dmorin77@aol.com)
Board Member	Peter Bunker (784-2909; peter@shads.com)
Board Member	Marc Tardif (783-7395; tardifml@efp-efs.com)

If you have internet access and are willing to volunteer to be an officer or director, please contact Dana Little to add your name to this list.



Taylor Pond Association Mission Statement

The Taylor Pond Association is a 501-c-3 federal tax-exempt organization committed to maintaining the water quality of Taylor Pond in order to preserve wildlife habitat, protect property values, and safeguard recreational opportunities.

WATER QUALITY SUMMARY FOR TAYLOR POND – 2012

By Woody Trask



Water quality monitoring for Taylor Pond was conducted by Ralph Gould and Woody Trask. Ralph conducted weekly checks for clarity using a Secchi Disk and Woody did more extensive testing once a month for dissolved oxygen, temperature, color, pH, alkalinity and conductivity as well as clarity. Water samples were also mailed to the University of Maine to be analyzed for total phosphorus in the surface layer and near the bottom.

The testing results for 2012 are not radically different from any of the past five years, indicating the condition of the pond is stable but with the same moderate level of concern about the potential for algal blooms. The threat is due primarily to the fact that during the height of summer there is high oxygen depletion below a depth of five meters (about 16.5 ft.) which means there is potential for phosphorus to leave the bottom sediments and become available to algae in the water column. The lack of oxygen also means Taylor Pond is not suitable for certain cold water fish such as trout. We have been fortunate not to have had any significant algal bloom for several years.

The overall water quality of Taylor Pond is considered to be average compared to all Maine lakes with the only real concern being a moderate potential for an algal bloom. Barring a major environmental event that causes major soil erosion and phosphorus rich run-off entering the pond, the water quality is expected to remain in its present condition for 2013 and beyond.

Taylor Pond Water Levels & Flooding Report

By Marc Tardif

Last year, the TPA newsletter included an article by Dana Little and Susan Trask summarizing some of the many considerations associated with water level control. The article was largely in response to inquiries the board received from the general membership concerning the extensive flooding we experienced in June of last year. To further address membership concerns, the board established a water level committee with the task of identifying the natural and manmade influences having the biggest impact on water levels and flooding. The ultimate goal of the committee is to determine if viable opportunities exist to reduce the extent and duration of flood events. The board does not endorse control of normal water levels on Taylor Pond, and the water level committee is not engaged with any activity in that regard.



Hotel Road Culverts

Over the past year, the water level committee has been very active with field surveys and meetings with professionals knowledgeable in hydrology and local conditions. The committee would like to acknowledge and thank the following organizations for their contributions of time and expertise which has led to the preliminary conclusions contained in this report: Stony Brook Land Use Consultants; Jones Associates Land Surveyors; John Field Geology Services; Auburn City Engineers office, Auburn Water and Sewer District, and the Auburn Public Works Department. A substantial amount of information has been provided by these sources and will be made available to view on the TPA website.

Flooding is a function of the broad and complex subject of hydrology. There are three primary factors that affect the extent and duration of a flood event. 1) The amount and rate that water is introduced to the watershed. 2) Storage capacity of the watershed at the onset of precipitation. Before flooding occurs, features in the watershed that are capable of holding water need to fill and overflow. This includes depressions in the land, soil saturation, dams, and the pond itself. 3) The rate at which water is allowed to exit.

Taylor Brook is the primary outlet for water exiting the pond in both normal and flood water conditions. Six features of the brook have been identified from the pond outlet to the Kendall Dam 1.5 miles downstream that affect both conditions in and around Taylor Pond. The brook elevation drops dramatically immediately after the dam, so there is no impact on the speed of pond water level recession from conditions located further downstream.

The first feature effecting the time it takes for water levels to recede is the fact that there are only two feet of elevation drop over the 1.5 mile stretch. The very gradual slope provides minimal energy to move water downstream and away from the pond. Thick vegetation throughout the stream course further reduces flow rates and results in what can be described as a very sluggish waterway.

The second feature of interest can be found a few hundred feet downstream from the pond outlet. Here we find a heavily vegetative area rooted in silt deposits that have raised the bottom of the stream channel. This raised area is referred to as a berm



Upstream Side of Beaver Dam

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and extends the full width of the brook. The bottom of the channel in the berm area is higher than any other point along the 1.5 mile course. The significance of this naturally created feature is that this is the point where water would stop flowing from the pond and into the brook under receding low water conditions. Water levels below this elevation would be the result of water exiting by ground infiltration, evaporation, and transpiration. The berm has little or no significance relative to flood water dynamics.

The third significant feature is located just downstream of the berm where two culverts are installed at the point that the brook passes under Hotel Rd. Unlike the berm, this feature has no effect on normal water levels. However, under flood water conditions, this feature acts as a dam of sorts that limits pond discharge to the maximum flow capacity of the culverts. Another negative characteristic associated with this feature under flood conditions is that large amounts of water accumulating from the downstream Taylor Brook watershed backs up against the culverts further reducing water discharge rates from the pond.

The fourth feature encountered traveling downstream from Hotel road is a large beaver dam located adjacent to the Granite Mills Estates development. The dam traverses the entire width of the brook, and water elevation drops one foot between the upper and lower sides of the dam. This feature doesn't have much if any effect on normal water level since its elevation is slightly below the height of the berm. The dam does have some negative impact on mitigating a flood event in that the water volume retained by the dam is volume that is not available for storage of storm water accumulations.

The fifth feature of interest is the slab bridge located on the driveway to the Kendall property. This is probably the most significant manmade influence affecting the time it takes for flood water levels to recede. The bridge acts in the same manner as the Hotel Road culverts by restricting flow rates. The restricted flow at this point exaggerates the backed up water condition at the Hotel Road culverts. The only impact this feature might have on normal water levels in the pond would be the slight increase in the time it takes for water levels to recede.



Kendall Dam and Bridge

The sixth and last feature to discuss is the Kendall Dam which is located just below the Kendall driveway bridge. The dam has a higher flow capacity than the bridge, and is equipped with a currently inoperable sluice gate which might be used to further increase flow in a flood event. Flow restriction over the dam is somewhat moot at this time since the upstream bridge is more restrictive than the dam. The dam has little or no effect on normal water levels in Taylor Pond since the elevation of the dam's spillway is below the berm elevation. The Kendall dam has the same effect as the beaver dam under flood conditions in that the volume of water retained by the dam is volume not available for storage of storm water accumulations.

The information used to prepare this report is reliable and adequately detailed to support the conclusions expressed above. Given the heightened level of understanding we now have, several options to reduce the extent and duration of flood events have been suggested. The most promising options entail methods to increase the flow capacities of the Kendall Road Bridge and Hotel Road culverts. Unfortunately, the existing data we have is not adequate for the purpose of quantifying the extent that any one feature contributes to the overall problem of flooding. If undertaken, the next step in this process would involve an expert analysis to determine benefits which would be realized by modifying existing features. The value of any proposed benefit would need to be weighed against the cost to implement modifications. To be viable, several state and local authorities having jurisdiction would need to be on board with the process. The concerns articulated by Susan and Dana in the 2012 newsletter remain pertinent and should be revisited before additional action is taken.

Turtles

By Dana Little

Living on the pond's edge, we occupy prime turtle habitat. Both the large snapping turtle, up to 20 inches long and 60 pounds, and the smaller, more colorful painted turtle thrive in Taylor Pond. At our house, every June, a female snapper emerges from the mud on the bottom of the pond, and appears on our lawn or driveway. She's searching for a nesting site. Over several hours, she digs up spot after spot in the soft mulch of our gardens, before settling on the right one. There, she lays and buries 20-30 white eggs, about one inch in diameter. She returns to the water and often, within 24 hours, we find the location of her raided nest by the broken egg shells strewn about by a marauding fox, mink, raccoon, or skunk.

Any remaining eggs will hatch in the fall. The sex of these little survivors is determined by the temperature of their environment. Females thrive at the extremes, low or high; males, at intermediate temperatures. Because the temperature in a nest varies with depth usually a blend of males and females occur. The young hatch within 24 hours of each other and emerge en masse, overwhelming predators with their numbers to enhance their chance of survival. They may climb to the surface immediately or wait until spring to appear.

Snappers, on average, live 30 years, although they can live much longer in captivity. Aquatic plants compose about a third of their diet. They often wait hidden in the mud on the bottom of the pond or suspended in the water where they will ambush fish, small birds, frogs and snakes. Do snappers bite people? On land their slow speed makes them vulnerable so they will snap if you get too close. Swimming in the Pond, I've met snappers on many occasions. They simply turn and swim away when they spot me. I am told snappers make good soup. Unfortunately, they may harbor high levels of toxins. I prefer to watch, rather than eat, this creature who's been around since the dinosaurs ruled.

Painted Turtles get their name from the bright red, orange and yellow markings on their dark underside shells. They prefer warm, shallow water where underwater plants are plentiful. They love to bask in the warm sun. When space is limited, up to four turtles will pile on top of each another. During the summer they chase small creatures such as insect larvae, baby fish and tadpoles. They also consume cattails, pondweeds and long strings of algae. Although they can occasionally be spotted swimming beneath clear ice, in the winter they usually bury themselves in the mud to wait for spring. Female Painteds prefer to lay about 20 eggs in sandy soil in the sun. Painted turtles have been known to live for 13 years, but probably live much longer.

When out in a boat, check that floating piece of log again; it may be a snapper's head. Scan logs at the water's edge for basking painted turtles. If you want to see the Snapper or the Painted turtle in the water, put on a mask and snorkel, and float quietly in the shallows.



Treasurer's Report on Finances and Membership

By Michael Dixon

The following is our 2012 end-of-year financial report:

Balance through 01/01/2012				\$26,247.62
2012 Income				
	Dues & Contributions	\$5,140.00		
	Interest Income	\$99.89		
	Income Total	\$5,239.89		
2012 Expenses				
	State fees		\$50.00	
	C.O.L.A. dues		\$500.00	
	VLMP Contribution		\$100.00	
	Web Hosting Fee		\$71.85	
	Dues Letter Printing & Mailing		\$124.05	
	Newsletter Printing & Mailing		\$945.83	
	Annual Meeting Expense		\$81.11	
	End-of-Year Printing & Mailing		\$37.63	
	Miscellaneous Printing & Mailing		\$12.40	
	Water Monitoring supplies & testing		\$414.10	
	Technical Services		\$1,140.90	
	Shoreline Improvement Grants (2)		\$1,000.00	
	Expense Total		\$4,477.87	
Net Gain				\$762.02
Balance through 12/31/2012				\$27,009.64

As of 7/3/2013, the Taylor Pond Association checking account had a balance of \$14,516.60. We also have a CD whose current value is \$15,134.18. We continue to build a balance that can be used to carry out the work of the Association, such as supporting projects that will decrease the amount of phosphorous entering the pond.

An important part of our efforts is our annual newsletter. We mailed out almost 250 copies of our 2012 newsletter. Our database is frequently updated in an effort to send the newsletter to all property owners in the Taylor Pond shoreland zone, whether they are TPA members or not. We also send the newsletter to many "honorary" members, such as City Councilors, members of the Planning Board, and so on.

In 2012, we had 125 dues-paying members, which included 78 basic memberships, plus 47 memberships at higher levels of giving, including 30 Supporters (\$50) and 17 Benefactors (\$100). So far this year, I have processed 94 memberships. The Association is very appreciative of the generosity of all its members.

TPA Shoreline Improvement Grant Update

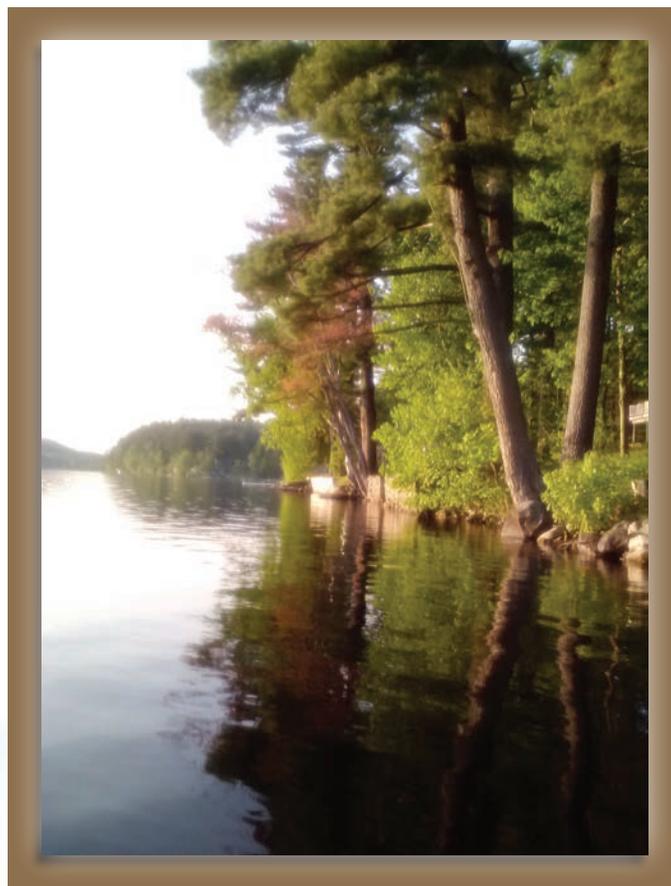
By Susan Trask

Are you thinking about making some improvements to your waterfront property? Would you like to make your space more beautiful and also help to secure the future health of Taylor Pond? Please consider applying for assistance from the Taylor Pond Association!

For the seventh straight year, the Taylor Pond Association is offering matching grants of up to \$500 for watershed residents to improve their property in lake-friendly ways. "Lake-friendly" improvements include (but are not limited to) creating or expanding a buffer strip, installing rip-rap, creating better walkways to the water, etc. So far we have awarded five grants, expending \$2500. The process is simple:

1. Contact Susan Trask at 784-4606 or susatrask@roadrunner.com and let her know that you are interested in making some improvements to your property. She will ask an expert from AVSWCD (Androscoggin Soil and Water Conservation District) to schedule a visit to your property to evaluate your situation and make recommendations.
2. Carry out your project, following the guidelines given. Save all your invoices and records of personal hours expended.
3. Contact Susan to let her know that the work has been completed. She will schedule a return visit by an AVSWCD expert who will evaluate the work and send a report to the Board.
4. Send copies of all your expenses and personal hours expended to Susan.
5. If the work completed follows best-practice guidelines, the Board will vote to award the grant, up to \$500 in matching funds.

If you are even just *thinking* about what to do with your property, please consider getting some expert advice first! We will send someone out to consult with you. You have the benefit of professional expertise even if you ultimately decide not to apply for the grant.



Board Revises Taylor Pond Association By-laws

By Larry Faiman

The Taylor Pond Association has a varied and active membership and a challenging agenda. Up until now, the By-laws governing Taylor Pond primarily consisted of a brief description of some of the purposes of our organization, but provided little detail on how TPA business would be conducted. Since the By-laws are in effect the constitution for the organization, the Board recently decided that it would be prudent to develop a more detailed and comprehensive set of By-laws. The revised By-laws establish the rules and regulations under which the TPA will operate, and will enable the TPA to conduct its business in an orderly and transparent manner. The revised By-laws address the following:

1. The purposes for which the organization exists.
2. The voting rights of the members of the organization.
3. The rules governing the Board of Directors.
4. The powers and duties of the Officers of the organization.
5. A variety of subjects related to the administration of the organization, including our fiscal year, meeting requirements, communications and notices, procedures, amendments, and special committees.

The proposed By-laws are available for review at the Taylor Pond Association website. We will be discussing them and seeking your approval to adopt them at the annual meeting.



TAYLOR POND ASSOCIATION ANNUAL MEETING, SUNDAY, July 28, 7 P.M. AT THE TAYLOR POND YACHT CLUB

Please plan on attending the TPA Annual Meeting. This year's meeting will feature a discussion of the revision to the by-laws being recommended by the Board, plus a discussion of the results of a water level study completed by fluvial geomorphologist, John Field. Light refreshments will be provided.

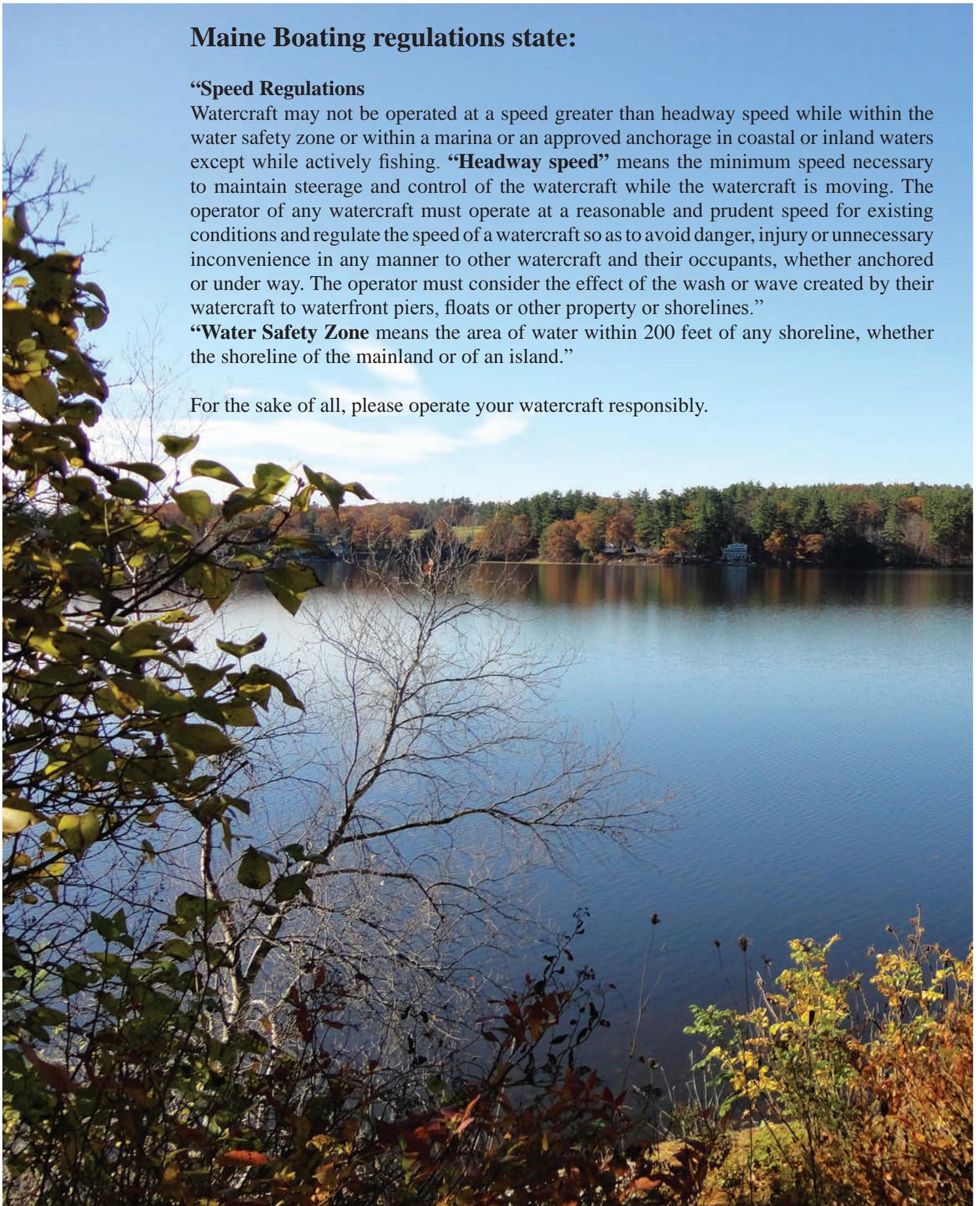
Maine Boating regulations state:

“Speed Regulations

Watercraft may not be operated at a speed greater than headway speed while within the water safety zone or within a marina or an approved anchorage in coastal or inland waters except while actively fishing. “**Headway speed**” means the minimum speed necessary to maintain steerage and control of the watercraft while the watercraft is moving. The operator of any watercraft must operate at a reasonable and prudent speed for existing conditions and regulate the speed of a watercraft so as to avoid danger, injury or unnecessary inconvenience in any manner to other watercraft and their occupants, whether anchored or under way. The operator must consider the effect of the wash or wave created by their watercraft to waterfront piers, floats or other property or shorelines.”

“**Water Safety Zone** means the area of water within 200 feet of any shoreline, whether the shoreline of the mainland or of an island.”

For the sake of all, please operate your watercraft responsibly.



Summary of Board Activities, August 2012 – June 2013

By Susan Trask

Your Board of Directors has been hard at work this year! Our “usual” work continued apace: We supported water quality monitoring, managed our local Shoreline Improvement Grant program, and fielded questions and concerns of Association members. In addition, we tackled two large projects: evaluating the water levels of the Pond, and re-writing our by-laws.

Last year’s spring flooding was the main topic of our annual meeting, held August 5 at the Taylor Pond Yacht Club. Our guest speaker was Mike Gotto of Stonybrook Consultants, who offered a slide presentation describing his survey of the Pond and the Taylor Brook outlet. The survey looked at many of the possible back-up points which may contribute to the flood waters’ relatively slow dispersal, including the Kendall dam, a beaver dam, the Hotel Rd. culverts, and the vegetation at the outlet. The presentation stimulated a lively discussion with many questions and concerns raised by members.

The Board decided to address these concerns and any possible actions at another Board meeting, which interested members could attend. This special meeting took place on September 5, with thirteen members in addition to Board members in attendance. After much discussion, the Board created a Water Level Subcommittee to investigate and evaluate the various issues and possible solutions. Members of the committee were: Michael Dixon (chair), Marc Tardif, Ed Gray, Donna Morin, and Bettyann Sheats. The committee worked diligently and made its report to the Board on October 31. More follow-up work has occurred since then as well. Please see Marc Tardif’s article elsewhere in the newsletter for a full report.

The Board realized last year that our by-laws were very outdated and in need of revision. The by-laws had never been revised since the TPA’s incorporation in 1974, and really did not hold up to modern-day standards for by-laws. Dana Little and Larry Faiman created a draft of a more complete set of by-laws using COLA (Congress of Lake Associations) guidelines. The Board reviewed these carefully, revised them further, and will present them to the Membership for approval at the July 28 meeting. This was a lengthy and sometimes arduous task, but we felt it important work to accomplish. Please see Larry Faiman’s article elsewhere for more information about the by-law update.



Taylor Pond Association would like to thank Dana Little, Joan Macri, Dyanne Smith, Marc Tardif, Paul Tardif, and Susan Trask for contributing photos for this year's newsletter.

