

Basin-David-Tilton Ponds Association

Newsletter

Summer 2015

Invasive Plant Patrols

Our annual survey was bumped up this year!

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Summer 2015 Greetings & Highlights

Dear BDTPA Member:

I hope you are having a joyous summer on the pond! The BDTPA has been busy behind the scenes to help preserve the quality of our environment. Highlights from this past year include a volunteer survey of the full shoreline of David Pond for invasive aquatic plants (see page 2); monthly monitoring of water quality with secchi disk readings by Water Quality Steward Rene Mathieu; and the renewal of the LakeSmart program to encourage and assist property owners in preventing harmful run-off into David Pond (see page 6).

Following Audubon Society guidelines, two BDTPA members installed buoyed warning signs near Loon Rock, alerting boaters to avoid the area while loons were nesting. A team of volunteers participated in the annual loon count (see page 7). Another group of volunteers led by Al Wheeler consulted with Thirty Mile River Watershed Association and the Town of Fayette to resolve a serious and longstanding erosion issue on the Sandy River Road; Rene and Pauline Mathieu led a private fundraising effort to remediate the problem (see page 6). The BDTPA Board has also begun research into reported issues surrounding water levels on David Pond (see page 5).

To all of our many volunteers, I am very grateful. The health of David Pond is stronger because of your individual and group efforts. We need everyone's help to ensure that the ponds and their environments are here and healthy for generations to come. That help can come in many ways: staying informed, volunteering for a plant patrol, or simply improving the buffer on your shoreline. Please attend our annual meeting to learn more, or contact me or any of the BDTPA officers.

**Annual
Meeting &
Potluck Brunch
on
July 11th
9:00 a.m.
Starling Hall
Route 17**

Please come to the meeting to hear news and to talk about environmental issues on the ponds. Then stay to meet other neighbors who share your interests in the water.

Thank you,
Misty Rock, BDTPA President

Invasive Plant Patrollers Give David Pond A Clean Bill of Health for 2014

Last summer, volunteer Invasive Plant Patrollers examined 100% of David Pond's shoreline looking for the dreaded invasive plants that have been found in a growing number of Maine lakes and ponds. I believe that this is the first time that David Pond's entire shoreline has been surveyed for invasive plants during a single summer. I am happy to report that no invasive plants were detected during this survey.

The survey was accomplished with the help of many volunteers who came forward and offered their help. Invasive Plant Patrollers usually attend a training course given by the Maine VLMP (Voluntary Lake Monitoring Program) team of educators. During this course, they are provided with materials and instruction on how to identify Maine's eleven most unwanted invasive aquatic plants.

On July 8th last summer, an invasive plant identification paddle was held at the home of Kirstie Ludwig, who resides on the shore of David Pond, and was led by Lidie Robbins, Executive Director of 30 Mile River Watershed Association. Preliminary instruction was given by Lidie before attendees went out on the pond for some "on the pond" training. Inexperienced volunteers were paired up with more experienced partners for a better learning experience.

VLMP also provides workshops at various times and

locations during the summer for those who think they may be interested in helping to keep a watchful eye for invasives while enjoying our pond during the summer. If you are interested in volunteering for our annual invasive plant survey, please consider attending a VLMP session. More information is provided below and in a separate column on VLMP.

I would personally like to thank last year's volunteers for donating their time and effort to accomplish our 2014 Invasive Plant Survey. Those volunteers included Barbara Kinney, David Pollock, Linda Stanton, Pat Stanton, Alecia Tenney, Deb Cayer, Bill Dunham, Rene Mathieu, Pam Lanz, Al Wheeler, Misty Beck, Kirstie Ludwig, Sally Lafond, and myself, Joe Longtin. When asked why they volunteered for the survey, most say that they simply want to do their part in helping to protect our pond.

If you think you'd like to volunteer to help in this worthwhile effort, please go to www.mainevlmp.org on the web to get information on training and certification to become a VLMP Invasive Plant Patroller or call me at 293-9313 and I can provide more information to you about the process. It only takes a single class to get started and we can usually team you up with someone who will help you to gain more experience.

Thank You,

Joe Longtin

VOLUNTEER LAKE MONITORING PROGRAM (VLMP) WORKSHOPS

The Volunteer Lake Monitoring Program of Maine has helped protect our waters from invasive species like Eurasian milfoil, which has invaded other nearby ponds. VLMP conducts free training sessions, publishes data on the web, and provides resources to the public for free or at low cost. Those of us leading plant patrol teams on David Pond have attended training sessions to be certified to monitor invasive aquatic plants. We encourage anyone with an interest in preserving the pond's water quality to attend one of this summer's workshops, or to go out with one of the experienced plant patrollers on David Pond. See VLMP's website for details: (www.mainevlmp.org) or contact Joe Longtin (293-9313) or Misty Beck (491-9216).



This summer VLMP is also leading efforts to begin monitoring the growth of metaphyton (an algae that looks like green cotton candy found near the shore). Metaphyton appears to be on the rise, and VLMP is seeking more data on it as well as conducting research to understand how and why it grows as it does. For information or to become involved with their efforts, see www.mainevlmp.org/volunteer-info/other-monitoring-opportunities/metaphyton/.

You might also consider attending their annual conference, this July 25 in Turner, which features guest speakers, VLMP staff, and all kinds of material on our aquatic environment. For more information or to register, see the website or contact VLMP at vlmp@mainevlmp.org or 207-783-7733. Registration closes July 17th.

Understanding Changes in Our Great Ponds

Two Ongoing Studies of Weather and Climate Related Changes

Buoys on Basin: A Note From Amherst Researchers

Did you see those orange buoys on Basin Pond this summer? We apologize! Those were not supposed to be visible. We have fixed the problem, and the buoys are now situated below the lake surface, where they should be.

We are a group of Ph.D. students in the Biogeochemistry Laboratory at the University of Massachusetts – Amherst studying the algae in Basin Pond. This work is in support of ongoing research on Basin Pond involving scientists at UMass, Bates College, and elsewhere. The goal of the project is to use the sediments in Basin Pond to reconstruct extreme climate events (such as droughts, floods or fires) over the last 2,000 years in the Northeast United States.

Future impacts from climate change can be better understood by placing modern climate trends into perspective. Lakes are particularly good recorders of climate variability because (1) sediment from the landscape accumulates in lakes and (2) microorganisms (like algae) growing and dying in the lake provide insights into the environment in which they grew.

By examining the remains of land plants and aquatic microorganisms preserved in lake sediments, we will be able to reconstruct a long record of climatic events at Basin Pond. This will enable us to more effectively discern natural versus human-caused environmental changes across the region into the future.

At 106 feet deep, Basin Pond is one of the deepest lakes in the Northeast. Basin Pond has

beautiful sedimentary record, making it unique among New England lakes.

Currently, there are five sediment traps deployed in Basin Pond. The sediment traps are suspended at depths of 20, 40, 60, 80, and 100 feet to collect algal material throughout the water column. The traps are checked each month, so that we can look at what types of algae grow at different water depths in the lake and see where the most algal material production occurs in the water column.

Having this information about modern algal production will help us interpret the Basin Pond sedimentary record and understand historical and modern climate change and its impacts in New England. The sediment traps remain in the lake through the winter, and are monitored again following ice-out.

We have prepared a brochure including this information and provided it to Misty Beck (mistybeck.davidpond@gmail.com). We can also send you a copy if you are interested in the project or want additional information.

Graduate Student Researchers

Ben Keisling bkeisling@geo.umass.edu
M. Helen Habicht mhabicht@geo.umass.edu
Dan Miller dmiller@geo.umass.edu

Faculty Mentors

Dr. Ray Bradley (413)545-0659
rbradley@geo.umass.edu
Dr. Isla Castañeda (413) 577-1124

Ongoing Research on Temperature in Maine Waters by UMF Scientist Dan Buckley

Since 2007 UMF Professor of Natural Sciences Dan Buckley has been monitoring summer lake temperatures to see how weather patterns affect local waterbodies in the short and long term. He does this by using Hobo Data Loggers, which record temperatures and light intensity every 15 minutes. They are small devices, about the size of a lighter, and are installed with a buoy. At the end of summer, Dr. Buckley collects them and downloads the data. He says, “Using this data we can detect trends in the lake temperatures and potentially forecast how the lake ecology might be impacted over time. Better understanding of these temperature changes is essential as we work to maintain water quality in our favorite lake or pond.”

Data from Lake Auburn’s water intake over the past 50 years shows a rise in lake temperatures of between 1.8 and 3.6 degrees F. This corresponds with earlier ice-outs on Maine lakes and ponds. The project initially involved seven lakes and now includes 27-29 lakes per year. This year records will be taken from David Pond at a buoys site hosted by Mary Lynch. We are glad to participate!

CHANGE COMES TO OUR POND

by Mary Griffith Lynch

In the 1950s, not too long ago, David Pond was still and quiet. Even in summer, only loons, ducks, herons, beavers, otters, and an occasional jumping fish disturbed the surface, when a boy in a canoe could explore without hearing the sound of even one motor. Wes Hodgkins remembers that time when, drifting on the lake, he could see only a couple of houses on the shore and perhaps only one boat over near the O'Brien house. "There was just no one there." In those days, he says, it would snow and snow and snow in winter and the temperature wouldn't get above zero for weeks, down to -30 sometimes.

Ice-out used to come around April 26. Wes remembers because it happened right around his father's birthday, but it comes generally one or two weeks earlier now. He sees fewer crayfish now and more large-mouthed bass. Ellie Andrews, a niece of Harry and Loretta O'Brien, who had bought a large piece of land on Lower David in the 1920s, grew up coming to David Pond in summers. She doesn't remember seeing the large snapping turtles and remembers sitting on a rock and looking into absolutely clear water to watch the fish below.

Established residents like Rene and Pauline Mathieu mention the increase in floodlights around the pond -- no longer do we have the deep darkness on the shore and this surely changes the character of our little lake in the woods. Sometimes, instead of looking into rippling water under the moon, we might see only a glaring spotlight across the cove. Rene also notices that there are more weeds in the coves than when he arrived in the 1970s, growth that is stimulated by runoff from roads and shore-land development.

Shore-land development has contributed the most to the changes around the pond -- the cutting of trees and the building of camp roads. We've changed the habitat with our docks and lawns and decks and lights. But now the pond is warming and there will probably be more houses; every year there seems to be another lot cleared on our road. All this can only make our relatively shallow lake more vulnerable. The Fall 2014 newsletter from the Maine Lakes Society cites research done on European lakes that shows the warming global climate is feeding algal growth there, and that more frequent strong rain storms are increasing "nutrient loading to water bodies," also nourishing the algae.

Fortunately, there is, as well, an increased educational effort and growing knowledge about how to protect our

Help Survey the Pond

Lending Resources Available:

Extendible rakes, kayak scope, pickle bucket scope, magnifying glasses & plant identification cards

Contact Misty Beck (491-9216) or Joe Longtin (293-9313) to get started

lake from these threats. The LakeSmart program run by the Maine Lakes Society encourages shorefront owners to plant buffers of shrubs and other plants to catch the phosphorous-rich runoff from roads and yards before it can drain into the lake.

The nature of our pond has been evolving. There was a period in the 70s and 80s when a rush of people arrived to build second homes. They had discovered the thrill of fast boats and threatened the loons and disturbed the peace of this tranquil place with their "noisy hollering," Wes Hodgkins remembers. That was a time of big change on David Pond. Others have lamented when the magnificent old oaks were cut as Lake View Estates was built and floodlights began to appear around the shore. Luckily for the health of the pond and its creatures, many of the speedboats moved to other larger lakes to race, and David Pond became again a quieter place. Even on a Saturday afternoon in August, I sometimes see only a couple of kayaks and a fishing boat going by our dock. Luckily also, Wes says, people on the pond now are more respectful of each other than during that period of wild activity.

Along with the other changes, the bug population is evolving. When I came to central Maine as a child for summers on the Belgrades, there were no ticks and even as late as 2000 or so, there was no Lyme disease. But again the warmer climate has brought those creatures north. There seem to be fewer black flies though because of the increased development. But, with all this change and its effects on our lake habitat, some positive, but many possibly damaging, let's continue the respect Wes has noticed for our fellow lake users and for our "little piece of paradise," as a visitor called it. We can maintain good buffers and duff on the shore, keep our septic tanks pumped out, and refrain from using phosphorous fertilizer in our yards. Our actions now will determine the future of our lake and human interaction with it.

-- Mary Griffith Lynch

WATER LEVELS & ENVIRONMENTAL QUALITY OF DAVID POND

If you were on our mailing list last fall, or talked with others on the pond, you'll know that issues arose relating to an attempt to maintain water levels at the outlet. I'd like to give a little history here, as I understand it, and ask for your help in assessing water levels and preserving its quality.

Shortly before the annual meeting, I received an email from the local Code Enforcement Officer about an impoundment that had been erected at the outlet of David Pond. From what I've been able to verify, first a beaver dam and then a debris dam had kept the pond at a level higher than what many residents observed following the destruction of Tropical Storm Irene. Attempts were made to maintain the lake at levels similar to those in the years of the natural dams. Last fall, I wrote to ask about the history of the outlet and to see what, if anything, BDTPA members would like the pond association to do. The surveys largely supported efforts to research the issue to see if a state-approved impoundment is feasible and appropriate. A few respondents strongly disagreed with BDTPA's involvement and offered clear reasons for their position. (See the sidebar for the variety of comments we received – there are many strong opinions!)

BDTPA Trustee Bill Dunham has communicated with state officials, and from the information he has gathered and shared with me, I am personally doubtful that this will be a viable project for the pond association (but that will be up to the members to decide). The Natural Resource Protection Act states that no human interference with a natural waterway is to be allowed. Even were it possible to show a constructed dam had existed prior to the beaver dam, the process of state and local (Chesterville) permitting, engineering design and drawings, and ongoing maintenance and flood emergency plans are formidable.

What the BDTPA Board has suggested is that we gather information from residents about how lake levels are affecting their shoreline and activity on the water. What specific changes are you observing? Please send these to me, at mistybeck.davidpond@gmail.com.

The best thing that we can do for the quality of our pond habitat, in the meantime, is to work to keep unwanted elements from entering it, whether that is phosphorus in rainwater run-off or invasive species on a visiting boat. Please join our efforts to buffer shores and to inspect any boats coming onto David Pond from other shores.

Thanks to all for your concern for our water quality and willingness both to listen to other views and also to express your own.

Respectfully,
Misty Beck, BDTPA President

Selected Comments from the Fall Survey

- “The loons nest in specific places each year. When the water level is raised, the eggs are washed into the pond! Loons are the perfect indicator that David Pond is in good shape.”
- “We would like to maintain our shoreline.”
- “We think the BDTPA should use some resources, if necessary, to research the pros and cons of an impoundment and should advocate whatever recommendations would best aid long term water quality.”
- “The environment of David Pond should be left to nature, without the interference of humans.”
- “Hopefully the common sense goal of improvement of the overall quality of the environment of the lake can prevail over some blanket notion of ‘preventing human influence on natural waterways’ when the latter can result in a degradation of the environment.”
- “It does seem that keep water levels up can only improve the health of the pond and help maintain property appearance and value.”
- “I am not convinced we as an association should take this complicated project on. I believe it would become very litigious and would require a great deal of energy and patience moving forward acquiring various permits from numerous environmental agencies.”



Reports from the Field

Reflections from David Pond LakeSmart Coordinator

The first summer day back on David Pond brings with it so many sensations. The familiar scene out my camp window brings memories of prior years' camp openings with excitement for the summer days ahead. Better not linger here too long, I tell myself, as there are so many chores to attend to. Soon enough though, after all that cleaning and re-stocking I find myself again gazing at that beautiful, clear water, watching for our loons, our heron, our dragonflies.

To the eye, the pond appears to be a timeless and unalterable source of recreation and beauty, and a healthy habitat for the wildlife that we delight in observing. The quality of the water in our state is changing, however, with some lake associations reporting massive and expensive efforts to reverse damage done over years of inattention.

On David Pond, there is a different story to tell. Due to the strength of our lake association and enthusiastic participation in the LakeSmart program, we can be proud of the number of properties that have become LakeSmart certified over the years. LakeSmart homeowners have agreed to have their property evaluated by volunteers trained to spot shorefront trouble areas, for instance, where rainwater runoff to the pond can be prevented. Resources and solutions have been made available at no or little cost, resulting in an award and the peace of mind that comes with good stewardship and never taking it for granted.

I encourage everyone on the pond to participate in this fantastic program! Contact me, Patricia Wheeler at patriciajwheeler@gmail.com, or by phone at my camp (207)293-2064. Thank you for your attention and I look forward to hearing from you.

Lakes Day Legislative Update from Deb Cayer

Lidie Robbins, executive director of the 30 Mile River Watershed Association, Bill Dunham, and Deb Cayer testified before the Environment and Natural Resources Committee on Lakes Day at the state house. Three bills were being heard. The first, LD-713 "Resolve to further protect lake water quality," had two parts: 1) to make the setback 112 feet in an effort to keep new development within the law, which states no disturbance of the ground within 100 feet of the shore; and 2) to ask the DEP commissioner to set up a stakeholder group to investigate non-compliance with the Maine Shoreland Zoning Act and to report back in one year. The unanimous decision was to create a stakeholder study group convened by the Maine Municipal Association, with a report due back next year.

The second bill, LD-40, "Prohibition on application of fertilizer near great ponds," passed unanimously as well. The original bill we supported set a 50-foot ban, but it was amended at the last moment by Senator Tom Saviello to reduce the ban to 25 feet. Maggie Shannon, Director of the Maine Lakes Society, stated that 25 feet is not enough to protect water quality and it is not scientifically justified. Considering that Maine was the only New England state that did not have restrictions on fertilizer next to our waterways, however, this is a start.

The third bill, LD-568 "Amendments to the Lakes Assessment and Protection Program," the attendees did not hear about at the time of writing. Several testimonies were given on Lakes Day, with most in favor of some or all of the bills. What became clear is that code enforcement officers cannot do it all. With too few hours, too many violations, and very low fines.

infractions continue to occur. The committee members commented several times that enforcement should occur at the local level. The question is how our towns and lake associations can help. We would love to hear your comments, at the annual meeting, or you can e-mail me Deborah Cayer, 30MRWA Rep, at debbiecayer@gmail.com. Thanks for your help.

News from 30 Mile River Watershed Association

Youth Conservation Corps accepting project requests

Our Youth Conservation Corps (YCC) is back for its 5th season. This year's YCC crew will help safeguard water quality by installing low-cost erosion control projects for landowners, such as vegetative buffers and infiltration steps. **Do you have an erosion issue on your property?** We are still taking applications, but our YCC crew gets booked very quickly. Visit www.30mileriver.org or email dave@30mileriver.org to schedule an initial site visit now.

Technical Assistance available for camp roads

Complementing our YCC program, 30MRWA also provides free technical assistance to help maintain gravel roads, which are the biggest source of polluted stormwater runoff to Maine's lakes. Last year, we provided assistance to David Pond landowners prior to their making improvements to an erosion site on Sandy River Road that our Watershed Survey identified in 2011.

Save the Date: 7th Annual Paddle Trek, Saturday, August 1, 2015. Please join us for all or part of our annual paddle from Mt. Vernon to Wayne. See the watershed by canoe and kayak through many of the lakes that form the "30 Mile River." Participants will be permitted to travel a continuous route, thanks to generous landowners who grant us permission to portage across their property for this annual event. Register online at www.30mileriver.org.

Nuisance Canada Geese? Plant a vegetated buffer.

While many people enjoy seeing Canada geese, they can become a nuisance. Geese love lawns with water access, green grass and open sight lines. The most lasting way to minimize problems is to change the habitat. Reduce lawn near the shoreline by planting a vegetated buffer of tall grasses and shrubs, or by allowing plants to grow back naturally, not only makes it less attractive for geese, but also protects water quality by filtering stormwater runoff. Our YCC crew is available to help install buffers (see above).

New Program Coordinator, Dave Allen, joins the staff

In April, Dave Allen joined 30MRWA's year-round staff as program coordinator. Originally from southern Maine, Dave first fell in love with this part of the state almost 20 years ago while attending UMF.

Contact us: For information about upcoming programs and events, visit www.30mileriver.org, contact info@30mileriver.org, 860-4043 or like us on Facebook.

David Pond Boat Launch Restoration Project

Committee members Jennifer Boyce, Dick Duncan, Jessica Maher, Rene Mathieu, Billy McQuaid, Pat Stanton, and Al Wheeler developed a site plan, applied for permits, and appointed Pauline Mathieu as treasurer. Thanks to generous donations from David Pond property owners, funds were quickly raised, and the project was completed in the fall of 2014. Special thanks go to Rene Mathieu, who developed the site plan in consultation with 30MRWA, and who did the tractor work; and thanks to the Town of Fayette, for installing a new culvert at the top of the site.

Loons On David & Basin Ponds

The Annual Loon Count

Each year the Audubon Society conducts a statewide loon count, for a half hour on one morning late in the breeding season. Five volunteers participated this year: four on David (Misty Beck, Deb Cayer, Joy Higgins, and Kirstie Ludwig) and one on Basin (Jim Seidel). Armed with watches, maps, notebooks, and binoculars, we set out.

Our loon count on David Pond yielded 6 adults and 1 chick. It was an exciting half hour. As Kirstie and Joy circled Flagg and Loon Islands, they observed three adults rafting in the waters between Loon Island and Basin Cove. Coming out of Basin Cove by Jackman's Point a few minutes later, I observed the same three, with one loon slightly ahead of the other two. As I paddled around toward the Narrows, the leading loon took off and flew in a low arc directly toward Upper David (outlet side of pond). Two minutes later, Deb Cayer, who was observing an adult pair with a chick on Upper David, saw the loon land. The incoming loon was chased off by one of the adults. All four of us observers spotted, from our various points, the two adults screaming and racing on top of the water from upper David through the narrows onto lower David. And a final



Image from Portland Press Herald

loon, quietly feeding in the narrows, surfaced on the way from Upper to Lower David, just below at the point where the observers had agreed to meet. As we four conferred, sorting out who was landing where and when, yet another loon flew far overhead (not part of the count).

Meanwhile on Basin Pond, Jim Seidel observed a single loon. His was a quiet but important addition to the count, as a potential breeding pair had been sighted but not confirmed earlier in the year. Pairs or single loons are considered an indication of a potential breeding pair.

Let us hope for more chicks this year!

—Misty Beck

Membership Information

1. Help Keep Our Mailing List Up-To-Date

Name:

Winter Address:

Summer Address:

Phone Number(s):

Email Address:

Would you prefer a print or emailed newsletter next year?

2. Renew/Contribute

We are a 501.c (3) corporation, and contributions are deductible. We suggest an annual membership contribution of \$10-25, which will help us to maintain and protect the excellence of our ponds.

Mail to:

Basin-David-Tilton Ponds Association
c/o Monique Longtin
300 Shore Road
Fayette, ME 04349

3. Volunteer! Come to the Annual Meeting or contact any board member to find ways to help.

Basin-David-Tilton Ponds Association

Board of Directors

Misty Beck, President
Linda Stanton, Vice President
Mary Lynch, Secretary
Monique Longtin, Treasurer
Barbara Kinney, Past President

Water Quality / IPP / LakeSmart

Joe Longtin (Invasive Plants)
Rene Mathieu (Water Quality/Lake Steward)
Debbie Cayer (30 Mile Rep)
Patricia Wheeler (LakeSmart Coordinator)

Trustees

Bill Dunham
Joe Longtin
Kirstie Ludwig



*Pure water is the
world's first and
foremost medicine.*

~Slovakian Proverb

*The BDTPA works to improve the water quality of the ponds and their total environment.
The association also educates and informs landowners, their guests, and other interested individuals
on issues of water quality, invasive plants, and other environmental and safety issues.*

Basin-David-Tilton Ponds Association

c/o Misty Beck, President
16 David Pond Road
Fayette, ME 04349

[Recipient]

Address Line 1
Address Line 2
Address Line 3
Address Line 4