

BELGRADE LAKES ASSOCIATION

*To protect and improve the watershed of Great Pond and
Long Pond through Preservation, Education and Action.*

Winter 2018 – 2019



Championship Ice Boat Racing on Great Pond

A MESSAGE FROM OUR NEW PRESIDENT

As 2018 winds down, and we prepare for a new year, I wanted to THANK YOU for all you do to support our lakes. We have had a great year with our most successful raffle ever. Our membership is holding steady, and both the Milfoil and Annual appeal have allowed us to support the following lake projects:

- \$95,000 towards the continuing Milfoil efforts
- \$10,000 towards the Courtesy Boat Inspector program
- \$10,000 towards the Youth Conservation Corp
- Found and brought Ken Wagner, lake expert, to Maine to evaluate the phosphorous problem in our lakes
- Successful Alum treatment in East Pond
- Continued evaluation of the Great Pond Survey Result—a necessary requirement before any remediation is permitted
- \$5000 for the Lakesmart program
- Participation with the new 7 Lakes Alliance projects including important land acquisitions



Carol Johnson, BLA President

Usually the Village calms down and settles in for the winter, but this year has been just the opposite. Construction on the road through the village began immediately after Labor Day and continue through December. The project started in the middle of town near the Maine Made Shop and headed south. The new drainage system was installed along with the new salt prisons. These are state-of-the-art filtration systems which are being used for the first time in the state of Maine. Our village, located on a little isthmus between two lakes, provided the perfect utilization for this technology. The intersection of the West Road and Route 27 has been reconfigured, the southern half of the project has been dug up, and a new road bed has been installed and paved for winter. Hopefully, the contractor will be able to put in the underdrain in the northern half of the project before winter. The good news is that the water draining into the stream and Long Pond should be much cleaner.

As mentioned, we completed the Great Pond Survey in September using 22 volunteers and inspecting 843 properties. Thanks to all the volunteers and the help from our neighboring lake associations who made this possible. This winter we will be reviewing the data and designing an action plan to help protect the lake.

This coming spring will be a busy one with the second phase of the road reconstruction to be completed, hopefully, by the end of June. In any event, July and August will be construction-free, so we can enjoy the lakes as before.

We have lots to do and need your continued support and help to educate folks about the importance of treating our lakes kindly. Please ask your families and neighbors to become BLA members and join the effort.

Have a wonderful winter. Before you know it, the crocuses will be popping out of the snow, and it will be time to plan for summer.

Carol Johnson



The town tree lights up the Village Green.



Hwy 27 seen from the front steps of Dockside Physical Therapy. The asphalt is gone!



The gazebo is ready for an oompah band (when the weather warms up), and the workmen are working on the surrounding sitting wall in their heated hut.

LOON RESCUE ON GREAT POND!



A wounded loon was noticed swimming in our cove. We called several experts. They couldn't come to help, but gave a variety of suggestions.



After a few hours the loon finally found a resting spot on our beach where we were able to capture it in a towel.



While talking quietly to the loon, we spent a few tense minutes searching for the problem.



The lure seen above was found hooked into the loon's body and wing so that the loon couldn't fly and it couldn't swim underwater. When free, the loon quickly swam away. We all hoped for the best.



A surprise came several hours later when it returned and performed lots of vigorous flapping. We like to think it was thanking us.

FALL/WINTER WATER LEVELS IN THE BELGRADES

(Water levels be dammed!)

By Dick Greenan, Secretary, Inter-local Dams Committee

As you all know by now, 2018 has been one heck of a terrible year for our water levels! As our third year of drought comes to a close, we are still dealing with its effects. We went into Columbus Day weekend with Great Pond down 8.64 inches, Long Pond down a whopping 20.88 inches and Salmon/McGrath down 18 inches. Excluding the lack of rain, the difference between Great Pond and Long Pond water levels was due to the leaks at the Belgrade Lakes Village Dam which was repaired in December 2017. However, Long Pond levels continued to drop due to the many leaks discovered in the 30-year old crib-structured Wings Mill Dam. It was estimated that it had a loss of 15-18 cubic feet per second (cfs) day and night. The leaks actually brought the levels of downstream Messalonskee up to full pond even with their mandated 15 cfs continuous flow. The dam appeared sound but was, in fact, leaking like a sieve!



View of the Wings Mill Dam repairs looking East.

Now fast forward to October 30, 2018. It is estimated that 90% of the leakage has been remediated with the successful completion of a two-day project by Commercial Divers, Inc. and our local contractor and dams-maintenance guru, Steve Liberty. The temporary repair, with nylon-reinforced poly, 5/8-inch tongue-in-groove Advantech sheathing along with 500 bags of ¾-inch gravel weighing 80 pounds each to secure the poly out to eight feet in front of the dam, reduced the leakage under the dam by 40%. It is estimated that this will give us at least a year or two of breathing room to formulate a plan for a more permanent solution. We can all breathe deeply knowing that, whatever Mother Nature deals us next summer and fall, we should be able to accommodate her. I, for one, was running out of what little patience I had with the low water. I live on upper Long Pond and had to take my motorboat out the first week in August without even going through one tank of gas!

Now with the majority of the leaks behind us, we can effectively address the mandated Fall and Winter Water Level Drawdowns.

For the “2018 FALL LAKE DRAWDOWN & WINTER STORAGE ACTIVITIES” Public Notice and an explanation of your specific lake’s drawdown levels, please visit the BLA website: <http://belgradelakesassociation.org>.

Our target lake levels are mandated by the State and are under constant examination. If you would like to attend a monthly Dams Committee meeting you are more than welcome as they are open to the public. All of your Dams Committee members are volunteers and, like you, are very concerned about our lakes and this heritage which is why we have become involved in the first place. See you next summer!



Divers and workers install Advantech sheathing.



Long Pond's Wings Mill Dam temporary repairs were completed on 10/30/18.

THE 2018 BLA MEMBER RECEPTION AND ANNUAL MEETING



Most of our BLA Board Members



*Lynn Matson,
outgoing President*



*Taconnet received their
LakeSmart Award.*



*Our new President,
Carol Johnson*



*BLA members packed the tent full,
with standing room only at the back.*



*The Distinguished Service Award was
presented to the family of Fred Weston, Jr.*



*Pete Kallin was awarded the
President's Paddle.*

The 2018 BLA Member Reception and Annual Meeting was held at the beautiful Belgrade Lakes Golf Club on Sunday, July 29th. Many thanks to our new sponsor Golden Pond Wealth Management and to the Golf Club.

Have a look at these fabulous BLA umbrellas! They are not for sale, BUT... sign up three new BLA members, and we will give you one for FREE!

Please contact Carol Johnson at caroljohnson@allstate.com or phone 603-828-1252 for membership information.



SAILING WITH IMAGINATION ON GREAT POND

By John Gibbs



Suspended gently over the rough earth in a constantly moving body of liquid, the air pushes and pulls your vessel smoothly forward, with nothing but the essence of nature moving you along toward nowhere special. You are already where you're supposed to be, a spirit flying through space and time just doing what you are destined to do: float, smile, breathe, and absorb the meaning of this moment in time. The trappings of your daily world slowly wash away in the small wake gurgling behind the transom leaving you cleansed for the day ahead as you press forward into fresh air.

Hairs on the back of your neck sense every wind shift. Your eyes, ears and skin push messages to the brain for adjustments made to the sheets and helm that cannot be explained, an external stimulation intuitively processed for external action over and over again as if in a trance. Oh, the essence of sailing! You are now spiritually somewhere on another planet or perhaps just better in tune with the character of this one.

The rhythmic rise and fall of the bow through the small waves soothes the soul even further as you gaze out at your next destination point. As you un-cleat the mainsheet, the pressure in your hand seems to be your only connection to the hard world around you. You push the tiller toward the mainsail and smartly come about with a tack that puts you on a line between Indian and Crooked Islands. As you pass through this small straight, pushed by a northwesterly wind, you set your sights on the western side of Oak, another island gem in our lake about three miles south. This will easily be a long broad-reach all the way to Oak, so you cleat all the lines and get back to daydreaming. Your speed increases as you gain the open waters of the lake moving southward along Hoyt's Island, now off your starboard gunwale. The sloop heels over a few more degrees, stretching your sails into beautiful white curved shaped wings. There is a feeling of power as you accelerate forward and slice through sunlit waves now flashing a million light beams of messages your way. What are they telling you?

With stable winds for miles ahead, your mind drifts back into peaceful imagery perhaps contemplating the millions of people over the last several thousand years who have sailed the waters of the world. In reed boats the ancient Egyptians sailed up rivers against the current, and at the same time ancient Sumerians used square rigged sails in the sea somewhere around 3200 BCE. Excavations in Mesopotamia revealed sailboat drawings on ceramics a thousand years or more before that, and here you are now blissfully sailing along using the same basic principles, however, for purposes of leisure rather than work or trade.



As the earth's air molecules continue to circle around the globe, you start to wonder if they are built from the same atoms that once filled other sails throughout the millennia. Could the very same air molecules that pushed the ancient Vikings toward Europe for their savage raids on civilized countries be the same that are propelling your vessel at present? Feeling more aggressive now, you start to eye the eastern shore of Hoyt's Island looking for a likely group of camps to raid but are subdued by the site of a Norwegian flag flying along its shore. Ah, yes, that's right, the Nelsons already made landfall years ago and have probably pillaged all that is worthy, so you bear off and point back toward the western shore of Oak.



More molecules change and this time a bunch that once pushed old Ironsides through the rolling waves of the Atlantic fill your sails and your lungs. Your suspicions increase as you pass by the Witkin's compound on the south end of Hoyt's Island. Expecting a surprise volley or two from their land-based howitzers, you arm your starboard side 24-pounders in anticipation. However, the Witkins seem to be having a family cookout, and you slide by unseen. Staying armed, you pass southward and closely survey the channel between Baxter Point and Hoyt's because French privateers, freshly restocked from Day's Store and Great Pond Marina, could be making their way eastward through the channel for open-

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SAILING WITH IMAGINATION (CONTINUED)

water raids. Three or four quick volleys to de-mast them, before they could turn within the tight quarters of the channel to fire back, could be the perfect winning maneuver, increasing your record to 25 and 0. But, alas, only a few bass fishermen are present, drifting off the point, casting toward the rocks. So, on you sail.

With the sun hanging high and winds holding their speed, you tack around Oak and head back to your camp, wherever that wonderful place may be. Gently sloshing through the playful waves, the winds from Hawaii move across your beam creating visions of cool pineapple flavored drinks being served on your dock upon trip's end. Ah, sailing, what a fabulous way to relax in the very essence of your natural world! Miles traveled and not one speck of energy of the world's precious resources was consumed, nor was one milligram of pollution dropped into our beautiful clear waters. It's time to sit on the dock, grab that cool drink, and listen for the loons.

The Great Pond Yacht Club holds four lake-friendly regattas every summer and is open for all to join at <http://greatpondyachtclub.com>. The Youth Sailing program, with lessons to be given by SailMaine from certified instructors, will be held July 21 through August 15 this coming summer for ages 8 to 15. The Belgrade Community Center on Route 27 will serve as the youth sailing center. For information go to www.sailmaine.org; click the Programs tab; click Belgrade Lakes Junior Sailing.



Recipes

EMILY'S FAMILY FAVORITES

Coconut Shrimp

24+ large shrimp, cooked

1 can coconut milk

(soak shrimp in milk for 20+ mins)

½ cup coconut flour

1 ½ tsp baking powder (mix with coconut flour)

1 ½ cups panko breadcrumbs

2 cups shredded coconut

*Place flour mix, panko crumbs, shredded coconut in 3 separate bowls.

Preparation:

- Take shrimp one at a time out of milk, dredge shrimp (by tails) through flour/baking powder mix, then press shrimp into panko crumbs, then roll/press into shredded coconut.
- Place shrimp onto baking sheet lined with wax paper.
- Refrigerate shrimp for 30 mins.
- Heat 2 cups of Crisco shortening to frying temperature.
- Fry coated shrimp in small batches, 1-2 mins each side, until golden brown.
- Use tongs to flip and to remove shrimp from oil.
- Place shrimp on paper towels to drain.

Lemon Bars

-Makes about 2 dozen.

-Prep time = 45 mins.

-Chill time = 4 hours.

Crust:

2 cups flour

1/3 cup sugar

Dash of salt

1 ½ sticks (or 12 tbsp) cold butter, either cut or shredded

Preparation:

-Preheat oven to 350 deg Fahrenheit.

-Mix/pulse together flour, sugar, salt until just combined.

-Add cold butter and mix/pulse until mixture resembles coarse meal.

-Press dough onto 9-inch square baking pan.

-Bake 20 mins until golden brown.

-Make the filling while baking the crust.

Preparation:

-Whisk together eggs, sugar, flour, heavy cream, zest, lemon juice and salt in a large bowl, until combined.

Baking the bars:

-When the crust is baked golden brown, re-whisk the lemon mixture and pour onto hot crust.

-Bake at 350 deg until just set, 20 mins.

-Transfer baking pan to a cooling rack,

-Refrigerate bars, covered, for 4 hours until cold.

-Before serving, cut bars into 1-inch squares and sprinkle/dust with confectioner's sugar. Enjoy!

Filling:

6 large eggs

2/3 cups sugar

4 tbsp flour

4 tbsp heavy cream

2 tsp Lemon zest

1/2 cup Lemon juice

Dash of salt

Dust with confectioner's sugar

TACONNET CAMPS ON JOYCE'S ISLAND: A LAKESMART SUCCESS STORY

By Daphne Rayment, Mary Beane and Dave Gay

Camp Taconnet began as a tent community in 1881 on Ram Island on Great Pond by George Joyce and his family. The name Taconnet is derived from an Indian village in the Waterville area. It began with friends coming to camp, sharing cooking and enjoying the wonders of Great Pond's bounty and beauty. Just as it is today, the lake was an integral part of life at Camp Taconnet. Guests spent their days swimming, canoeing, fishing, and enjoying the serenity of the lake.



One of the first clay tennis courts in Maine was built on Ram Island in the late 1890's, and two more courts were added in the early 1900's. Lessons were provided and many tournaments took place among the guests. For many years, former Taconnet owner and USTA Hall of Famer, Lawrence Rice, coached countless young tennis players on the Taconnet courts.

In 1970, the Club Taconnet Unit Owners Association was formed, becoming one of the first owners associations in Maine.

Some families have been coming to Taconnet for six generations. There are 11 owners presently, three tennis courts, 28 structures including staff quarters, a ferry to move people and supplies from land to the island, and mulched walking paths for getting around the island.

THE LAKESMART STORY

Taconnet's LakeSmart story began with the first LakeSmart screening in July, 2011. This screening was also the first to use Colby students as screeners under the direction of Dr. Whitney King. This initial screening identified potential areas that could be improved to make the island and shore area more lake-friendly.

From 2012 to 2016, improvements were made with continual communications between LakeSmart, the Taconnet Board, and property managers. Many of the changes were implemented using high school and college students who also waited tables for owners and guests during the summer season. A second full screening in conjunction with the Youth Conservation Corp was completed in 2016. The recommendations made at that time were implemented in 2017 by the YCC. After a final review a LakeSmart Award was given to Taconnet and each individual property owner.

PRESERVATION OF THE LAKE

Daphne Rayment, the President of the Taconnet Association, is a member of the 6th generation family. When asked about what makes the island and Great Pond so memorable, she said, "I love the beauty of the lake, the sound of the loons at night, the sunsets, the clear water, and the friendships that have developed over many years. I want to preserve this for future generations."

Being so closely connected to the island and the lake, Daphne and the other owners noticed changes – the appearance of Gleotrichia and algae, murky water and a decrease in the fish population. They wondered what was happening and what they could do. "It is clear that the lake is a fragile ecosystem. What each of us does makes a difference to the health of the lake. We must be stewards for Taconnet, Great Pond, and the Belgrade Lakes community. We cannot take it for granted that they will always be here." Daphne further stressed, "We must always be aware of how our actions impact the lake, and we all need to do what we can to preserve, protect, and defend this watershed."

The actions taken by the Taconnet Board as a result of the LakeSmart and YCC recommendations resulted in the LakeSmart Awards in 2017. The present property managers, Mary and Don Beane, have been with the Taconnet for 29 years and were tasked with making the changes necessary to make the island LakeSmart.

Mary and Don have a very deep love for the lake and our environment, and Mary said:

"When we started working on Great Pond in the early 90's, Gleotrichia was just starting to rear its ugly head. While this bane of water quality could have ruined our livelihood, something much more inestimable was at stake. The privilege of working in such a beautiful place as Great Pond is not lost on us. We appreciate the serenity and rejuvenation that this place brings to so many people and their families. The history of Taconnet describes how important the natural setting was to the first guests of the island. The family memories from these places are so very precious. If we are to pass these same places and opportunities on to our children and grand-children, we must all take responsibility to care for the fragile and finite resources of our lakes and streams. We must all work to repair past damage and to keep any future contamination from ruining what we have been entrusted with keeping for future generations."

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REVENGE ON GREAT POND!

By Jack Schultz

Camp Taconnet is located on the north end of Great Pond in Rome, Maine, on what we locals called Joyce's Island in the 40's and 50's. It was known as Ram Island before that. The dozen cottages were run with an American plan where three meals were offered every day - the camps, run by Mrs. Joyce and Tucker, had no private kitchens.

One interesting story from my teen years occurred when some of my friends and I tried to date the young ladies who worked and boarded at the camp for the summer, serving the cabins and dining room.

The island camp was accessed by a simple platform ferry that ran from the shore's parking lot out to the island for a distance of about 100 yards. The ferry was pulled back and forth on a wire. This service still exists, although they now use an outboard engine for propulsion.

One day my friends and I disconnected the ferry from the wire and paddled it out into the lake in order to use it as a swim float to entertain the young ladies and take them swimming. Of course, we did not have the girls back to the island by dinner time, but we did get an earful from a very unhappy Mrs. Joyce as she ran along the shoreline yelling at us to return her waitresses so that they could serve dinner! Of course, Mrs. Joyce told us to stay away from her young ladies and told our parents about the ferry-paddling incident, and we received a scolding.

We weren't happy about this and decided to take our revenge! The ferry was made of a wooden platform set on top of two rowboats. Late on a Saturday night, my friends and I went out to the ferry, stood on the edge of one of the rowboats until the gunwale was under water, filled the rowboat with water, and sank the ferry. The Sunday morning churchgoers got up to find that they were stranded on the island. Of course, Mrs. Joyce knew right away who had done this nasty deed and contacted our parents right away.

One of the "friends" I refer to in this story was Diana Fenn, a shoreline neighbor. Diana and I were married in 2005, and we spend our summers in the same

family camp where I have lived for the past 83 years.

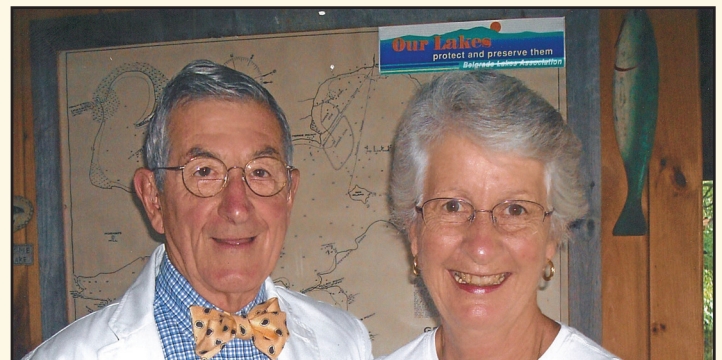
P.S. When questioned about this event by the BLA's crack newsletter team, Diana reported that, "When I saw Mrs. Joyce marching down our driveway, I knew I was in trouble, and after Mrs. Joyce had left my dad asked, 'Why is it that, whenever those boys get into trouble, you happen to be there?'"



Jack Schultz, 1955



Diana Fenn, 1954



Jack and Diana now

TACONNET CAMPS (continued)

"Here at Taconnet we try to educate our guests on how to be good stewards of the lake. We ask them not to create a wake near shore and be aware of the loon habitat we have. We try to use all-natural cleaning agents and do not use any phosphates in our landscaping. We have worked hard at reducing run off with retaining ponds, better shore maintenance and plantings, and by using Erosion Control Mulch and crushed stone at loading sites. We use natural coverings, pine needles and wood chips for the paths to reduce erosion. We have changed some of our kitchen practices to reduce water usage whenever we can. Every little thing can help or hurt the lake, and we must all do whatever we can."

We hope this article will inspire communities, organizations and individuals to take action to protect and improve the water quality in the Belgrade Lakes Watershed.

The BLA wishes to express a heartfelt THANK YOU to TACONNET!

GREAT POND'S FUTURE LOOKS VERY ENCOURAGING

By Lynn Matson

For at least the last 20 years algae has plagued residents and visitors to East Pond. Algal blooms typically took over the lake in mid-August, causing pea green conditions and raising concerns about toxicity levels and water safety in late summer.

Not any more. Last fall East Pond residents reported that the lake is the clearest they have seen it in 25 years. So what happened? The answer is that East Pond received an aluminum sulfate/sodium aluminate treatment, or "alum treatment," as it is commonly called.

Here's The Story Of The East Pond Treatment

The culprit is phosphorus. It's a naturally occurring element in soil. It's also in lawn and garden fertilizer in a much more concentrated form. It makes things grow, including the algae. In a balanced lake system the iron on the lake bottom can keep the phosphorus in check. The iron binds up the phosphorus. It grabs it like a magnet and holds on to it ... but only when there is oxygen in the water.

Our lakes are out of balance. They are loaded with too much phosphorus and more is entering every day. Our lakes also lose oxygen every summer. Organic matter on the lake bottom decomposes and uses oxygen. When our lakes go anoxic or "without oxygen," the iron releases the phosphorus that was bound to it, and it's once again free to feed the algae.



One of the barges used for the alum treatment on East Pond this past season.

But there is good news. Aluminum, another naturally occurring element in our lakes, also attracts and locks up phosphorus, just like iron. But it does not need oxygen to do it. So even when the lake goes anoxic, the aluminum continues to bind up and hold the phosphorus.

The solution for East Pond was to add more aluminum to their lake. This decision was not made lightly. It was reached after more than a decade of careful water quality monitoring and research by members of the East Pond Association, the Belgrade Regional Conservation Alliance (now the 7 Lakes Alliance) the Maine Department of Environmental Protection, outside consultants and scientists and students at Colby College.

Undertaking The Alum Treatment

Last spring a contactor was hired and alum was put into East Pond, half in June and the second half in October. The alum was pumped into the lake as a liquid from tanks on a barge-type watercraft. The material formed a "floc" in the water and fell to the bottom like a blanket of snow. Once on the bottom the aluminum chemically bonded with the phosphorus.

So far it's working beautifully. East Pond residents were thrilled with their water quality following the treatment. And they expect to see a nice jump in their property values.

Careful research and modeling determined that East Pond needed 45 grams of alum per square meter on 676 acres of the lake. That's a lot of alum ... 135.7 tons to be exact or 360,000 gallons, which was delivered to the site in 75 semi trailer tank loads. The East Pond project was the largest alum treatment ever completed in New England.

Questions About The Alum Treatment

The idea of dumping that much aluminum into one of our lakes raises some questions. Like, is it safe and what does it cost?

Safety first. The alum treatment is non-toxic and effective. Alum has been successfully and safely used for decades on other lakes throughout the U.S. including Maine. Alum is also used in over 90% of the water treatment plants in the U.S. to purify our drinking water and is an additive in many food products.

So what does it cost? The alum treatment on East Pond costs about \$1.1 million. In a collaborative effort between the East Pond Association and the 7 Lakes Alliance, \$600,000 was raised from residents and commercial camps on the lake, \$232,000 was provided by the U.S. Environmental Protection Agency under Section 319 of the Clean Water Act administered by the Maine Department of Environmental Protection and \$200,000 came



The East Pond alum treatment alleviated the algae bloom that has plagued that lake for years and will help protect local property values.

FOLLOWING SUCCESSFUL EAST POND ALUM TREATMENT

from a private foundation grant.

East Pond is 1,717 acres. Great Pond is 8,239 acres, almost 5 times larger. While there will be some savings due to scale, you can easily see that an alum treatment for Great Pond is going to be a multi-million dollar proposition.

We know the alum treatment works. It's working on East Pond. It will also effectively take care of the phosphorus that's already in our lakes. And it will do it for 15 to 20 years if ... if ... we stop more phosphorus from getting into our lakes. That's where we all have a responsibility.

What You Can Do To Help?

1. Do everything possible to stop soil erosion on your property. Keep in mind that everything in our watershed runs downhill. Even if you do not have shorefront property, erosion from your land, your yard, your driveway, your drainage ditches and culverts will eventually wash more phosphorus into the lakes.
2. Make sure your septic system is working properly. Pump it out every three years. Poorly maintained systems can put out such a high nutrient load they can trigger local algal blooms in the shallow water near system outlets.
3. Don't use lawn fertilizer and clean up pet waste. They feed the phosphorus right into our lakes.
4. Maintain or create a natural buffer along the lakeshore. It should be at least 15' wide and be composed of several layers including trees, bushes, ground cover and duff to break up heavy rain and water flowing into the lake.
5. Have your lakefront property screened by a LakeSmart volunteer. They will advise you how to make your property more lake friendly. And be sure to use the 7 Lakes Alliance Youth Conservation Corps to undertake any needed erosion control projects at your camp. You pay only for the materials they use. Their labor is free.



The alum trail is clearly visible behind the application barge on East Pond.

Thank You East Pond

We should all be very appreciative of the East Pond Association, the BLA, the 7 Lakes Alliance and all the individuals, camps and entities that funded the East Pond alum treatment. They led the way by demonstrating the effectiveness of an alum treatment for dealing with excess phosphorus right here in our own Belgrade Lakes watershed. Now it's up to us to follow their lead to insure that the waters in Great Pond and Long Pond stay clean and pristine for generations to come.



Emily, our favorite recipe-maker, enjoys a sunny day on the lake.

“Bald Is Beautiful” For Yul Brynner, But Not For Your Shorefront

Adapted from DEP online publications by Marcel Schnee

Do the Maine DEP Guidelines for Municipal Shoreland Zoning Ordinances (the model ordinances for municipal regulations) include limitations on vegetative cutting for development activities in shoreland areas? Yes. The Guidelines limit the amount of vegetation which can be cut in the shoreland zone. In order to maintain water quality, protect wildlife, and to preserve the natural beauty of shoreland areas, it is important to maintain naturally vegetated shoreland areas.

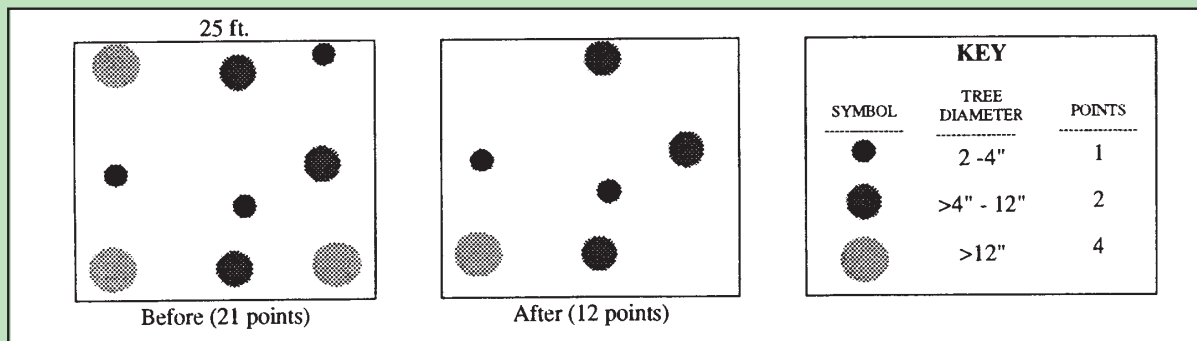
What are the restrictions on clearing of vegetation in the shoreland zone? Generally, in the first 75 feet from the normal high-water line or the upland edge of a wetland, no “clear-cut openings” (openings in the forest canopy greater than 250 square feet) are permitted period. The cutting must be done such that a well-distributed stand of trees and other vegetation, a buffer strip, remains for a distance of 100 feet from the normal high-water line.

How does the Department define a “well-distributed stand of trees and other vegetation”? The Department has a point system based on tree diameters, which assigns values to trees down to two (2) inches in diameter, and requires a certain total value of trees be maintained in any 25-foot by 25-foot square (625 square feet) area within the buffer strip.

<u>Diameter of Tree at 4-1/2 feet</u> <u>Above Ground Level (inches)</u>	<u>Points</u>
2-4 inches	1
>4-12 inches	2
>12 inches	4

Adjacent to Maine great ponds, and rivers and streams flowing to great ponds, a rating score of 12 or more points must be maintained. Adjacent to other water bodies, tributary streams, and wetlands, a “well distributed stand of trees and other vegetation” is defined as maintaining a minimum rating score of 8 per 25-foot square area. For example, if a 25-foot X 25-foot plot adjacent to a great pond contains three trees between 2 and 4 inches in diameter, three trees between 4 and 12 inches in diameter, and three trees over 12 inches in diameter, the rating score is: $(3 \times 1) + (3 \times 2) + (3 \times 4) = 21$ points. Thus, the 25-foot by 25-foot plot contains trees worth 21 points. Trees totaling 9 points ($21 - 12 = 9$) may be removed from the plot provided that no cleared opening is created. The figure below is just one example of allowable cutting under the point system.

The point system was created to provide a more enforceable standard for tree cutting activities within the buffer strip.



Is the cutting of vegetation less than 2 inches in diameter limited? If removal of vegetation less than two inches in diameter will create cleared openings, enough vegetation must be retained to prevent the creation of such openings. Furthermore, vegetation less than three (3) feet in height must be maintained within the buffer strip.

Are there areas where the cutting of vegetation is prohibited? Yes. Vegetative cutting is prohibited abutting a great pond zoned for Resource Protection for a distance of 75 feet inland of the normal high-water line.

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May I cut within the buffer strip for shoreline access? Yes. A footpath not to exceed (10) feet in width as measured between tree trunks is permitted provided that a cleared line of sight to the water through the buffer strip is not created. In other words, the footpath must meander, rather than being a straight line to the water. The purpose is to prevent runoff from funneling directly along the pathway to the water. By meandering, runoff is more likely to be trapped by vegetation and natural depressions. Adjacent to Maine great ponds, rivers, and streams flowing to great ponds, the width of the footpath is limited to six (6) feet.

May I prune trees within the buffer strip? Yes. Pruning of tree branches, on the bottom 1/3 of the tree is permitted. Dead branches are permitted to be pruned without restriction.

What if a cleared opening is created within the buffer area due to storm damage, disease, or the removal of an unsafe tree? When the removal of storm-damaged, diseased, unsafe, or dead trees results in the creation of a cleared opening, the opening must be replanted with native species unless existing new tree growth is present.

Can existing cleared openings to the water be maintained? Yes. Cleared openings may be maintained. However, areas that were once fields or cleared openings, but have reverted to primarily shrubs, trees, or other woody vegetation are regulated as any other buffer area under the ordinance.

NEW FACES IN TOWN



Laura Rose Day

Laura Rose Day, President and CEO - Laura Rose Day became President and CEO of 7 Lakes Alliance in September 2018. She and her family are long-time Kennebec watershed residents who have for decades paddled, boated, hiked and otherwise enjoyed the Belgrade Lakes region. Laura served as the Executive Director of the Penobscot River Restoration Trust, the non-profit formed to lead an historic effort multi-party to restore nearly 2000 miles of sea-run fish habitat while maintaining energy production. There she helped develop and led innovative, collaborative and interdisciplinary approaches and teams, including a coordinated successful campaign to raise over \$60 million in public and private funds to implement the project fully.

Laura's career began in the Great Lakes as Regional Counsel for of U.S. Environmental Protection Agency in Chicago where she developed programs and policies related to water quality, pollution prevention and habitat restoration. She then became the Lake Superior and Biodiversity Project Manager and Attorney for the National Wildlife Federation's Great Lakes Office where she also taught environmental law seminars and clinic at the University of Michigan. Laura also served as Director of the Natural Resources Council of Maine's Watershed Program. She helped found Maine Rivers, a statewide watershed organization, and serves on Maine Woods Forever and the Klamath River Renewal Corporation. Laura has degrees in wildlife management (B.S.) and law with an emphasis in environmental and energy law.



Dr. Danielle Wain

Dr. Danielle Wain, Lake Science Director for the 7 Lakes Alliance. While originally from New England, she was most recently an assistant professor in Water Quality Engineering with the Department of Architecture and Civil Engineering at the University of Bath (UK). Danielle graduated with a BS in Civil Engineering from Cornell University after which she spent two years in the US Peace Corps building rural water systems in the Dominican Republic. Upon return, she worked for a year as an engineer in environmental consulting until pursuing an MS degree in Civil Engineering from the University of Illinois, followed by a PhD in Civil Engineering from Iowa State University. After research stints at the University of Washington and the National University of Ireland at Galway, Danielle joined the University of Bath in 2013 where she developed her expertise in investigating turbulence-plankton interactions in stratified lakes and worked with the water industry on the impact of reservoir hydrodynamics on water quality. She joined the 7 Lakes Alliance in September 2018 and is bringing over a decade of aquatic research experience to the organization to help ensure the future of the Belgrade Lakes.

THE 2018 BLA ANNUAL RAFFLE - ANOTHER RECORD-SETTING EVENT!

By Dick Greenan



Our motley and hard-working volunteers

Thank you all for your support of another record-setting Summer Raffle! The Belgrade Lakes Association would like to thank its valued sponsors, members, lakes region residents, and visitors for their continued support and for making the 2018 Summer Raffle such an overwhelming success! As always, all proceeds from our Annual Raffle are dedicated to Belgrade Lakes Association's programs for improving the water quality of our Great and Long Ponds and to further protect and preserve the Belgrade Lakes and our Watershed. Your support allows numerous ongoing programs to reduce phosphorous pollution, block invasive species and combat Gloeotrichia as well as the other blue-green algae.

Twelve tickets were pulled and the winning names announced at the Belgrade Lakes Association Annual Raffle drawing on Sunday, August 5th at the Farmers Market. While these lucky winners received some wonderful prizes, everyone who purchased a ticket is really a winner, as every dollar of the record \$39,345 collected from ticket sales this year goes to protecting and improving our Lakes. We want to congratulate our winners this year for their prizes and more importantly, their support!

Prize	Description	Winner's Name	Address
Bonus #1	10' Inflatable Paddle Board <i>donated by Lakepoint Real Estate</i>	Susan Rogers	Anchorage, Alaska
Bonus #2	Four Rounds of Golf, Belgrade Lakes Golf Club <i>donated by Gail and Frank Rizzo</i>	Grace Mitchell	Bloomfield, CT
Bonus #3	9' Ocean Kayak with paddle <i>donated by Great Pond Marina</i>	Tim Foster	Broomfield, CO
Bonus #4	Dinner for four at the Village Inn <i>donated by the Village Inn and Tavern</i>	Andy McBeth	Leominster, MA
Raffle #1	18' Bennington Pontoon Boat, Trailer & motor <i>donated by Hamlin's Marine</i>	Julie Michelitch	Alpharetta, GA
Raffle #2	Shoremaster Boat Lift <i>donated by Hammond Lumber</i>	Larry Korske	Sydney, ME
Raffle #3	Three Sections of Shoremaster Dock <i>donated by Hammond Lumber</i>	Tate Tegtmeier	Stamford, CT
Raffle #4	Snake Point Camp Rental <i>donated by Anne and Steve Smith</i>	Mike Ludwin	Guilford, CT
Raffle #5	Tearmann Loch Camp Rental <i>donated by Lynne and John Gibbs</i>	Maria Benedette	Nashville, TN
Raffle #6	Big Green Egg <i>donated by Somerset Stone, Oakland, ME</i>	Cricket Barrazotto	Baltimore, MD
Raffle #7	Adirondack Chair <i>donated by Stephanie and Adam Gardner</i>	Ben Beatie	Chatsworth, CA
Raffle #8	Day's Picnic Basket <i>donated by Day's Store</i>	Kim Gore	Topsham, ME



The Rafflemeister mixing the tickets



Raffle Prize #7 gets 2 thumbs up.

BOARD MEMBER SPOTLIGHT



Elizabeth Fontaine

ELIZABETH FONTAINE is another of our esteemed board members. BLA has been fortunate to have her talents and smarts for the past several years. Her most obvious skill is the printing and design knowledge she contributes to the BLA newsletter. So, she became co-editor and a “not so secret weapon.”

But, who is Liz? How did she become the member of our community whom everyone wants to have help them. Well, she married Fred. That’s how.

First, she tells a story of arriving in Maine from Virginia late one night to see Fred’s “Camp” (she thought she was going to a tent in a campground) and, on the way, visited the “old” L. L. Bean Store still open at midnight. The “Camp” was a cabin on the shore of Great Pond where the flood lights showed a clear lake, and she first heard the “call” of the loons. She immediately fell in love with Maine! Before meeting Fred, Liz grew up in Culpeper, Virginia. Early work included a management position in a large printing firm, handling major accounts in the Washington, DC area. This led Liz to start the first woman-owned direct mail company in Northern Virginia.

Second, after meeting and marrying Fred, she moved to Bolton, Massachusetts, where she launched and ran the largest direct marketing/mail company in Central Massachusetts for ten years. However, always in love with the lakes of Maine, she sold her company and moved to Belgrade where she worked for JS McCarthy Printers to open their mailing division.

Third, Liz is currently a realtor and an owner of LakeHome Group, a real estate company in Belgrade Lakes Village, and also The Lakeside Inn. She also serves on the Belgrade Regional Health Center Board and others. She loves her time on Great Pond and is kept exceptionally busy with visits from her three grown children, their families, pets, and her many close friends who visit in the summer to swim and to ride on her beloved pontoon boat, “The Good Steward.”

Liz works to preserve our lakes and educates visitors and clients about water quality which is work she hopes will never be taken for granted and will be passed along to our future generations.



Joy Meason Intriago

JOY MEASON INTRIAGO, a native of Atlanta where she lived her early life, received her Bachelor of Science degree, with a major in Accounting, from the Georgia State University Robinson College of Business. She earned her Master of Science degree in Finance from Florida International University, in Miami.

A Certified Public Accountant, she was a Senior Manager at Ernst & Young, one of the Big Four accounting firms, primarily focused on tax issues, non-profits and healthcare organizations. Apart from taxation, her years of experience include expertise in Managerial Accounting, Operations, and QuickBooks. She is most proud of her participation as the Chief Financial Officer of businesses that she helped grow from inception through major growth and ultimately taking them to market and successful buy-outs by major private equity firms.

In 2017, she founded Intriago Advisors in Belgrade Lakes, a firm that offers Business Valuation, Tax and Virtual CFO Services. In 2018, she earned her Certified Valuation Analyst (CVA) designation.

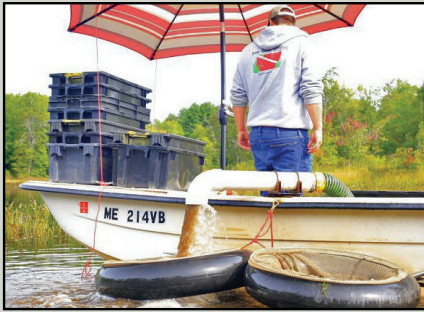
Joy and her family moved to Maine in 2016 after enjoying seasonal visits for ten years. She fell in love with the nature, the people and the Kennebec County area. She enjoys hiking, skiing, kayaking, and caring for her spunky and clever Norfolk Terrier, Roscoe.

She is a member of the American Institute of CPAs and the Maine State Society of CPAs. In addition to serving as the Treasurer of the BLA, she is active in the Union Church of Belgrade Lakes and a volunteer for Neighbors Driving Neighbors.

INVASIVE MILFOIL RUNS BUT CAN'T HIDE FROM STOP MILFOIL CREW

By Lauren Pickford

Invasive plants continue to threaten our precious Belgrade Lakes. The discovery this summer of Eurasian milfoil and European Frogbit only 15 miles away in Cobbossee Lake was a scary reminder of the importance of our efforts to prevent and stop milfoil and other invasive plants. The STOP Milfoil crew was out all summer long protecting our watershed from invasive aquatic plants. Day in and day out, they snorkeled miles of shoreline, hauled pounds of milfoil, and worked in waist-deep muck. The STOP Milfoil crew is not only certified to look for variable milfoil, but also all 13 invasive species threatening Maine's waters.



The DASH boat at work

In 2018, the crew removed 16,800 gallons of variable milfoil using diver assisted suction harvesting (DASH), and with the help of New England Milfoil. 7 Lakes Alliance hired 7 crew members who surveyed, identified, and removed variable milfoil. The crew also deployed benthic barriers - tarps weighed down with rebar - to starve the plants of sunlight for 45-90 days. The barriers were then removed. Although benthic barriers effectively kill invasive plants, they are not ideal for many situations including shallow areas, streams with strong current, and high boat traffic areas.

Prevention is still the most critical and cost-effective way to control invasive aquatic plants! The STOP Milfoil crew surveyed the entire shoreline of Great Pond and Long Pond. Roughly 50% of the shoreline was snorkeled, and the rest was paddled and observed through Aquascopes. Trained volunteers also helped survey shoreline through our Adopt-A-Shoreline Program. By summer's end, volunteers had signed up to keep a look out for milfoil on up to 70% of the shoreline!

The STOP Milfoil crew did not find any new infestations! However, the infestation in Great Meadow Stream is thriving, aided by low water levels and abundant sunshine. Variable milfoil also persists in previously identified locations such as Robbins Mill Stream and Rome Trout Brook. The focus of our effort is to remove as much as possible and to contain and prevent the spread of the infestation. Without these ongoing removal efforts, the infestations could have doubled or even tripled in size.

In New England as well as our own Belgrade Lakes, there are numerous reminders that, without vigilance, invasives spread rapidly and ruin swimming, boating, wildlife habitat, and property values. We are analyzing results and working with Maine DEP and other experts to develop the most impactful and cost effective approach to fight back against variable milfoil in 2019.

YCC MEMBERS WORK LIKE CRAZED DEMONS TO SAVE LAKES (MAYBE A BIT DRAMATIC, BUT THEY DO WORK HARD)

By Lauren Pickford

In 2018, the 7 Lakes Alliance (formerly the BRCA) Youth Conservation Corps (YCC) was hard at work decreasing erosion throughout the watershed. When soil is exposed, rain carries nutrient-rich water into the lakes. Algae utilizes those excess nutrients often causing algal blooms. With the prevalence of algal blooms in 2018, awareness of the issue is higher than ever.

YCC completed 80 projects on Great Pond, Long Pond, Messalonskee, North Pond, East Pond, Salmon Lake, and McGrath Pond. The crew consisted of 7 crew members and 2 supervisors committed to improving the environment. They moved 480 tons of rock by wheel barrow to complete 27 shoreline stabilization rip rap projects. They also installed multiple drip line trenches to prevent erosion from roof runoff.

Property owners are recognizing the seriousness of erosion-related algal blooms creating an influx of project requests. 7 Lakes Alliance is hoping to expand the YCC team to include more crew members to meet the demand. With additional help, YCC could accomplish more projects to significantly decrease erosion and improve water quality.

Funding is provided by the Belgrade Lakes Association, East Pond Association, North Pond Association, McGrath Pond and Salmon Lake Association, the towns of Oakland, Smithfield, Rome, Belgrade, and Sidney, and through business, private and public donations.



*YCC members
and Milfoil crew*

TOP 10 WAYS TO PROTECT LAKES

1. LEAVE THE NATURAL VEGETATION



The trees, shrubs, bushes and groundcovers between your home and the water are the lake's last line of defense. This area is often called the buffer because it "buffers" the lake from excess nutrients, sediment and stormwater. It also provides an essential habitat corridor for riparian animals. Whether you live on a lake, pond, river or stream this area is crucial for maintaining water quality. However, a view of the water is also important for most lakefront landowners. This is why shoreland zoning, which is designed to protect this area, has provisions to allow trees to be limbed up 1/3 of their height. Care was taken to leave the natural vegetation intact while allowing for a view on this waterfront lot.

2. PLANT A SHRUB BORDER OR 'ISLAND'

If all you have between your home and the lake is grass or trampled sandy soil, then consider planting a shrub border or "island" to help soak up rainwater. After picking up speed on your driveway or roof, stormwater needs a place to slow down and get absorbed back into the ground. Low-growing, native woody shrubs hold back the earth and take up much more water than grass or bare ground. Using the proper plants which are suited to the area can also be easier to maintain than a lawn. This beautiful waterfront planting (left) on Moose Pond included a variety of native ornamentals. For some planting recommendations see [Go native!](#)



3. STOP OVER-FERTILIZING YOUR LAWN



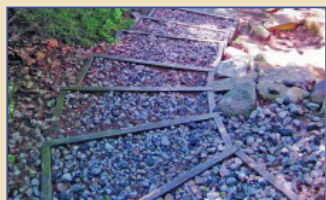
Eighty percent of all soils tested by the University of Maine Cooperative Extension in the last five years did not need the nutrient phosphorus to grow grass. Still phosphorus laden lawn care products are routinely added to waterfront lawns. The use of lawn fertilizers in the last 15 years has skyrocketed and our lakes are paying the price. Topical fertilizers easily wash into the lake and encourage superficial root growth which makes grass more prone to drought. In addition to nutrients that harm both fresh and marine waters, lawn fertilizers are also often full of pesticides which are known to cause cancer. Is a green lawn worth that much? The safest way to a green and healthy lawn is by building up the soil. This can be done by adding good quality compost and natural fertilizers like alfalfa meal and corn gluten. Signs like this are a good indication that some lawn care products are not safe.

4. FIX YOUR DRIVEWAY

Lakefront driveways are one of the biggest culprits of erosion on residential lots. Having a home on the lake means that by necessity, you are at the bottom of the watershed and therefore water is coming your way. Erosion of your driveway is also erosion of your money. No matter what, roads and driveways always need some level of maintenance but if you are just adding gravel every couple of years and watching it slowly wash away then it is time to think about alternatives. Oftentimes a berm at the top of the driveway can force water off into woody areas which can absorb stormwater. Open-top culverts and rubber razors are an easy way to get water off the driveway for seasonal homes that don't require plowing. Routine grading or raking can help keep a proper crown or pitch so that water runs to the side instead of down the whole length. For more ideas, check out the Maine Camp Road Maintenance Manual. Severe erosion like this could have been prevented with a properly sized ditch.



5. FIX YOUR PATH



Paths are like little driveways except they run all the way down to the lake. They channelize stormwater and wash soil right down into the water. However, they are often a lot easier to fix than driveways. Waterbars made from logs or landscape timbers can push runoff into adjacent areas with vegetation. Steps, back-filled with crushed stone, can stabilize the walking surface while providing infiltration. Infiltration steps like these on Foster Pond absorb rainwater and are stable even in heavy rains.

TOP 10 WAYS TO PROTECT LAKES (continued)

6. TAKE CARE OF ROOF RUNOFF



While water coming directly off the roof is relatively clean, it builds up enough volume and velocity to immediately erode the soil as soon as it touches the ground. Using dry wells, drip edge drains, rain gardens or rain barrels can alleviate erosion caused from roof runoff and reduce your homes overall environmental footprint. This rain garden at the Portland Water District's Lake Office in Standish is an attractive way to treat roof runoff.

7. MULCH BARE AREAS

Heavily used areas frequently have compacted soils and little capacity to absorb runoff. These spots are often devoid of vegetation and have exposed tree roots protruding from the soil. Stormwater builds up on these areas and has the ability to wash out natural vegetation, shorefront or beaches below. If you can't plant or at a minimum get grass to grow, consider top dressing with superhumus or erosion control mulch. These products are primarily made from ground up stumps and bark and look similar to garden mulch, but they are much less erosive. They not only slow down and absorb water, but they also protect tree roots (and bare feet from tree roots). Always make sure not to cover existing plants when bringing in mulch and remember to contact the Code Enforcement Officer if you are planning on getting more than 10 cubic yards.



8. TAKE CARE WHEN STORING YOUR DOCK



Docks are an integral part of lakefront access, but in the off-season their storage can leave a swath of dead vegetation right along the water's edge. The plants and shrubs in this area are too important to be smothered for 6 months and then spend the rest of the year trying to recover. Storing your dock directly on your footpath or outside of the 100 foot buffer are the two best options. If these are not feasible because of the docks weight or size, consider upgrading to a different type. There are many dock systems available today that are both lightweight and portable.

9. PUMP YOUR SEPTIC TANK

Although you don't see your septic system, it is there and it is very important. It also requires maintenance to function properly. When septic tanks are not pumped regularly, sludge from the tank begins to flow out into the leach field which is designed primarily to percolate water. The sludge can clog the bed and cause the system to fail. Aside from being a threat to water quality, a failed system often means backed up pipes with no ability to drain water. Replacing a leach bed also requires a substantial amount of excavation and can be quite expensive. To avoid all these problems have your tank pumped every two to three years if you live year-round and every five years if you are up only seasonally. If you have a filter on your tank that prevents debris from entering your leach field this should be regularly hosed off too. This will help prevent your system from backing up at the outlet of the septic tank. Pumping your septic tank regularly will extend the life of your leach bed and protect the lake.



10. DO A RAINY DAY SURVEY



If you are not sure how your property is affecting the lake, grab an umbrella and raincoat and head outdoors during the next heavy downpour. This is the best time to really see what is happening with stormwater and how you could fix problems. Start at the top of the property and work downward towards the lake. Take note of where water is channelizing, where sheet flow is heavy and areas of vegetation that might be able to absorb some of the water. The key to treating stormwater is to break it up and divert water flow to stable areas as often as possible. Use some of the techniques above to get stormwater off driveways and paths. If there is already a ditch designed to hold stormwater, make sure it is stable by armoring it with rocks or vegetation. Natural tributaries and wet areas should be left alone.

The preceding article was printed from the Lakes Environmental Association website www.minelakes.org with permission. If you still have questions or would like help to evaluate your property, please contact Colin Holme, LEA assistant director, for a free [Clean Lake Check-Up](#). Call 207-647-8580 or email colin@leamaine.org.

GREAT POND HOSTS EASTERN ICEBOAT CHAMPIONSHIPS



The 2018 DN Eastern Iceboat Championships were held on Great Pond on December 15th and 16th. The DN is the most popular iceboat in the world. The racers often build their own boats and sometimes travel great distances to race their ice yachts on the hard waters of the world. Iceboat racers from around the northeast travelled to Great Pond because its ice was black, hard, 4.5-5.5 inches thick, 40% snow-covered with 1/4-inch drifts, and offered a 3/4-mile circle to race on.

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A RARE SIGHT!

Before a recent early morning hike, as I went out onto the deck to refill the peanut feeder that hangs there, what did I spot on the ground outside? Yes, a real bobcat! These nocturnal animals are very elusive and difficult to spot, but they do hunt at dawn and dusk. As we watched, it leapt behind a boulder and came up with a red squirrel in its mouth and quickly carried it down to the lakeshore for breakfast.

- Dan "Tree" Robbins

