



PARTRIDGE LAKE PROPERTY OWNERS ASSOCIATION

Spring 2018

A Lake Preservation Group

Partridge Lake experienced a severe cyanobacteria bloom that lasted from August to November 2017.

The lake experiences hypolimnetic anoxia during winter months that causes internal phosphorus loading to occur and provide nutrients available for algal/cyanobacteria growth during spring turnover. The process repeats during the summer due to anoxic conditions during stratification. These conditions combined with warmer water temperatures and the ability of cyanobacteria to migrate down the water column for nutrient uptake and then migrate back up for sunlight are ideal for these types of blooms. Algal growth, as measured by chlorophyll-a, has become increasingly variable since 2011 and coincides with a shift in phytoplankton community dominance to cyanobacteria as well as early ice-out.

10 Things We Can Do To Extend the Life of Our Lake

1. Pump septic and holding tanks regularly
2. Prevent as much runoff from roads as possible
3. Replace failing septic systems
4. Use phosphate-free fertilizers
5. Use phosphate-free dish, laundry, and cleaning products
6. Keep sand away from the water
7. Remove grass clippings and leaves
8. Don't launch fireworks over the lake or watershed
9. Prevent erosion from properties
10. Pick up dog litter



Summer at Partridge Lake Kicks Off with the Annual Volunteer Day
Saturday, June 2, 2018

Contact **Dave Ernsberger** at dave@ePartnerships.net or call him at (603) 444-7269 or cell (210) 387-4627 if you want to be part of the Volunteer Crew... or just show up at 9:00 a.m. Saturday morning in front of the Warden camp.

It's Your Watershed! Get Involved Today!

Runoff Water and Faulty, Old, or Non-existent Septic Systems are the two largest contributors to the amount of phosphorus entering the lake

#1

RUNOFF WATER allows higher concentrations of pollutants

Improper management of lawns, eroding gullies and shorelines, malfunctioning septic systems, and runoff water allows higher concentrations of pollutants, including nutrients and sediments, to find their way into our lake than would naturally occur. Increased nutrient loading can cause **ALGAE BLOOMS** and **EXCESSIVE AQUATIC PLANT GROWTH**, thus greatly accelerating the natural lake aging process, as well as polluting them with harmful substances.

Older lakes contain high concentrations of nutrients, are shallow, have sediment accumulated on most of the lake bottom, contain extensive plant beds, and support much algal growth.

Humans can accelerate the natural lake aging process by increasing the amount of nutrients (**PARTICULARLY PHOSPHORUS**) and sediment that would naturally flow into a lake from its watershed. Changes in how watershed land is used can result in changes in nutrient runoff from the watershed. Studies have shown that the amount of phosphorus entering waterbodies from agricultural land is at least FIVE times greater than from forested lands, and from urban areas is more than TEN times greater than from forested lands?

Phosphorus and Lake Quality

Increased phosphorus loading to a waterbody fertilizes the lake and can cause nuisance algal and plant growth. Algal blooms can cloud lake water and cause taste and odor issues in drinking water sources. Excessive phosphorus can also lead to toxic bacteria and algae bloom.

Improve the quality of runoff water your property generates.

- Avoid using fertilizer, herbicides, and pesticides
- Correct erosion problems by planting deep-rooted vegetation and groundcover
- Divert the flow of runoff water from driveways and roofs to rain gardens and other vegetated areas. Never divert runoff water into streams, rivers, or lakes
- During the winter, use de-icing agents and sand on your driveway and walkways SPARINGLY. Sweep up residues between storms and at the end of winter.

Courtesy: New Hampshire Lakes Association

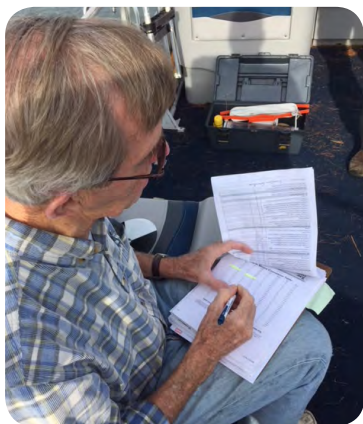
#2

SEPTIC SYSTEMS - Quality and Maintenance

It is very important to know the location and age of your system. Please make yourself aware of the state of your system and what needs to be done.

Again, mindfulness is the key word when thinking about your system. A septic system needs to be pumped every year for year-round residents and every 2-3 years for summer people. **WHAT GOES INTO YOUR SYSTEM WILL STILL END UP EVENTUALLY AFFECTING THE LAKE** as phosphorus seepage from the leach field will enter the ground water and eventually still show up in the leaves on the trees, for example, which will potentially blow into the lake. Therefore, please try to use cleaning products that are phosphorus-free and be mindful about putting food in the garbage disposal, etc.

The PLPOA currently offers a subsidy of up to \$2,500 for the replacement of failed lake-front septic systems.



Volunteer Water Quality Monitoring Program

By collecting water samples from the lake and the streams that flow into and out of it several times each year over a period of years, volunteer monitors help detect changes in water quality and identify pollution sources before the lake is seriously impacted.

Testing is ongoing.

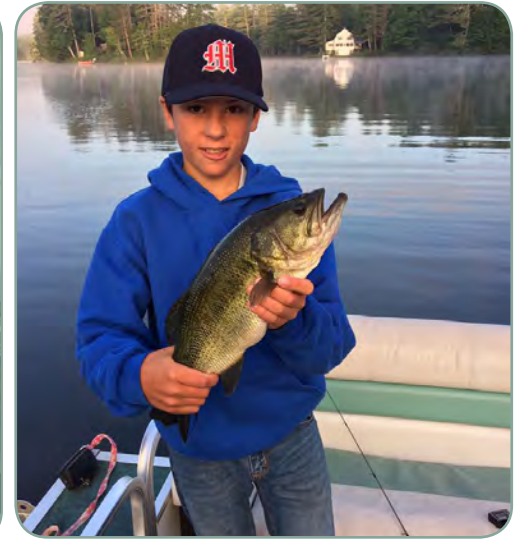
If you are interested in helping with this process please contact **Dayton Goudie** at (603) 444-2793 or email him at daytongoudie@gmail.com.



Summer Fun 2017



Ladies of the Lake Gathering – Hosted by Kerri Schultz



Winterfest 2018



It is with great sadness that we lost three of our long-time residents at Partridge Lake in 2017, **Peter Gauthier, Slavia Savage, and Debbie Savage Schultz.** With deepest sympathy, our condolences go out to their family and friends. They will be greatly missed.

Peter Gauthier

Last summer our neighbor and friend Peter Gauthier passed on from this life. Millie Nelson and Peter's son Ken shared some history and stories about Peter. They described Peter as a person with many talents who was good at everything he tried. He played a variety of musical instruments including fiddle and guitar. He was an excellent marksman, golfer, bowler, card player, martial artist (black belt), horseshoe player, fly fisherman and skier. He was very good at Badminton—at one time ranked first in all of New England. Ken said, "When you distill his many talents down to one essence, you end up with "capability".

Pete was a New Hampshire native and life-long resident, born in Franklin and raised in Claremont, towns where his father taught high school French and English. He attended Claremont Stevens High School where he participated in the Stevens marching band which performed in the second inaugural parade of President Eisenhower. Millie said that Peter's fondest memories of his childhood came from his time living, hiking, and fishing with his brother at New Hampshire State Park summer camps, at which his father was a director.

After graduation, Peter served six years in the Coast Guard. He then went to art school after which he began his career in the printing industry. Peter and his family moved to Littleton when his children were young. Millie's family and Peter's family were neighbors and became friends. Peter came to Littleton to work for the Courier. He oversaw the construc-



tion of the new Union Street building and set up the printing operations. He later worked for a printer in Concord and then served as Senior Vice President of a large printing business in Manchester.

Peter and Millie became reacquainted years later in Concord when Millie was serving on the board of the New Hampshire Community Loan Fund. They renewed their friendship, and Millie said, "The rest is history."

Peter was an avid and accomplished golfer and passed the passion on to his sons. Ken: "On one hole at Keene Country Club, there were power lines running above the tee box. Peter's tee shot hit the power lines, went sideways into the trees, bounced around like a pin ball, and landed behind us. We all, including Dad, were laughing so hard, it was ten minutes before we could hit another shot."

Millie and Peter golfed together also, belonging to Lisbon Village Golf Course where they shared memorable times. "Weekends, that's where you would find us; a lot of good memories."



Later in his life, Peter owned Littleton Signs. Millie said that he made most of the signs we see on businesses in town. Peter donated his talents also. He always made the signs for the PLPOA events. Once, after noticing the Littleton Methodist Church's deteriorated sign, without fanfare, he made them a new one. He liked to do things for others.

It's Your Watershed! Get Involved Today!

Annual Volunteer Day — Saturday, June 2, 2018

There is a lot of sand on the town roads along the lake. As the season progresses, traffic grinds the sand to a fine dust which makes its way to the water's surface and into roadside ditches.

Please join us on **Saturday, June 2, 2018 at 9:00 am**, in front of the Warden Camp for our Annual Volunteer Day, to clean catch basins and help collect some of the remaining sand not swept up by the town.

We are reaching out to the Watershed Assistance Section of the NHDES to set up a meeting on a plan to improve our lake moving forward.



SAND DUMPING

While all of us would like to have a nice sandy beach and swim area at Partridge Lake, here are some very important things to consider first before bringing any sand to the lake:

- Sand does not leave the lake and therefore accelerates the natural filling of the lake
- A shallower lake increases the sun-lit zone therefore encouraging more plant growth
- Sand in NH can contain high levels of IRON which encourages growth of iron loving bacteria that create rust colored slime deposits and oil-like films
- Sand in NH can contain high levels of PHOSPHORUS which can lead to algae blooms that are a potential health hazard
- Sand can contain fine particles of clay causing turbidity of the water
- Dumping of sand can smother bottom dwelling animals disrupting the food chain
- Dumping of sand destroys fish spawning areas

Lastly, be aware that any beach replenishment, or construction of a perched beach, requires a permit BEFORE any work can be started. To apply for a permit, contact the NHDES Wetlands-Bureau at (603) 271-2147 or wetmail@des.nh.gov.



So if you are still really yearning for the feeling of sand between your toes, please consider taking a day trip to the ocean before adding more sand to our already fragile lake.

WEED WATCHERS

Join the Partridge Lake Weed Watchers Group in cleaning up the shoreline on Volunteer Day. We ask that anytime this summer, if anyone sees something growing in the lake that does not look like it belongs, please contact Nancy Ernsberger at nancyernsberger@gmail.com or call (603) 444-7269.

SORRY, NO FIREWORKS!

Fireworks often contain trace amounts of phosphorus. While each individual firework may contain only a small amount of phosphorus, it is the accumulation of the phosphorus over time that becomes a significant source of pollution. **We all have enjoyed these over the years but time has come to consider our lake quality - and the future of it - so we are asking everyone to be mindful of this and no longer light fireworks over the lake or in the watershed.**





Spotlight on Volunteers

Board of Directors

Tom Allen *President*

Tom Norris *Vice President*

Jill Corey *Treasurer*

Lisa Morello *Secretary*

Burt Bechtel Albert Howes

Jeanne Burdette Jim Hutchins

Megan Carman Nina Johannessen

Tonya Eastman David Merrill

Eileen Goodrich Pam Parker

Glen Hadwen John Schultz

Ex-officio:

Jerry Eames, Dayton Goudy

Lake Quality Committee Chair

Dave Ernsberger

Thanks to our 2017 Annual Lake Association Picnic Hosts:


Tom & Dawn Norris

Thanks to everyone who provided photos and articles for this issue of the PLPOA newsletter. Your help was greatly appreciated.

If you would like to contribute to future newsletters please contact Jeanne Burdette at jburdette1214@gmail.com.

**A Special
THANK YOU to
Judy Warden
Paula Berry**

**for their dedication and
years of service to the
Partridge Lake Association.**

Connect with us on: 

Treasures Report

Jill Corey



As of August 2017 our checking account had a balance of \$1215.11. The water quality account has a balance of \$34,711.36.

Ticket price for the 2018 Annual Picnic is \$5.00 across the board, under 10 years old will be free.

Where else could you have as much fun, eat SO WELL and enjoy each other's company? For only \$5.00!

If you would like to volunteer your time with, set-up, clean-up, cooking, sell merchandise, or collecting tickets, contact one of our board members listed on this page. Many hands make light work.

2018 Schedule of Events

Saturday, June 2, 2018

Lake Volunteer Day
Meet at Warden Camp 9:00 a.m.

Saturday, June 16, 2018

Spring Board of Directors Meeting
Jill Corey's House 9:00 a.m.

Wednesday, July 4, 2018

Annual Lake Association Picnic
TBD 11:30 a.m.

Saturday, July 21, 2018

PLPOA Annual Meeting
Open to all members! Please join us!
Ernsberger's Camp 9:00 a.m.

Saturday, August 18, 2018

End of Summer
Board of Directors Meeting
TBD 9:00 a.m.

4th Annual "Official Partridge Lake Ice-Out Contest"



We Have A Tie!

Dayton Goudie & Lucy Craig

(Tom Allen's Granddaughter)
Both with the time of 4:00 pm.

Patrick took his plunge at 1:23 pm 4/28/18

Thanks to all that participated.

**We will start selling
"Ice Out 2019" tickets
at the Annual Picnic on
Wednesday, July 4th 2018.**

Get your tickets early!



PLPOA Merchandise Sale

As we look forward to summer in Littleton and to the activities on and around Partridge Lake, one of the ways to show your support to the PLPOA is to purchase some of the items we have for sale. **Nancy Ernsberger** will be selling PLPOA merchandise throughout the summer.