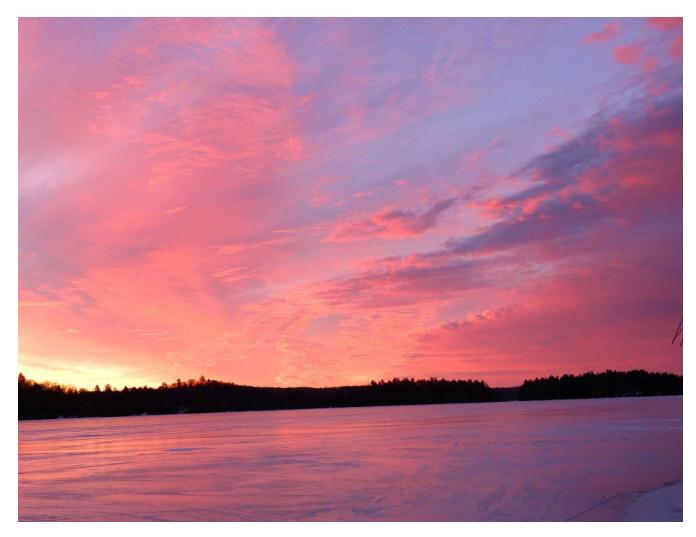
Paudash Lake Conservation Association



Spring / Summer 2021



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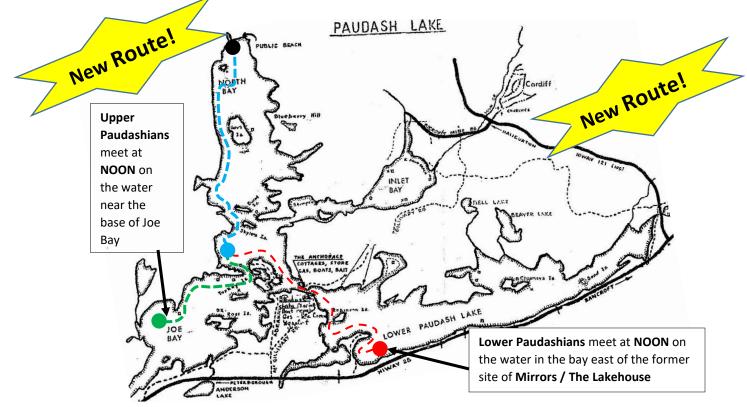
Email: info@paudashlake.org Web: www.paudashlake.org



THE ANNUAL Canada Day Boat Parade!

Thursday, July 1st Noon

Decorate your boat with Canadian Spirit & Celebrate Canada's Birthday!



The Route: Pick the meeting spot closest to you: <a>Lower Paudash or <a>Joe Bay. Be at either site at noon, then follow the leader. Both routes will <a>combine around Centre Bay and form one parade line to <a>end at North Bay Beach; gather on the water for a social distanced "Oh Canada" chorus. **THERE IS NO RAIN DATE!**

This year, due to COVID 19, we are not hosting the annual PLCA social after the parade. <u>Parade questions? Call or text Tracy 905-442-0363</u>

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On our cover: This magnificent morning picture was taken by Jackie Keir, a year-round lake resident in North Bay, this past winter. As we all welcome 2021, we think of it as a new beginning, like a crisp morning with the beautiful sky reflecting off the ice showing us great promise for the future.

Newsletter Editor: Tracy Pastic

President's Report

by Mike Thomas, PLCA President

COVID-19 continues to 'haunt' us. Because of that most of our summer activities may again be cancelled or virtual. Here are the activity dates for 2021:

Canada Day Boat Parade – July 1st (same route as last year-see page 1 for more info.)

Don Thomas Memorial Rock Bass Derby – July 10th (done independently like last year)

PLCA Regatta – July 31st (tentative)

PLCA AGM – August 14 (virtual by 'zoom')

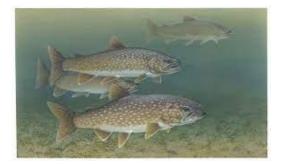
PLCA Golf Tourney – August (tentative)

 $\textbf{Geocaching}-all\ seasons$

Further details will be sent out prior to the respective activity date.

Thank you to all who donated to our spring fundraiser for the North Hastings Community Fish Hatchery. Your generosity totalled \$5,850.00 which goes a long way in helping this very important association through these difficult times.

Paudash Lake has received lake trout stocking of 30,000 over the past seven years. Without the ability to have their fundraising events in 2020 and 2021, the hatchery has needed funds from other sources to help keep the hatchery functioning. They are a totally volunteer organization.





When travelling by boat on the lake this season you will see a number of 'wake zone' signs posted by PLCA (with the permission of property owners) in appropriate locations where 'no wake' is required to protect the shorelines, loon nests and docks. Please reduce your speed to the correct speed for your boat to make minimal waves.

On May 15th, 2021, twenty PLCA members participated in a 'Chinese Mysterysnail' training program so that they are qualified/licenced to remove this invasive species from our lake. This invasive species came to our attention in 2019. More information on this will be coming soon.



Unfortunately, we had to cancel our May 22nd 'septic level 4 Demonstration' due to the COVID-19 rules on gathering. We hope to hold this later in the summer.

Status of Septic Inspections on Paudash as of April 30,2021

Lower & Upper Paudash

Risk Level	Total	Resolved
Low	329	291 (88%)
Moderate	152	59 (39%)
High	121	38 (31%)



This is the current status and the high priority follow-ups will be the locations called 'High' in the data. This will be done this year. A healthy septic tank, means a healthy lake.

You may have read or heard the **BESHORE** campaign currently running on Canoe FM 100.9, Moose FM 97.7 and in the Haliburton and Bancroft newspapers. PLCA has joined this group of associations and individuals in Haliburton to educate and solicit participation by residents to support the draft **'Shoreline Preservation Bylaw'** currently being reviewed by the Haliburton Council. With ever increasing human activity on our lakes and rivers, keeping our waters healthy and safe, requires human intervention. Many municipalities have already, or are considering, expanding shoreline preservation bylaws so that the land from the water to the dwelling can be kept as natural as possible. Read the information provided and add your name to the supporters area if you too agree that we are protecting this resource for tomorrow as much as today. The more names the better to show the world that we care. Details about this issue can be found at

https://www.beshore.ca/.

On April 27th I appeared before Highlands East Council (on behalf of PLCA) to present our views at this public consultation meeting about Centre Lake. Two developers have applied to the MNRF to buy the 200' shoreline that surrounds the lake and abuts their properties. One developer has already presented their plan to build a 'wellness resort' and 28 cottage locations. All of the participants at the meeting either opposed or were neutral (wanted more information) to MNRF selling this shore allowance. PLCA is not opposed to development but wants to make sure it follows an environmentally healthy process for the short and long term. Centre Lake drains into Inlet Bay on Paudash by way of Deer Creek. Whatever happens to the water there 'flushes' into our lake.

In March I attended the Federation of Ontario Cottagers Association (FOCA) annual meeting (by zoom). In 2021 the 'lake partner program' (FOCA and MECP) is back and Paudash will participate with measuring the quality of our water, as we have done for 25 years now. FOCA presented their strategic plan for the next three years, which continues to focus on government advocacy, environment and member resource. As a member of PLCA, you are a member of FOCA and have access to all their services, including competitive insurance plans. Check them out at https://foca.on.ca/.

PLCA will be presenting a number of 'constitutional bylaw' amendments at our AGM this summer. You will receive this information in advance. This is an updating needed to comply with the current 'Not-for -Profit Corporation' rules and some changes that are coming from our Task Force Communications' Report.

Thank you to Tracy Pastic, who has taken over being the editor of this newsletter. She does this as a volunteer (PLCA was paying for this service before) and provides us with a professional and first-class information production. Welcome to Kathy Smith as a new board member and our new treasurer. Al McKellar has been our treasurer for decades and is stepping down from this position but still staying on the board. Thank you, Al, for 'keeping the books' so well and for so long.

The PLCA is also on Facebook and Instagram. Please like and follow us to stay up to date:

- Paudash Lake Conservation Association
- Paudashlakeassociation

Email: info@paudashlake.org

Web: www.paudashlake.org

Have a fun and safe summer season!!

Míke Thomas President





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Students help stock trout in Paudash & Limestone Lakes

A total of 17 students from the Northern Outdoors Studies class at North Hastings Highschool kept busy on Sept. 22, 2020 helping NHCFH volunteers transfer lake trout safely from the hatchery to both Paudash and Limestone Lake.



The students each had an opportunity to experience the work at the hatchery loading the fish into tanks for transport and taking them out into the lake. At Paudash, a pontoon boat was used to take the fish out away from the shore and the students were enthusiastic to assist.

The Hatchery volunteers enjoyed having the young people participate in what is the culmination of everyone's effort over the past months. These trout had initially had health challenges and samples were sent away to various labs to confirm the problem. At the end of the day, the trout recovered and testing showed they were healthy for stocking in local lakes.

This is a happy ending to a story that has been several months in the making. Thanks to the volunteers, the students who have been coming out weekly to clean the tanks, to the owner of



the pontoon boat and to the Haliburton fish hatchery for the use of its large tank for the day.

By Fish Tales, September 29th, 2020

https://fishhatchery.ca/students-help-stocktrout-in-paudash-and-limestone-lakes/



What's Wrong with Grass?

We all love grass. It looks nice, is great under foot, super to play on and most of us have fond memories of doing some of our favourite things on grass. So why do the lake health experts tell us not to use it around lakes in the Highlands. Are they just spoil sports or do they have valid reasons for their concerns with grass in lake country? Here's the scoop....

Commonly used grass varieties are <u>not native</u> in lake country.

Non Native plants:

Are <u>not</u> well suited to life in the Highlands and therefore need more inputs than native plants:

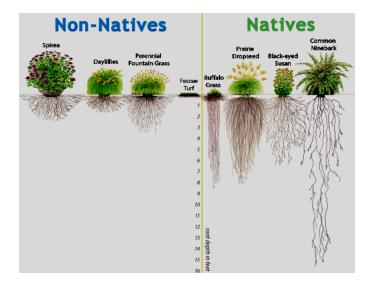
- Water something the experts say we may soon be short of
- Fertilizer- polluting our water- and costing us money
- Cutting and trimming adding to Global warming

These extra inputs add nutrients to our lakes increasing algae and weed growth thereby decreasing the oxygen that fish need. We are told that no point in the Highlands is more than 500 metres from water; how far from the lake is your septic system? Non native plants do not provide any habitat for the species that we all love such as frogs, toads, butterflies, humming birds etc.

Perhaps the biggest downside with grass is that grass does not contribute to and in fact harms the health of our precious lakes. Why is that – well there are all those reasons above but the biggest one is that grass does not do a good job of intercepting and absorbing nutrients before they get to our lakes.

Nutrients such as Phosphorus come from:

- Our bodies, through our septic systems
- Our Pets, Fertilizer use, Wildlife such as geese, birds etc.
- Rainfall has 2-4 as much Phosphorous as lake water



This picture shows why native plants absorb far more nutrients than non-native species such as grass.

While grass roots extend **mere inches** into the soil, the roots of native species extend **many feet** into the soil, searching for and absorbing nutrients such as phosphorous before they can damage our lakes. These long roots also do a better job of preventing erosion.

So why not take an area of your grass and plant it with native plants to help protect our lakes! You can start with a small area and then add more area over the years. Every little bit will help your lake where you, your kids and grandchildren can make new memories!

Author Paul MacInnes is Chair of the C.H.A. and a Member of the Haliburton Highlands Stewardship Council.

Article provided by





Wait! Those "weeds" are improving the health of our lake

By Caroline Konarzewski Lake of Bays Association

Thinking of removing aquatic vegetation from your shoreline or around your dock and swimming area? STOP! In Muskoka, it is illegal to remove vegetation from the water without a permit from the Ministry of Natural Resources and Forestry. Furthermore, these socalled "weeds" are actually helping to keep our lake healthy.

Aquatic vegetation helps remove phosphorus from the water. Phosphorus is considered one of the major stressors contributing to algal blooms. Fortunately, we have not experienced a bloom on Lake of Bays and our water quality is excellent, but one would seriously and negatively affect our enjoyment of the lake and property values. Aquatic vegetation also provides fish habitat both feeding grounds and spawning areas.



Blueflag Iris is a beneficial shore plant.

recommend agitators to minimize plant growth in the water. While not illegal, these devices disturb silt from the bottom of the lake and greatly increase water turbidity. Disturbed silt can

Some companies

smother fish eggs, cause damage to the sensitive gills of fish and potentially interfere with particulate feeding. Turbidity makes it more difficult to treat water for drinking and reduces light penetration which affects the growth of phytoplankton, negatively impacting the entire aquatic food chain.



Disturbing the bottom of any waterbody, whether by pulling vegetation or using an agitator could release contaminants, including cadmium, mercury, lead, excess phosphorus, pesticides, PCBs and others, which had been safely contained in the silty bottom.

So rather than trying to get rid of aquatic vegetation once it's there, why not address the cause? Aquatic plants often grow where nutrients such as phosphorus, nitrogen and potassium are plentiful. Efforts to prevent excess nutrients in the soil along the shoreline from reaching the lake are our best line of defense. This can be done by:

- reducing or eliminating lawn areas which have shallow root systems that do not absorb many nutrients;
- never using fertilizers (which all contain phosphorus, nitrogen and potassium); and
- establishing deeper and wider buffers of indigenous, deep-rooted shrubs or trees along the shoreline that filter out excess nutrients from the soil before they can reach the lake water.

If you are interested in getting help to renaturalize your shoreline, visit www.naturaledge.watersheds.ca

They offer advice on indigenous plants, planting plans and subsidized rates for shoreline property owners.

Article provided by the





No Wi-Fi at the Cottage?

The pandemic has changed many aspects of our lives especially those that no longer have to physically go to "the office" and instead, travel steps to the kitchen table, or home office. Many have been able to re-locate to and work from their cottage, but the problem of reliable, affordable Wi-Fi has created many problems. Without getting into what provider offers what, where in this article, there is another solution for those that are looking for a short term and cost effective alternative.

Free Wi-Fi is available at the following locations throughout Highlands East:

Agnew's General Store, 2284 Loop Rd., Wilberforce

Royal Canadian Legion Branch 624, 1054 Burleigh Rd., Wilberforce

Cardiff Country Store, 23233 Hwy 118, Cardiff

Cardiff Library, 2778 Monck Rd., Cardiff

Gooderham Library, 1032 Gooderham St., Gooderham

Highland Grove Library, 5373 Loop Rd., Highland Grove

Wilberforce Library, 1101 Holmes Rd., Wilberforce

Wilberforce Curling Club, 2786 Essonville Line, Wilberforce

Highlands East Municipal Office / Lloyd Watson Community Centre, 2249 Loop Rd. Wilberforce

See the link below for the map:

https://www.highlandseast.ca/en/explore-andplay/wi-fi-map.aspx



Blue Green Algal Blooms & Eating Fish

As Haliburton County had 11 suspected blue green algae blooms in 2020 questions have been raised about eating the fish from lakes with suspected blooms. Out of an abundance of caution our local health unit has, for several years now, been recommending not consuming fish from a lake with a bloom.



Initially the science indicated that the toxins associated with blue green algal blooms could accumulate in fish organs but there was no conclusive science that the toxins would be present in the flesh of fish.

That has changed as a few recent studies have found toxins in fish flesh.

It is important to know that the toxins can detach themselves from the algae and move freely and widely throughout the lake so the fish may not be safe to eat even in areas of the lake where no bloom is visible and even after the bloom is dissipated.

In this article we provide some highlights from a number of studies and links to those studies.

Information Collected by the



According to the Simcoe Muskoka Health Unit:

People not on public water supplies should not drink surface water during an algal bloom, even if it is treated. In-home treatments such as boiling and disinfecting water with chlorine or UV and water filtration units <u>do not protect</u> from blue-green algal toxins.

Be cautious about eating fish caught in water where blue-green algae blooms occur.

Source:

https://www.simcoemuskokahealth.org/Topics/ SafeWater/bluegreenalgae_copy1.aspx#4b8d66 a6-f1a5-4ec5-a123-8b05180022d1#cacaf8a4-78aa-430c-90db-75eff852b432

Centres for Disease Control and Prevention

You can't tell if a bloom is harmful just by looking at it, and you can't easily see all blooms.

People or pets can get sick when they have contact with harmful algal blooms in these ways:

- Swimming, kayaking, fishing, wading, or doing similar activities in contaminated water.
- Breathing in tiny water droplets, mist, or wind-blown sea spray that contains toxins.
- Drinking contaminated water.
- Eating contaminated seafood (fish or shellfish).

Source: <u>https://www.cdc.gov/habs/be-aware-habs.html</u>

Another source:

https://www.ncbi.nlm.nih.gov/pmc/articles/PM C3148776/) suggests that toxins can accumulate in fish muscle and it is possible that they can reach levels of concern.

Loon Calls



Often, while we sit on the dock or up in our cottages, the unmistakable call of a loon can be heard; and they have many different sounds. Have you ever wondered what each one means? Loons have four basic calls, which can also be shortened or combined together.

"The Wail" which sounds like a wolf howl, is used as a means of long distance communication when one loon wants to communicate with its mate.

"The Hoot" is a soft, short call between members of a family, like a pair or adults with young. **"The Yode!"** is only given by males to defend their territories, and each yodel is slightly different

"The Tremolo" which sounds like crazy laughter, is given in response to a threat or while flying.

Learn more here and hear each of the calls to help you identify them: <u>https://loon.org/the-call-of-the-loon/</u>

Editor's note: As always, please be on the lookout for loons when out on the water and avoid getting too close to them while boating. Baby loons often ride on the backs of their parents until they are old enough to swim on their own. The parents will avoid diving with the young on their backs and even when young loons are swimming on their own, they still have not mastered successful diving to avoid danger. Their nests are very close to the water on shore, so please watch those large boat wakes as well.



Passed on Wednesday - *Failed on Saturday*

According to the Lakeshore Capacity Handbook "High levels of phosphorus in lake water will promote eutrophication — excessive plant and algae growth, resulting in a loss of water clarity, depletion of dissolved oxygen and a loss of habitat for species of cold water fish such as lake trout. While shoreline clearing, fertilizer use, erosion and overland runoff can all contribute phosphorus to an inland lake, <u>the</u> <u>primary human sources of phosphorus are</u> <u>septic systems."</u> Thus, keeping our septic systems functioning well is very important for healthy lakes.

As of spring 2021 all 4 Haliburton County municipalities will have Septic Reinspection Programs running. These programs are extremely important as they tell owners whether or not their system needs repairs, or in rare cases replacement. They check the physical condition of the systems.

WHATEVER YOU DO, DO IT PROTECTED.



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The results vary by the level of inspections – levels 1 through 4. A level 4 finds more of the problem systems than a level 3 etc.

Even the level 1 reinspection program in Highlands East has so far determined that 35 % of all systems inspected are at moderate to high risk. So, the reinspection programs are critically important.

A system that passes inspection on Wednesday can still fail.

Why does this happen.? The system has been inspected and is physically sound – how can it fail?

Here are the 2 most common reasons:

1. Hydraulic Overloading

Septic systems are designed with many factors to consider. Two important considerations are:

- How many people will use the system?
- An average water usage rate per person

An average incoming amount of wastewater is derived from this information, which then defines the size or capacity of the septic tank and drain field. The purpose of the septic tank is:

- To allow solids to settle at the bottom of the tank
- To allow bacteria to break down the nutrients in the organic waste

In simple terms – if you have too many people using the system or put too much water and waste down the drains you can overload the system. The septic system for a 3-bedroom cottage or house is designed to handle the waste from 6-8 people. If you have more, you risk overloading the system which can then send untreated waste into your tile bed and in the worst case from there into the lake.



2. Killing the Good Bacteria in your system that are needed to break down the nutrients.

Some of the most common ways that this can happen:

- Using products that kill bacteria
 - Laundry detergent with bleach
 - Bleach itself
 - Antibacterial soaps or other products
 - Commercial dishwasher rinse aids use lemon juice or vinegar instead

For Septic Tips <u>https://www.cohpoa.org/septic-health/septic-tips/</u>

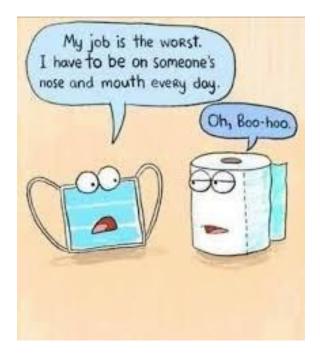
So, make sure your system gets inspected and then don't overload it or kill the good bacteria

To read the full Lakeshore Capacity Handbook visit:

https://www.ontario.ca/document/lakeshorecapacity-assessment-handbook-protectingwater-quality-inland-lakes

Article provided by:





Busting the Biodegradable Shampoo Myth

By Caroline Konarzewski Lake of Bays Association

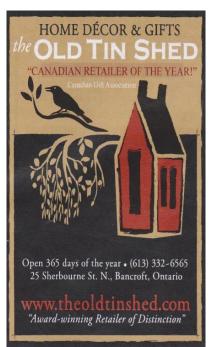
When the first cottagers settled on the shores of Lake of Bays it was exciting and exhilarating to jump into the lake and wash with soap and shampoo. There was no indoor plumbing, the lake was right there, and after all, any bubbles created quickly dissipated. It was assumed that a little bit of soap in a big lake was harmless. Turns out that assumption is dead wrong. Even

a biodegradable soap is not safe to use in the water. All soap, whether biodegradable or not, detrimentally affects lake chemistry and can have negative impacts on fish and other aquatic organisms.



Why is this so? Biodegradable means something is capable of being decomposed by bacteria found in soil, not in water. Biodegradable soaps and shampoos need soil and the bacteria found in that soil to break down. Used directly in water, products labelled "biodegradable", "natural", "organic" or

"handmade" are all bad. In the lake soaps and shampoos reduce surface tension so that little insects that crawl on the surface drown. Fish and other aquatic creatures that feed on these insects lose a vital food source. The surfactants in soaps and shampoos can be toxic to other lake life as well, especially tiny



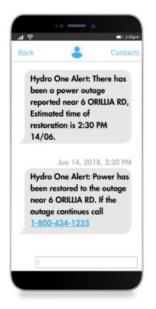
invertebrates that are near the bottom of the food chain and therefore, essential for the health of the lake. Surfactants cause changes in the ecological balance of the water and can contribute to algal blooms and we sure don't want that to happen!

If you desperately want to clean off in the lake, just use a washcloth and scrub hard. Water is an excellent solvent that attaches to dirt and mud and washes it away. No soap required! And if you must wash with soap out-of-doors, use one that is biodegradable and phosphate-free and use it sparingly. Do all your washing, bathing or cleaning at least 30 metres from any water source and dispose of your soapy wash and rinse water in a hole six inches deep. Better yet, use your indoor plumbing and let your septic system do its job of slowly releasing its contents into the soil where it can biodegrade slowly.

Information collected by the



Hydro One Outage Alerts



You can easily sign up to receive text messages from Hydro One when there's a power outage at or near your property. They will also give you an estimate for when the power will be back on, and then again once power has been restored. It's very helpful and something worth signing up for!

https://www.hydroone.com/request-aservice/outage-alerts

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COVID and Caddisflies: Assessing Lake Health During a Public Health Crisis



Trent students Alison and Lucas clean a net used to collect benthics on the shores of Lake Kashagawigamog.

Goodbye 2020 and hello 2021! When our first article on benthic biomonitoring went out a year ago, COVID-19 was a new challenge in our lives. Now it's almost Spring, we're all tired of hearing about the "new normal" and "these uncertain times", but I know you are all wondering: what was the fate of U-Links' benthic biomonitoring program?

I am happy to report that U-Links, Trent University, and 10 lake, cottage, and property owners' associations have successfully sampled all but three lakes that had initially expressed interest in our program. In total over 90 sites spread over 15 lakes were sampled by 15 undergraduate students. The health of our community, students, and staff was in the forefront of our minds as we carried out each of these sampling events and all our activities followed the rules and guidelines laid out by our local public health units. The students are now hard at work analyzing the data they collected in preparation for our virtual Celebration of Research taking place on March 27 (keep an eye on www.ulinks.ca for more information in the coming weeks).



- Permanent steel docks, boathouse and Lift structures
- Commercial Dock systems

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Many thanks go out to everyone who donated their time and put up with the endless emails and phone calls as our plans developed and evolved with every twist and turn of the global pandemic. Your flexibility and willingness to adapt to the ever-changing rules and regulations has not gone unnoticed and we are extremely grateful to you.

If you are interested becoming involved in this program, would like to support it, or have another community research need you'd like to pursue contact Brendan Martin, Biomonitoring Project Coordinator at <u>bmartin@ulinks.ca</u>

By: Brendan Martin, Biomonitoring Project Coordinator at U-Links

30 Metres - - - - Why??

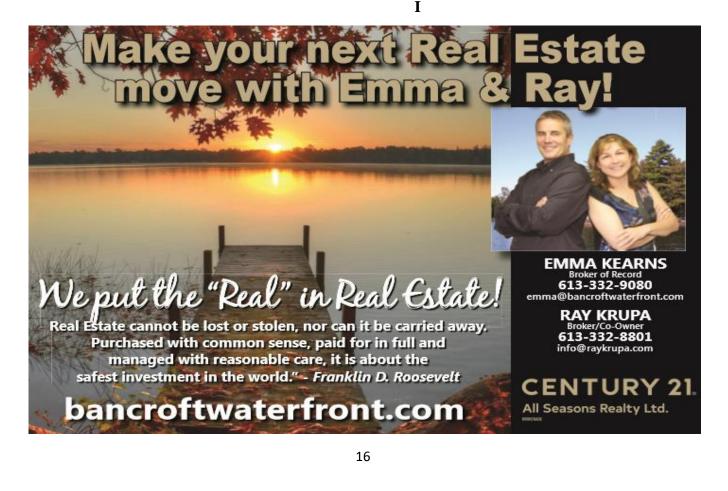
by Charlsey White, MCIP, RPP, Director of Planning

At the Sept 9, 2020 meeting, Committee of the Whole reviewed options for a Shoreline Preservation By-law including content, prohibitions, exemptions and regulations. Staff were provided direction and asked to draft a Shoreline Preservation By-law for public consultation purposes.

A County wide Shoreline Preservation By-law is proposed to regulate only the Shoreline Area, as defined as an area inland 30 metres, measured over a horizontal distance, from the high-water mark of a body of water. A Body of Water is defined as a lake, pond, river, stream or any other areas which is permanently covered by water or lands which may be subject to intermittent flooding.

Information Collected by:





30 Metre Analysis:

The 30 metre "ribbon of life" distance is well supported in the scientific literature and represents a reasonable balance between shoreline development and water quality protection. The shoreline vegetative buffer serves numerous purposes such as mitigating the impacts of storm water and septic effluent through filtering, infiltration and attenuation; supporting native biodiversity by conserving habitat and maintaining wildlife corridors; and regulating temperature in the near-shore area. It also serves other land use related purposes such as maintaining the natural character of a lake's shoreline, diffusing light pollution and reducing noise.

The scientific evidence is supported and referenced in many documents the County of Haliburton utilizes including the Natural Heritage Reference Manual (NHRM) and the Lakeshore Capacity Assessment Handbook (LCAH). The Ministry of Natural Resources and Forestry (MNRF) recommends that generally 30 metres of natural vegetation be maintained or rehabilitated adjacent to fish habitat for its protection (Natural Heritage Reference Manual, 2nd Edition). The Ministry of the Environment, Conservation and Parks (MOECP) includes the following in their draft update 2020 to the LCAH:

"Numerous studies published in the scientific literature have demonstrated that vegetative buffer strips can reduce non-point source pollution to surface waters, ... Nutrient and sediment removal and temperature control can be achieved with narrower bands of vegetation to waterbodies, but wider buffers are required to provide effective wildlife habitats and movement corridors (ELI, 2003). Many studies show that vegetated buffers are able to attenuate nutrients and sediments along a wide gradient of buffer widths (Castelle et al., 1994; Norman, 2005; Abu-Zreig et al. 2003). While small buffers (2 to 15 metres) can remove some sediment and phosphorus, the literature overwhelmingly supports buffer widths of 30+ metres to provide effective mitigation and protect aquatic resources (Beacon 2012; Knutson et al. 1997)."



Paudash Lake Conservation Association

With respect to the 30 metre "ribbon of life" measured from the highwater mark of a waterbody, MOECP Eastern Region has recommended this setback distance for well over 25 years. It first came out in 1993 as a recommended setback to protect the shoreline buffer in a report of Lake Trout Lakes in Southeastern Ontario. Since then, the province has recommended that all Official Plans and their implementing zoning bylaws recognize the 30-metre zone as a minimum setback for all structures (including sewage systems).

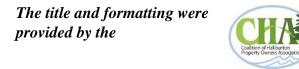
The Ontario Building Code (OBC) sets a province-wide uniform standard requiring that there be a minimum of 15 metres clearance between a Class 4 or 5 Sewage System and any lakes, pond, spring, river or stream (as well as other water sources such as wells or reservoirs). This requirement is intended to mitigate pathogens that are harmful to humans from entering water bodies. There are no requirements in the building code that apply specifically to phosphorus and the OBC does not address environmental protection of natural heritage or waterbodies.

Provincial policy and guidance documents will continue to recommend the 30-metre minimum setback and the protection of the shoreline buffer within that zone. The new draft policy 2020 will also provide direction on minimum lot size and shoreline frontage with the goal of minimizing shoreline lot disturbance. The MOECP has identified to the County of Haliburton staff that they are going further than current direction and considering supporting an approach used by several Conservation Authorities (Rideau Valley, Mississippi River, and Cataraqui Region) referred to as the Site Evaluation Guidelines. These were originally developed as part of the "Rideau Lakes Basin Carrying Capacities and Proposed Shoreland

Development Policies" (Michalski and Usher, 1992) and provided a simple tool to determine development setback based on site specific biophysical criteria (soil type, slope, vegetation). The minimum setback starts at 30 metres and may be increased depending on the total score of a proposed lot. This approach was recently peer reviewed by Hutchinson (2014) [document provided to staff] and found to be a valid tool based on current scientific knowledge. Within this recommended sitespecific setback, we would continue to support the minimum 30 metre buffer protection.

Dated Sept 23, 2020

This report was written and submitted to Haliburton County Council by Charlsey White MCIP, RPP, Director of Planning





Have you noticed that wind speeds have changed over the years?



I thought it might interest readers to know that it is much less windy in the summer season now, compared to 4 decades ago. In data provided

Dr. Norman Yan

by Dr. Huaxia Yao from the Dorset Environmental Science Centre, wind speeds measured near Dorset now average about 0.75 m/s from May to October, only half what they were 40 years ago. This is good news for sun bathers and swimmers, but perhaps not so good for sailors.

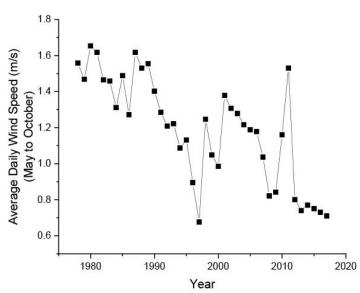
Lake scientists are keenly interested in how falling wind speeds might change how our lakes work. It could mean different things for different lakes. The surface mixed layer of lakes might actually be warmer but not as deep given less wind-induced mixing. In these lakes, the deeper cool layers will be thicker, and retain their oxygen longer. More cool oxygenated waters is good for trout. On the other hand, in other lakes, warmer surface waters might delay fall overturn increasing the risk of losses of deep water oxygen. This would be bad for fish and would increase the risk of fall algal blooms. Indeed, both of these patterns have been documented in different lakes.

We have entered a time when climate change is affecting our lakes in new and sometimes surprising ways. We need to pay attention as we continue to journey through these less predictable times.

Article by Dr Norman Yan PhD,

Article Provided by





Reference: Yao H, et al, The interplay of local and regional factors in generating temporal changes in the ice phenology of Dickie Lake, south-central Ontario, Canada. In: Inland Waters - Journal of International Society of Limnology, 2013, pp 1-14.

What is Getting into Your Drinking Water?

The C.H.A. is following an ongoing study that is being conducted in southwestern Wisconsin to test private wells for evidence of contamination. The Southwest Wisconsin Groundwater and Geology study began in 2018 with two objectives: (1) Evaluate private well contamination using indicator bacteria (total coliform and *E. coli*) and nitrate based on randomized synoptic sampling events, and (2) identify the source of contamination in a subset of total coliform- and nitrate-positive wells once per season using microbial tests that distinguish between human, bovine and swine fecal sources.

Two phases of the study have been completed, and <u>the results are concerning</u>. During a first sampling, 42% of the wells showed either <u>bacteria contamination or elevated nitrate levels</u> above the 10 mg/L health standard. A second sampling showed 27% of the wells were contaminated. Higher percentages of wells showed <u>contamination with bacteria</u> as opposed to nitrate, which was surprising, as nitrate (nitrogen) moves more easily through soil and is not captured by adsorption and filtering as bacteria are when septic tank effluent moves by unsaturated flow through soil.

In the second study phase, 34 contaminated wells were evaluated for bacteria associated with fecal contamination from either animals or humans. <u>Human fecal material was found in 41% of the wells.</u>

The next phase of the research is to carry out geologic studies and analyze well construction practices in the three-county region. The goal is to determine correlations between water quality, geology and well construction. The hope is to understand where the water in the wells is being drawn and whether the wells are properly cased and finished to avoid contamination from the surface. Contamination may be coming from sources other than septic systems.

What can you do to protect your water?

- 1. Ensure your septic system and all of the surrounding septic systems are inspected every 3 years
 - a. A level 4 inspection is the best but even a level 3 will help
- 2. Ensure you follow the C.H.A. Septic Tips <u>https://www.cohpoa.org/septic-health/septic-tips/</u>
 - a. to minimize and spread out water use as overloaded systems are one of the suspected causes of this contamination
 - b. To keep the bacteria in your system healthy and plentiful to digest as much as possible

The C.H.A. Volunteers will be following this research and will keep your association up to date as more results come in.

Article provided by





Take a Trillium Walk



Hastings Destination Trails Inc.

Welcome back to our seasonal residents. It's been a hectic time in Hastings County with the ice taking its sweet time melting. Apparently in early spring, there was still ice clogging up regional rivers and watersheds.

COVID still brings complexity to coming back and visiting. Please remember to follow all public health guidelines. We appreciate that Hastings County is a second home for many of our residents, and we look forward to welcoming you back when our local resources and healthcare system can support your return. To those seasonal residents who have already returned, such as snowbirds returning from the south, please act responsibly to protect your community by physically distancing, practicing proper hygiene, and self-isolating as required.



When self-isolating, do not leave your residence. One of the things that can still be enjoyed during COVID is our wonderful outdoors.

Get outside and enjoy our trails any season!



We did a pilot this winter, making groomed cross-country ski and snowshoe trails available as an additional service that both permanent and seasonal residents utilized.

There was strong community financial support for this enhanced service available at McGeachie Conservation Area. We will have more details about the possibility of this service continuing into future winter seasons. Seasonal residents particularly found this a fun activity as it gave an extra dimension to their being here, year-round with more things to do.

We would like to let you know about our new website <u>www.hastingstrails.ca</u>, that has useful information about non-motorized trails for your enjoyment and safety year-round. And a new Facebook page, Hastings Ski and snowshoe club

https://www.facebook.com/hastingsskiclub/

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If you want to get involved, help out or have an impact on what the PLCA does, become a board member or join a committee! Be sure to attend our Annual General Meeting to toss your hat into the ring!

PCLA Summer Events

CANADA DAY BOAT PARADE

Thursday, July 1st at 12 Noon * New route this year * (No Rain Date) Two starting points: Lower Paudash and Joe Bay; meeting up in Centre Bay and ending at North Bay Beach with a boat chorus of "Oh Canada" *(info. page 1)* Decorate your boat with Canadian Spirit and Celebrate Canada's Birthday with us!

DON THOMAS MEMORIAL ROCK BASS DERBY

Saturday, July 10th, All Day! - Done Independently. Youths 2-18 compete to remove the most rock bass from the lake and are awarded prizes and a certificate for helping protect Paudash Lake's game fish. Register online at: <u>www.PaudashLake.org</u>

ANNUAL REGATTA AND FUN DAY

(Tentative Due to the Pandemic)

Saturday, July 31st, Noon – 4pm at North Bay Beach (No Rain Date) Bring the whole family for a day of fun and competition! Register online at: <u>www.PaudashLake.org</u>

PLCA ANNUAL GENERAL MEETING

Saturday, August 14th, 9 am Virtual Meeting by ZOOM (Zoom code to follow) A great opportunity to find out what the PLCA has been up to and have input into the Association's future. If you haven't yet joined, tune into the meeting, find out what it's all about and sign up!

3RD ANNUAL PAUDASH LAKE GOLF CHALLENGE

(Tentative Due to the Pandemic)

Sometime in August - at Bancroft Ridge Golf Club

9 Hole Shotgun followed by Bar-B-Q Lunch and Prizes.

Contact Leslie Ferrier at <u>upperpaudashrocks@gmail.com</u> to play for Upper Paudash and Mike Hale at <u>jamesmikehale@hotmail.com</u> for Lower Paudash. Register as one or a team!!

WE WANT TO HEAR FROM YOU!

Please send letters to the editor to Editor@PaudashLake.org and be sure to check out our website at <u>www.PaudashLake.org</u> Great ways to stay up to date on all Paudash Lake news!