

Welcome to the summer of 2021

The co-chairs of the Yoho Lake Association, Bonny Hoyt-Hallett, Sean Haley and Walter Bidlake and the Lake Executive welcome you all to the summer of 2021. We are all looking forward to getting out and on the lake. It has been a long, cold and isolated winter, time for fun.

The lake Executive has been working through the winter to make this summer the best it has ever been. Again this year we are planning a bigger and better boat parade, more spectacular fireworks and a bigger yard sale to end the season so you can get rid of your used treasures and find new.

This spring, Yoho Lake has been approved for a grant from the Environmental Trust fund to help find a way to control our geese population. During the summer we will be looking for ways to discourage geese from nesting around the lake. Keeping the riparian vegetation along the lake shore and using geese fences are two ways you can help deter geese from using your lawn as a dinner table.

The water monitoring crew will be taking to the lake come May and continue to keep track of the lake's health. We are starting to get a sizable data base so we can track how the lake cycles throughout the summer season. Comparing last year's data to previous years we can see very little change even though we had the lowest water level in recent history. We can see no ill effects of last summer's Blue Green algae scare at the Boy Scouts beach. That is not to say we should let our guard down. We all need to use phosphate free soaps, get our septic tanks pumped regularly and keep lawn fertilizers from running off into the lake.

August 15th we will be having the Lake Association Annual General meeting. Depending on the Covid situation a B-B-Q and get together may or may not be held BUT we hope to see as many as you possible out to the meeting. This is your lake and you need to care for it. The lake needs you to step up to the plate and give a few hours of your time to help with the association. It is time well spent. The current leadership is there to help, but feels the board needs new blood if it is to survive and thrive and grow.

Please put your hand up to help! We are needing a Secretary, Vice Chair, and Road Reps for June 2021-2023.

Have a great summer.

Bonny, Sean, and Walter



To all residents of Yoho,

The Yoho Lake Association members are Yoho Lake owners who have a desire to protect cottage owners and our beautiful lake so that we can all enjoy it and to do so we all need to work together to ensure it stays this way.

Your membership is important, as any association is only as strong as it's members. As a member you will be kept up to date on all issues facing our community and we would appreciate your input as this will help your association deal with these issues and plan for the future.

Please complete the membership form and return. Please do not hesitate to contact me should you have any questions regarding this form.

Thanking you in advance and wishing everyone a safe and enjoyable summer!

George Roach Association V. President (506) 444-1754 gndroach@gmail.com



227 Yoho Lake Road Yoho, NB E6K 3B8 www.yoholake.ca

Yoho Lake Association Membership Form

Name(s):		
Yoho Address	Yoho Re	esidency: 🗆 Full-time 🗆 Part-time
Street		
Yoho	New Brunswick	
City	Province	Postal Code
Phone	Email	
☐ I consent to having r Yoho Lake Communi Non-Yoho Address (if ap		elephone number appear in the
Street		
City	Province	Postal Code
Phone	Email	
•	0 per household. Cheques payable d by Cheque □ Email Money Tr	
You can mail this comple	eted form with membership dues t	0:
YLA Membership 227 Yoho Lake Road Yoho, NB E6K 3C1		
or email to: treasurer@yo	oholake.ca	

Member of the New Brunswick Alliance of Lake Associations | www.nbala.ca

IMPORTANT NOTICE FROM THE YOHO LAKE ASSOCIATION

Yoho Lake is important to all of us. To swim in, to paddle on, to live beside. To love.

But recently, we're seeing more algae in the lake. Some algae can pose major risks to our health and the environment. And algal blooms can make property values drop.

Why has algal growth increased this summer, making the water look cloudier? Here's why. Summers are getting warmer. Water levels are dropping. More of us are staying longer at the cottage, and many more folks live here full-time. All these factors deeply stress the lake ... and the shoreline that protects it.

The good news: We can take **three critical steps** to help keep our lake healthy. Three steps that will starve the algae and prevent the lake from turning toxic. The many Yoho Lakers who attended the Association's Annual General Meeting in mid-August discussed — and agreed on — the importance of these three key steps.

For these three steps to work, we must ALL act together.

Step One: Turn the Yoho area into a phosphate-free zone.

Why? Because phosphates feed algae. Plain and simple. This means turning our households into phosphate-free zones. All of our household products — shampoo, dish detergent, laundry soap, hand soap, cleaning supplies — must be free of phosphates. All greywater eventually reaches the lake. So anything that enters our greywater system must be phosphate-free, too. We can find phosphate-free items at regular grocery stores or Walmart. These products cost the same as regular products. Look for the PHOSPHATE-FREE label.

Step Two: Encourage natural vegetation around our shoreline.

Why? Because all the runoff from our lawns, roads, lanes, driveways, culverts, and bare soil areas carries nitrates. Nitrates feed algae. Natural vegetation along the lakeshore absorbs that runoff and those nitrates. If your natural shoreline vegetation is gone, consider planting some. All you need is a buffer strip about two to three feet wide. It will help to stop nitrates from entering the lake.

Step Three: Stop fertilizing lawns and flowers at the lake.

Why? Because fertilizers contain nitrates, too. Again, it's plain and simple. We cannot fertilize our lakeside lawns and flower gardens, because over time the chemical nitrates will enter the lake. And they will feed the algae. No way is a perfect green lawn worth a toxic, algae-green lake.

Three simple steps to starve algae. Three simple steps to save our lake.

Let's work together. **Every action counts**. As they say, *Together We Can Make a Difference*. If you have questions, please call your zone rep or any YLA executive member (see page 2). Or email us at YLA@yoho-lake.com. Also, check the Yoho Lake website (see below) for water-quality updates as they become available.

YLA SPECIAL BULLETIN Website: www.yoho-lake.com Email: YLA@yoho-lake.com

2021 Yoho Lake Association Contact List

Website: www.yoholake.ca Email: communications@yoholake.ca

Position	Name	Email	Phone
	Bonny Hoyt-Hallet	bonnyhh@gmail.com	366-3515
President	Sean Haley	sean@haleys.ca	260-3889
	Walter Bidlake	walter.bidlake@outlook.com	
Vice President	George Roach	gndroach@gmail.com	444-1754
Secretary	Kimberly Boone	boonekimd@gmail.com	461-9397
Treasurer	Mark Roach	Mark.Roach@nationalleasing.com	461-7470 366-3195
Webmaster	Nick Spacek	nick@spacek.ca	260-6051
Directors-at-Large	Sean Haley	sean@haleys.ca	260-3889
Directors-at-Large	Dick Russell	dicklrussell@gmail.com	
Zone Representatives Committee Chair	Sean Haley	sean@haleys.ca	260-3889
Scouts Canada Liaison	Dean Mundee	dean.mundee@gmail.com	455-1989 259-2249
Water Committee Chair	Bonny Hoyt-Hallett	bonnyhh@gmail.com	366-3515
Membership Committee Chair	VACANT		
Adopt-A-Highway Committee Chair	Larry Somerville	larryandjudith@bellaliant.net	366-5345
Communications Committee Chair	•	VACANT	

Road Representatives

Zone	Name	Email	Phone
Zone 1: Yoho Lake Rd South	George Roach	gndroach@gmail.com	444-1754
Zone 2: Yoho Lake Rd North	Kimberly Boone	boonekimd@gmail.com	461-9397
Zone 3: Route 640 (Hanwell Rd) from Yoho Lake to Hunter Rd; Scott Rd	VACANT		
Zone 4: Jerry Chessie Rd, Jerry Crescent	Mark Roach	Mark.Roach@nationalleasing.com	461-7470 366-3195
Zone 5: John Chessie Rd	Shelly MacQuarrie	bobmq@nb.sympatico.ca	366-5823
Zone 6: Hanson Rd, Nana's Promenade	Richard Hanson	sherrit@nbnet.nb.ca	399-3101

Yoho Lake Association Annual General Meeting

Sunday, August 15th, 2021 Yoho Scout Lodge AGM starts at 1pm

The YLA Annual General Meeting will be held Thursday the 15th of August, 2021, at the Yoho Scout Lodge. Due to preventative health measures in the province, there will not be a BBQ before the meeting. The meeting will start at 1pm. The meeting will:

- Review the Board of Directors and its various committees over the past year
- Provide our financial statement
- Discuss issues you want tackled in the upcoming year

Discussion topics can be submitted in advanced to the YLA secretary, Kimberly Boone, at BooneKimD@gmail.com. Discussion topics will also be accepted at the AGM.

All are welcome

2021 Calendar of Events

Date	Event	Contact
Saturday, July 24	Light Up The Night / Boat Parade	Sean Haley
Thursday, July 29	Septic Clean Out	Bonny Hoyt-Hallett
Sunday, August 15	Annual General Meeting	Bonny Hoyt-Hallett
Thursday, August 26	Septic Clean Out	Bonny Hoyt-Hallett
Saturday, September 4	Community Yard Sale	Alma Bidlake
Saturday, September 11	Fall Clean-Up	Larry Somerville

Light Up the Night - Boat Parade

Once again, Fun Days has been cancelled because of COVID-19. Thanks to last year's success, we are happy to announce the return of "Light Up the Night, a Boat Parade". Register your parade boat with Sean Haley (260-3889). Decorate your boat with lights and meet out on the water in front of the Scout Lodge at 9pm on Saturday, July 24th. The boats will parade around the lake and the evening will conclude with FIREWORKS!!

Septic Clean Out

YLA will be arranging for two septic pump outs on July 29 and August 26 in order to access group rates. Contact Bonny to coordinate a timing at 366-3515. Once rates have been finalized we will post on website and the Yoho Facebook page. Please help us by having your septic pumped out.

Garbage and Recycle

Garbage pickup is on Wednesdays and Recycling pick up is on the first and third Friday of the month. All garbage must be bagged and recycling must be separated into papers and plastics.

Yoho Lake Association Membership

The YLA has committees and runs events to benefit our community. Membership dues are \$20 annually per household. They are a major source of funding for the YLA. The more members we have, the more we can do to give back to the community. A membership form has been included with this package.

Community Yard Sale

Gather your unused items and participate in the Yoho Community Yard Sale, Saturday, September 4th. Please follow the applicable Covid guidelines.

Yoho Fun Day 2021 has been tagged for Saturday, July 24th. Restrictions are loosening, but Covid is still very much a part of our lives. With this in mind, the Yoho Lake Association has decided to continue with the 2nd Annual Yoho Lake Boat Parade and fireworks display.

We would love it if people would decorate their waterfront area for the day and evening. This would add to the festiveness and also allow those not participating in the parade to take part in this event.

The boat parade will be close to dusk (time to be determined). The fireworks will be just before dark. The location will be in front of the Chessie Cove between the two points.

What we need from the residents of Yoho Lake are theme Ideas and donations for the fireworks.

THEME---- We are looking for suggestions---examples---Christmas in July, Your favorite travel destination, Halloween, etc. Send all suggestions to me at sean@haleys.ca prior to June 1st. Put your imaginations to work!

The Yoho Lake Association uses no money collected from memberships for this event. It is a donation based day - all donations go up in smoke!!

Remember we are always looking for people to help with the association as directors and organisers of events like this one. Please feel free to contact me if you would like to involved.

Sean Haley CO President

VOLUME 21, ISSUE 1, JUNE 2021

The Yoho Echo

The Newsletter of the Yoho Lake Association

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Yoho Fun Day and Yard Sale SWAG

Welcome to the summer of 2021

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The water monitoring crew will be taking to the lake come May and continue to keep track of the lake's health. We are starting to get a sizable database so we can track the lake cycle throughout the summer season. Comparing last year's data to previous years we can see very little change even though we had the lowest water level in recent history. We can see no ill effects of last summer's Blue Green algae scare at the Boy Scouts beach. That is not to say we should let our guard down. Please continue to be vigilant. We all need to use phosphate free (Continued on page 2)



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Happy summer!

Calendar of Events!

Date	Event
29 May 2021	Spring clean up
24 July 2021	Boat parade and fireworks
29 July 2021	Septic clean out
15 August 2021	Annual General meeting
	(AGM)
27 August 2021	Septic clean out
4 September 2021	Community Yard Sale
11 September 2021	Fall clean up
(Rain alternate 12 September)	



For the Love of Loons

By Dinah stocker and Greg Legere



Our first fall at Yoho Lake in 1995 we watched the latest family of five young loons learn to fly. We took much pleasure in watching as they splashed, belly flopped and finally learned a smooth take off and landing. By early summer 2017, however, we had noticed there seemed to be a few years where we had not had any successful loon babies enjoying our lake, despite there being at least three adult loons who had been on the lake yearly. The cause of why this had happened could be discussed forever; the loss of loon mates, people, boat traffic, high than usual water levels, natural predators and so on. We needed to at least do our part to bring the loon babies back to the lake, but how?

It was Greg's brother who started the ball rolling, He described seeing a loon's nest platform on a nature program and thought he could build us one. Fast forward to the late summer of 2017, when I asked Greg is his brother had forgotten about building a platform. Rather than ask is brother to build the platform, Greg showed up at cottage one day with piping, netting, slats, glue, paint

and the plans downloaded from the internet to build a platform. It took a couple days for him to cut and assemble the platform. Tying and sewing the netting to form the surface of the platform needed both of us to complete. After a coat of "camouflage" paint and a test to ensure it floated, we were ready to co-opt the help of Richard and Sherri Hanson. They tool it, put the branches and natural covering on the platform and anchored it in the spring of 2018, 2019 and 2020 at the end of the lake near their place.

To everyone's delight, we have had three successful summers, one baby the first summer in 2018, and two babies in 2019 and 2020. Richard and Sherri will continue to put the platform out. Our thought is to construct another one for the Boy Scout end of the lake but we want to consult with a biologist to ensure we do not threaten the existing nesting pair as we understand that loons can be very territorial and have enjoyed the whole lake this past year.

Our plea to everyone:

Please do not disturb the loons by going close to their nest in spring. Stay away from that end of the lake please!!

When you are out on the water, please watch out for the loons, steer clear, and teach your children to respect wildlife. It may feel great to get close but remember these are wild birds and in order for them to survive they need to stay wild. Keep your distance.

INVASIVE PLANT MONITORING PROGRAM

By Sherry Hanson

Yoho Lake is a member of the New Brunswick Alliance of Lake Associations (NBALA). Part of the mandate of this alliance is to facilitate and support a province-wide Volunteer Lake Monitoring Program. Volunteers for several years have regularly monitored the water quality at Yoho Lake. In recent years another group of volunteers have been monitoring the flora of the lake on the lookout for invasive species.

Another mandate of the NBALA is to provide education on stewardship of the lake environment. The volunteers have received information and some training on several invasive species, which can interfere with the natural plant life of the lake and lead to further destruction of the habitat. The Eurasian Milfoil is one particularly noxious plant that has been found in the Saint John River that would be a great threat to native species if introduced to the lake. It is of paramount importance that all residents (and their guests) are diligent in protecting the lake from any introduction of these plants because they are extremely difficult, if not impossible to eradicate. Signs have been posted on all of the roads leading into the lake with information on the "Clean, Drain, Dry" program for any watercraft; but it is not only boats, but fishing gear or even footwear that could be the means of transfer.

The volunteers' canoe or kayak along the shorelines of the lake looking for water plants that may be alien. Every home and cottage owner here can help by familiarizing themselves with the plant life in their area and sounding an alert if something unfamiliar presents itself. If anyone is interested in becoming part of the Invasive Plant Monitoring Volunteer group please contact Sherry Hanson.



YOHO FUN DAY!!

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Sean Haley CO President

YOHO LAKE ANNUAL YARD SALE

Mark this on your calendar!!

September 4th

8:00 am to 1:00pm

Yoho Lake Yard Sale

Time to purge your treasures and find new ones!

Join the annual Yoho Lake Yard Sale. It is a great way to end the summer's fun. More information will be provided in the next newsletter.

Yoho Lake Park Opinions

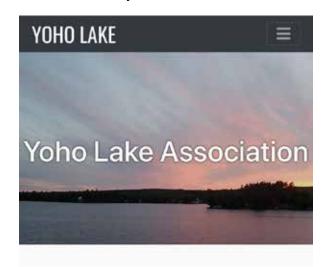
The Facebook post on the possibility of a park along Yoho Lake road generated a lot of feedback. The Yoho Lake executive was consulted on the concept of a park and children's playground but we would like to clarify that it was not an association initiative and is not an association decision. The post on Facebook was promptly communicated to gain feedback from our membership and residents. The association works to represent you but if you feel strongly one way or the other you should to attend Hanwell council or speak with councilor representatives.

Yoho SWAG!

Yoho T-shirts, Hoodies, Long Sleeve Shirts, Coffee Cups, Water Bottles, Hats, Cozies and Calendars are most of the items that become Yoho SWAG on an annual basis. If you would like to order any products contact Debi at 366-2913 or email rickdebi@nr.sympatico.ca. Look out for lake maps in the works this year.



Visit the Yoho Lake web site at https://yoholake.ca and join the Facebook group if you are not already a member.





YOHO LAKE, NB > PRIVATE GROUP - 360 MEMBERS

Have a Safe and Happy Summer

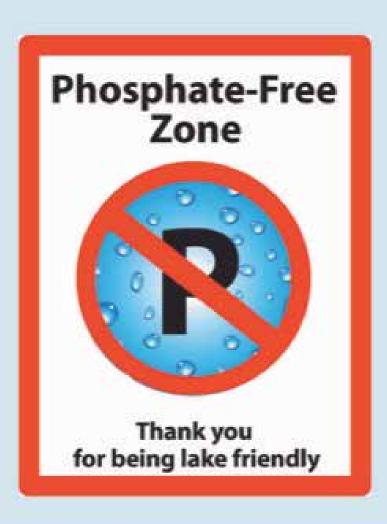
Yoho Lake: New Brunswick's Newest Phosphate-Free Zone

At the YLA's Annual General Meeting in August 2012, we heard strong evidence that phosphates are the main cause of blue-green algae in lakes. The algae can cause major health risks, harm wildlife, and lower property values.

Residents at the meeting agreed to make Yoho a phosphate-free zone. That means we are committed to using only phosphate-free household products around Yoho Lake.

It takes less than a minute to read a label ... to make sure a product is free of phosphates.

This single step will make a huge difference and help to protect Yoho Lake against blue-green algae.



Important Numbers

Police: RCMP
Call 911 for emergen

Call 911 for emergencies only

For inquiries: 357-4300

Fire: Upper Kingsclear Fire Dept. Call 911 for emergencies only For inquiries: 363-5207



Hanwell Rural Community 5 Nature Park Drive Hanwell NB, E3E 0G7 506-460-1177 www.hanwell.nb.ca

- @HanwellRC
- @HanwellRC
- 2 @HanwellNB

Burning Permits: Dept. of Natural Resources Permits & Information: 1-866-458-8080 https://www.gnb.ca/public/fire-feu/dbpmap-e.asp

Wildlife Nuissance: Dept. of Natural Resources

Call: 453-2345

Well & Water: Dept. of Environment & Local Government

Call: 453-2690

Road Inquiries: Dept. of Transportation & Infrastructure

Call: 453-2611

Recycling: FERO

Call: 472-3376

Garbage, large item pick up: BMI

Call: 209-0669

Zoning, Building Permits: Regional Service Commission 11

Call: 453-2956

Power: NB Power

For inquiries and to report outages

Call: 1-800-663-6272

Yoho Lake Fact Sheet

Setbacks:

Boundary of an arterial or collector highway Boundary of any other street or highway Side lot line Rear lot line 15m 7.5m 3m 3m The following material is provided as general information and is not intended to provide specific legal advice.

Be sure to contact the proper authorities and obtain all necessary permits prior to commencing any development project.

Permitted Uses:

Main Uses

- · a single family dwelling
- a park
- a special care home
- a community hall
- a hunting or recreation camp
- a forestry use
- a convenience store (subject to terms and conditions)

Secondary Uses

- a community day care home
- a home based business*
- a garden suite*
- Any accessory building, stucture, or use incidental to the main use of the land, building, or structure

For more information on what development is permitted in the Yoho Lake Zone check out the **Hanwell Rural Plan** at http://hanwell.nb.ca/documents/by-laws/

Replacing a Structure:

The first step in replacing a structure is obtaining a demolition permit from Regional Service Commission 11 (RSC11), located at 860 Prospect Street in Fredericton.

When ready to rebuild, a person may obtain a building permit from RSC11 by filling out the permit application and providing detailed information, such as plans and drawings of the proposed development. If the project is within 30 metres of a wetland or watercourse, further permissions from the Department of Environment and Local Government will be required prior to having the permit approved.

If building occurs shortly after demolition, the two permits can be combined, to save on fees and to allow the property owner to retain any non conforming rights of the property. If demolition and rebuilding do not occur together, two permits with separate fees will be required, and non conforming rights will be lost.

For more information on permits visit the **RSC11** website at

http://www.rsc11.ca/planning

Buildings or structures in place prior to the adoption of the *Hanwell Rural Plan* (March 9, 2016) which are not in compliance with the by-law are considered non-conforming and may continue their use.

However, if the use is discontinued for a period of 10 consecutive months (or a further period as considered fit by the Regional Service Commission), or if the building or structure has been damaged to the extent of at least half of the whole structure (not including the foundation) the use shall not be reccommenced, and further use of the land, building, or structure shall conform to the rural plan.

For more information check out the **Community Planning Act** at

http://laws.gnb.ca/en/ShowTdm/cs/2017-c.19//

^{*}Subject to provisions in the Hanwell Rural Plan and/or terms and conditions

Watercourse and Wetland Alteration (WAWA):

Description

Provisional permits deal with alterations (activities) that pose a potentially low level of environmental risk and can typically be carried out with a standard set of conditions of approval. The process time for a provisional permit can be up to ten (10) days.

Standard permits are intended for projects of a more significant nature and potentially represents a higher risk to the environment. These projects require a more comprehensive review and the establishment of site/project specific conditions of approval. The process time for a standard permit can be up to eight (8) weeks.

Sewage Disposal:

Properties that do not have access to municipal wastewater services require an on-site sewage disposal system, typically a septic tank and a subsurface disposal field.

Property owners who need to install, construct, repair, and/or replace an on-site sewage disposal system must obtain an approval by having a licensed installer submit an application to the Department of Public Safety.

Overview

The purpose of the Watercourse and Wetland Alteration Regulation is to protect provincial streams, rivers, wetlands, and lakes from work or ground disturbance in their vicinity.

Eligibility

Any person intending to do work (construction, demolition, clearing land, landscaping, etc.) within **30 metres** of a watercourse or wetland.

For more information on **WAWA permits** check out http://www2.gnb.ca/content/gnb/en/departments/elg/environment/content/land_waste/content/reference_manual/watercourse and wetlandalteration.html

The design and location of the system and the property's soil conditions are evaluated to determine if sewage can be effectively treated to limit the spread of communicable diseases.

For more information check out the **Septic System Guide** at

http://www2.gnb.ca/content/gnb/en/departments/ jps/public_safety/content/safety_protection/ content/on-site_sewage_disposal.html

Separation distances for sewage disposal systems:

Feature	Septic Tank or Pump Chamber		Disposal Field	
	(m)	(ft)	(m)	(ft)
Drilled well	15	50	23	75
Dug well and/or sandpoint well	30	100	30	100
Bodies of water normal high water mark (not used as designated potable water supply)	30*	100	15	50
Bodies of water normal high water mark (used as designated potable water supply)	90	300	75	250
Building foundation, foundation drain	1.5	5	3	10
Property line or intermittent ditch	3	10	3	10
Limiting factors (e.g. impermeable soil, groundwater table, bedrock)	N/A	N/A	1.2**	4**

^{*}Requires WAWA

^{**} From the invert of pipe or pipe opening

YOHO LAKE ASSOCATION

Roles and Responsibilities with Respect to Complaints

In the spirit of the Constitution and By-Laws (proposed amendments August 2012) for the Association, the activities of the Association are targeted at fostering and promoting the protection of the natural environment of the Yoho Lake watershed.

In undertaking activities it is not the intent of the Association, its Executive or Standing Committee Chairs and its members to regulate and enforce any municipal, provincial or federal legislation that governs activities that may impact the Yoho Lake Watershed.

Based on this the Association, its Executive and members of the various standing committees are available to support members or residents in identifying if possible the appropriate regulatory authority and contact.

Departments having legislative authority relating to water quality, zoning, fish habitat, recreational fisheries and wildlife are:

Provincial Department

Natural Resources Environment and Local Government Health

Federal Department

Fisheries and Oceans Canada

Rural Planning Commission

CONTACT INFORMATION

Natural Resources

Fish and Wildlife Branch Fredericton Phone: 453-3826 Ranger Office Phone: 453-2345

Environment and Local Government

Regional Office Fredericton Phone: 453-2838

Department of Health

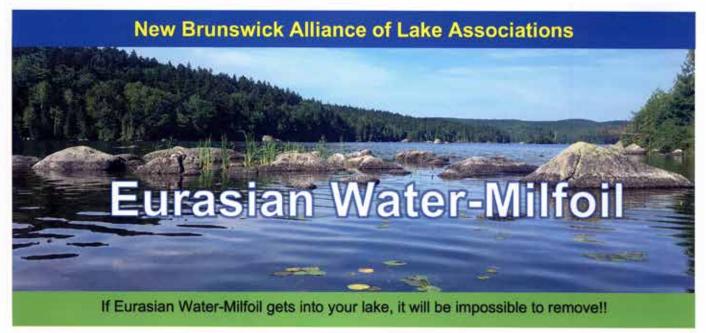
Health Protection Regional Office Fredericton Phone: 453-2830

Fisheries and Oceans Canada

Conservation and Protection Fredericton Phone: 452-3018

Rural Planning District Commission

Phone: (506) 453-2956 Toll Free: 1-866-453-2956



Eurasian water-milfoil (Myriophyllum spicatum) has been discovered in the St. John River system. It has also been seen in Nova Scotia, Ontario, Quebec, and New England waters.

The impact of Eurasian Water-milfoil on a lake can be severe: loss of native plant species through competition; reduced oxygen levels in the water leading to fish death; thick mats of plants hindering recreational activities such as swimming and boating; dense stands leading to water stagnation and increased mosquitoes.

What it looks like

- Feather-like green leaves arranged in whorls of 3 to 6 around the stem (usually 4 leaves)
- Whorls are openly spaced (1 cm or more) on long spaghetti-like stems
- Average of 12 to 24 leaflet pairs per leaf
- Tip of the plant will be reddish in colour; small reddish flowers appear above the water surface in mid-summer

For more information: www.nbala.ca

Supported by the Environmental Trust Fund





What you can do

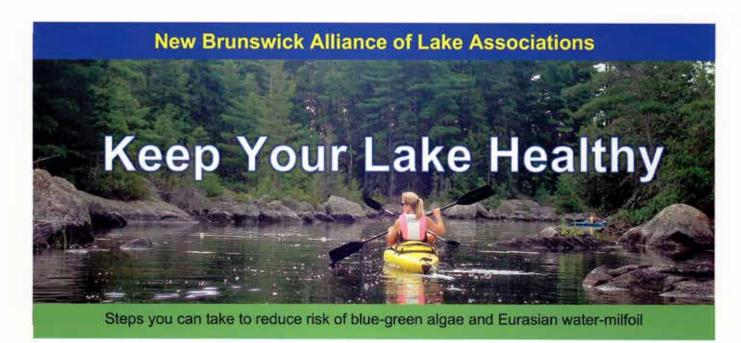
- Every time you move from one body of water to another, aquatic invasive species can travel with you
- Inspect and remove all visible aquatic plants and mud from canoes, kayaks, jet skis, boats, motors and trailers
- Drain all water from your boat bottom including live well, bilge, and motor
- Wash watercraft with high pressure or hot water or let dry for 5 days
- Check, clean and dry personal gear including waders, fishing lines and lures

Water-milfoil spreads when pulled or broken up



Adapted from New Brunswick Department of Natural Resources: Eurasian water-milfoil

(http://www2.gnb.ca/content/gnb/en/department/erd/natural_resources /content/fish/content/milfoil.html)



If blue-green algae, or Eurasian watermilfoil, gets into your lake, the consequences will be dire. Lake health and property values will be instantly affected. **The goal is to limit nutrient load, and to avoid introduction of invasive species**. Here are some steps you can take:

Eliminate Phosphates and Nitrates

- Read the labels on soaps, cleaners, and clothes/dish detergent you use
- Use only environmentally friendly cleaning agents
- Avoid using fertilizers or weeds killers on lawns and gardens
- Avoid using body soap or shampoo in the lake

Keep Your Shorelines Natural

- Stop soil erosion from rain/snow run-off
- Create a buffer zone by planting native shrubs and trees along the shoreline
- · Mulch driveways, paths and gardens
- · Report suspicious-looking plants

For more information: www.nbala.ca



Supported by the Environmental Trust Fund



Pump Out Your Septic Tank Every 2 to 3 Years

- Be sure your septic tank/field meets today's standards
- Avoid bleach products they kill good bacteria
- Avoid commercial septic tank additives
- · Use septic friendly paper products

Be Careful Around Boats and Motors

- Before launching a water craft that has been in other lakes and rivers, prevent the introduction of water-milfoil by inspecting and removing plants/mud, draining all standing water from your boat, pressure washing or scrubbing with hot water, or let dry for 5 days
- · Store gas and oil properly
- Avoid spills; refuel away from the lake
- Keep boats and jet skis away from loons and their nests

Be a Good Neighbour

- Join your lake association
- Volunteer for activities that promote a healthy lake

Adapted from: A Shoreline Guide to Healthy Waterfronts, Federation of Ontario Cottagers' Associations https://docs.wixstatic.com/ugd/eb4e24_7988bd6b45f94f12a86d2c2d726 591e2.pdf

New Brunswick Alliance of Lake Associations Boat Inspection Package



What are invasive species?

The introduction of non-native invasive plant and animal species to North America has been escalating with widespread destructive consequences. The impacts of the spread of invasive plants are well known: habitat disruption, loss of native plant and animal communities, reduced property values, impaired fishing and degraded recreational experiences, and enormous and ongoing control costs.

With over 2500 lakes in New Brunswick, the task of preventing the spread of invasive plant species in New Brunswick freshwater is a serious environmental challenge. Invasive plants are moved about in complex and often unseen ways. The speed which a new invasive species can explode into an ecologically and economically disastrous infestation is well documented. Once an invader is well established, eradication is extremely difficult and costly, if not impossible.

Prevention is the first step to fighting this invasion, but no matter how comprehensive and aggressive the prevention effort is, chances are some invasive organisms will slip through the cracks. In such cases, it is crucial that the invaders are detected as early as possible, before they have had an opportunity to cause significant damage or to spread to other waterbodies. Early detection provides the best hope of eradication.

What is a boat inspection?

Boat inspection consists of visually inspecting all areas of boating and recreational equipment (i.e., boat, trailer, motor, live well, anchor, swim fins, scuba gear, etc.) that come in contact with or hold water; removing all visible plants, animals, and mud; and draining water from all compartments and containers. These practices reduce the risk of movement of all organisms from one body of water to another. The purpose of watercraft inspection is to:

- · Reduce the impact of AIS on native aquatic organisms and ecosystems
- Limit or prevent the spread of AIS by containing infestations to current locations
- Increase boater awareness about ways they can help prevent the spread of AIS

A watercraft inspection program is an outreach tool utilizing paid and/or volunteer stewards to engage and teach boaters how to inspect boats, trailers, and recreational gear for unwanted aquatic hitchhikers, and to properly remove and dispose of those hitchhikers. While voluntary watercraft inspection is common at some launches, regulations overseeing the removal and proper disposal of hitchhiking debris and organisms is increasing across New Brunswick.

Why should we care about invasive species in our waterways?

1. Economic consequences

The federal, provincial, and local costs to manage AIS increase each year as AIS populations continue to grow and spread. Infestations of AIS that limit recreation, clog waterways, prevent boating, and obstruct water pipes may impact the value of public and privatelyowned property.

1. Recreational consequences:

With the ability to grow faster and reproduce more frequently than many native aquatic species, and lacking natural predators, AIS can overwhelm the natural habitats. Aquatic invasive plants can form dense mats of vegetation, making it difficult or impossible to boat, swim, or fish.



2. Environmental and ecological consequences:

AIS can out-compete and displace native species, disrupting food webs and altering native aquatic species population abundance and composition. These ecosystem changes may make once suitable

habitat less favorable for native aquatic animals such as sport fish and macro invertebrates.

Courtesy Boat Inspections:

- Clean off any mud, plants (even small fragments) and animals from boats, trailers and equipment.
- Drain boat, live well, engine and equipment away from the water.
- Dry anything that comes into contact with the water.
- Never leave waters with live fish, or release plants or animals into a body of water unless they came out of that water.

Additional consideration(s):

- Always check trailered boats prior to arriving to the launch to ensure their bilge and live wells are drained (and better, dry!) prior to launching the boat in the water.
- Check jet boats and personal watercraft (PWCs) intake grates.
- Run the engine for 5-10 seconds to blow out excess water and vegetation from internal drive before leaving the water.
- Encourage boaters to dry the boat and equipment between use in different lakes

Aug 2020

YOHO LAKE RESIDENTS

The result of the water sample taken at the Scout Camp last week has been received and confirmed as Blue Green Algae.

Please read the following to inform yourself on process to follow.

The Scout Camp will be posted by the Department of Health to warn swimmers in that area.

Please Read and Keep hopefulls!

Office of the Chief Medical Officer of Health (Public Health)

Blue-Green Algae

https://www2.gnb.ca/content/gnb/en/departments/ocmoh/healthy_environments/content/blue_green_algae.html

"Safety advice includes:

- Always check the water before entering and avoid using the water if algae is present
- Do not swallow lake or river water when swimming, and always supervise young children and pets in recreational waters.
- Bathe or shower immediately after swimming.
- Do not enter the water with open cuts or sores.
- Do not use water from areas with blue-green algae blooms for drinking or cooking. Boiling the water will not remove toxins. Always obtain drinking water from a clean and safe source.
- Fish caught from water where algae are present should have all their organs removed and be rinsed well with clean drinking water before being cooked and eaten.
- Even if no algae are present, it is recommended you shower with clean water after being in recreational waters."

Blue Green Algae Q&A

https://www2.gnb.ca/content/dam/gnb/Departments/h-s/pdf/en/HealthyEnvironments/water/BlueGreenAlgaeQA.pdf



Blue-green algae in New Brunswick lakes and rivers: Questions and Answers

What are blue-green algae (cyanobacteria)?

- Cyanobacteria are bacteria that are similar in size to common algae and get their energy from the sun (through photosynthesis). They are commonly called blue-green algae because of these similarities as well as the fact they can appear blue-green in colour.
- They are a natural part of our environment and water ecosystems, and can be found in many ponds, lakes, rivers and wetlands in New Brunswick. They are not normally visible, but under certain conditions (warm, slow moving, shallow water and lots of sunlight) and when there is lots of food (nutrients such as phosphorus and nitrogen), they can clump together to form a "bloom."
- Some types of blue-green algae are capable of producing toxins, called cyanobacterial toxins.

What is a blue-green algal bloom?

- When there is lots of food (nutrients such as phosphorus and nitrogen) in the water, bluegreen algae can grow very quickly and clump together to form a bloom.
- A bloom will look like surface scum, foam or mat and often be blue-green in colour. Blooms can also look red, brown, green, or yellow in colour.
- Some blooms look like paint streaks on the water, while others may not affect the look of the water. Fresh blooms can smell like newly mown grass; older blooms can have a foul smell, sometimes like garbage.
- Blooms usually occur when it begins to get hot outside, typically in the late spring and early summer.
- Blue-green algal blooms can appear quickly or overnight. On windy days algae blooms may accumulate near the shore.
- Blooms can also be suspended at different depths in the water. This can make them more
 difficult to see. They can float up and down in the water and move to where there is more food
 (nutrients) and light. So even if a bloom is not floating on the surface of the water, it doesn't
 mean that one isn't present.
- While not all blue-green algae blooms are harmful to human health, some can produce toxins.
 The most commonly found toxin in North America is microcystin, which can cause skin, eye and throat irritation and more severe illness if consumed.
- For examples of algae blooms, please visit the cyanobacteria section of the New Brunswick Department of Environment's abbreviated identification guide to New Brunswick's aquatic curiosities:
 - https://www2.gnb.ca/content/gnb/en/departments/elg/environment/content/water/content/lakes/whats_that.html

Where do I report blue-green algae blooms?

- The Department of Health and the Department of Environment and Local Government are working together to evaluate reported or suspected blooms, and post advisories when necessary.
- If a bloom is observed, or suspected, please report it to the Department of Environment and Local Government regional office.
- For more information on how to report a bloom please visit this link: https://www2.gnb.ca/content/gnb/en/departments/elg/environment/content/water/content/algae/how.html

Is it safe for me to swim or boat in water containing blue-green algae?

- The Department of Health encourages the public to be active and enjoy the outdoors, but to be aware that algal blooms can appear in different locations and do not always look the same.
 It is recommended to always check the water before entering.
- While not all blue-green algae blooms are harmful to human health, some can produce toxins.
- If a bloom is present, as a precaution, you should avoid swimming or engaging in other
 activities (e.g., water-skiing, canoeing, paddle boarding, etc) that may involve contact with the
 water.
- When enjoying any recreational water, there are always things you can do to protect yourself:
 - Always supervise young children and pets. They may be more at risk of becoming ill.
 - Do not swallow lake or river water.
 - Bathe or shower shortly after swimming.
 - Do not enter the water with open cuts or sores.
 - Always wash your hands before eating.
- Toxins can sometimes remain in the water for several weeks after the bloom is no longer visible. As a precaution, it is recommended that recreational water use be avoided in areas where blue-green algae blooms have been seen or are suspected.

Can I drink or cook using water with blue-green algae in it?

- No. Always obtain drinking water from a clean and safe source. Residential water treatment systems may not remove blue-green algae toxins from your drinking water.
- Do not cook with or drink water that was obtained from areas with blue-green algal blooms.
 You cannot determine if the water is harmful by its taste, odour or appearance, so it should be assumed that toxins are present.
- Boiling water does not remove toxins from the water.
- If you are connected to a municipal water supply system, you can continue to use the water as normal unless notified otherwise by the system owner/ operator.
- If you have your own groundwater well supply, you can continue to drink the water as normal.

Can I use water containing blue-green algal toxins for washing?

- If a safe source of water is available, don't use water containing blue-green algae for washing clothes or dishes.
- If an alternative safe source of water is not available, use rubber gloves to avoid direct contact with the water.
- Bathing or showering in water containing blue-green algae should be avoided, as skin contact
 with the toxins can lead to skin irritation and rashes.

Can I eat fish from water containing blue-green algal toxins?

- Toxins can accumulate in the tissues of fish, particularly in the internal organs (liver, kidney, etc.). Levels in the tissues depend upon the severity of the bloom in the area where the fish are caught or collected.
- The internal organs of fish should be removed and disposed of. Fish should be rinsed well
 with clean drinking water before being cooked and eaten.

What are benthic algal mats?

- Benthic algae are a natural and essential part of our freshwater ecosystem.
- Benthic algae grow on the bottom of rivers and lakes where they can form large mats. These
 mats can grow quickly when the water is warm, there are stable flows and lots of food
 (nutrients).
- The algae mats look like clumps of vegetation, and can appear black, brown or dark green in the water.
- · On the shoreline they may appear brown or grey once they have dried.
- The mats can contain a mixture of algae and cyanobacteria (blue-green algae).

What is the concern with benthic algal mats?

- Since blue-green algae can be present in algal mats, it is possible that toxins may be present.
- The algal mats can break away from the bottom of a lake or river and wash up along the shoreline, making them accessible to pets and children. They can also be attached to rocks or aquatic plants or may be found floating in the water or along the surface.
- Children should not play with, and pets should be kept away from, algal mats or plants that
 are found floating near the shore or that may have washed up along the shoreline.
- Dogs can be attracted to the odour of algae mats and may want to eat them. Dogs should not
 eat vegetation or floating mats found along the shores of lakes or rivers.

Is it safe to let my dog swim in the water?

- Dogs should not swim in water if a bloom is present.
- Dogs should not eat algae mats or vegetation found near, or along, the shore of lakes or rivers because the mats or plants may contain toxins that can be fatal if eaten.
- Dogs are attracted to the odour of these algae and may want to eat them.
- The algae mats look like clumps of vegetation, and can appear black, brown or dark green in the water. They can also be attached to rocks or aquatic plants or may be floating in the water or along the surface. On the shoreline they may appear brown or grey once they have dried.

What are possible health effects from water containing blue-green algae toxins?

- If you swim in water containing blue-green algae toxins, your eyes and skin may get itchy and
 irritated. You may also get other hay fever-like allergy symptoms. Skin contact with blue-green
 algae toxins may cause result in hives, rashes, blisters, etc.
- If water containing blue-green algae toxins is swallowed or inhaled while swimming, or enjoying other recreational activities (water-skiing, canoeing paddle boarding, etc.), you may experience:
 - headaches:
 - fever:
 - sore throat;
 - dizziness;
 - stomach cramps;

- nausea;
- o diarrhea and
- vomiting.
- Symptoms can last for several days.
- Children and immuno-compromised individuals are at a higher risk for the more severe
 effects.

What should I do if I contact water that contains blue-green algal toxins?

- If you have swam in or contacted water containing blue-green algal toxins, as a precaution, you should remove any affected clothing and shower with clean water as soon as possible.
- Persons experiencing symptoms or health effects should seek medical advice.

How harmful are blue-green algal toxins?

- Very few incidents of human poisoning have been reported. People don't usually drink water containing blue-green algae because of the scum and smell; however, water containing bluegreen algae could accidentally be swallowed during recreational activities (e.g., swimming).
- Extended exposure to low levels of toxins can potentially have long-term or chronic effects in humans.
- Children are at greater risk than adults of developing serious liver damage should they ingest high levels of toxins, mostly because of their comparatively lower body weight.

Why are Public Health Advisories issued for blue-green algae blooms in recreational waters?

- Since some blue-green algae species can produce toxins that are harmful to humans, bluegreen algae blooms are considered a public health concern and advisories are issued.
- Advisories are issued to notify local recreational water users of the potential for blue-green algae blooms. This is so they are aware of the potential risk and to make informed decisions on water use in the affected area.
- Since water conditions can change, advisories also are a good reminder to check the water for algae blooms and scum (which pose the most risk) before entering.

How long will an Advisory remain in effect?

- Once an advisory has been posted, it will remain in effect for the rest of the recreational water season. Sampling will not be undertaken to rescind an advisory before the end of the recreational water season due to the unpredictability of blue-green algae blooms.
- Water bodies that have an established history of blue-green algae blooms will have an
 advisory posted at the start of the recreational water season (late spring/early summer).

Is there blue-green algae research taking place in New Brunswick?

- The Government of New Brunswick (GNB) supports various blue-green algae (cyanobacteria)
 research projects through the Environmental Trust Fund. These research projects are taking
 place within the Saint John River as well as in lakes across the province. The projects will help
 us to better understand the distribution of blue-green algae and their toxins in our recreational
 waters.
- These research projects use various methods or tools to assess whether cyanobacteria and/or their toxins are present in the water. These methods/ tools include:
 - Identification of cyanobacteria and counting of cyanobacteria cells using microscopes.
 - Testing the water for toxins, such as microcystins.

 Testing the water for the presence of cyanobacteria genes responsible for producing the certain cyanobacteria toxins. The presence of the gene (a unit of DNA) responsible for producing toxins may or may not mean that that toxins are present.

What are other effects of algae blooms?

- Excessive levels of blue-green algae toxins can be extremely harmful to fish and wildlife. As
 algae die, they decompose using up the dissolved oxygen in the lake. This reduces the
 amount of dissolved oxygen available to fish and other aquatic life.
- Even seemingly benign algae blooms can impair the visual enjoyment of a lake, cause
 unpleasant odors, and may interfere with the safe use of the lake for diving and swimming by
 obscuring potential dangers that may lie beneath the water's surface.
- Blooms may also foul water supply intakes or render the water not suitable for uses by cottagers, industry, municipalities or others.

What can I do?

- Although nutrients are naturally occurring in a lake and are needed for plant and animal life, too much phosphorus and nitrogen can cause problems by offsetting the natural balance of the lake.
- These problems arise or are compounded when storm water, agricultural runoff, industrial and wastewater effluent, faulty septic systems and lawn fertilizers find their way into the lake.
- We can all play a key role in the prevention of algae blooms in lakes through helping to keep excess nutrients from entering the water. This can be done by:
 - Not removing shoreline vegetation and promoting the growth of natural plant species;
 - Not using fertilizers or herbicides, especially near water;
 - Ensuring your septic tank and field are well maintained and located far from the shore; and
 - Using only phosphate-free household and personal cleaning products.

SHORELINE EDITION

OVER HER 24 years on

Christina Lake, in the Boundary Region of B.C., Brenda LaCroix has seen a growing footprint on the beautiful waterbody-"bigger buildings, boats, and lawns," all culminating in a bigger impact on the natural, vibrant shoreline. But as stewardship manager for the lake, she is a cheerleader for better change. A healthy shore "not only benefits myriad wildlife," she says, "but us as well-through erosion control, water quality, species diversity, and the intrinsic feeling you get from living a lifestyle on a lake the way it is supposed to be. Most people know this, but need some reminding from time to time."

For cottagers who need reminding, and those who may need convincing, here are nine dos and don'ts for keeping a thriving shoreline or restoring one to health. When you allow it to function as nature intended, you'll be pleasantly surprised by what it gives you in return.

Do Less Work

If you're lucky enough to have a natural shore, unaltered by manicuring, clear-cutting, or concrete barriers, love it and leave it alone. Instead of using your precious cottage time to "tidy up" the water's edge, you can loll in the hammock, enjoying the blessings that come from being hands off. That strip of native plants, shrubs, and trees with their extensive root systems forms a "green wall" of protection for cottage properties, says Dan Kraus, a conservation biologist for the Nature Conservancy of Canada. "It buffers erosive forces coming from the lake, such as waves and boat wakes, and prevents runoff from carrying nutrients and sediments into the water."

A healthy shore is not only a friend to cottagers, but countless wild species, adds Heather Murphy, the manager of the Love Your Lake program, a partnership between Watersheds Canada and the Canadian Wildlife Federation. Up

to 90 per cent of all lake and river life is born, raised, and fed within the shallows and first 10 to 15 metres of shore. "All of that space is critical for wildlife to thrive." It's home for painted turtles and bullfrogs, a frequent haunt for waterloving mammals, such as mink, a nursery for young pike and bass, and a foraging haven for mallards and goldeneye.

For cottager Sherry Cox, also on Christina Lake, watching creatures amid so much natural beauty is the payoff for having a pristine shore. Her thicket of thimbleberry, ferns, and cottonwoods "takes no maintenance, just a little pruning. We let it be what it wants to be."

Do Learn to Value What's There

"I've seen people dig up what they think are weeds along their shore, then go to the local nursery to buy the same wildflowers they got rid of," says Rick Keevil, a geologist and shoreline rehabilitator on Lake Vernon in Muskoka, Ont., where he also cottages. He uses a variety of native plantings in his work, from willow to Labrador tea, species you can learn to identify by getting help from your lake association's environmental committee or a local naturalist. Kraus recommends iNaturalist, an app that can take a picture of a plant or animal and then help you ID it. Simply putting a name to a "weed" can change perceptions. Sweet gale, for instance, a common shore shrub, smells wonderful and repels biting insects-what's not to like? "We seem to prefer plants and trees once we know their unique stories," says Kraus. "They give your cottage country its identity."

Do Minimize Your Mowing

Okay, we know lawns can be a touchy topic with both fans and foes of cottage turf. As the president of the Eagle Lake Conservation Association, in North Bay, Ont., Michael Mitchell isn't thrilled that "the lake's biggest problem is the lack of natural vegetation," thanks to manicured lawns running right to the shore. While clean-looking (to some) and great for sports, close-cropped, shallow-rooted grass is essentially ornamental and a hard surface that gives contaminants such as fertilizers and pesticides an easy ride into the water. >>



A lush buffer zone is a welcome mat for wildlife



Happily, there is a compromise for those who want to keep some lawn and reduce runoff: create a "no-mow zone" at the shore, says Watersheds Canada's Heather Murphy, which "allows grass to get a little taller and native seeds to take root." Your NMZ can be as big or as small as you like, although the farther back it extends from the shore, the more effective its absorbency (it can include a path to access the water). As part of a substantial restoration of his eroded waterfront on Wabamun Lake, Alta., Kelly Aldridge stopped mowing six to eight metres of his large lawn, which he'd had for years, unaware of its impact. After he joined his local stewardship group, however, he discovered "what I was doing was no good for the lake's health."

When persuading cottagers to shrink or to give up their barbered lawns, Meaghan McDonald, the lake-planning-shoreline stewardship coordinator for the Rideau Valley Conservation Authority, in Manotick, Ont., says those lawns are no match for climate change. "A natural shoreline withstands flooding and large rain events. You can have that lawn, but it will come at a cost to your property."

Do Recreate a "Living" Shore

Perhaps you have a cottage that came with an altered shoreline, or maybe, like Kelly Aldridge, you did the altering without realizing the repercussions. In many cases, all you have to do is stop clearing vegetation and removing deadfall from the shallows for a shoreline to slowly repair itself. But you can lend a hand by planting a buffer of native species from water's edge to drier land. Through the North Bay-Mattawa Conservation Authority's Restore Your Shore program, which provides a site assessment, plans. plants, and planting crews for free, Paul Girard of Wasi Lake, Ont., reinforced his shoreline with bush honeysuckle, red oak, wild rose, and others. "It's nice-looking and complementary to the cottage," he says, "and it's future insurance for the lake." Other CAs in Ontario offer similar

planting programs, with cottagers paying 25 per cent of the overall cost, as does Watersheds Canada, which covers Ontario, Saskatchewan, and Alberta. And there are more like-minded partnerships across the country, between lake associations, government agencies, and environmental organizations.

For cottagers on marine coasts, confronted with oceanic erosive forces, there are no easy answers. The best is a natural shoreline left totally alone to do its buffering work, says Brian Emmett, a Victoria marine biologist and a co-founder of Green Shores, a shoreline protection program initiated by the Stewardship Centre for B.C. Where vegetation and beaches have been removed, the next best remedy to defend against erosion is "beach enhancement," he explains. Often requiring the aid of professionals, the idea is to cut back into the upland to make a longer, more gradual slope, built up with native plants, gravel, and sand, so waves have farther to travel to dissipate energy.

On tiny Killenbeck Lake, Ont., big waves and wind aren't an issue. However, Mike Jackson wasn't happy with the grass he inherited on his waterfront, so he enlisted the aid of Watersheds Canada, whose restoration plan included a wide path to the lake and a 12-metredeep buffer of 140 native plants. "It has been fantastic," he says. "We've seen a significant increase in small mammals. frogs, and snakes, and more beneficial aquatic plants such as waterlilies. And this year, there was lots of flooding, but while our neighbours saw noticeable erosion, our shoreline wasn't impacted." He urges others to convert. "You can easily work hand in hand with nature."

Don't Harden Your Shoreline

"In the past, retaining walls were sought to combat erosion," says Heather Murphy. "Cottagers thought, It's tough, it's going to hold my shoreline together. But over the years we've definitely found out these hardened structures do more damage than good." They actually cause waves to reflect back with greater energy, undercutting the structure and sometimes collapsing it, explains Dan Kraus. "You end up with exposed shoreline and more erosion." Kraus is slowly

dismantling, log by log, the retaining wall put in by previous owners of his family cottage outside Algonquin Park, Ont. His plan is to let native growth like sweet gale, red maple, and alder come back on its own as a vegetative buffer. "Some family members worry the exposure will lead to erosion, but I just point to the adjacent shorelines that haven't been altered and you'll see they aren't receding."

Like their counterparts on lakes, seawalls can make matters worse, says marine biologist Brian Emmett. "They might protect the upland, but there's a huge amount of erosion at the toe of the wall. A big wave sucks away sediment at the base, and suddenly you don't have beach below that structure, and the habitat is gone." He stresses to coastal cottagers that these sterile barriers between land and water disrupt the natural food chain of terrestrial insects feeding young chinook, which then feed orca whales. As he says, "Hard shores are dead shores."

Don't Add to Your Lake's Nutrient Load

You're forgiven if you think "nutrient" sounds like a good thing. In fact, these naturally occurring elements, like phosphorus, do nourish plant growth. It's when we add man-made ones to the environment, by using phosphorus-laden fertilizers, for example, the overabundance wends its way into the lake, fostering suffocating algal blooms that steal oxygen from other aquatic life and degrade water quality. More worrisome is blue-green algae, actually a toxic bacteria, which is grim proof of "significantly higher phosphorus levels, much of it due to fertilizer," says Michael Mitchell, the association president of Eagle Lake, which identified its first-ever case last year. He's talking with the local council about making a bylaw to prohibit fertilizer use within a set distance of shore. Not using it at all, or any products containing phosphorus, is even better.

Faulty septic systems are another nasty nutrient loader, as waste water is rich in phosphorus and nitrogen. Be preventive by pumping out yours every two to five years and having periodic inspections, advises Meaghan McDonald. And watch out for warning signs. "Really wet or green grass around weeping fields indicates excess nutrients," she says. "Your septic might be overloaded or you might have a running toilet."

Don't Sacrifice Your Trees for Sightlines

The green giants on the upper slope of your cottage shoreline aren't there to muck up your view. They are the heavy lifters when it comes to absorbing runoff, taking water from the ground and transpiring it through their leaves into the air. "A mature oak tree can transpire 150,000 litres of water in the growing season," says Brian Emmett. Their overhanging vegetation provides shade and a steady supply of dead insects and other organic "fall" for young fish sheltering in the shallows, he adds.

If you let your birches and aspens play their role, you can still see the lake by giving them what is sometimes called a "vista prune." "I just trim the lower branches and leave the higher ones," says cottager Kelly Aldridge. "You don't have to wreck trees for a view."

Don't Wage War on Water Weeds

You hate them, we get it. Clogging up your prop or snaking around your ankles when you swim, water weeds seem to have no purpose but to drive you crazy. Would it help to know they are erosionfighters, capturing and controlling wave energy that would otherwise hit the shore? Plus, they oxygenate the water and improve its clarity by impeding waves and wind that stir up sediment, says Dan Taillon, an aquatic biologist with the Ministry of Natural Resources and Forestry (MNRF) in Peterborough, Ont. And for aquatic wildlife, the vegetation is a vital underwater sanctuary.

So can we make peace with water weeds? "It's about finding the right balance," says Taillon. "You can clear an area for swimming and keep an area for water weeds so everybody benefits." Regulating bodies for aquatic plant removal vary from province to province {Continued on page 102} and may

To keep erosion at bay, limit wakes and let native plants thrive



HOW TO GET THE GANG ON BOARD

It's not easy to shift some people's preferences for tidy landscapes to tangled buffers of vegetation, but let them know natural shorelines will mean they:

Enjoy more play time. Clearing shoreline growth and mowing a large lawn is work. Why slave when you're there to escape?

Scoop less poop. Canada geese love the easy access short grass gives them to land. With enough vegetation along the shore, you can fend off the birds and their mess.

Prevent frontage loss. A turfed shoreline, unprotected by shrubs and trees, is wide open to erosive battering by wind and waves.

Entertain the kids. A natural shore teeming with tadpoles, minnows, frogs, and ducklings Save hard-earned cash. A "living" shore costs less than one hardened by a retaining wall because you won't



