



Range Ponds Reporter

Summer 2023



Range Ponds Association Annual Meeting ALWAYS the LAST SUNDAY in JULY!

July 30, 2023

Poland Town Hall, 9AM, plenty of parking!

PRESIDENT'S LETTER

On behalf of the RPA board of directors, I would like to thank our current membership. For those who are not members please consider joining and volunteering.

At the annual meeting this year, Sunday July 30, 9-11 AM, we will be discussing and voting on whether we want to do a "Watershed Survey" in 2024. This newsletter contains information on what a Watershed Survey is, its benefits, what has been done in the past. Please take the time to read the article from Emma Lorusso, Project Director Androscoggin Valley Soil & Water Conservation District.

We anticipate that you will have questions, so to start it would be easier if we had the questions before the meeting. This will give us time to research answers.

Send questions to our email:
OurRangePonds@gmail.com.

Bill Williams, President

RANGE PONDS' NEED FOR UPDATED WATERSHED SURVEY

By Emma Lorusso, Project Director, Androscoggin Valley Soil & Water Conservation District

I'm sure we all have a little bit of fear and concern in relation to the algal bloom that happened across Middle Range last year. Algae blooms create unsatisfactory lake conditions both for creatures and critters that use the pond, including people and pets. Algae blooms create unsightly views, bad smells, kill fish and other aquatic organisms, are unsafe to swim in or drink from, and also lower overall property values. These are just a FEW reasons why conducting a watershed survey every 10 years is important!

ALGAE BLOOMS

First things first...what is algae? Algae is a naturally occurring organism that photosynthesizes. They are

simpler than plants as they lack true roots, leaves and stem structures. Algae produces oxygen and is food for microorganisms—which we like! In natural systems, phosphorus is the limiting nutrient that regulates algae production—but when too much phosphorus ends up in the lake this can stimulate their reproduction and can be detrimental to the health of the lake.

If algae are continually fed through stormwater runoff pollution this can cause continual cycles of algal blooms throughout the year. Once there is enough phosphorus in the pond and the algae is very established it can create a cycle of internal recycling. What this means is after the algae blooms it will die and sink to the bottom of the lake. It will start to rot and will remove more oxygen from the water, creating an anerobic environment. Oxygen at the bottom of the lake binds with phosphorus and when the decomposition of the algae removes the oxygen, this will result in the release of more phosphorus—because it cannot bind with the oxygen anymore. So even if no other external Phosphorus (soil erosion/stormwater runoff) enters the lake, the lake will still have continual algal blooms. If these cycles persist, pond associations often try to chemically treat the water with Alum—an expensive and not always successful treatment.

Algae blooms are dangerous. It is not safe to swim in, drink water from, eat fish from, and sometimes even breathe air from a lake with an active bloom on it. Algae blooms also rob all of the oxygen from the water, which kills aquatic organisms that live in the water, as well as making it unsafe for other animals that visit the lake, including pets. In addition to the negative impacts to recreation and the ecosystem, continual algae blooms also affect property value. Shorefront properties can drop 10-30% in value compared to a lake that doesn't struggle with algae blooms. Managing algae blooms BEFORE they become a problem is the most important thing you can do for yourself, your kids and pets, your community, the entire Maine ecosystem, and your wallet!

BIGGEST INPUTS OF PHOSPHORUS – SOIL = EROSION

Stormwater runoff is the water that travels over impervious surfaces (like roads, driveways, roofs, etc). This water picks up pollutants along the way and ends up in our rivers and streams and then eventually in the pond. Believe it or not, the biggest pollutant in Maine is soil. Phosphorus occurs naturally in soil and soil also binds with excess nutrients from fertilizers, pesticides, pet waste, and septic systems. Soil is carried easily by water, making it an easy way for excess phosphorus to get into the pond. Any soil erosion that you can see within the Middle Range watershed is likely ending up in the pond one way or another. Often erosion that occurs on a property only looks like a small amount over a year, but collectively it ends up amounting to an entire dump truck of sediment, soil and other excess nutrients added to our ponds yearly. That's a whole lot! Sometimes these excess nutrients can cause blooms, but more often it results in small changes in water quality that, over time, damage the ecology, aesthetics, and economy of the ponds; this has been the current trend on Middle Range, which has resulted in the algae bloom we noticed last August. Either way we want to stop it before it becomes a problem! This is why we recommend watershed surveys every 8-10 years.

WHAT IS A WATERSHED SURVEY?

A watershed is all the land that surrounds a pond that drains its water into the pond through streams, ditches, directly over the ground surface or through groundwater. It includes everything within its borders—the land, air, plants, animals, towns, farms and people. Activities in this entire area (not just the shoreline areas) eventually impact the lake's water quality, for better or worse.

A watershed survey is conducted over 1-3 days, where teams of technical leaders and local volunteers will walk or drive the entire watershed in search of obvious erosion problems. Landowners will receive postcards informing them of the survey, with an option to request to not have their property surveyed. But we encourage all landowners to participate in the survey—so we gather the most information to keep Middle Range healthy! The watershed survey is conducted to identify sources of polluted runoff and soil erosion within the Middle Range watershed. After the survey is complete the Pond Association will apply for additional federal funding (319 Grants under the Clean Water Act). These federal grant funds will be used to fix the most extreme problems, landowners with identified erosion sites on their property may also be eligible to receive some of these funds to help to mitigate the erosion problems found.

The purpose of a survey is NOT to point fingers at landowners with problem spots, nor is it to seek enforcement action against landowners not in

compliance with ordinances. The survey is just used to collect INFORMATION about the health of the pond(s) and identify potential problem areas.

Recommendations are made to landowners who may volunteer to fix erosion problems on their properties but will not be forced or required to do anything following the survey.

RANGE PONDS PAST + PRESENT

Volunteers have tested water quality on the Range Ponds for more than 30 years. According to this data, the three ponds' water quality is generally considered to be above average, although "there have been indicators that the lake is sensitive and susceptible to enrichment from its watershed." (Scott Williams)

Last year Middle Range Pond dipped significantly in clarity in late August and experienced a mild algal bloom of what Scott Williams believes to be *Microcystis*; a Cyanobacteria that can be associated with algal toxins, which is not something that we want to get any worse in the future.

These three ponds provide the area with top fishing spots, recreation, tourism, beauty and more. We want to continue to enjoy the many benefits of Upper, Middle, and Lower Range Ponds and we need your help to do it.

The Range Pond system is special because they each have their own pond and respective watersheds as its own entity AND they are all affected by each other. All three ponds are listed as threatened by non-point source pollution (mainly stormwater runoff) under the DEP guidelines, this makes them eligible to receive the 319 funding mentioned above.

"In 1993 the Androscoggin Valley Soil and Water Conservation District (AVSWCD) and Range Pond Environmental Association conducted a cursory survey of the entire Range Ponds Watershed. This survey was followed by the Range Ponds Watershed Project from 1995 through 1998. This 319 grant project fixed erosion problems on 7 state and town roads, 2 camp roads, and 6 residential sites. Workshops, technical assistance, and teacher trainings also helped raise awareness and stewardship. The next survey was completed in 2004 and focused only on Middle Range Pond, due to heavy development pressures and significant remaining problems." (MDEP "Nonpoint Source Management Program 2005 Annual Report,")

This time around the Pond Association must decide if they want to focus on the entire Range Ponds system, or just Middle Range. Surveying all three ponds will be more work (and more money) but will give us the whole picture of the problems that all three ponds face. But with most of the development, impact, and recreational activity happening on Middle Range, perhaps its better to focus all that energy (and subsequent funding) towards eliminating the erosion around Middle Range to avoid another algae bloom in the future. I would

encourage local community members to ponder what are the problem areas that they already know on Middle and Upper Range (starting with roads). Weigh those problems against a larger survey and less money spread across Middle Range.

The Androscoggin Valley Soil & Water Conservation District is available for assistance on this project in the future. We have been in conversation with board members of the pond association since last year, and recognize the concern that all shorefront property owners have, as well as the entire Poland/Lakes Region community have over another algae bloom. We hope to collaborate with you next year to coordinate a watershed survey and make sure that the quality and health of the Range ponds are preserved for all who enjoy these beautiful ponds.

TRANSIENT OVERNIGHT BOAT MOORINGS ON THE RANGE PONDS

The Range Ponds Association Board has received inquiries about transient overnight boat moorings on the Range Ponds. These have been most prevalent on Middle Range Pond, where over the past few years several boats, apparently not associated with any lakefront lot, have moored overnight on the lake, some for the entire summer season. Across Maine, problems have been noted with such overnight moorings, most notably adverse environmental impact including discharge of waste into the lake. A number of Maine towns have an ordinance restricting transient overnight moorings and more are considering it.

In response to the inquiries it has received, the RPA Board reached out to the Town of Poland to learn more about the process for a local ordinance restricting transient overnight moorings. Town Manager Matthew Garside provided the following information.

The process for citizens to propose a new town ordinance is governed by Article IX of the Poland Town Charter. It requires a significant expenditure of time and money, shepherded by a Petitioners' Committee of five registered voters, including drafting the proposed ordinance, paying for the town attorney to review it, and detailed public petition and hearing procedures.

The full text of the relevant Charter provisions, at Articles 9.2.1-9.2.6, is available for review at https://www.polandtownoffice.org/sites/g/files/vyhlf4886/f/uploads/adopted_charter_11.08.2022.pdf.

The Town Manager also raised the following specific issues to consider:

- To ensure any proposed ordinance is consistent with State law;

- Whether such an ordinance would apply to all town lakes and ponds (and by implication involve representatives of those other lakes and ponds);
- How the ordinance would define permissible moorings, and whether those would be limited to existing lakefront lots or also include rights of way;
- The number of moorings permitted under the ordinance; and
- Who would enforce the ordinance and the impact that would have on the town budget and resources.

The RPA Board will welcome comments and discussion about this issue at the annual meeting of the Range Ponds Association on July 30.

BUILD BETTER BUFFERS

An Excerpt from The Lake Book: A Handbook for Lake Protection - Read More At www.lakes.me

A SHORELINE BUFFER ideally starts at the water's edge and extends 75' or more into the uplands. The best shoreline buffers are deep, wide, and continuous (with only a narrow path or other small break). They have many layers of vegetation, including tall trees (canopy), shorter trees (midstory), shrubs, perennials, and groundcover. A layer of duff (twigs, fallen leaves, and pine needles) accumulates on the ground in a buffer. Vegetation in a buffer intercepts raindrops so less rain reaches the ground. The uneven duff layer absorbs rain, and loose soils filter out pollutants. Tree roots help anchor soil in place and absorb water and nutrients. Buffers act like a sponge, soaking up rainfall, absorbing nutrients and runoff, and reducing the flow of stormwater into the lake. But that's not all they do! They also provide habitat for insects, birds, small mammals, and believe it or not, even fish! Overhanging branches provide cover for fish that need safe, cool places to hide. Dropped leaves provide food for bugs and dropped limbs provide habitat structure. Ideally, shoreline buffers are composed of native vegetation, which is easier to maintain and better for wildlife.

It can be tempting to "limb up" trees in the buffer to increase lake views. Although you can trim the lower 1/3 of branches and removedead limbs, consider removing less. Remember, each branch left on the tree enhances the integrity of the buffer and provides more habitat value for wildlife. Let the trees frame your view! Buffers are the last line of defense for a lake against NPS pollution and runoff coming from your property! You can make your buffer bigger and better by adding plants to fill in thin spots, a few at a time. In fact, you can plant up to 24 plants along the shore each year without a permit from the Maine Department of Environmental Protection.

Let leaf litter accumulate in the buffer, and limit the use of fertilizers, pesticides, and herbicides on your property. Note that pesticides and fertilizers are not allowed within 25' of shore. With a healthy buffer, you are helping to ensure your view is of a clean, healthy, blue lake!



RAIN BARRELS

capture rainwater from the roof by redirecting the downspout into the barrel. Save this water to use another day, while also reducing stormwater runoff.



A **RAIN GARDEN** is a depression in the ground planted with water-loving native perennials and shrubs. Water from a downspout or other source flows into the rain garden, where it slowly soaks into the ground. Rain gardens are beneficial for the lake, for wildlife, and for pollinators.

HARDY PLANTS FOR THE LAKESHORE

There are many resources available to find native species for your shoreline buffer (see page 11 for more information). On this and the following page are a few popular options to consider. For more information, visit www.lakes.me/protect for a full planting guide and additional plants to consider, such as the ones below.



Summersweet

Clethra alnifolia

Full to Partial

Sun

Moderate to

Wet Soil

Highbush Blueberry

Vaccinium corymbosum

Sun to Shade

Wet to Dry Soil

Wildlife

Friendly



Visit www.lakes.me for more information on being Lake Smart!



**cut here ** cut here ** cut here ** cut here ** cut here **			
The RPA no longer uses envelopes for your contributions/dues to keep our mailing costs low.			
We prefer to use the funds for lake expenses.			
We hope you choose to contribute using this form or online using paypal or our website.			
Name:			
Mailing Address:			
Summer Address:			
Email:			
Your dues support the continuation of RPA's efforts to protect the water quality of our Range Ponds.			
Please make your check payable to RPA.			
Thank you.			
Lake Friend \$35	Lake Lover \$50	Lake Patron \$75	Lake Protector \$125
Please join or renew your membership today!			
Be a friend! Tell a friend!			
We are a 501(c)3 Non-Profit Organization!			
RPA, PO Box 451, Poland Spring, ME 04274			

2022/2023 Friends of the Lakes - Contributors

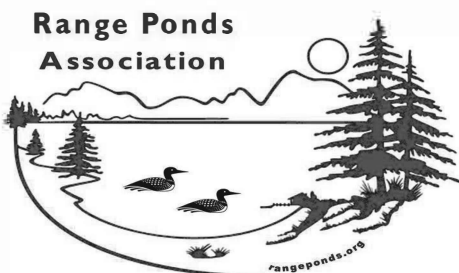
Thank you for your generous contributions to keep the RPA working for YOUR lakes. We cannot do this without your support.

Lake Protector \$125+	Lake Patron \$75 - \$124	Lake Lover \$50 - \$74	Lake Friend \$35 - \$49
Anderson, Julia	Arsenault, Daniel *	Almy, Bill & Jeanette	Akin, Carl / Rachel
Aromando, John / Brandt, Cheryl	Clegg, Frederick & Moira	Anderson, Matt	Anderson, Dorothy & Clifford
Audesse, David / Erickson, Patricia	Cyr, Claudette	Bazinet, Gary	Bailey, Greta
Becker, Hope & Kurt	Fifield, Jeanne / Rick	Bsullak, George	Darling, Gail
Dwyer, Shannon/ Rob	Kutzen, Barry	Cappucci, Michael & Bonnie	Fahey, Richard Jr.
Etheridge, Connie	Lamb, Paul	Cimino, Joe	Gilberto, Paul *
Fifield, Craig & Christine	Lambert, Linda	Conner-Crouch / Poppy *	Harris, Dr. Jerry / Johnson, Lynne
Gambardella, Paul & Susan	Mildram, Doug *	Crouch, John	Haynes. Chad / Erin
Geiger, Ken	Nadeau, Richard & Emily	Farquar, Susan	Lavoie, Michael & Tracy
Hutcheon, Dr Alex & Elizabeth	Ray, John & Elizabeth	Gagne, Ann	Levesque, Walter
McDonald, Lisa / Lance	Sansouci, Nancy	Gerry, Thomas	Morris, Beverly
Moore, Stephen	Waybright, Deborah	Herland, Cheryl / William	Polley, David / Deborah
Ricci Michael & Angela		Knight, Ken	Provost, Richard & Susan
Saccone, Tomothy		Knight, Kenneth	Tinsley, Cynthia
Sexton, Charles & Rosemary		Lasky, Marc	
Welch, Ben		Limoges, Robert & Gloria	Business Donors
		MacWhinnie, Gary	Town of Poland * \$1,000
		McGillivray, Patricia	Range Pond Campground \$250
		Milton, Steven & Lou Ann	(John Young)
		Morgan, Barry & MaryJo	
		Pellerin, Linda	* after name
		Pentheny, Jane	deposited between 5/31 and 6/30
		Smith, Leese / Gordon	
		Steinbeck, Katherine-Raymond Family	
		Watson, Patricia / Richard	

	Treasurer's Report		
	Balance on 5/31/2022		13,518.45
Income	<i>Membership dues</i>	4,904.00	
	<i>Business contributions</i>	0.00	
	<i>Sale of merchandise</i>	35.00	4,939.00
Expenses	<i>LWRMA - water quality report / algae bloom</i>	5,100.00	
	<i>Newsletter exp / postage - Curry Printing</i>	836.71	
	<i>Web hosting</i>	119.70	
	<i>Corporate filing fees & Legal</i>	135.00	
	<i>P O Box Rental Fee</i>	96.00	
	<i>Meeting costs</i>	570.00	
	<i>Paypal fees</i>	26.33	
			6,883.74
	Balance on 5/31/2023		11,573.71

Range Ponds Association (RPA)
PO Box 451
Poland Spring, ME 04274

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Range Ponds Association Mission Statement

The Range Ponds Association is dedicated to protecting the water quality of Lower, Middle and Upper Range Ponds by consistent water quality monitoring and by providing education and technical assistance to residents and municipal officials.

RPA Board Member List with Lake & Term End Date

Come to our meeting, join our board, start a committee and make a difference.
Board members serve for a three year term; we can have fifteen board members.

Bill Williams - Middle (2023) President
Abbie Mannett - Upper (2025) Vice President
Ann Gagne - Upper (2023) Treasurer
Shannon Dwyer - Middle (2024) Secretary

John Aromando - Middle (2025)
Tom Mannett - Upper (2025)
Jerry Harris - Middle (2024)
Richard Nadeau - Middle (2025)
Ken Knight - Middle (2024)
Linda Sprague Lambert - Middle (2022)
Tracie Lavole - Middle (2024)

email - OurRangePonds@gmail.com or INFO@RangePonds.org Facebook - Range Ponds Maine

The Shoreland Zone is the land area within 250 feet from the normal high water mark.
Contact code enforcement prior to ANY tree, earth or construction work in the Shoreland Zone.

These codes were enacted to protect the waterways of Maine.
Your lake association is here to assist you while helping protect the lakes.

Invasive plants are an unwelcome resident at any lake.
Invasive plants are NOT our lakes biggest threat.
Storm runoff of soil and sand, animal waste, fertilizers and failing septic systems damage our lakes more.
What you do near your lake, affects your lake.