VISIT OUR RALALA WEBSITE ralalalakes.org TO BE MORE INFORMED



SPRING 2024

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RALALA LAKES ASSOCIATION

MESSAGE FROM BOB EDDY, RALALA ASSOCIATION PRESIDENT

As we put another interesting winter season behind us and we prepare for an upcoming beautiful lake season, I want to reflect on the complexities we encountered during our 2023 season.

RALALA's financial demands significantly increased, as we communicated during the 2023 season, due to:

- Treatment of a much larger amount of Eurasian Watermilfoil (EWM) in the south end of Roosevelt Lake
- Discovery and treatment of EWM on Lawrence Lake for the first time
- Initiation and ongoing testing of water samples from the stream flowing into the north end of Roosevelt Lake as an early warning indicator of a leak in the Enbridge pipeline
- Implementation of new launch site prevention measures to reduce the risk of introduction of additional AIS from nearby infested lakes, including increased inspector hours and an onsite decon station

In the last few years responses to additional threats to the quality of our lakes have required expenditures equaling almost \$200 per member. These costs will continue to increase. We try to keep our membership dues low, but we cannot continue these important efforts with \$25 dues.

To help offset these additional expenses we have taken the following actions:

- We approached Crooked Lake Township and the City of Emily for additional funding. Unfortunately, any funding request requires at least 2 years before it appears in their budget. We hope our requests for additional support are included in their 2025 budgets.
- We continue to seek grants and funding, but grants that target our needs are very specific and limited. We annually apply for DNR funding for AIS treatment, but the last two years have not been selected in their lottery.
- We are encouraging everyone, including area businesses to become members and help support our critical initiatives.

Even with these actions, we ran a deficit in 2023 and we foresee a deficit again in 2024. Details of our finances were shared in our 2024 membership solicitation letter and on our website <u>ralalalakes.org</u>.

In August of 2023 at our annual meeting, we discussed our projects and our financial deficits with the members. We solicited suggestions on how to obtain additional funding. Members supported efforts already taken and suggested increasing membership dues and creating honored donation levels to encourage and recognize generous donors.

Our goal is to raise \$40,000 for 2024.

WE NEED YOUR SUPPORT TO PRESERVE AND PROTECT OUR LAKES AND THE WATERSHED:

- Renew your membership
- Donate at the honored level:

 Sunfish
 \$150 to \$299

 Walleye
 \$300 to \$499

 Loon
 \$500 to \$999

 Eagle
 \$1,000 or more

Please reach out to your neighbors and friends and ask them to join all of us in protecting our beautiful natural treasure.



BUILDING AWARENESS • ENCOURAGING ACTION

HOW TO IDENTIFY EURASIAN WATERMILFOIL

-by Bob Lee

We need help from all of you in spotting, identifying and reporting new patches of Eurasian Watermilfoil (EWM) in our lakes. But in order for you to help, you need to know how to distinguish EWM from our native variety of milfoil, Northern Watermilfoil, and from Coontail, another native plant that many people seem to confuse with EWM. Of course, there are lots of other plants in our lakes, but most of them look nothing like milfoil. They have either broad leaves of various shapes and sizes or look more like grasses. So let's concentrate only on these three.

Coontail

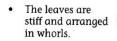
The easiest of these three plants to identify is Coontail (its real name is Ceratopphyllum demersum) and there is lots of it in all of our area lakes. Like both of the milfoil varieties, coontail has feathery leaves arranged in circles around the stem. I think that the easiest way to identify coontail is by looking at the tip of the stem where the leaves are bunched up and pointed towards the end of the stem. These feathery leaves taper up to a blunt point that does look somewhat like the tip of a furry animal's tail. There are not many bright green furry animals in our area, but somebody with a vivid imagination named this one after the tail of such a beast. A drawing and a list of characteristics of Coontail appear on the right.

Northern Watermilfoil

The next contender in our trio of plants is Northern Watermilfoil (Myriophyllum sibiricum) which is a very close relative of the bad stuff but is native to lakes and rivers in the northern half of the United States and Canada. It does not spread aggressively like Eurasian Watermilfoil and is considered beneficial to water quality. It also provides a valuable protective cover for fish

Coontail

Coontail is a free-floating aquatic plant without roots. It may be completely submersed or partially floating on the surface.



- Each leaf is divided in a forked pattern.
- Leaf divisions have teeth along one margin.
- Leaves are crowded toward the tip of the stem creating the "coontail" appearance.





- Rigid feather-like leaves forming a christmas tree shape. The lower leaflets are usually quite long.
- Leaves usually stiff when out of water.
- Leaves arranged in whorls (circles) of four to six around stem.
- Usually seven to ten leaflet pairs per leaf.
- Stem is usually whitish or whitish green in color.

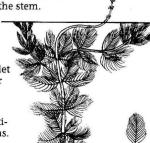


The Intruder— Eurasian Watermilfoil

- Delicate feather-like leaves. Leaflets are mostly the same length.
- Leaves are usually limp when out of the water.
- Leaves arranged in whorls (circles) of three to five around the stem.



 Long spaghettilike stems.



and minnows. We have lots of this and most of the members who have asked us to check out possible EWM infestations were actually looking at a bed of native Northern Watermilfoil.

Northern Watermilfoil looks like the picture on the left. I think the thing to zero in on from a distance is the stiff central stem which is a light green color. It makes the plant look more like a little tree. It doesn't always stick out of the water, but it does look quite a bit different than EWM. But the real clincher can only be seen when you get close. On Northern Watermilfoil there are fewer than 10 pairs of the little leaflets on each small stalk, called a leaf. Most of the plants I have seen on our lakes have fewer than 10 leaflets. Check out the difference in the leaf detail in the pictures of Northern versus Eurasian. You will see a huge dichotomy in the number and the spacing of the leaflet pairs between these close cousins.

The Intruder— Eurasian Watermilfoil

Eurasian Watermilfoil (Myriophyllum spicatum) pictured below left, the invasive species is really similar to Northern Watermilfoil. Their very similar scientific names show they are of the same genus, but are different species. We have found that if you look at a leaf sample, it is relatively easy to see the difference in the number of leaflets (a clear indication of which species you are looking at). Compare the leaf inset in the picture of EWM with the leaf inset in the picture of Northern. But if you are in a boat and can't easily get close enough to examine the leaves, you can still see differences. The biggest is the shape, Northern Watermilfoil being more tree-like and EWM being bushier with stems curling in multiple directions.

BUILDING AWARENESS • ENCOURAGING ACTION

The limpness of the stem of Eurasian Watermilfoil is also quite different than the stiffness of the native. EWM's stem has a spaghet-ti-like look. There is also a difference in color of those stems. The limp spaghet-ti-like stems of EWM are not the greenish white of the Northern Watermilfoil. They are a creamy light brown, sometimes almost a pinkish hue.

I have often been asked in what depth of water EWM can grow in our lake. I am not entirely sure. I have seen EWM sprout in only a few inches of water along the shore, but these little plants usually do not seem to thrive. Most of the mature plants I have observed have been in roughly 3 to 8 feet of water, although the DNR says that the plants can grow up to 20 feet tall. Once mature the EWM will spread out in a canopy near the surface and will form a dense mat if enough plants are present.

EWM does produce flowers and about 100 seeds per year, but it's primary method of spreading is from fragments that break off the mature plant, float away, settle into the bottom, grow roots, and then grow into a new plant. That is why we have new EWM every year.

MINNESOTA DEPARTMENT OF NATURAL RESOURCES (DNR) 2023 FOREST HEALTH SUMMARY











There were five very extensive tree health problems in Minnesota's forests in 2023 causing widespread problems: mortality to ash, oak, tamarack, and more concentrated areas of mortality of balsam fir and white spruce. The most ecologically concerning problem in the short-term continues to be the outbreak of eastern larch beetle on tamarack, while long-range concerns continue with the spread of emerald ash borer and oak wilt northward through Minnesota. The most widespread tree problem across Minnesota in 2023 was declining oaks, primarily caused by a combination of older age, consecutive years of significant drought, and two opportunistic pests that cause serious problems for stressed oaks.

Recent extreme droughts coupled with aging oaks have caused dieback and mortality of oaks, causing major concern of homeowners, woodland owners, and professionals. The growing seasons for the last four years have been dry in Minnesota, and a couple of those years have been exceptionally dry; 2021 was the 11th driest on record, 2023 was the 9th driest. Our forests can tolerate some drought, but the more stress they experience from drought and other stressors such as flooding, defoliation, and ground compaction, the more likely it is they'll suffer serious problems, such as infestation, disease, and mortality. In 2023, the scattered mortality of oaks exploded across much of Minnesota, from the southern border to the northwest tip. Two oak pests, Armillaria root disease and two lined chestnut borer, are notorious for attacking stressed oaks, and they were extremely common in woodlots this year.

The DNR expects this decline to continue for a couple years following the conclusion of significant drought and advises homeowners to strategically irrigate their oak trees.

Currently, there are three regional DNR forest health specialists available to offer assistance *Eric Otto in Grand Rapids, Megan O'Neil in Bemidji, and Rachael Dube in Brainerd*.

BECOME A LAKE STEWARD

RALALA is continuing its LAKE STEWARD partnership with Minnesota Lakes and Rivers Advocates promoting and supporting managing our lands to improve water quality in our lakes. It is much easier and more cost effective to prevent degradation of our lakes than to repair them. PLEASE JOIN THESE EFFORTS! Start by using this link to take the Lake Steward Quiz and find out what you are doing well and areas to improve.

https://forms.gle/gKCc18RHC1dgDf398

Your quiz responses and contact information will be sent to Anne Bonnerup, RALALA's Protecting Our Lakes, Shoreline Initiative Chair, who will reach out to you to schedule a site visit, if you are interested. This visit provides an opportunity to answer your questions, share information, and offer guidance.















Emily Ace Hardware

39959 State Hwy 6 Emily, MN 56447 Phone: (218) 763-2691

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The Destructive Effects Mouse Poisons Have On The Lakes Of RALALA Article and photos by Trista Snapko

The sound of a distant owl hooting near my cabin has always calmed me.

As I stand out on my porch surrounded by serene darkness and the beautiful sounds in these pristine woods, I'm reminded of all the different species of wildlife that live near my property and how fortunate I am to spend time on Roosevelt Lake and the Land O' Lakes State Forest.



The Barred owl has a distinct hoot and prefers to nest near water. You've probably heard them calling while spending time up at your cabin. Beyond owls, Roosevelt Lake is home to many different types of raptors and the presence of owls is a sign of a healthy ecosystem. We want them to flourish. It's when these birds are poisoned (rodenticide) and die that we must think differently about eliminating rodents. How we destroy them can make a difference between life and death for these birds of prey.

When mouse poison is used the mice consume it and die slowly and, instead, become easy prey for raptors who eat them and/or bring them back to their young. Sometimes all it can take is one poisoned mouse to kill an owl. Mouse poison, or Anticoagulant Rodenticides (ARs) are a form of ingested rodent pest control that block the vitamin K cycle, inhibiting blood clotting and can cause internal bleeding, anemia, hemorrhagic shock and/or death.

In the US, the Environmental Protection Agency reported that Americans spent \$5.5 billion in 2023 on rodenticides. Exposure to and mortality from ARs in wild birds of prey is well documented in studies over many years in multiple countries throughout the world.

The destructive effects of poison go beyond birds of prey. Rodenticide use in agricultural, commercial, and residential properties also poses a significant risk to cats, dogs, other wildlife, and even our children.



The Raptor Center at the University of Minnesota is one of the leading institutions in the Midwest for treating injured and suspected poisoned birds of prey. Dana-Franzen-Klein, DVM, MS Medical Director-The Raptor Center-University Of Minnesota, College Of Veterinary

Medicine states, "The research highlighting the very high prevalence of rodenticides in raptors is the best evidence we have to say this is a significant problem we need to address, because it is scientifically proven and not speculation."

Ultimately, there is no safe way to use mouse poison.

Their toxic ingredients are distributed throughout our properties when the owls, eagles, and hawks consume the mice. Using alternative methods like mechanical traps, non-toxic repellents or a non-lethal approach is the safest way to stop this destructive cycle.

Eliminating holes and gaps around your foundation and removing potential food sources (accessible trash, open compost bins, or fallen birdseed) is an effective method to deter mice infestations.

Nobody likes mice on their property. They are destructive and can lead to costly repairs.

and can lead to costly repairs.

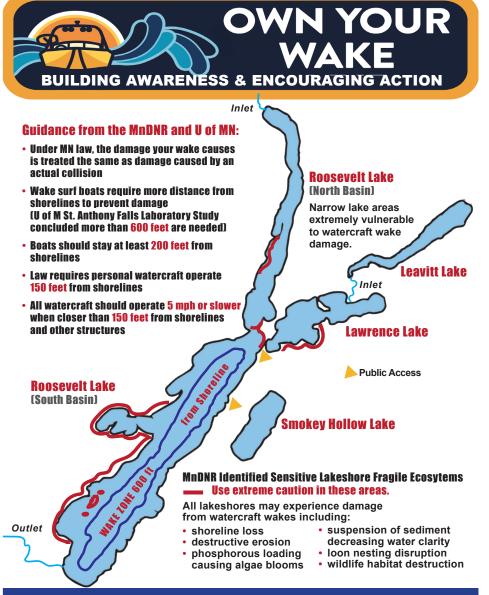
Photos by Trista Snapko

Raptors, however, love mice. An owl can consume over 3,000 mice a year, nearly 10 per day. Undermining nature's way of rodent control by poisoning their food source is a destructive cycle we can prevent. Creating and maintaining critical habitats where birds of prey can thrive is more beneficial.

Minnesota is home to over 10,000 lakes where these birds of prey call home. On the lakes of RALALA we can enjoy their majestic beauty while they eliminate mice.

Please consider using non-toxic, alternative methods to remove mice from your property.

OWN YOUR WAKE: Shoreline recession, erosion damage and destruction, as well as wildlife habitat disturbance caused by wave action have increased significantly as greater numbers of boats, many with increased horsepower, cruise the lakes. **RALALA** reminds you to be aware of the impact of your wake and we encourage your safe and respectful watercraft operation.



Roosevelt and Lawrence Area Lakes Association ralalalakes.org

LEAVITT LAKE CONSERVATION PROJECT

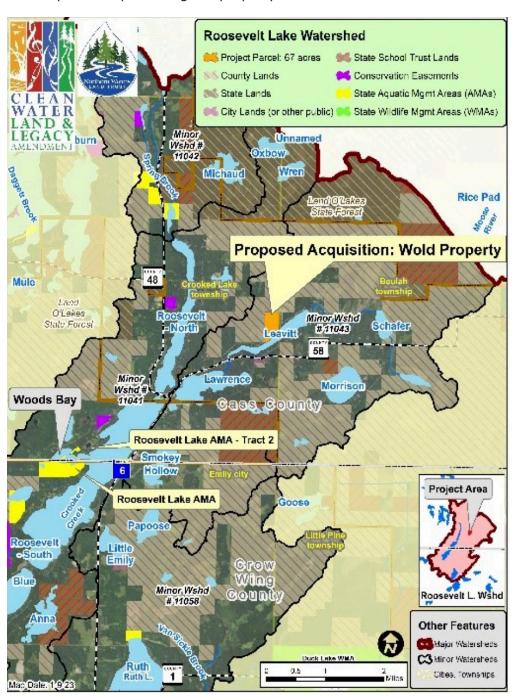
A significant 67 acre property was protected in 2023 when it was purchased using Outdoor Heritage Funds and transferred to Cass County for permanent public management as forest land.

The property in Crooked Lake Township is bordered by Cass County forest land on three sides and 1,600 feet of shoreline on Leavitt Lake. The upland pine and hardwood forests are on moist soils with springs emerging and flowing into the lake. One third of the property is composed of shallow marsh, shrub and wooded marshes.

Land surveyors and a wetland delineator recognized the ecological uniqueness of the property in 2021. Northern Waters Land Trust (NWLT) was able to prioritize protecting the property and

purchased it using Outdoor Heritage Funds. This Fund was created in 2008 when Minnesota voters passed the Clean Water, Land and Legacy Amendment to the Minnesota Constitution. These funds "may be spent only to restore, protect, and enhance wetlands, prairies, forest and habitat for fish, game, and wildlife." Cass County also contributed funds for this aquisition.

The 122 acre Leavitt Lake is within the Roosevelt Lake watershed and includes a fishery of crappie, bluegill, brook trout, sunfish, largemouth bass, northern pike, pumpkinseed, rock bass, tullibee (cisco), walleye, yellow perch, white sucker and tadpole madtom.



The property was sold to NWLT by Troy and Margo Wold. Margo's family has owned property in the area for several generations and protecting land was an important consideration for the couple. The property was previously owned by the Bauer Family for more than fifty years and who treasured the land for yearround camping, fishing, hunting, hiking and wildlife watching. Having the land protected and now in permanent public ownership is a tribute to the conservation values of Margo and Troy.

Margo Wold recalls "With fond memories I think of Lake Roosevelt and the Outing area. My late father built a cabin on the lake with reclaimed materials. I remember, as a little girl, every weekend he would have another truck full of reclaimed items that he was putting to new use on the cabin. We all enjoyed his hard work for years to come, with rides on the pontoon, the echoing sound of loons, and the beauty of towering pine trees among us. These are memories that will last my lifetime. We are hopeful that other families will be able to experience the precious beauty of northern Minnesota. By establishing preserved land for future generations, it brings joy to my heart knowing that my Dad would be proud."

The newly publicly protected property is in an area considered by The Nature Conservancy to be important for connecting aquatic and terrestrial habitat for fish and wildlife and allowing plants and animals to adapt and adjust to a changing climate.

The property is open for public hunting and fishing while also providing clean water, wildlife habitat and other recreational opportunities.



DON'T LET IT LOOSE



TOSS IT

Drain water from bait container on shore, away from water. Dispose of bait in the trash.



...OR KEEP IT

Drain water from bait container on shore, away from water. Refill container with bottle or tap water Releasing live bait threatens our environment. Bait and bait water can harbor fish diseases and aquatic invasive species.

Do your part to protect our lakes and rivers.

RALALA FACEBOOK PAGE

One of the main functions of a lake association is to share important information with its members. Over the years we have tried many formats to accomplish this goal, including newspaper articles, website content, email blasts as well as printed and virtual newsletters. Based on feedback, people are still not receiving essential news about the activities and efforts of RALALA.

As a result, we now have a Facebook page in hopes of reaching more of our members with beneficial news as well as links to learn more about specific subjects.

However, as most people know, a Facebook page is only as effective as its users. Early on, RALALA had a presence on Facebook, but later abandoned it due to lack of participation. This time we hope it will be different, but need your help for it to succeed.

Please navigate to https://www.facebook.com/ralalalakes or scan the **QR code** below and "Like Us". Next, we are ask-





ing you to share this Facebook page with the rest of your lake family and neighbors as well as anyone interested in preserving and protecting our lakes. RALALA emails and newsletters typically just go to the named person on the membership form, so a Facebook option is a great way for more people to gain easy access to useful lake information.

Please help make this a success as well as guarantee you get the "news you can use".



DNR REMINDER TO BE BEARWISE

The Minnesota Department of Natural Resources (DNR) reminds everyone to prevent conflicts with bears by being "BearWise".

- Remove bird feeders when bears are active
- Secure food, garbage and recycling
- Never leave pet food outdoors
- Clean and store grills and smokers
- Alert neighbors to bear activity

Once a bear finds a food source, it will likely return. If bear problems persist after cleaning up food sources, contact a DNR wildlife manager at mndnr.gov/areas/wildlife



SOIL AND WATER CONSERVATION DISTRICTS AND DAGGETT BROOK WATERSHED STAKEHOLDERS:



PARTNERING TO IMPROVE WATER QUALITY One Watershed One Plan

By Ryan Carlson, Cass Soil and Water Conservation District

On November 4th, 2008, Minnesota voters approved the Clean Water, Land and Legacy Amendment to the state constitution, providing crucial funding for the protection, enhancement, and restoration of the state's lakes, rivers, and streams. This landmark decision led to the adoption of a watershed approach aimed at safeguarding Minnesota's valuable water resources for the enjoyment of all citizens and visitors.

As part of this approach, the Board of Soil and Water Resources developed watershed plans, facilitating access to essential data for organizations like the MN DNR, Conservation Districts, Lake Associations, and other stakeholders to protect water and natural resources within the watershed."

Roosevelt, Lawrence, and Leavitt Lakes constitute a connected water system within the Daggett Brook sub-watershed. This area, primarily surrounding Lake Roosevelt, is a forested landscape, with 66% protection falling short of the 75% goal. The Cass Soil and Water Conservation District is collaborating with partners such as the Roosevelt and Lawrence Area Lakes Association to educate stakeholders about voluntary actions to improve water quality across the watershed. Moreover, the district is leveraging Clean Water & Land Legacy funds to enhance water quality directly within the Daggett Brook sub-watershed, with priorities outlined in **Table 1**.

The watershed plans have identified how stakeholders, who care about the well-

Table 1: Priorities to Enhance Water Quality

Category	Resource	Issues	
Surface Water	Lakes Daggett Brook	Cabin density Impervious surface and stormwater runoff Shoreline development	
Ground Water	Shallow sand aquifer Drinking water	Protection of groundwater discharge areas Septic systems Well sealing	
Forests Habitat	Forests Fish and wildlife habitat	Fragmentation White Cedar wetland protection Education/dissemination of information	

being of Roosevelt-Lawrence-Leavitt Lake system, can work with us to directly improve water quality in this sub-water-shed. The key actions property owners can take are outlined in **Table 2**.

The Cass Soil and Water Conservation District remains committed to collaborating with others to achieve these goals. If you're interested in contributing to the conservation efforts in this sub-watershed, please contact the Soil and Water Conservation District within your county for guidance.

Table 2: Key Actions for Property Owners

Goal	Implementation Action	Minimum 10-year goal	Annual Goal
Phosphorus Reduction	Install rain gardens and stormwater management practices to capture rainwater and let it infillrate instead of running off into the lake.	10 rain gardens	1 project/year
Shoreline	Install shoreline buffers of native plants to protect the shoreline from erosion and provide habitat for fish and wildlife.	10 projects	1 project/year
Restoration	Plant trees along your shoreline	500 trees	50/year
-	Develop a Forest Stewardship Plan (minimum 20-acre area).	9 forest plans	1/year
Shoreline & Land Protection	Sign up for Sustainable Forest Incentive Act (SFIA) to receive payments to keep wooded areas undeveloped (minimum 20-acre area).	1,187 acres	120 acres/year
	Permanently protect undeveloped land and shoreline with conservation easements.		
Monitoring	Continue to monitor Secchi depth annually to track trends.	10-year trend analysis	Minimum of 5 readings per year
	Have subsurface sewage treatment systems maintained/pumped every three years.	Pump 3 times in 10 years	Pump every 3 years
Groundwater	Seal unused wells in the Shoreland Zone.	10 wells	1/year
	Minimize chloride use on driveways, sidewalks, and in water softeners.	Only use minimum amount necessary	

= potential SWCD cost share

References: (2017). Pine River Watershed - One Watershed, One Plan (pp. 4-166). Crow Wing Soil and Water

"(2018). Roosevelt Lake Implementation Plan (pp. 1-5). Crow Wing Soil and Water Conservation District. https://www.casscountymn.gov/DocumentCenter/View/633/Pine-River-Comprehensive-Watershed-Management-Final-Plan-PDF

ICE DAMAGE TO SHORELINE PROPERTY

Property owners occasionally return to their cabins in the spring only to discover they are dealing with property damage caused by a phenomenon called ice heaving or ice jacking. This powerful natural force forms a feature along the shoreline known as an **ice ridge**. The result may include significant damage to retaining walls, docks and boat lifts, and sometimes even to the cabin itself.

Ice damage to shoreline property is often caused by the pushing action of an ice sheet. Cracks form in ice because of different contraction rates at the top and bottom of the ice sheet. **This is especially true in years lacking an insulating snow cover.** Ice cracks also develop because the edges of the ice sheet are sometimes firmly attached to the shoreline. When water rises in the cracks and freezes, the ice sheet expands slightly. When rising air temperature warms the ice, the additional expansion exerts a tremendous thrust against the shore. The expanding ice sheet moves soil to create ice ridges, also known as ice pushes or ramparts, as high as five feet or more. Alternate warming and cooling of an ice sheet causes additional pushing action that possesses enough power to nudge masonry bridge piers out of plumb and push houses off their foundations.

What can be done? Is a DNR permit required to remove or grade soil material (ice ridge) pushed up by ice action onto my shoreline?

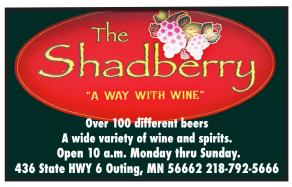
Minnesota rules allow for some exceptions with regard to ice ridges. An individual Public Waters Work Permit would not be required from the DNR for ice ridge removal or grading under the **following conditions**:

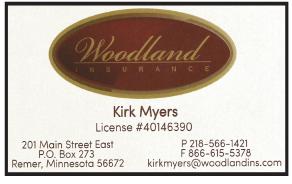
- The ice ridge resulted from ice action within the last year
- The project is either exempt from local permits or is authorized by issuance of a local government permit
- Not more than 200 feet of shoreline is affected
- All ice ridge material that is composed of muck, clay or organic sediment is deposited and stabilized at an upland site above the ordinary high water level (OHWL)
- All ice ridge material that is composed of sand or gravel is removed as provided above or graded to conform to the original cross-section and alignment of the lakebed, with a finished surface at or below the ordinary high water level (OHWL)
- No additional excavation or replacement fill material occurs on the site
- All exposed areas are immediately stabilized as needed to prevent erosion and sedimentation
- Local zoning officials, the Watershed District, if applicable, and the Soil and Water Conservation District are given at least seven days prior notice











DEMONSTRATION SHORELINE RESTORATION PROJECT



John and Bonnie Rowell had been coming to Roosevelt Lake, camping on a friend's property when the peninsula north of Woods Bay was divided into lots for sale in the early 1970's. They bought one of the lots, started building their cabin in 1976 and received permission to build a small boathouse near the lakeshore. They spent most of their weekends hammering, sanding and staining and told themselves they had no interest in spending their time cutting grass. They wanted to fish, enjoy the lake and the wildlife.

Their property has no mown grass, instead there is an abundance of lush plants and wildflowers that provide a beautiful progression throughout the spring, summer and fall under a canopy of a wide variety of trees. Bonnie summed up her philosophy, "We love nature and the natural look and feel of our place. We enjoy colorful flowers from early spring 'til late fall." She summarized by sharing her favorite Ralph Waldo Emerson quote "A weed is a plant whose virtues have not yet been discovered."

John and Bonnie have been very conscientious about managing runoff. They constructed infiltration steps that curve to the lakeshore and added extra wide gutters with extensions to send roof drainage to purposely constructed gardens to capture it. Their fire pit is adjacent to the house, well removed from the lakeshore. Slabs of stone, set in pea gravel surround it to aid in rainwater infiltration rather than runoff. Along their undisturbed shoreline bulrushes thrive and underwater aquatic plants are visible. Trees have blown down and have

fallen into the lake and are left for fish and wildlife habitat. John and Bonnie were among the first Lake Stewards on Roosevelt Lake.

They have been seeking solutions for bank erosion on the steep descent to the lake and tried placing their dock in a different location to encourage the growth of native plants with their deep stabilizing roots. However, increased wave action in the last few years has caused further erosion. They sought expertise to remediate the problem, participating in the free Prairie Restorations consultations coordinated by RALALA, arranged a Crow Wing Soil and Water Conservation District site visit which included a site plan and recommendations to install a willow wattle barrier along the shoreline. Come observe this process. See page 11.



Runoff Infiltration Steps

Finding Solutions to Remediate Shoreline Erosion



OBSERVERS WELCOME

Shoreline Restoration Project

John and Bonnie Rowell and friends will be completing a Shoreline Restoration project on their South Roosevelt Lake property. Their plans have been approved by the Cass and Crow Wing Soil and Water Conservation Districts. It will involve the construction and installation of willow wattle logs, installation of **erosion** control blankets, and the planting of a variety of native grasses, sedges, flowers and shrubs. Laura Mendoza Romero, a consultant with Great Roots, Aitkin, MN, will be providing instruction, advice and guidance during this semi DIY project.

Anyone interested and wanting to learn more is welcome to stop by during the day to observe this process.

Thursday, June 13, 2024 Estimated Start 9-9:30 6039 Royal Oaks Dr NE, Outing MN

If you are willing to participate as a part of the working crew PLEASE CONTACT JOHN AND BONNIE ROWELL 218-792-5364

4bonnierowell@gmail.com

Minnesota Department of Health RECOMMENDS TESTING OF PRIVATE WELLS FOR FIVE COMMON CONTAMINANTS

More than 4 million Minnesotans rely on groundwater for their drinking water, including 1.1 million who rely on a private well. A recent Minnesota Department of Health (MDH) study found that that less then 20% of well users test their drinking water as frequently as recommended.

Public water

systems are

required to meet federal



DEPARTMENT Safe Act stan-

OF HEALTH dards, which MDH enforces, but private wells do not have those same protections. If groundwater is or becomes contaminated, it can affect the health of those who drink it. MDH therefore recommends testing private wells regularly and using an accredited laboratory for that testing. Testing is particularly important if babies or pregnant people will be drinking the water.

"You cannot taste, smell or see most contaminants, so testing your private well is the only way to know what's in your drinking water," said MDH Water Policy Manager, Tannie Eshenaur. "The good news is there are many ways to address water quality issues."

The five most common contaminants in Minnesota and their potential health effects:

NITRATE

Test every year. Porous geology in southeast Minnesota and sandy soils in central Minnesota make these areas of the state especially susceptible to nitrate contamination from fertilizer, manure, wastewater and faulty

septic systems. Consuming too much nitrate can cause babies to develop methomoglobinemia, also known as as blue baby, which can be fatal.

COLIFORM BACTERIA

Test every year. Coliform bacteria can indicate that other infectious bacteria, viruses or parasites may be in your water. These may cause diarrhea, vomiting, cramps, nausea, headaches, fever and fatigue.

ARSENIC

Test at least once. Arsenic has been detected in about half of private wells constructed since 2008. Drinking water that contains arsenic can increase your risk of cancer and other serious health effects.

LEAD

Test at least once. Lead from pumps or pipes can damage the brain, kidneys and nervous system. It also can slow development or cause learning, behavior and hearing problems.

MANGANESE

Test at least once. Manganese can cause problems with memory, attention and motor skills. It can also cause learning and behavior problems in infants and children.

If testing identifies any contaminants, a variety of treatment options are available to improve water quality, depending on the contaminant(s) to be removed. Solutions can include installing point-of-use or whole-home filters such as reverse osmosis or a water softener, repairing cracks where contaminants are entering the well, or potentially even building a new well.

Accredited Laboratories for well water testing:

https://www.health.state.mn.us/communities/environment/water/
docs/wells/waterquality/labmap.pdf

BE SAFE Wear your life jacket COLD WATER QUICKY INCAPACITATES SWIMMERS



THE BALD EAGLE

Seeing a Bald Eagle soaring through the sky in Minnesota doesn't get too many people excited anymore. But that hasn't always been the case. The National bird and symbol of Freedom and Democracy had almost become extinct in Minnesota and the United States.

It's well documented pesticides like DDT were being absorbed by fish and other prey that passed the toxins along to eagles and their offspring. Eagles were also illegally hunted for a long time. In 1973, there were only 115 nesting pairs in Minnesota. In the 1980s, lead buck







Article and photos by Trista Snapko

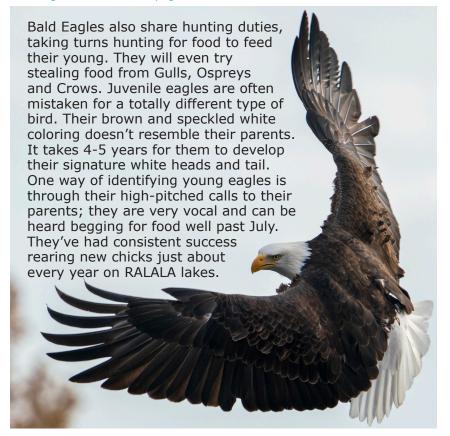


shot and lead fishing tackle contributed to their decline too. Sadly, lead poisoning is still the leading cause of death for Bald Eagles in Minnesota.

But fortunately, things have changed because different federal and state initiatives created to protect these raptors have worked and they've made an incredible rebound. These conservation efforts have been enacted by many different agencies, including the MNDNR and The Raptor Center at the University of Minnesota, taking these magnificent birds of prey off the federal list of endangered and threatened species in 2007, and the state list in 2013.

We're fortunate to see them in such abundance now, including several mating pairs on Roosevelt Lake and the surrounding RALALA lakes. There are a few well maintained eagles' nests near the shorelines on Roosevelt Lake. Some of these nests can weigh over a ton and are built so well they can last decades. These nests are often rebuilt by fellow eagle pairs and used for many years.

Minnesota Bald Eagles typically lay their eggs in mid-March. Returning to their nests early causes challenges as they must endure harsh Minnesota winters. Eagles mate for life and usually stay in the same nests for years. So, from year to year, you are likely seeing some of the same eagle pairs on our RALALA lakes. The dedicated parents take turns sitting on their clutch in the cold, keeping snow and other elements clear. And even though Eagles are apex predators, they must fend off predators like racoons and other birds that can access their nests. Young chicks have about a 70% chance of surviving their first year. You can probably tell by watching them on one of our lakes that they are fierce and loyal parents.



When eagles are active, they stop you in your tracks (or your boat). Watching them dive for fish is breathtaking. Mid-air territorial fights are fascinating to witness too. My husband and I regularly see their aerial maneuvers on full display on Roosevelt. They soar to great heights, change direction very quickly, and plunge at incredible speeds for their prey diving up to 100 miles per hour before gracefully snagging a fish from the water. Their eyesight is at least 8 times greater than ours, giving them the ability to see prey up to 3 miles away.

They are indeed incredible birds. So next time you see a Bald Eagle flying high above you, try to remember what this species endured and overcame. Celebrate their return from the brink. Take in their beauty and majesty. This symbol of Freedom will hopefully never be threatened again.

CALENDAR OF EVENTS

MAY 2024

- 5 RALALA Board Meeting
- 18 Highway 6 Adopt a Highway Clean-up
- 20 Water Quality Testing

JUNE 2024

- 13 RALALA Board Meeting
- 17 Water Quality Testing

JULY 2024

- 6 Independence Day Boat Parade
- 6 Fireworks
- 11 RALALA Board Meeting
- 15 Water Quality Testing
- 20 Emily Day

AUGUST 2024

- 3 RALALA Annual Meeting and Board Meeting
- 15 RALALA Board Meeting
- 17 Lions Corn Feed
- 19 Water Quality Testing

SEPTEMBER 2024

- 9 RALALA Board Meeting
- 14 Highway 6 Adopt a Highway Clean-up
- 16 Water Quality Testing



PROTECTING OUR LAKES (POL) SHORELINE INITIATIVE

It is important for everyone to understand the disastrous impact adding phosphorus to our lakes has on water quality. Many of us, often unintentionally, are doing exactly that and degrading the lakes. A lake with high water quality has the necessary amount of dissolved oxygen in the water to sustain life. Sunlight penetrates to greater depths sustaining submerged plants that purify the water by cycling nutrients, filtering pollutants and producing oxygen required by fish and other aquatic species.

Phosphorous accelerates the growth of algae, sometimes creating smelly, unsightly algae blooms that can be dangerous for humans and pets.

We can reduce the amount of phosphorus and other pollutants that reach a lake by making conscientious decisions on how we manage our land. Of paramount importance is controlling runoff into the lake and shoreline erosion because our soils naturally contain phosphorous.

10 Ways to Protect and Preserve Our Lakes

- Allow native plants and vegetation to flourish in a 25' deep buffer zone along the lakeshore
- Maintain septic systems according to best management practices

https://www.pca.state.mn.us/news-andstories/keep-your-septic-system-healthy

- Reduce the amount of impervious surfaces on your property
- **4.** Pick up pet waste and keep fire pits at least 25' from the shoreline
- 5. Allow fallen trees and branches to remain in the water
- Store docks and other equipment away from the shoreline
- Avoid the use of riprap and allow native plants to emerge
- 8. Allow aquatic plants to flourish along shorelines
- Avoid the use of broadcast fertilizers and pesticides
- **10.** Allow natural vegetation to grow everywhere

The main goal of RALALA's Protecting Our Lakes Shoreline Initiative, in its fourth year, is to share information and support the efforts of property owners to manage their land in ways that sustain our lakes' water quality.



Our plans include the continued maintenance and enhancement of the demonstration buffer zone and no mow, let it grow site at the Outing public dock on Roosevelt Lake. Watch the beauty and progression of the native plants whose deep roots stabilize the soil and filter runoff keeping phosphorus and other contaminants from entering the lake. Consider ways you could create a buffer zone on your own property to protect and preserve the lake.

RALALA continues to share information and support individual efforts to maintain, or restore, naturalized shoreland and upland spaces through our **Lake Steward Program**, financial reimbursement **BENNIES**, and collaboration with other agencies. This is essential work to sustain the water quality of our lakes as they receive more pressure from development, heavy use, and climate change.

Our founding documents state our mission is both to preserve our lakes for ourselves and future generations but also to find a BALANCE between recreational use and environmental protection.

If everyone owning property surrounding our lakes maintained 75% of their shoreline and upland spaces in a naturalized state without impervious surfaces—buildings, sidewalks, driveways—runoff could be effectively filtered, keeping phosphorus and other detrimental elements from degrading our water quality.

RALALA is here to support everyone's efforts to achieve that goal.

BENNIES

RALALA will **reimburse** property owners

\$100 for Soil and Water Conservation District site visit fees. **\$500** for approved shoreline and upland restoration projects

Contact Anne Bonnerup for more information

Email: bonnerupanne@gmail.com Subject line: BENNIES



POLLINATORS AND PESTICIDES

Photo and article By Sheila Langer

Sadly, pesticides widely used to control mosquitos have serious impacts on countless other wildlife. Despite being approved by the EPA, chemicals used by companies are highly toxic to bees, butterflies, moths and countless other beneficial insects.







the Boat Doctor up North Mobile Shrink Wrap and Buffing * Waxing * Detailing 218-792-5816 cell 218-820-1107 bdun@brainerd.net 768 State 6 NE Outing MN 56662

YOUTH BOATER SAFETY TRAINING

RALALA, in partnership with the Crow Wing County Sheriff's Department, plans to host a Youth Minnesota Waters Operator's Training. A certificate will be awarded after successful completion of the course. There is no cost to participate in the training. This is a great opportunity for your kids, grandkids, and friends to learn about safe boat operation and have a great lake experience.

The training is available to 12 to 17 year olds, or those turning 12 this summer. Adults are also welcome to attend.

Plans are being finalized to host the class in June. It will include approximately 3 hours of classroom instruction, followed by another hour of training in the boats on the water, and ending with lunch provided by RALALA.

Finalized details will be sent via e-blast, posted on Facebook, and at <u>ralalakes.org</u>

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WATERCRAFT DECONTAMINATION UNIT ARRIVES at ROOSEVELT LAKE PUBLIC LAUNCH SITE By Gary Langer

Landa ECOS Mobile Wash and Reclaim Decontamination System Arrival is a BIG DEAL! Research conducted by the Min-

nesota Aquatic Invasive Species Research Center (MAISCR) concluded most aquatic invasive species (AIS) are introduced at public water access points. Preventing introduction is the single most important strategy in the battle against AIS. There are no current methods of elimination once AIS are introduced, only management strategies. MAISCR research also found watercraft decontamination with hot water, and trained AIS inspectors at launch sites to be the most effective prevention strategies.

Fall 2023, RALALA, Crooked Lake Township and Cass County Soil and Water Conservation District (CSWCD) entered into a partnership agreement to purchase, maintain and staff a Landa ECOS Mobile Wash and Reclaim Decontamination System for use at the Roosevelt Lake launch site.

Cass County SWCD purchased the Landa ECOS unit for

\$33,221. In March, Cass County delivered the unit to Crooked Lake Township (CLT). Training of AIS inspectors for its use was held in April.

The original decontamination unit (located at the site of CLT Town Hall) had been donated to Crooked Lake Township in 2016 by CSWCD. In true partnership, it has been donated back to Cass County to be used at other decontamination sites within the county as it works to fight AIS.

We are extremely fortunate the Roosevelt Lake launch site has been chosen! This opportunity has been earned through many years of the dedicated fight against AIS by RALALA and CLT Lakes and Shores Committee members investing thousands of volunteer hours and thousands of dollars.





Visit the Roosevelt Lake launch site, meet the AIS inspectors, and learn about the Landa decontamination process.

DECON unit is available to all watercraft owners at the Roosevelt Lake launch site

THURSDAY through SUNDAY May 16 through September 15

Two AIS inspectors will be on site during times of increased watercraft launch activity.

Prevent the spread of AIS, **Protect** your property values, **Promote** decon unit use!

When sorting your tackle box, remember to remove the leadbased tackle, especially split shot sinkers which are particularly deadly for loons. Drop it off at the Crooked Lake Township canister station during hours that an attendant is present.

Non-toxic tackle is available from local sports shops like My Store in Outing and Redding's Bait in Emily, at a reasonable price and has shown to perform as well as toxic lead tackle.





Loons are now nesting on our lakes and chicks will be hatching by the end of June or early July and are especially vulnerable. Do your part to protect these magnificent birds.

- Watch Loons from at least 200 feet away. Close encounters can be deadly for swimming and resting loons. Use binoculars or spotting scopes from a safe distance.
- Use non-lead fishing tackle. Ingesting one lead sinker or jig will kill a loon.
- Avoid islands before July 15th of each year. Loons prefer islands for nesting.
- Protect native vegetation on all shores. Loons often nest on natural shorelines and use natural materials to build their nests.
- Conserve electricity. Mercury emissions contaminates lakes and loon food.
- Dispose of household garbage at a collection site. Garbage draws raccoons, foxes, gulls and eagles, which prey on loon eggs. Trash can ensnare wildlife like loons.
- Be an ethical angler. Never fish near loon nests or swimming loons, and properly dispose of extra bait and trash on land.
- Keep dogs and cats away from loons and nests. Pets disturb nesting loons and destroy loon eggs.
- Use only phosphorus-free fertilizer on shorelands, and only if needed. Fertilizer that runs off into lakes increases aquatic plant growth, making it difficult for loons to swim and find food.
- Monitor water quality and aquatic invasive species. Check with your lake association, the Pollution Control Agency and other organizations for ways that you can help.
- Be a responsible boater. Harassing wildlife is illegal in Minnesota. Never chase loons or run motorboats or personal watercraft over areas where loons have been seen. Loons and loon chicks have died from being hit by boats and propellers. Report any unusual loon activity or harassment of loons to the DNR at 651-296-6157, ask to be directed to a conservation officer to report an incident. Documentation by photo or video is often most helpful.

Practice and Teach Wildlife Stewardship!



218-820-2728





Darrin Dylla

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651-270-4151 darrin.dylla@gmail.com

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PRESERVE AND PROTECT

Roosevelt Lake is considered a "refuge lake" for tullibee (cisco), a preferred forage fish of walleye, northern pike, and muskellunge. Tullibee require cold, well oxygenated waters, a condition most common in lakes with deep water and healthy watersheds. Refuge lakes have the best chance to sustain conditions for cold-water habitat and species unique in northern Minnesota. The protection of 75% of their watersheds, the land that drains rainfall and snowmelt into a lake, has been shown to protect water quality and aquatic habitat in that lake.

The Roosevelt Lake watershed is more than 35,000 acres in size, about the size of the City of St. Paul. Efforts to protect this watershed will continue through future purchase of qualified land for public ownership and conservation easements, and the efforts of private landowners to manage their property ecologically.

Woods Bay Aquatic Management Area (AMA) was created and expanded to 111 acres with over 5,900 feet of forested shoreline because of the foresight and generosity of Judy and Charlie Eggers and Lois and Bill Stevens.

We, as the beneficiaries of their efforts, must recreate responsibly and respectfully making it our priority, too, to protect this beautiful, pristine space.

Don't miss Linda Van Straaten's beautiful tour of Woods Bay:

https://www.youtube.com/watch?v=feBF -SvYw0



ROOSEVELT LAKE
STATE AQUATIC MANAGEMENT AREA
JUDY & CHARLIE EGGERS TRACT

A SENSITIVE SHORELAND WITH CRITICAL AQUATIC WILDLIFE

PLEASE DO YOUR PART

- MINIMIZE BOAT WAKES
- LEAVE IT CLEAN
- RESPECT WILDLIFE

ENJOY, PROTECT AND PRESERVE FOR FUTURE GENERATIONS

A COOPERATIVE PROJECT BETWEEN

OUTDOOR HERITAGE FUND • HUGH BECKER TRUST MUSKIES INC THE EGGERS FAMILY • NORTHERN WATERS LAND TRUST ROOSEVELT AND LAWRENCE LAKES ASSOCIATION (RALALA) MINNESOTA DEPARTMENT OF NATURAL RESOURCES



Beaver Obstructions on Crooked Creek Weir 4/17/24

All of our RALALA lakes eventually release water through south Roosevelt into Crooked Creek, determining the water level of north and south Roosevelt, and Leavitt Lakes. Years ago, the MN DNR constructed a weir (a structure to control water level but has no by-pass like a dam) across the stream for greater stability of the water level. This allows homeowners to normally gauge dock levels and shoreline protections. Rain and melting snow do create fluctuations in the actual lake levels, but that variation is within a fairly specific range.

In recent years, beavers frequently return to do what beavers do— build dams to create deeper water pools in which to build lodges and store their food. The resulting increased water depth causes problems on the lakes and disturbs shorelines.

RALALA is again working with the MN DNR to have the weir cleared of the debris, and to make another attempt to remove the persistent beaver.





RALALA LAKES
ASSOCIATION
SINCE 2021

VOLUNTEERS NEEDED FOR ADOPT

A HIGHWAY CLEAN-UP Saturday, May 18, 2024 at 9 AM

Meet in the Emily public parking lot at 9 am, May 18, 2024 and join other RALALA volunteers cleaning 2 miles of the ditches along both sides of Highway 6 just north of the city of Emily. It will take about an hour and a half to complete the job. In case of rain or bad weather, the clean up will be done one week later.

Volunteers are always welcome, watch for fall 2024 clean-up dates in our newsletter, and on our website and facebook page. <u>ralalalakes.org</u>



CONGRATULATIONS
Betsy and Cliff Skagen
FIRST LAKE STEWARDS ON LEAVITT LAKE











Roosevelt and Lawrence Area Lakes Association P.O. Box 139 Outing, MN 56662-0139

FORWARDING SERVICE REQUESTED

JOIN RALALA IN 2024

You received a mailing asking you to become a partner in RALALA's important efforts

PROTECTING AND PRESERVING THE LAKES AND THE WATERSHED:

Preventing the spread of AIS
Preserving wildlife and fish habitat
Maintaining clean and pristine waters
Encouraging ecologically sound land management
Supporting safe and responsible recreation

RENEW, REJOIN OR BECOME A FIRST TIME RALALA MEMBER

In 2023 RALALA invested \$200 per member, a deficit budget for the first time, to achieve these important goals. We ask you to Donate generously to Environmental Quality Projects & Initiatives (EQPI)

2024 FUNDRAISING GOAL \$40,000

Special Recognition Donor Levels

Sunfish \$150 to \$299
Walleye \$300 to \$499
Loon \$500 to \$999
Eagle \$1,000 or more

Please return your membership forms, also found at *ralalalakes.org*RALALA, PO Box 139, Outing, MN 56662-0139