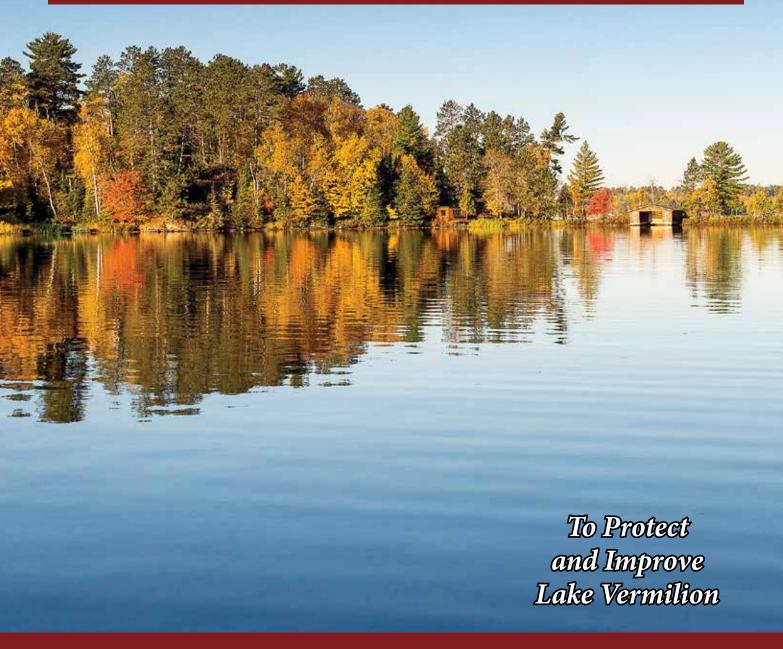
The VERMILION



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PRESIDENT'S MESSAGE

ear Lake Neighbors and Friends,

I trust you had a good summer with all the lake has to offer. As we transition into fall and winter, enjoy all the wonderful things our seasons have to offer.



Dwight Warkentin VLA President

Our Lake Association was very active this summer. We held our annual meeting in July, attended by over 140 members. Our guest speaker, Natasha Bartolotta from the National Loon Center, gave a very informative lecture on the status of loons in Minnesota. We

elected Jessica Templeton as a new board member, who will transition to become editor of this newsletter. Welcome Jessica!

We completed an extensive survey of our water quality, and, for the most part, our water quality is high. Please see the report in this newsletter. Our annual aquatic invasive species (AIS) survey found no evidence of starry stonewort, invasive watermilfoil, or zebra mussels. Our comprehensive AIS prevention program was once again successful, not something we should ever take for granted. We all must continue to be vigilant to help prevent the introduction of AIS in our lake.

With the help of Eagle Docks and our volunteers, we were able to restore our shore lunch sites to

full use in just a few weeks after they were flooded during the June rainstorm. We are working with the DNR and US Forest Service on a potential unique new shore lunch site as we reinvest the donations we receive back into the lake. See the article on page 16 for more details.

We have given over 45 Lake Steward awards to applicants for their stewardship of our shoreline.

Our lake association is strong, with an active board, over 200 volunteers, and, with our membership dues, grants, and donations we have the resources to continue to fulfill our mission to "Protect and Improve Lake Vermilion." Thank you to our dedicated board members and volunteers for your countless hours of tireless work.

I have been honored to serve as your president. I will be stepping down at the end of 2024 and am pleased to announce Lori Ptak as our new president starting in January 2025. Lori has served on the board as our communications director and editor of our newsletter. Welcome Lori!

Regards,

Dwight Warkentin

VLA President

The Vermilion Lake Association newsletter is published quarterly and mailed to members.

Managing Editor: Lori Ptak, VLA Communications Leader

Content Editor: Terry Grosshauser, VLA Board Member

Typography and design work by the Timberjay

Send story ideas and photos to Lori Ptak at <u>lori@ptak.org</u>

Cover photo by Mark Schmidt, VLA member



This Year's Photo Contest Winners

for their favorite photos for the "My Favorite Way to Enjoy the Lake" photo contest at the Annual Meeting held on July 27, 2024.

Taking first place was member Kate Higgins' "Water Spout," taken on the East End of Lake Vermilion earlier this summer. Said Kate upon hearing of her win: "This is the best contest I have ever won! After working 9-5 for the last 25 years, I can honestly say, that was the proudest form of payment I have received."

Kate also took second place with her photo of the Northern Lights above her cabin. To see more of Kate's photos, go to @elyislandgirl on Instagram.

Taking third place was member Patty Hermanson's photo "Last One In," taken on Niles Bay. Patty describes her lake experience and photography: "Our kids grew up spending the majority of every summer at the lake. The cabin is such a special place to our family. That picture, for me, captures the essence of what all of those years mean to me and the joy that has come with them. I can almost smell the sunscreen!"







Introducing: Legends of the Lake

by John Yocum and Terry Grosshauser

new feature called Legends of the Lake will appear from time-totime in The Vermilion. We invite members and friends of the Vermilion Lake Association to share their stories about a wide variety of topics that relate to the rich history of Lake Vermilion. We anticipate that a fair number of stories will involve epic battles with trophy fish, but others will be biographical pieces of various people who shaped the history of the lake. We also want human interest stories relating to life on the lake, as well as stories of unusual or monumental events in the lake's history. Our initial goal is to get enough material from members and friends to craft two or three articles a year in the quarterly newsletter for this new section. To demonstrate what we have in mind, we have recrafted a piece that Terry wrote that appeared in The Vermilion five or so years ago.

It was late August, the lake level was very low from drought, and the smoke from wildfires covered the lake in a ghostly fog. Besides being foggy and blocking the sun's rays, the smoke was not necessarily healthy for many people, especially those with respiratory issues.

My brother and nephew were up for some fishing on Lake Vermilion, and we left the house and headed



out to a favorite area to do some bass fishing. It was partly cloudy with only a little smoke in the air when we left the house. As we cut across a large bay and past several islands, we pulled into the area we were going to fish, and we were met with a wall of smoke very thick covering

the entire area and blocking daylight to the point that it seemed like it was dusk. When I was young, I had asthma and was thinking that this may not be a good day for me. However, I relished the time out in the



boat with my brother and nephew.

We hit some spots that we knew well, and the first produced a beautiful, trophy-caliber Largemouth



at 20 inches. A nice quick fight and a couple of pictures and it was released back to the area we caught it. The fishing continued to be good with very nice sized bass hitting in just about every spot we tried. At a different spot where many years ago we caught lots of bass, and some large ones too, my nephew tied into another trophy-caliber Largemouth bass, again at just over 20 inches. Again, a quick picture and a release.

Only two times on Lake Vermilion have we been able to catch two 20-inchers during one outing. The other time when this happened was when there was an eclipse and the day turned dark and the sun was blocked. We caught many bass that morning along with the two trophies and even lost several to broken lines in thick cover. For people who really enjoy the pleasure of the catch and fishing on a wild and beautiful lake, it was a day for making memories.

This story has elements included such as weather conditions and family member participation that give the reader a full picture of the event. That is what we are seeking for future Legends of the Lake articles. For epic stories about trophy-sized fish, what we had in mind was 20-inches and larger for bass, 40-inches and larger for northerns, 50-inches and larger for muskies, 15-inches and larger for crappies and 11-inches and larger for bluegill.

Have a great story about Lake Vermilion? Please submit your legend of the lake to: VermilionLakeAssociationNews@gmail.com

2024 Lake Vermilion Antique and Classic Boat Show

by Sandy Jackson

little wind (really big winds!) resulted in some pretty wet boat rides but did not stop us from having a great 32nd annual boat show on Sunday, September 1st. Once again, our gracious hosts from The Landing Restaurant provided great food and service as well as wonderful music. which added to the beautiful day.

The Lake Vermilion Boat Show present-

ed the Vermilion Lake Association a check for \$2,000 to be used for continued stewardship of Lake Vermilion. The Landing Restaurant also donated \$250 through beer sales of Castle Danger Cream Ale. For all of us boating enthusiasts, we so appreciate the Vermilion Lake Association in helping us understand what it takes for our



beautiful lake to remain healthy and viable. We want to thank

all our new and old sponsors, as well as the boat captains and their families, for their participation. Without their efforts we would not be able to provide such a fantastic weekend. Thank you once again to The Landing Restaurant for hosting this wonderful event.



The date for next year's show is Sunday, August 31, 2025.

Congratulations to our winners!

For the second year in a row, the People's Choice award went to "Swan Song," a 1938, 22' Chris Craft custom runabout, owned by the Hurley Family on Lake Vermilion (at left).

Captain's Choice award went to Miss Minneapolis IV, a 1948, 22' Hacker Craft, owned by Steve & Nancy Shoop of Lake Minnetonka (pictured above).

Anyone interested in displaying their antique or classic boat, whether it's wood, fiberglass or homebuilt, please contact lakevermilionboatshow@aol.com for more information.



Wear your new caps proudly...

Show your support for your lake association. The price is right! Cap prices are \$20, plus \$7 shipping per order. When you order 3 or more hats the shipping will be \$9. Free local pickup is available. Order online at

https://www.vermilionlakeassociation.org/merchandise/caps/

For more information contact Jerry Lepper, 218-753-2629 (H) or 218-404-2320 or email at inclep4@frontiernet.net

Thank You 2024 Volunteers!

Annual Meeting

Bies, Susan
Carson, Beth
Klapmeier, Patty
Lemieux, Andrine**
Michaelson, Pat**
Towle, Pam
Wade, Ellen

Aquatic Invasive Species Sentries & Detectors

Ankrum, Howard Bryers, Rob Clines, Larry Heimann, Jeff Heimann, Terrie Jackson, Byron Jackson, Penny Korpela-Bontems, Jill Marxhausen, Ann Marxhausen, John McNamara, Bob Patterson, Rick Patterson, Sharon Peach, Richard Siskar, Frank Souja, Wayne Watkins, Nancy** Welke, Wayne Zigler, Sandy

Board Members

Beveroth, Craig
Bright, Sara
Grosshauser, Terry
Hanson, Eric & Mary
Haugen, Gary
Lemieux, Andrine
Lepper, Jerry
Ludlow, Kelly
Michaelson, Pat
Ptak, Lori
Schmidt, Mark

Tamte, Lisa
Templeton, Jessica
Warkentin, Dwight**
Watkins, Nancy
Yocum, John

Communications

Amundson, Steve
Bergman, Joanne
DeAngelo, Alan
Grosshauser, Terry
Lenertz, Steve
Michaelson, Pat
Moccio, Kathy
Ptak, Lori**
Roberts, Lisa

Templeton, Jessica Yocum, John

Donor Volunteers

Cownie, Jim Cownie, Patty Muhich, Denise Muhich, Mark Niepagen, Anne Niepagen, Lee Olson, Eric Olson, Karen

Fisheries

Deangelo, Alan
Eisenhauer, James
Grosshauser, Terry**
Peach, Richard
Riggs, Michael
Vohs, Richard
Wade, Al
Warkentin, Dwight
Wellman, Brian
Yocum, John



Loon Count

Anderson, Warren Anderson, Joann Annen, Valerie Aune, Jim Begich, Ann Begich, Thomas Bergman, Joanne Beveroth, Carol Beveroth, Craig Bontems, Jerry Boutto, Barb Bremer, Corliss Bremer, Melvin Carlson, Cathy Carlson, Jim Conger, Bailey Conger, Bill Cooney, Terri Cooney, Tom Eisenhauer, Betsy Enroth, Gerald Gabor, Michael Gabor, Shannon Grosshauser, Bonnie Grosshauser, Terry Harelstad, Mark Hujanen, Alvin

Hujanen, Florette Hutchins, Don Hutchins, Pam Jeske, Greta Korpela-Bontems, Jill** Kurtz, David Larson, Sue Leciejewski, Val Lenertz, Steve Levy, Mary Lindberg, Reany Lindberg, Steve Lipton, Steve Lipton, Susan Marbaker, Dottie Marbaker, William McGillivray, Elaine McGillivray, Peter Nelsen, Heidi Nelsen, Norm Panichi, Joe Panichi, Kathy Parkes, Ann Ptak, Lori Ptak, Mike Rinehart, Denise Rinehart, Dennis

Schultz, Mark

Volunteer Recognition Picnic

by Andrine Lemieux, Volunteer Coordinator

n Thursday June 20, we had our annual Volunteer Recognition Picnic. Unfortunately, this was after the "great flood of 2024!" Though 66 had sent in an RSVP, 41 intrepid volunteers battled their way around flooded and closed roads, taking long detours to join the celebration. Those who were able to make it were rewarded with fellow volunteers to commiserate with and share stories of sunken docks, wet basements, and a brave rescue of a dog that had been swept away.

This year the picnic was held at the beautiful Camp Vermilion dining hall, which was spared any flooding. As is to be expected for the camp, the BBQ pulled pork meal was delicious and plentiful. After some social time and dinner, there was a brief presentation to express the board's heart-felt appreciation of VLA volunteers. New this year was special recognition of the volunteers with five or more years of service. These tenured volunteers were given a



round of applause and gifted with a large coffee mug bearing the VLA logo.

We thank you all for your service to the lake. You are helping to keep Vermilion the best lake in Minnesota! If you are interested in volunteering, contact Andrine at lemieux.andrine@gmail.com

Schultz, Sandy
Suoja, Wayne
Swanson, Nancy
Teeter, Rick
Tode, Bruce
Ulseth, Judy
Ulseth, Robert
Walker, Kern
Walker, Mary
Weller Smith, Mary

Weller Smith, Mary Ellen Wied, Janet Wied, Karl Williams, Al Williams, Mary Zwieg, Claire** Zwieg, John

Shore Lunch

Bonach, Ed Bonach, Peggy Born, Chris Bremer, Corliss
Bremer, Melvin
Cabbage, Aaron
Fossum, Caren
Fossum, Theodore
Gribble, Ann
Gribble, Jim
Hartley, Sue
Hartley, Tom
Knox, Tom

Lauerer, Kathleen Lipton, Steve Lipton, Susan Mathis, Carl

Mathis, Lori Ptak, Mike**

Schultz, Mark Schultz, Sandy Teeter, Nancy

Teeter, Rick

Templeton, Jessica Ulseth, Judy

Ulseth, Robert

Wollmuth, Timothy

Zwieg, Claire Zwieg, John

Zwonitzer, Dan

Lake Steward Program & Shoreline Restoration

Bright, Sara**
Forester, Jeff
Lanigan, Kevin
Larson, Sue
Litherland, Mark

Navigation lights

Suoja, Wayne

Bontems, Jerry** (east) Jenkins, Mike (west) Zweig, John** (west) **Resort Ambassadors**

Condon, Pat Haugen, Gary Michaelson, Pat

Moccio, Kathy

Water Quality

Beveroth, Carol Beveroth, Craig** Bies, Susan

Cooney, Terri Cooney, Tom

Hunter, Peggy McNamara, Bob

Potter, Don

Potter, Laurie Stebbins, Jeff Wallace, Doug

Watkins, Doug Watkins, Nancy

Wied, Karl

2024 Aquatic Plant Survey Report

he Vermilion Lake Association continues to maintain a comprehensive strategy to monitor, identify and report any new invasive species that may be found in Vermilion. Our vigilant lake sentries are assigned specific public accesses, resorts



and marinas for monitoring, and they use rakes to pull out aquatic weeds for examination. Weed screens are performed towards the end of June, July and August. In addition, the VLA annually hires a professional weed survey company to perform a thorough assessment of the lake. The survey monitors changes in the plant community that could indicate changes in the lake's health and

detects any new invasive species. This enables a rapid response to formulate strategies for management and containment.

Steve Henry of Aquatic Survey Professionals performed this year's survey. Steve has been studying Vermilion through the past few years and has a good sense of lake trends. After the 2023 survey, he recommended targeting newer areas of the lake that had either never been surveyed or had not been surveyed recently. Ten sites were selected. Vegetation was observed at 321 of 598 sample points, which is 53.6% of sites; in contrast, in 2023 vegetation was observed at 47.4% of the sites. While the percentage of sites with vegetation was generally lower in previous years, the new set of survey points was influential in the increase.

The three most common species observed in 2024 were Wild Celery, Canada Waterweed and Robbins Pondweed. Everett Bay is historically one of the most heavily vegetated areas in the lake. The water clarity seemed to be reduced in 2023 and the flood of June 2024 appeared to have dramatically contributed to a reduction in most of the plant species. The Western bays of Head O Lakes and Spring Bay were well vegetated. Bushy Pondweed, an annual native aquatic species, was particularly prolific this summer and was an issue not only in Vermilion but other lakes in the region. Its tendency to break loose and wash up on the shore in the second half of the summer was a nuisance for many cabin owners.

Tables of species and occurrences for the full lake are accessible on the VLA's website. The most important finding was that no new aquatic invasive species were found.

Thank you to all who use this lake for your continued caution in maintaining the health of Vermilion and preventing the introduction of an invasive aquatic species.

Pulling Your Dock or Lift? Make Sure to Check for Zebra Mussels

The Minnesota DNR reminds lake property owners to visually check boats, trailers, docks, lifts and all other water-related equipment for invasive species when removing equipment for seasonal storage. Zebra mussels may have become attached to surfaces that have been in the water over the summer.

Whether pulling equipment directly onto the shore for the winter or transporting it on the road to a storage location, it is important for equipment owners to help prevent the spread of invasive species. Recommendations from the DNR are as follows:

- ➤ Keep docks and boat lifts out of the water for at least 21 days before placing them in another body of water. This is state law.
- ➤ Inspect the posts, wheels and underwater support bars of docks and lifts, as well as any parts of boats, pontoons and rafts that have been submerged in water for an extended period. Focus your attention on hard surfaces that have been in the shade. Zebra mussels tend to avoid direct sunlight. Sometimes you may not see them, but as you run your hand along inspection sites you may note areas that feel like sandpaper.
- ➤ If hiring a lake service provider to install or remove water related equipment, check that they are on the List of Permitted Lake Service Providers (see link below) on the MN DNR website. These businesses have received training regarding Minnesota's aquatic invasive species laws.
- ➤ Equipment owners may need a no-cost transportation permit to transport equipment from an access or shoreline property if it cannot be completely cleaned of aquatic plants or invasive species.
- ➤ Contact an area DNR aquatic species specialist if you think you have discovered an invasive species not already confirmed on the lake.

https://webapps15.dnr.state.mn.us/ais business training/lake service provider permits/public website list

Improving Our Public Access Launch Sites

ary Haugen (at right), the VLA's AIS Co-Chair, has over the last two years been making steady progress enhancing launch sites on Everett and Black Duck Bay. Improved stenciling on the pavement is in process of being completed,

reminding boaters to clean, drain and dry their watercraft. Tool stations are in place to facilitate weed removal.



Bait disposal stations have been installed not only at Everett and Black Duck but also at launch sites at Hoodoo Point, Frazer Bay, Pederson's and the Landing. Gary reports the bait disposal stations have been

a success. Usage has increased significantly through the summer. Check them out and stay tuned for the final drone shot marking these improvements.



Annual Meeting 2024

nce again, Vermilion Lake Association's Annual Meeting was a big success! Members met at Camp Vermilion to catch up on the latest program news, vote in the Photo Contest, and approve VLA board business items.

After a delicious meal of smoked brisket, sides, and wood-fired brownies, board president Dwight Warkentin called the business meeting to order. Members approved last year's minutes and treasurer's reports. New board members approved were Kelly Ludlow, Lisa Tamte, and Jessica Templeton. Gary Haugen, Pat Michaelson, and Nancy Watkins were re-elected to another three-year term. The new accessible Shore Lunch Site was given special recognition by Jim Fisher, son-in-law to Ray and Vi Harris, to whose memories the site is dedicated.



Following the meeting, our speaker Natasha Bartolotta, Stewardship and Outreach Manager at the National Loon Center located at Cross Lake, MN, gave a lively and educational presentation titled "Land of 12,000 Loons." Her presentation covered many interesting loon facts, including breeding habitat, migration habits, and the calls of our common loons as well as other loon species.

To cap off the event, door prizes of donated bread from Camp Vermilion, puzzles from WA Fisher, and centerpieces made and donated by Terri Heiman were raffled and distributed.

Water Quality Survey Results

hanks to ten Water Quality volunteers (Terri and Tom Cooney, Bob McNamara, Laurie and Don Potter, Jeff Stebbins, Nancy and Doug Watkins, Karl Wied, and Carol Beveroth), we completed the second comprehensive water survey of the



VLA Board Member

sampled 20 sites for 20 different chemical and physical characteristics of Vermilion surface water. Even with the spring rains, the water level was only 2 inches higher than our last major sampling in June 2022. (As a side note, the lake set a new high water level record on June 23 at 1359.71 feet, but as of September 3, it was 26 inches

lake during the week of July 22. We

lower; probably 32 inches lower by the time this is published.)

Following are some notable results from the survey; the complete findings are available on the VLA website (see the Water Quality box on the home page).

For the first time we are seeing higher levels of manganese and phosphorous, mainly on the East end bays and Black Bay. Manganese is a micronutrient needed for plant growth and development. One Canadian study has suggested high (>0.05 ppm) levels of manganese are not tolerated by Starry Stonewort. When oxygen levels are low, manganese, iron, and phosphorous can be released from sediments, and water rich in organic matter (like decaying leaves, vegetation, etc.) is known to increase the release of manganese from the soil and bedrock. It does not appear that levels are high enough to affect water quality.

Sulphate is still an issue for wild rice growth in Stuntz, Cable, Armstrong, Mud Creek, and Big bays, but surprisingly not in Pike Bay (historically, this has been a hotspot). Mining, artificial fertilizers, mineral weathering, and decomposition all contribute to sulphate levels. Flora and fauna can be impaired by sulphate pollution, which reduces pH and oxygen concentrations.

East Two Rivers, as it enters Pike Bay, is still a calcium hotspot (last reading was 22.3 ppm, and we prefer to see less than 20 ppm); no zebra mussels have been found.

Aluminum levels are high at Breitung Monument (Soudan mine pump-off), Pike River under Hwy 77 bridge (MinnTac leakage via the Pike River), and Black Bay. High aluminum levels are usually due to mining and weathering of rock. Aluminum is a natural component of local bedrock and is known to control toxic algal blooms by cutting off nutrients such as phosphorous, and it may be the reason we don't see algae blooms in some bays. It is not a big issue for plants or fish.

Iron levels are high in Black Bay and the entrance to Pike Bay from East Two Rivers. Greater than 1 part per million (ppm) can affect aquatic life and turn water brown.

Black Bay merits more monitoring – results were high for aluminum, iron, manganese, and phosphorous.

Water leaving Vermilion in Wolf Bay near the dam is GOOD – no yellow "caution" signs.

What is the bottom line? Vermilion water remains fairly pristine, but we must continue to monitor it, especially the known "hotspots." If you're talking to your friends on Crane, Namakan, Kabetogama, Sand Point, or Rainy lakes, be sure to let them know that we're sending some pretty good water their way.



Like Vermilion Lake Association on facebook for regular updates, links to articles, and more...



By Carol Beveroth

he 8th of July was a terrific day on the Cooney "Pontooney" for counting Lake Vermilion loons. The weather was as perfect as possible. The water on the west side of Big Bay was calm, the day sunny and we left the mosquitoes back at the cabin. As we motored to our assigned territory and waited for our first loons to appear, we breakfasted on Eggs in a Muffin Cup, fresh peach scones and hot coffee.

Our first sighting was a lone loon. We quickly started to see more. The highlight of the day occurred as two loons swam nearby and a third loon joined them. Almost immediately two more loons flew next to the pontoon to join the other three. The five loons entertained us swimming nearby in a circle for several minutes. We are unsure if Terri Cooney's loon calling was responsible for this gathering of loons. Later, as we read Stan Tekiela's "Loons: The Iconic Water-

birds," we learned swimming in a circle is social behavior.

A lone cormorant flew into our assigned territory. After our count was complete, and as were returning to the dock, we motored in the vicinity of Potato Island where we saw another loon (not included in our count) and a particular cormorant masquerading as a loon.

The only thing to have made the day more spectacular would have been to see a chick riding on the mother's back. We have that to look forward to next year.

Nine was the total loon count for our team. The total number of loons counted was 193, eight more than we counted in 2023.

It was a delightful way to spend the morning and an enjoyable time was had by Terri, myself and our spouses.

Dock Signs Show Member Support for our Mission.... to protect and improve



The 12x18 inch sign is designed to attach in either corner of dock front with self-tapping sheet metal screws or stainless hose clamps. Some members are choosing to mount them on their boat houses as well, or even at the entrance of a driveway. These striking aluminum signs with UV protection can be ordered at

https://www.vermilionlakeassociation.org/merchandise/membership-signs/

Loons lose a guerrilla war with mink raiders

by Noel Sederstrom, VLA Volunteer, Live LoonCam Team

In the peaceful summer evenings on Lake Vermilion, the loon pair we've been watching this year had to confront a horrible reality this June and July. Their nest was never safe. Not right on the water with its perfect escape route—and not even atop a rocky island that let them see what's coming.



Hidden under a pine tree, dad loon scans the bay for trouble, protecting the two eggs in their second nest.

The loons always watch with intense interest the fishermen coming and going in their noisy boats and the nearby vacationers making a racket. Or every Monday, the guy mowing the lawn. But they actually seem to take comfort in these familiar behaviors and noises from their human neighbors.

One real danger often materialized in the darkest of nights, about midnight, when there was no moon to light up the lake. Without a sound, a gang of critters would target Mom Loon sitting vigilant on her nest, not once or twice, but over and over at both locations. But it was a daylight terror, the loons' mortal enemy—the bald eagle—eventually spooking them and driving them away from their second nest out onto the lake.

The VLA's Live LoonCam with its infrared night imaging capability was able to capture what happened on many of these different occasions, even in the dead of night. We're grateful to Access Broadband for the internet service that made it all possible! Video clips of the loons' adventures are at our website and YouTube Channel. Unfortunately, for those of us

hoping to see a loon chick, this would not be our year.

"Oh my gosh, my heart just goes out to those loons," said Gaea Crozier, a Minnesota Department of Natural Resources non-game wildlife specialist based in Grand Rapids. "The videos are a real eye-opener. You would never know that this goes on in the wild!"

For much of the summer, we were engaged in a robust back-and-forth on our VLA Facebook page, wondering if these three attackers were mink, or possibly otters, which are larger. Crozier took a careful look at our video clips to give us her expert opinion.

"Those are some crazy videos!! My first reaction was... that it was an otter. Otter was my gut reaction, but then comparing the size of the nest and the size of the egg, it looks more like a mink."



Two furry thieves wrestle with the loons' egg before rolling it off the nest into Lake Vermilion.

When Mom Loon was viciously attacked early June 14, she tried to use her long beak to take a stab in the dark at her attacker. But then the animal jumped on her, biting and hanging on, the two of them tumbling into the lake thrashing about, while another attacker came after her second egg from the rear.

"I didn't realize mink would go after a loon like that," noted Crozier. "Putting my love of loons aside, it was really fascinating to watch the mink and their behaviors. The videos intimately capture the circle of life."

Continued on next page



The loons' first nesting location was vulnerable to assaults from the water. Loons have trouble walking on land and prefer the lake, often swimming underwater to hide their approach. We watched as Mom and Dad Loon took turns guarding their eggs, then attempted to protect them when the lake level suddenly rose six inches in mid-June. It is entirely possible that the high water was to blame for the loss of their first egg.

After the loons abandoned their first nest on June 14 (see our coverage in the Summer edition of The Vermilion), they rested for two weeks, then returned to try again. They chose to build a second nest nearby atop a rocky outcropping under a pine tree, hidden and protected from an assault from above. Mom loon laid two more eggs and the two again attempted to incubate them. But the attacks didn't stop. At this new location, the trio of bandits would wait until both loons left for a swim before invading the nest and making off with a precious egg.

After losing the third egg to these thieves, the loons seemed to lose heart. Though we can't really tell which is the female and which is the male, it appeared that Mom Loon's dedication for sitting on the nest was no longer shared in the same way by Dad Loon. There were long periods of time when the fourth egg went unprotected. After one such overnight lapse, our infrared camera captured this surreal image of the parent returning in the pre-dawn hours to the last egg. It was there, and it was still OK, after being left alone and unprotected for more than ten hours.

Later that very day, the loons were scared away again by an eagle flying overhead, with the shadow of the ferocious bird visible as it swept across their nest.

We got another surprise a few hours later. As the sun begins setting in the west, the faithful loon simply gives up and quietly swims away without looking back, never to return. Wildlife experts have witnessed this kind of thing before, where a loon just abandons the nest after a series of troubles. A few hours later, the same trio of thieves climbed up out of the water and rolled the last egg over the back of the nest and onto the rocky shoreline, where they could be heard snarling and fighting over it.

Bill Michaelson of our team went to inspect the nest area afterwards. In his photo, you can see there is no trace of the egg in the empty nest or the rocky shoreline behind it.

The same trio of raiders were out on patrol a day later, and our Live LoonCam caught them checking out what had been the loons' nest. The images gave Crozier another chance to study them.

"I still think these are mink. Long, slender body... and they appear to be small compared to the vegetation."

By now, the loons have all headed south to their winter hangouts. And although we were nearly as disappointed as the loons, the DNR's Gaea Crozier gets the last word. "Thanks for promoting a love of wildlife!"

You can watch "Loons abandon nest and their 4th egg after eagle scares" on our website, www.vermilionlakeassociation.org or at https://www.youtube.com/@LakeVermilion

Finding Vermilion, a family story

by Alan R. DeAngelo

In the summer of 1962, my parents were talking to a neighbor's son, Father Jarecki, a



Catholic priest, who knew that Mom and Dad took their four sons fishing every year for vacation. It was then that the good Father told my parents about this near wilderness lake in northern Minnesota called Lake Vermilion. Calls were made to Fr. Jarecki's favorite resort, Retreat Lodge, and we were scheduled for

two weeks in June of 1963. I was eight years old.

The Buick LeSabre would've been too overloaded for a family of six with all of our stuff, including an old 5hp Johnson Seahorse outboard. To remedy this, two duffel bags were loaded up and shipped two days before via Greyhound bus to the bus stop in Cook. The duffels contained life jackets, heavy coats, rain gear and any other items that would fit, mostly clothing. The trunk of our car was packed with fishing stuff and Mom's Presto cooker. She would've been lost without her pressure cooker. She was a whiz with it and could create a meal in no time flat.

The trek from Chicago to Cook is approximately 600 miles. With four boys ages 3-13 stuck in the car for 12+ hours, I'm sure it was a lot of fun for my folks. The three older guys sat in the back, the youngest sat between Mom and Dad up front. Remember, back then, most of trip was two lane road so Dad passed a lot of people, which was very common. It was also before fuel injection, so the hills south of Duluth, around Solon Springs, were a challenge. Dad would yell "Charge," motioning with his arm and pointer finger forward. He would literally floor it, approaching the hill at 80 mph, and then climb and lose speed, cresting the hill at 30 mph or less. The car was heavy, loaded with people and, as I said, fishing stuff.

We also had two coolers, one for water and the other for lunch meat and chocolate milk. A bag with bread and cups was by Mom's feet. We stopped for a sandwich and chocolate milk just south of Eveleth at Half Moon Lake. There was a roadside picnic table there before 53 was widened into four lanes. Mom, who had a tendency for road sickness, really took advantage of that half hour respite. This became a tradition.

Arriving in Cook, we stopped at the bus stop. (Through conversations on Facebook with some Cook residents, I found its name was Ardin's store.) We got the duffels, put them in the back seat, and we three older guys sat on them, leaning forward because we had little head space. Finding the resort directional sign was an omen that we were almost there. In '63, the sign was full of resorts, not like it is now. We found the Retreat Lodge sign and began our journey down the dirt road.

Being from the city, Dad was uncomfortable with the narrow, winding, dirt and gravel road, so he took his time. At sharp turns, would honk his horn, afraid that oncoming traffic would hit us head on with all the blind spots that were present. After all, he had precious cargo aboard! Finally, the Retreat Lodge sign appeared and we were almost there. One section of the one lane road went through a swamp and I recall having to drive over logs that were placed across the wet area. Dad opened his door, leaned out and watched intently as he drove over that the first time. It was very memorable hearing him talking under his breath as he crept forward. And then we arrived.

Lou and Claire Coviello were gracious hosts and showed us to the furthest cabin, close to the point, that was at the top of a steep shoreline. A long flight of stairs led to our dock. We unloaded the car, got settled in and, like horses waiting at the gate, we boys were set free, bursting out of the cabin. Lake Vermilion, here we come! We were in Heaven. Thanks, Father Jarecki.

Retreat Lodge was our homebase for two weeks every year until the Coviellos sold it and retired. Lou got to calling us "his boys" after a few years. We willingly helped him gather the trash, get the fish guts

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In Memory...

The Vermilion Lake Association is grateful for donations received in memory of beloved friends, family, and neighbors. These gifts were received between June 1 - Oct. 1, 2024 honoring:

Charles Rasor Keith Leroy Miller Ray & Vi Harris

Don Pilger Mark Phillips Sheri Sawatzky

Garret Westby Mary Elisabeth "Sissy" Taylor Kurth Vern Amundson

Finding Vermilion...from previous page

from the fish house, and ride with him to the open dump. He even let us ride the tailgate of his station wagon. What a treat!

Bears were always present at the dump, awaiting a fresh meal. There was no need to go to the Vince Shute Sanctuary. There were always bears feasting on trash. We learned that the bears would leave you alone if you left them alone. They only wanted an easy meal. Lou also taught us to keep vigilant and never, ever approach a sow with a cub or a cub alone. That was our payment for collecting the guts

and trash. What an adventure. An adventure that is still lasting a lifetime.

There are other stories of other resorts that we stayed at, hanging our hats as a family at Timbuktu Resort for many years and then, finally, settling in at Muskego Point Lodge. There are so many great memories of the lake over the past 61 years. Lake Vermilion gets in your blood and there is no cure. Divine intervention; it sure feels like Heaven every time I return.

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The Vermilion Dam area

A potential new picnic site and more

arlier this autumn, VLA board members Terry Grosshauser and Dwight Warkentin met with Ed Tausk (owner of Vermilion Dam Resort) and key employees of



Terry Grosshauser VLA Board Member

DNR Parks and Trails (Brad Dekkers, Chris Suihkonen), DNR Fisheries (Matt Hennen), and the U.S. Forest Service (Tim Engrav) to discuss the canoe portage on the east side of the

dam, which ends below the rapids on the Vermilion River. Currently there is access to the river on the west side of the dam, running through the Vermilion Dam Resort and private

property. Due to the sale of the private property on the river side, public access on the west side of the river will no longer be available next year.

The concept that all parties are working on is to remove the existing dock on the lake side and replace it with a longer floating dock that would accommodate at least two boats. On the river side, a floating dock and ramp would be constructed. The VLA would be responsible for maintenance of these docks in the future. On the lake side, a day-use picnic site is being considered, with the standard items - latrine, picnic



table, and fire grates. Additionally, a couple of potential sites for another picnic table have been identified, which would allow for a view of the rapids.

Agreements and approval for plans are still in the works. We are optimistic that this could be another great capital project supported by our many volunteers and contributors.

We are continuing to look for other capital opportunities. If you have any ideas you would like to share, please contact the President, Dwight Warkentin, or any Board member. Contact information is included in this newsletter.

Give the Gift of Membership

Looking for a gift AND a way to support the lake? Give the gift of a membership to the Vermilion Lake Association. Your family member, neighbor, and/or fellow lake lover friends will not only get a great magazine four times a year; they will get useful information on how we all can improve and protect our lake for future generations to enjoy!

Go to https://www.vermilionlakeassociation.org/ and give a gift membership.

Lake Steward Community Grows

ave you noticed a few more Lake Steward signs posted around the lake this season? Our team visited 24 properties, awarding 13 signs to new Lake Stewards. Our final two awardees for the season are the Gebhardt and Bumgarner families. Both families have enjoyed the lake for years, then took the leap to purchase the perfect spot for their



Sara Bright VLA Lake Steward Leader

long-term use. Thank you for your stewardship of our beautiful lake!

While we certainly enjoy awarding signs, educating property owners about how to improve their land-

scape to preserve land and aquatic habitat is even more rewarding. As we walk the property with prospective awardees, we seek to strike a balance between the structures on the property, the landscape (mostly rock, or soil and plants), and how the family uses it



Above: The Gebhardt family



with the benefits to the lake, land and wildlife.

Are you curious about whether your place qualifies for a Lake Steward award, or are you looking for ideas to improve your alignment to best stewardship practices? Visit the VLA website and take the "Are You a Lake Steward" Survey: https://www.vermilionlakeassociation.org/other-programs/becomea-lake-steward/

Left: The Bumgarners with VLA President Dwight Warkentin

The Impact of Cyanobacterial Harmful Algal Blooms on Lake Vermilion

by Lienne Sethna, PhD, St. Croix Watershed Research Station, Science Museum of Minnesota

ou take a deep breath of fresh, morning air as your boat glides across the still waters of Pike Bay. The cool morning air lifts fog from the surface of the lake which, even in the crisp temperatures of early fall, has retained the warmth it gained during the long, sunny days of summer. Breathe in,

breathe out. You're one of the lucky few who get to start their days on one of the largest lakes in Minnesota.

Once the sun has fully emerged above the horizon, you notice a green speckled haze that stripes the surface of the water. You've heard of algal blooms – the stinky kind that turn the lake bright green and close swimming beaches – but on Lake Vermilion? As the sun continues to rise. the green color intensifies and mixes with a bright, cyan color, almost as if bright green and blue paints were spilled along the shore. You're witnessing a bloom of cyanobacteria.



Above: Green, speckled stripes of cyanobacteria on Sawbill Lake, one of the most popular entry points into the Boundary Waters Canoe Area Wilderness. Photo by Lienne Sethna.

Cyanobacterial harmful algal blooms (cHABs) are becoming an increasingly common concern for lakes across the country, and Lake Vermilion is no exception. These blooms, which occur when cyanobacteria (commonly known as blue-green algae) grow rapidly in water bodies, pose significant threats to water quality, fisheries, and recreational activities.



Above: A cyanobacterial bloom concentrating along the shore of Burnt Lake, in the BWCA. Toxins measured here were six times greater than the EPA recreational limit. Photo by Lienne Sethna

Understanding Cyanobacteria and cHABs



Cyanobacteria are naturally occurring microorganisms found in all types of water bodies. Cyanobacteria were one of the first organisms on Earth to make energy from sunlight – or photosynthesize – contributing to the oxygen-rich atmosphere that enabled life on Earth as we know it. Under certain conditions, such as warm temperatures, abundant sunlight,

one of the first organisms that could photosynthesize, helping to transform our atmosphere about 3.5 billion years ago. You can watch a brief history of cyanobacteria and how they're striking back in this episode of "Minute Earth" on YouTube, created in partnership with the St. Croix **Watershed Research** Station.

Cvanobacteria were

and excess nutrients (particularly phosphorus and

Continued on next page

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nitrogen), these microorganisms can multiply rapidly, forming dense colonies or blooms. While not all cyanobacteria are harmful and can exist in harmony with other aquatic organisms, the dominance of cyanobacteria over other beneficial algae creates environmental and public health concerns. In fact, some species of cyanobacteria produce toxins that can be dangerous to humans, animals, and aquatic life.

Water Quality

One of the primary concerns with cHABs is their impact on water quality. The toxins released by certain cyanobacteria can contaminate drinking water supplies, posing serious health risks. Even non-toxic blooms can deplete oxygen levels in the water as they die and decompose, leading to hypoxic conditions that can harm aquatic life. Additionally, the presence of these blooms can cause unpleasant tastes and odors, making the water less appealing for consumption and recreational use.

Fisheries

Cyanobacterial blooms also have a detrimental effect on fisheries. Not only are the toxins produced by cyanobacteria harmful to fish and other aquatic organisms, large blooms can contribute to fish kills and a decline in biodiversity. The low oxygen levels caused by decomposing algae further exacerbate the problem, creating an environment where many fish species struggle to survive. This disruption of the aquatic ecosystem can have long-term consequences, affecting not only the fish populations but also the larger food web that depends on them.

Recreation

Lake Vermilion is a beloved spot for swimming, boating, and fishing, but cHABs can severely impact these recreational activities. The thick, green scum that often accompanies blooms can be unsightly and uninviting, deterring visitors and reducing the lake's aesthetic value. More importantly, direct contact with toxic cyanobacteria can cause skin rashes, respiratory issues, and other health problems for



Above: Lienne Sethna works with Amelia Wilson-Jackson to collect water quality and algal samples to understand cyanobacterial bloom formation in the Superior National Forest. Photo by Adam Heathcote.

swimmers. Pet owners should be especially cautious, as dogs are particularly susceptible to cyanobacterial toxins when they ingest contaminated water or lick algae off their fur.

Prevention and Mitigation

Addressing the issue of cHABs requires a combination of proactive measures and community involvement. Reducing nutrient runoff into the lake is crucial; this can be achieved through better agricultural practices, proper disposal of lawn and garden waste, and minimizing the use of fertilizers near water bodies. Additionally, supporting initiatives aimed at monitoring water quality and promoting public awareness about the dangers of cHABs can help protect our lake.

Cyanobacterial harmful algal blooms are a serious threat to the health and vitality of Lake Vermilion. Understanding their causes and consequences is the first step toward mitigating their impact. At the St. Croix Watershed Research Station, we are actively engaged in studying how these blooms form, especially in lakes that are seen as "pristine" without a lot of outside nutrient inputs. Using science, outreach, and a passion for water quality, we hope to under-

stand how to protect our most valued lakes for generations to come.

About the author: Lienne Sethna is a PhD research scientist at the Science Museum of Minnesota's St. Croix Watershed Research Station. She studies how nutrients cycle in lakes and rivers to understand how people are affecting freshwater environments.



Vermilion Lake Association PO Box 236 Cook, MN, 55723

Volunteers Make the Difference

The Vermilion Lake Association has been fortunate over the years to have a dedicated group of leaders and volunteers to staff our important activities. We are grateful for their help.

Please consider joining this team. We have needs for both workers and leaders, for those with only a few hours to spare, and for those who can make a larger time commitment.

If you think you may be interested, please contact Andrine Lemieux, VLA Volunteer Program Leader, at 218-979-7893 (cell) or Lemieux.andrine@gmail.com.

Vermilion Lake Association Lisa Tamte, Member Records · P.O. Box 236 · Cook MN 55723 Itamte@gmail.com · 612-475-3064
Membership year runs from Jan 1st through Dec 31st ☐ 2025 New Member ☐ 2025 Renewal
Membership level ☐ \$20.00 Household membership ☐ \$50.00 Business or Organization
Member Name
Spouse/Partner Name
Mailing address Street
City State Zip
Email (requested) Phone (requested)
Please clip or copy this form and send to the address above.

Become a Member

Join those who love Lake Vermilion as much as you do. Help us continue the many activities you've just read about.

Not sure? Check us out at our website VermilionLakeAssociation.org. We're pretty sure you'll like our vision for the future and the work we have underway now to make Lake Vermilion even better.

Please mail a check with the form on this page or join at our website using PayPal or a credit card.

The Vermilion Lake Association is a 501(c)(3) nonprofit organization.

Do You Qualify?

Trick question. Anyone can join the lake association whose mission it is to protect and improve Lake Vermilion. No need to be a property owner. No need to be a fisherman or a kayaker. Just someone who cares about our great lake and wants to protect her for the next generation.