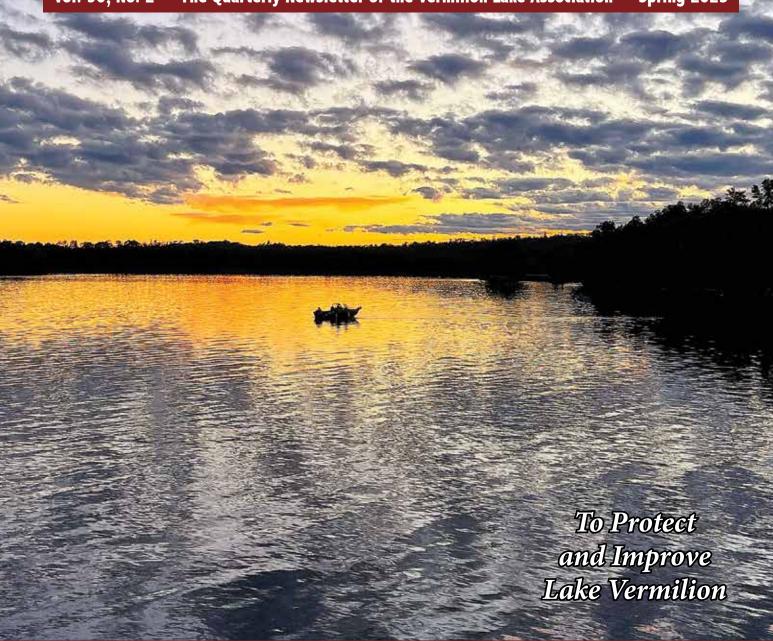
The VERMILION



Vol. 50, No. 2 • The Quarterly Newsletter of the Vermilion Lake Association • Spring 2023



IN THIS ISSUE

Get ready for spring....page 3
AIS updates...page 4-5
Loon facts and loon cam...page 6
Firewise tips...page 7

Lake Vermilion Fishery report...pages 10-15
Vermilion tournament schedule...page 16
Possession limits updates....page 19
Preventing barotrauma...page 20-21

PRESIDENT'S MESSAGE

ear Lake Neighbors and Friends,
As I begin my tenure as your president, I start with a thank you to Pat Michaelson for her leadership and many accomplishments over the



Dwight Warkent VLA President

past two years. We have seen our volunteer organization grow to over 200 people, probably the largest lake association volunteer group in the state. We began live streaming the loon cam and will hopefully have it on board again this spring. Our Lake Steward Program was launched and has been very successful, with the most partic-

ipants for our lake in this overall statewide program. Our board has been strengthened with new members. We initiated a water quality testing program under the leadership of Craig Beveroth. Once again, we were successful in obtaining our request for the annual AIS grant from the county. There are many other accomplishments so the list could go on, but, once again, thank you to Pat for her leadership.

I also wish to thank the Board, the many volunteers and the program managers that have made such a difference to our lake. We are blessed with an active membership-it is one of the largest, if not the largest lake association in the state.

As I sit here writing this in early April, we are still in the grips of winter with still another winter storm approaching. We may be looking at a late ice-out this year, but things could change. But, we will have a spring with all the joys the lake offers us. Please remember to clean your boat, practice risk prevention for AIS, dispose of your bait properly and consider conservation fishing.

We plan to have some improvements at some of the boat launch sites this spring with cleaning stations, bait disposal bins and improved signage as we continue with our AIS mitigation priorities. As we look forward, later this summer, we are working on improving some of our shore lunch spots, and, hopefully adding an additional one in the next year or two. These lunch spots are very popular as I am sure many of you can attest.

Please mark your calendar for July 29 for our annual meeting. Once again, this will be held at Camp Vemilion and we have a speaker I am sure you will enjoy.

I do not plan significant changes to the organization, but intend to build on the past successes. We continue to look for volunteers and will likely add another board member or two. We intend to increase our focus on the fishery as this is vital to the public's enjoyment of the lake.

Stay involved, enjoy the coming spring and all the wonderful things this lake has to offer.



Take a cat fishing!

Photo taken by VLA member Aaron Kania, of Roxanne Tea and their cat Smokey. "Smokey loves the canoe and runs down to the dock for a night paddle with us."

Springtime Checklist

s the winter snow gives way to the green grass and leaves of spring, our thoughts again turn to the open water fishing and boating season on Lake Vermilion. This article attempts to share some ideas in the form of a checklist to help lake association members and visitors prepare to enjoy and protect our lake.

Boating Safety – Before putting your boat in the water consider reviewing the Minnesota DNR's webpage on boating safety: https://www.dnr.state.mn.us/safety/boatwater/index.html

There is a lot of great information on this website. Periodically, the Minnesota DNR updates the applicable laws and places new information on this webpage. For additional information on *Boating Safety*, please visit the Vermilion Lake Association's website. It is under *Other programs* in the toolbar at the top.

Consider becoming a Lake Steward – Limit the use of fertilizer and other lawn chemicals, keep your septic system up to date, make sure no pollutants from your property enters the lake including pet waste, ashes from fire pits, leaves and fallen trees. For more information in *How to become a Lake Steward*, please see the Vermilion Lake Association's website.

Protect our Loons – When updating fishing gear, please replace sinkers and jigs made from lead with lead-free tackle to help prevent loons from ingesting toxic lead tackle at the bottom of the lake.

Additionally, the VLA conducts an annual loon count in the middle of the summer to help assess the loon population. Consider becoming a loon count volunteer. For more information on this topic, please visit the *Loon Stewardship* section on the Vermilion Lake Association's website. It is under *Other Programs* in the toolbar at the top.

Shore Lunch sites – The Vermilion Lake Association has developed and maintains a series of shore lunch

sites around the lake. Improving and updating these sites is an ongoing project of the Association. To learn more about this topic including the opportunity to volunteer to help maintain these sites, please see *Shore Lunch Sites* on the Vermilion Lake Association's website. It is also under *Other Programs* in the toolbar at the top.

Dispose of unwanted bait in the trash, not the lake

– Minnesota law requires anglers to dispose of their unwanted bait in the trash. This is to avoid possibly introducing unwanted aquatic invasive species (AIS) and fish diseases. Make sure the dirt from crawlers and the water from minnows and leeches also goes in the trash and not in the lake.

Review lake maps to refresh on main boat routes, water depths and nighttime navigation lights

– consider reviewing a recent map of the lake to refresh your memory on main boat routes and water depths. The Association has placed nighttime lights for the safety and convenience of boaters. The red and green channel markers as well as the white hazard buoys are maintained by Timbuktu. Call them at 218-666-2434 with issues concerning these buoys. For detailed information on these topics see the *Boating Safety* and *Nighttime Navigation Lights* sections on our website.

Review AIS prevention protocols including cleaning and drying your trailer and boat – Lastly, a topic of high importance and one of the main missions of the Association is Aquatic Invasive Species (AIS) prevention. We encourage you to review the AIS Prevention section on the VLA's website; it is chock full of information and videos on topics such as how to recognize and report suspicious vegetation and how to prevent introducing AIS into the lake.

Cover photo by VLA member Peter Tollefson, winner of the honorable mention award in the 2022 VLA photo contest

Vermilion Lake Association Receives AIS Funding

Nancy Watkins is pleased to announce that St. Louis County fully funded the VLA's grant application for \$23,500. Monies received will be used to continue watercraft inspections and cleaning, improving public awareness and education regarding AIS threats, enhancing early response efforts and expanding public and private partnerships.

Each year the state Legislature allocates funding to

counties to prevent the introduction or limit the spread of AIS.Since 2014, when the AIS Prevention Program started, St. Louis County has distributed more than \$5 million to organizations which address AIS issues. Recipients of funding must address AIS issues with multi-disciplinary, science-based solutions that sustain natural resources and address social and economic concerns.

eDNA Water Sampling to Detect Aquatic Invasive Species

Researchers at the Minnesota Aquatic Invasive Species Research Center (MAISRC) have created an environmental filter that can be used to screen for aquatic invasive species. Environmental



Nancy Watkins VLA Board Member/ AIS Co-Leader

DNA or 'eDNA' is the DNA that organisms shed into their habitats. It can come from skin cells, mucous, urine and more. Collecting water samples is one way to quickly and easily capture eDNA. MAISRC's past research into eDNA methods looked at the methods, timing and sampling process for multiple AIS. The current target is the eDNA of zebra mussels, common carp, spiny

water fleas and rusty crayfish. This season research is moving into a new phase. Volunteers will be doing sample collection and initial filtering to evaluate if samples they collected and initially processed (filtered) have comparable detection probabilities to those of the researchers.

The VLA is participating in the study. We hope to recruit ten volunteers to assist with obtaining samples. Volunteers will be assigned a location and provided sampling equipment with prepaid shipping envelopes for returning the equipment and samples to MAISRC. The actual duties include collecting water in bottles from publicly accessible shoreline sampling locations, filter samples using hand pumps and mailing filters for analysis of eDNA. There will be a ~10-day window of time between June 30 and July 9 to collect samples. This should allow for plenty of flexibility for volunteers to coordinate amongst themselves to do the work.

At the end of the season, volunteer participants will be asked to complete a questionnaire regarding the training resources and protocols to help evaluate and refine materials provided for the study. This is a great opportunity to assist in establishing a field-tested and reliable method of collecting eDNA for quick detection of AIS infestations. Early detection means spread prevention and potential treatment efforts will be more effective.

If interested in obtaining more information or volunteering for this project, please contact Nancy Watkins. You can also learn more & follow this project: www.maisrc.umn.edu/edna-monitoring.



Save the Date....

Saturday, July 29, 2023

Vermilion Lake Association Annual Meeting at Camp Vermilion.... late afternoon for a picnic dinner

Speaker: Doug Jensen, MN DNR AIS Prevention Planner, "BWCA AIS Dirty Dozen"

Watch for the summer newsletter and our web site with more details and registration as we will likely NOT mail postcard invitations this year due to escalating costs.

Help Stop the Spread of AIS - Proper Disposal of Unwanted Bait

By Nancy Watkins and Gary Haugen, AIS Co-Leaders

he Minnesota fishing opener is just around the corner, so a review of proper live bait disposal is important. Proper disposal reduces risk of introducing a new invasive species and helps maintain the health of our fish. Recent angler surveys conducted by both the DNR and MAISRC (Minnesota's Aquatic Invasive Species Center) report that 25-35% of anglers were discarding unwanted bait in lake waters. Significantly, this practice has seen little change in the last 30 years. There are many diseases that can be transmitted. Of particular concern is viral hemorrhagic septicemia which is fatal to fish. Disposal of bait water from one lake into another also risks the introduction of spiny water fleas and zebra mussel villagers.

So why are anglers releasing their live baitfish? Surprisingly, it was not due to concerns that disposal would cause the fish to suffer. Rather, many felt releasing bait would provide more food for the fish population. A MAISRC study reported that 20% were not aware of proper bait disposal methods. Other respondents were unaware it was illegal to release bait. Social factors also play a role. If anglers don't see others following the practice, it is easy to

ignore the rules. All of these responses indicate a need for better education and communication with anglers. The installation of disposal stations will provide an opportunity to reduce risk.



Live Bait Disposal Guidelines

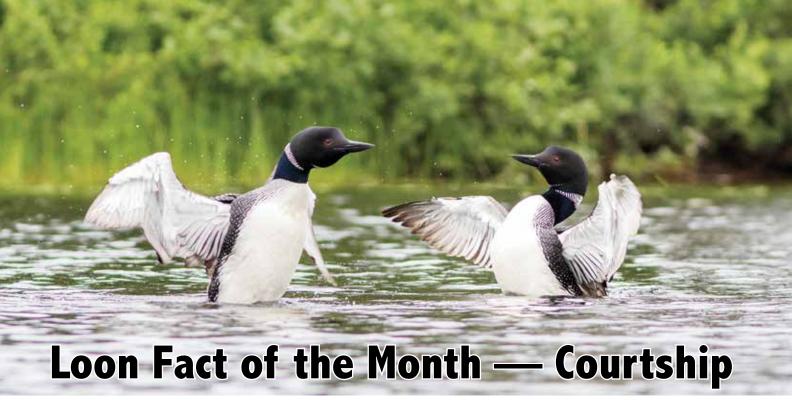
- ➤ Drain water related equipment, bait containers, live well and bait wells onto land before leaving water access.
- ➤ Dispose of unwanted bait including minnows, leeches and worms into the TRASH.
- ➤ If you want to keep your bait (minnows) drain your bait container and refill with tap or bottled water before entering another lake.
- ➤ Please take the proper actions to prevent the introduction of disease and AIS from all our waters.

Report from the 2023 DNR Roundtable

he MN DNR Roundtable has traditionally been by invitation only and scheduled just before the start of a new Legislative session. The event provides an opportunity for the MN DNR to brief leaders on their progress over the previous year and set priorities for the year to come. It has also provided an opportunity for conservation advocates to educate legislators on their issues and policy proposals. Until 2011 there were no lake associations invited to the event. This has gradually changed. Several of VLA's board members have attended in recent years. This was my first visit. I was surprised how many different groups were represented and how diverse and young some of the participants

were. There were at least 20 lake association leaders in attendance which recognizes how critically important they are as partners to protect and improve Minnesota lakes. The Roundtable was a combination of general presentations and break out sessions. The impact of wake surfing on lake ecology and wolves on the deer population were particularly contentious. From my perspective, the most valuable aspect of the event was the opportunity to meet and network with members of other lake associations, to gather ideas and contacts.

Article by Nancy Watkins, AIS co-leader



s far as we are currently aware, the members of loon pairs do not spend the winter together. They typically migrate separately in the fall, winter separately, and arrive back to breeding lakes at different times (the males tend to arrive a bit earlier than the females).

Because they don't spend the winter together, when members of a pair arrive on their breeding lake, they have to re-establish their pair bond (or, if those particular individuals have not been a pair in the past, establish their pair bond for the first time). Loons are monogamous, and due to their high territory fidelity (the tendency to return to the same breeding lake each year, especially if they've fledged chicks from that lake in the past), there is a good chance that the same loons are making up the pair year after year. However, loons do not mate for life. If a member of the pair dies or is evicted from its territory by an intruding loon, the remaining pair member will accept a new mate.

Used with permission from The Loon Preservation Committee

To see a video clip of the loon courtship dance, go to You Tube and search for loon mating dance. https://www.youtube.com/results?search_query=loon+mating+dance

Watch for our Loon Cam

ur Loon Cam team, Noel and Chris Sederstrom, will have our loon cam up and running shortly after ice out. Be sure to sign up for our "eVermilion" to get email alerts (at our website under "News", then "eVermilion", or follow us on Facebook.

Once up, you can view the live feed on our website www.vermilionlakeassociation.org. Go to the bottom of the home page, click on "Live Loon Cam".

Subscribe to eVermilion

re you getting email notifications of our newsletter postings, as well as breaking news regarding our loon cam and other exciting projects? If not, please subscribe via our website, under "News", then "eVermilion" https://www.vermilionlakeassociation.org/latest-news/

Your inbox will not be inundated with emails from us! While some months have more notifications than others, they average about 1-2 a month or less. And don't worry, we will never sell your email address.

Firewise Tips for your Home and Cabin

before "green up" is also when our region is at the highest risk for wildfire. Get outside, enjoy the fresh air, and help your property become more wildfire resilient. There are many projects you can do with little investment to lower your wildfire risks.

Be ready for emergency personnel if the need arises:

- ➤ Check and clear around address and street signs and ensure the sign is perpendicular to the road and reflective on both sides.
- ➤ Clear your driveway of overhanging trees and branches at a minimum of 14 feet wide and 14 feet high for easier access for emergency vehicles.

Make your home more wildfire resilient:

- ➤ Screen areas below decks and porches with 1/8" wire mesh to help prevent material from accumulating underneath.
- ➤ Cover exterior attic and soffit vents with 1/8" metal wire mesh to help stop sparks from entering your home.
- ➤ Sweep pine needles and leaves from porches and rake from under decks, porches, play structures, etc.
- ➤ Clear any needles and leaves out of gutters and off of roofs.
- ➤ Inspect and replace shingles or roof tiles as needed. Cover ends of tiles and metal roofs with fire resistant stops to help prevent embers being sucked in during a wildfire.
- ➤ Make sure chimneys have spark arrestors.

Make your property more wildfire resilient:

➤ Remove lower limbs of trees up to 6-10 feet off the ground within 30 feet of all structures to lower the risk of the "ladder" fuel from the forest floor igniting the tree crowns.



Dried pine needles in gutters, on rooftops and around structures are probably the number one causes of houses burning down during a wildfire

- ➤ Rake and remove pine needles and leaves and maintain trees, brush and grass within 30' around your structures and propane tanks. And remember, a full tank is a safer tank in the event of a fire.
- ➤ Properly dispose of branches, weeds, leaves, and pine needles at designated hazardous woody debris drop off sites.
- ➤ Remove debris from around your home and under decks and porches, including wood piles, construction materials, gas or propane tanks and trash.
- ➤ All wood piles should be 30' away from all structures.

Mark you calendars for a Firewise Best Practices Community Demonstration event on July 8 at 10:00 AM – 12:00 PM in the Vermilion area. Registration information soon.

For more information visit the Minnesota Arrowhead Fire Adapted Communities website: https://minnesotafac.org.

Content provided by Gloria Erickson, Contracted St. Louis County Firewise Coordinator. You can contact Gloria at:

gloria@dovetailinc.org or by phone at 218-365-0878.

Exciting new Shore Lunch Site Capital Project for VLA

he VLA will embark on one of its largest capital projects this summer, in two phases. In the first phase we'll be adding 12-foot extensions to docks at four of our highly utilized sites to accommodate up to four boats. With growing use of the sites, we



Pat Michaelson VLA Board Member

hope picnickers will share the space, meet some new lake friends and continue to enjoy all the spacious sites have to offer. The first locations to get this upgrade include; Wolf Bay, Norwe-

gian Bay South, Bystrom Bay, and Bear Creek. In addition to the extensions, structural bracing and repair work will be done on docks at our eight sites.

Partnerships, dedication and volunteers are the keys to success for a project like this. A significant partner with the VLA for the past several years is Eric and Karen Olson at Eagle Docks. They generously donate the dock service each summer to have their crew put-in and lift our docks. We're pleased to further partner with them to construct the new extensions and do needed repair work. Tim Engrav at the Forest Service in Cook and Jim Devries at the Tower, DNR State Park office have been instrumental in providing insights about expansion and potential new sites. We appreciate the expertise they share along with the latrines, new elevated fire grates and other equipment they provide. We'd be remiss not to mention



Jake Porter, a VLA Loon Cam Volunteer, and Amelia Michaelson enjoy a hot dog by the campfire at the Bystrom Bay site

the Guides League which donates the picnic tables. Lastly our VLA Shore Lunch Site Volunteers led by Mike Ptak and John Zwieg, assure our sites are well maintained, keeping the paths, picnic and shore sites brushed and safe.

Our Phase Two was envisioned after watching a 30'ish mother with Muscular Dystrophy enjoy a Shore Lunch Site because... 2 sturdy guys "piggy-backed" her up to the cleared area where we could all enjoy a picnic lunch. I'm certain others of you have relatives or friends in a wheel chair or with other mobility issues who have not had the good fortune to savor a summer hotdog by the camp fire at one of our sites....because they are not very "accessible". This Mom's daughter at age 4 exclaimed at the end of our afternoon, "this was the best day ever" to the

delight of us all. We want to make this experience available to all..... without the need for 2 sturdy guys.

We're hopeful our Phase Two project will begin mid-summer with the addition of a new, more "Accessible" site in the Hinsdale Island area in Smart Bay. We've explored several sites on the lake and feel this central location in a relatively quiet area, could be a great match for our needs. A state archeological assessment is required at the site which we're hopeful can occur in a timely manner for us to proceed by mid-summer. Watch for more specific details on this significant project in our summer newsletter.

Continued on next page

Lake Steward Program Lessons....Upland Zone: Reduce Phosphorus and Other Pollutants

by the continued growth of our lake property owners engaged in this state-wide partnership project led by Minnesota Lakes and Rivers.

The Lake Steward Program is a social program based in science. Every Lake Steward sign awarded builds a new aesthetic and cultural norm, a shift away from traditional landscaping towards lake-based landscaping. Together we can protect and improve Vermilion's iconic waters.

Overly-manicured lawns lead to algae growth. Continuous lawns from a building to the lake cause an increase in nutrient pollution. Phosphorus enters a lake in excessive amounts when there is not enough of a shoreline buffer to filter the phosphorus out of runoff. A lawn to lake shoreline allows 7-9 times more phosphorus to enter the lake than a more naturally vegetated shoreline. The phosphorus that escapes a natural shore can produce 15 pounds of algae in a lake as compared to 100 pounds from a lawn to lake lot.

To get more information on becoming a Lake Steward, go to our VLA web-site and take the Lake Steward Program "quiz" to start the process. Or, if you'd like a quick conversation with one of our Lake Steward volunteers....contact Pat Michaelson at plmichaelson@gmail.com.



Lake Steward Program Leader Pat Michaelson awards VLA Member Kevin Lanagin, Property Consultant.

Find information on reducing your phosphorous footprint on page 15

Shore Lunch...from page 8

What can YOU do NOW.....?

Thile we have some funds dedicated to these projects, with an anticipated cost of about \$80K for phase one and two, donations will be needed to accomplish our vision. If you enjoy our Shore Lunch Sites, consider joining this initiative by making a donation on our web site, mail to our Treasurer or contact me to discuss. If you are not a member, we welcome your membership via web-site or card on back of this Newsletter (published quarterly and sent to all members). You don't have to be a property owner to become a member, all who enjoy this gem, Lake Vermilion are welcome to be members.

As we plan for Phase Two, building an "Accessible" site, we'll need volunteers to assist with the "construction" of pathways, ramps, etc. If you enjoy that kind of volunteer work, contact Pat Michaelson, Capital Project and Volunteer Program Leader at plmichaelson@gmail.com or Mobile: (612) 306-7702. I'll contact you as plans progress mid-summer.

Status of the Lake Vermilion Fishery

2023 Angling Prospects

ake Vermilion is a unique multispecies fishery where anglers can experience outstanding catch and harvest opportunities. Results from the annual Minnesota DNR fisheries survey indicated walleye abundance continued to be above average in 2022. The high walleye numbers are due to strong recruitment from recent year-classes, with fish under 13 inches and fish over 16 inches well represented in the population last fall. These fish should provide ample catch and harvest opportunities in 2023. Of



Large Lake Specialist DNR

note, high numbers of fish between 16 and 20 inches are present in the population and should provide anglers substantial harvest opportunities. Also, an abundance of walleyes over 20 inches will continue to provide memorable catch opportunities throughout the lake while also ensuring plenty of spawners for future generations.

Anglers targeting muskellunge (muskies) will find opportunities for quality fish with trophy potential. Muskies measuring 45 inches or larger make up a substantial portion of the population, and a significant number of fish over 50 inches are present in the lake. Anglers targeting smallmouth bass will find them throughout the lake. East Vermilion tends to hold fewer fish with a larger average size compared to West Vermilion, which has higher numbers of smaller fish. Largemouth bass can be found in low numbers overall, but certain areas of West Vermilion provide the best angling opportunities. Although low overall in abundance, northern pike provide catch and harvest opportunities with the possibility for a fish over 40 inches. High numbers of yellow perch with a solid average size, including some larger fish in the population, will present additional angling opportunities. Black crappies and bluegills will continue to provide angling opportunities in areas of preferred habitat throughout the lake. Finally, whitefish and ciscoes (tullibee) offer harvest opportunities that primarily occur during the fall sport gill-netting season.



Stocking walleye fry into Lake Vermilion.

Anglers are reminded that a special regulation exists for walleyes where all fish from 20 to 26 inches must be immediately released. There is a four walleye possession limit with only one fish over 26 inches allowed. Anglers are also reminded that since 2019, northern pike have been managed under the Northeast Zone regulations requiring immediate release of all angled fish between 30 and 40 inches with only one fish over 40 inches allowed in a two fish possession limit. Separate regulations exist for dark house spearing which allows spearers to have two pike in possession but only one may be over 26 inches. All other fish species are managed under current statewide fishing regulations.

Fisheries Management

Lake Vermilion is composed of two major basins, East Vermilion (east of Oak Narrows) and West Vermilion (west of Oak Narrows). Each basin is slightly different in terms of habitat and fish communities. The lake is part of the Minnesota Department of Natural Resources (DNR) Large Lake Monitoring Program which includes annual fisheries population assessments, fish contaminant and disease inspections, water quality monitoring, zooplankton surveys, aquatic invasive species surveillance, and regularly scheduled creel surveys. Since 1984, standardized fish population assessments have occurred for Lake Vermilion using a variety of sampling gear to collect various fish species at different life stages. Fisheries assessments are standardized so that the same sampling gear is used at the same locations during the same time of year to accurately track population trends over time. Length, weight, age, and other scientific data are collected for fish of management concern.

The current Lake Vermilion Fisheries Management Plan summarizes goals, objectives, and activities to help guide fisheries management. Since 1971, the DNR has annually operated a walleye spawn take and hatchery each spring, excluding 2020 due to COVID, near the mouth of the Pike River, a major tributary to Lake Vermilion. A small portion of the walleye fry produced annually at the Pike River Hatchery are put back into Lake Vermilion as out-

lined in the current management plan. The walleye fry stocked into Lake Vermilion are replaced at a higher rate than would be hatched naturally from the eggs taken during spawn take operations. Spawn take operations in 2022 resulted in 5 million walleye fry stocked into Lake Vermilion. In the previous 10 years, outside of 2020, between 5 and 13.5 million fry have been stocked annually in Vermilion. Because the walleye population in Lake Vermilion is primarily driven by natural reproduction, reduced walleye fry stocking rates over the last 25 plus years have not resulted in a decline in abundance, rather abundance has increased due to various factors.

A muskellunge stocking program began in 1987 with the goal of establishing a low density, high quality muskie population in Lake Vermilion. The current management plan calls for a base stocking quota of 3,000 Leech Lake strain fingerlings annually with up to 2,000 surplus fingerlings per two-year period, as available. In 2022, the base stocking quota of 3,000 fingerlings was achieved along with 512 surplus fingerlings for a total of 3,512 muskie fingerlings stocked. All muskie fingerlings stocked into Lake Vermilion since 2017 have been implanted with passive integrated transponder (PIT) tags to learn more about the population and further evaluate management strategies.

Continued on next page

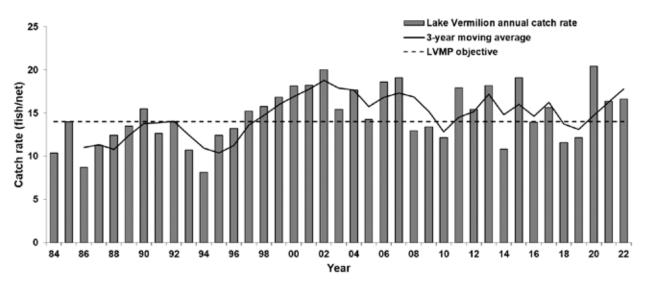


Figure 1. Gill-net catch rate (fish/net) of walleye in Lake Vermilion from 1984-2022. The horizontal dashed line represents the management plan objective. The solid line represents the 3-year moving average.

Fishery....from page 11 Walleye

Most anglers target walleye in Lake Vermilion and they account for most of the fish harvest on an annual basis. In 2022, the DNR's fall gill-net survey produced a walleye catch rate of 16.6 fish/net which was above average for annual surveys since 1984. The 2022 catch rate was nearly identical to what was observed in the 2021 survey and marked the third consecutive year of above average catches. The high catch rates throughout the lake in 2022 continue to be driven by recent moderate to strong recruitment. The 2022 East Vermilion walleye catch rate of 16.9 fish/net was near the historical average for that basin. The 2022 West Vermilion catch rate of 16.1 fish/net ranked as the second highest catch rate historically in that basin and continues the recent trend of high numbers. Three consecutive years of high catches in West Vermilion are mostly the result of an exceptionally strong 2018 year-class driving recruitment, especially in that basin.

An above average catch of fish from 13 to 20 inches was observed during the 2022 survey. Exceptionally high numbers of fish between 16 and 20 inches were captured boosting the overall catch rate of fish from the size range anglers prefer to keep. Additionally, above average numbers of small fish (<13 inches) were present in the population. These fish should provide ample catch and harvest opportunities in

2023. Above average numbers of fish 20 inches and larger will continue to provide memorable catch opportunities throughout the lake.

Recently, walleye recruitment in Lake Vermilion has been higher than expected. From 2010 to 2019, Lake Vermilion produced nine moderate to strong walleye year-classes and only one weak year-class. Generally, natural walleye populations display more fluctuation with additional weak year-classes expected to be produced in a 10-year period. The most recent weak year-class occurred in 2017. The most recent strong year-class was produced in 2018 and that exceptional cohort is currently driving the fishery. Preliminary estimates indicate that the 2020 year-class will be weak to moderate and the 2021 year-class will be moderate to strong.

Fall electrofishing provides useful information on abundance and growth of young-of-the-year (YOY) walleyes near the end of their first growing season. In Lake Vermilion, both the catch rate of YOY walleyes and average length of fish captured help predict future year-class strength. In 2022, the lakewide catch rate of YOY walleyes of 179.0 fish/hour was above average compared to previous surveys dating back to 1988. The 5.6-inch average length was slightly above normal. Based on the catch rate and size of fish captured, the 2022 year-class is likely to be moderate to strong.

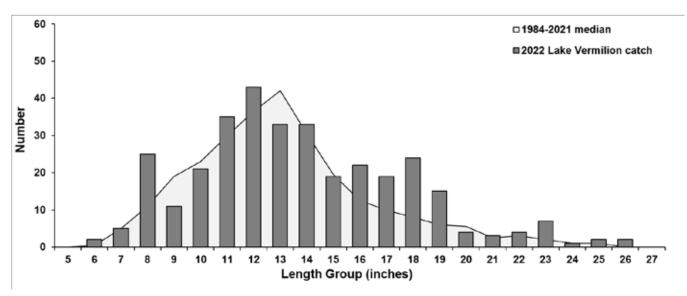


Figure 2. Length frequency distribution of gill-net captured walleye (dark bars) in Lake Vermilion in 2022 in relation to the historic median length frequency distribution from 1984 to 2021 (light gray).

Muskellunge

Muskies provide an important catchand-release sport fishery on Lake Vermilion. The muskie population was established via a stocking program that began in the late 1980s with the goal of providing a low-density, high-quality fishery. During the most recent assessment conducted in 2019. muskies averaged 44.7 inches with over 40% of fish measuring 45 inches or larger. Additionally, about 11% of the fish sampled were 50 inches or larger. Options for obtaining adult population estimates and evaluating recent stocking strategies are being considered for the future.

Smallmouth Bass

Smallmouth bass are found throughout Lake Vermilion and the population provides an important fishery. Overall, the smallmouth bass population in Lake Vermilion has shown an increasing trend in abundance over the last three decades. Abundance and size structure are notably different when comparing the two basins, as West Vermilion tends to have higher numbers of fish that are much smaller on average when compared to East Vermilion.

The lakewide catch rate of smallmouth bass during spring electrofishing in 2022 was 98.3 fish/hour. This was the highest catch rate ever observed and was primarily driven by high numbers of small fish (<10 inches) especially in West Vermilion. The average length of fish captured in West Vermilion was a little over 7 inches and only a small portion (<8%) of the catch was over 12 inches. In contrast, the average length of fish sampled in East Vermilion was over 10.5 inches and more than one-third of the catch was 12 inches or larger.

Largemouth Bass

Largemouth bass are a minor component of the Lake Vermilion fishery that are primarily found in West Vermilion. The population provides angling



DNR staff conducting the electrofishing survey for bass last spring.

opportunities and typically has a low harvest rate. Largemouth bass are not abundant and are limited to specific areas of preferred habitat in the lake. However, DNR electrofishing, gill-net, and creel data suggests a stable or increasing population, primarily in West Vermilion. Zero largemouth bass were captured during spring electrofishing or the fall gill-net survey in 2022. This is not uncommon for Lake Vermilion and is not an indication of a significant decline in the population.

Northern Pike

Northern pike are found in relatively low numbers in Lake Vermilion but are an important gamefish for some anglers and dark house spearers. Fisheries assessment data indicates higher abundance in West Vermilion. In 2022, 11 northern pike (0.6 fish/net) ranging in length from 17 to 37 inches were captured in gill nets. The low catch rate observed in 2022 continues a declining trend in northern pike abundance that has been observed lakewide over the past three decades. Simultaneously, the size structure has shifted towards larger fish due in part to protected slot

Continued on next page

Fishery....from page 13

limit regulations that have been in place since 2003.

Yellow Perch

Yellow perch are a primary forage species in Lake Vermilion that also provide anglers catch and harvest opportunities. The 2022 lakewide gill-net catch rate of 45.0 fish/net was the highest observed since 2013 and the third highest ever. Abundance and size structure are notably different when comparing the two basins, as West Vermilion tends to have higher numbers of fish that are smaller on average when compared to East Vermilion. The 2022 catch rate of 27.6 fish/net in East Vermilion was the highest since 2013 and above average for the basin. The West Vermilion catch rate of 71.0 fish/net was the second highest ever observed and continues a trend of four consecutive years of high catch rates in that basin. Yellow perch captured in the 2022 survey averaged about 8 inches in length, which was larger than normal. Good numbers of fish over 9 inches should provide anglers harvest opportunities while high numbers of fish under 9 inches will also be caught, especially in West Vermilion. On a lakewide basis the population is in satisfactory condition.

Bluegill and Black Crappie

Bluegills provide significant catch and harvest opportunities in Lake Vermilion, while black crappies are generally a minor component of the fishery that can on occasion produce good fishing. Summer trap-net catches and creel data indicate greater abundance of both species in West Vermilion compared to East Vermilion. Summer trap-netting targeting panfish did not occur in 2022. In the future, trap-netting will be done in the spring to provide better estimates of relative abundance and size structure of panfish populations.

Aquatic Invasive Species

Aquatic invasive species are nonnative animals and plants that do not naturally occur in Minnesota waters and cause varying levels of ecological and economic harm. Lake users should follow Minnesota's

aquatic invasive species laws to prevent introduction and minimize the spread of invasive species. Several invasive species are present at varying levels in Lake Vermilion including Chinese mystery snails, curlyleaf pondweed, Heterosporis sutherlandae, purple loosestrife, rusty crayfish, and spiny waterflea.

Rusty crayfish, native to the Ohio River basin, are invasive crustaceans that were first captured in fisheries survey gear in Lake Vermilion in 1986. The population rapidly increased and they became abundant in a significant portion of East Vermilion by 1993. Overall, catches of rusty crayfish in the annual gill-net survey display a relatively stable trend since the early 1990s, with substantial annual fluctuations. Rusty crayfish continue to be more abundant in East Vermilion, particularly Big Bay, but the population has continued to expand in West Vermilion. They have significantly reduced aquatic plant beds in certain areas and have displaced native crayfish.

Double-crested Cormorants

In 2022, double-crested cormorant nest counts during peak nesting on Potato Island totaled 418 nests. This was the highest nest count since the peak of 434 nests in 2012. No new nesting colonies have been established outside of Potato Island. Ultimately, negative impacts on fisheries populations of management concern, specifically yellow perch and walleye, appear to be negligible at this point. Cormorant and fish populations will continue to be monitored.

Fishing Tournaments

Historically, there have been relatively few permitted fishing tournaments annually on Lake Vermilion when compared to other popular Minnesota lakes. Recently, between four and nine permitted tournaments have occurred each year. In 2023, there are ten permitted tournaments. The DNR is responsible for regulating fishing tournaments and manages them in a manner that will protect fish populations and minimize conflict with other lake users. DNR permits are required for fishing tournaments that meet certain conditions and permits have been issued for the following tournaments in 2023:

- ➤ May 20: City Auto Glass Walleye Classic (maximum 250 anglers/125 boats)
- ➤ May 22: Minnesota Bass Federation (maximum 100 anglers/50 boats)
- ➤ June 17: MinnYak Elite (maximum 45 anglers/45 boats)*
- ➤ July 11: MN Junior Bass Nation (maximum 80 anglers/40 boats)
- ➤ July 22: Up North Bass (maximum 60 anglers/30 boats)
- ➤ August 11: MN High School Muskie State Championship (maximum 60 anglers/30 boats)*

- ➤ August 18 & 19: Professional Musky Tournament Trail (180 anglers/90 boats)*
- ➤ August 25 & 26: Minnesota Muskie Trail (maximum 150 anglers/75 boats)*
- ➤ September 7-10: Simply Fishing Muskie Classic (maximum 140 anglers/70 boats)*
- ➤ September 9 & 10: Lunker Squad Series (maximum 24 anglers/12 boats)
- *Denotes a catch-photo-immediate release tournament format



The Pike River walleye trap.

Upland Zone: Reduce Phosphorous and Other Pollutants

eep fire pits away from the shore and dispose of ash:
Leftover ash is very high in phosphorus. This is why soap was once made from ash. If the fire pit is located near the lake, rain can wash phosphorus-laden ashes into the lake. Locate the fire pit at least 50 feet away from the lake. Remove ashes from the fire pit to prevent ash from being blown or washed into the lake. Hint: ashes make a great garden soil amendment.

Pick up pet waste: Pet waste contains phosphorus and may contain disease-causing organisms which, if washed into the water, can make it unsafe for swimming. Pick up pet waste in the yard or near the shore and dispose of it properly.

Seal abandoned wells: An unused or abandoned well provides a direct route for pollutants to reach groundwater. Sealing all abandoned wells must be done by a licensed groundwater professional. Financial assistance may be available. Check with our county land management office.

Keep compost sites away from the shoreline: Grass clippings, leaves, aquatic plant materials that wash up on shore, and food waste compost sites all contain phosphorus, which is released when the materials decompose.

To prevent phosphorus runoff into the lake: Use a mulching lawn mower and leave grass clippings on the lawn as natural fertilizer; Collect and compost leaves and clippings away from the buffer zone or haul them away from the lake to a disposal site. Keep out of wetlands; Leave a buffer of taller grass, native plants, and tress along the lake to catch windblown leaves and debris; Do not burn leaves near the lake. It destroys the organic matter and releases the phosphorus; Remove washed up or harvested aquatic plant materials away from the shore, then compost or use as mulch in the garden.

The information is from Minnesota Lakes and Rivers....Shoreland Guide to Lake Stewardship; Radomski, P.J. and K. Van Assche. 2014 Lakeshore Living: Designing Lake Places and Communities in the Footprints of Environmental Writers. Michigan State University Press, East Lansing.



he Vermilion Lake Association has been actively involved with fishing tournament directors to ensure that the boats used in tournaments are checked for AIS since 2016. We have also lobbied for tournaments to be catch, record, and release tournaments to provide more protection of some of the largest fish in the lake. Tournaments are governed by legislation/laws that are in place for the DNR to follow. The legislation for tournaments allows both catch, record, and release tournaments and tournaments where fish are brought to a central location to be weighed in and then released.

Over the years, the lake association has received complaints about tournament boats, mostly about taking over fishing spots or encroaching upon fishing spots of non-tournament boats and high speed boats. The tournaments are increasing the payouts making for more aggressive participants and higher speeds. During COVID, the number of tournaments was down. In 2023 there is an increase in the number of tournaments.

This spring there have been several complaints about the August and September permitted tournaments. The maximum large tournaments for Vermilion is three tournaments in a month. In August, permits have been issued for three muskie tournaments and a another muskie tournament in early September. In August, the high school muskie tournament (30 boats- 8/11), PMTT (90 boats- 8/18 & 19), and MN Muskie Trail (75 boats- 8/25&26). In September, the Simply Fishing Tournament (70 boats 9/7 -9/10).

All of the muskie tournaments are catch, record, and release tournaments which is good; however, tournaments in August and early September will most likely be in warm water which increases the stress on the fish when released especially after a long fight or from deep water. The central location for all three of the large tournaments (not including the high school tournament) is the Landing restaurant. The public launch site next to the restaurant has limited parking spaces and one launch site. Since these tournaments are on Friday and Saturday, there could be conflict with local people launching boats. The primary concerns are that this is a huge pressure on the muskie fishery in August and early September when resorts, locals, and cabin owners are using the lake. This amount of pressure on one species is unprecedented. Also, the start area for the tournament is in a very small bay and speed needs to be controlled.

The permits, per law, have already been issued for the tournaments listed; however, if you are concerned about pressure on one species, the size, and number of these tournaments on the lake, the DNR is looking for feedback from lake users.

Matt Hennen, 218-300-7810, matt.hennen@state.mn.us

Keith Reeves, 218-300-7803, keith.reeves@state.mn.us

Your feedback to the DNR on this is important and the more people providing feedback could influence the DNR to make changes.

Catch and release

Responsible catch-and-release fishing can help ensure continued quality fishing opportunities. Anglers can boost the odds of fish surviving catch and release by using methods that avoid internal damage caused by hooks, stress and being pulled from deep water.

- ➤ Fish hooked in the mouth almost always survive. Set the hook quickly to avoid hooking a fish deeply. Jigs, circle hooks and active baits like crankbaits are more likely to hook a fish in the mouth.
- ➤ Don't angle for fish in very deep water, unless you plan to keep what you catch. Fizzing of fish, or the act of inserting a needle into a fish intended to deflate the gas bladder, caught from deep water can do more harm than good and is not legal.
- ➤ Have pliers ready that work well for taking hooks out. Cutting the line and leaving the hook in the fish is also a good option.
- ➤ Quickly land a fish to minimize a fish's time out of water.
- ➤ Handle the fish firmly but carefully. Wet your hands before touching a fish to prevent removal of



their protective slime coating. Rubberized nets help, too.

- ➤ Unhook and release the fish while it is still in the water, if possible, and support its weight with both hands or with a net when removed from the water. Never lift them vertically from the water.
- ➤ Do not place fish you plan to release on a stringer or in a live well.
- ➤ Revive a fish by cradling it under the belly and gently moving it forward in the water until it swims away.
- ➤ Do not release a fish that can be legally kept if it is bleeding heavily or can't right itself.



VLA Dock Signs show member support for our mission.... to protect and improve

These striking aluminum signs with UV protection can be ordered on our website for \$30.

The 12x18 inch sign is designed to attach in either

corner of dock front with self-tapping sheet metal screws or stainless hose clamps. Note: many of the dock installers will install the sign at no cost. Please contact your installer for details. Some members are choosing to mount them on their boat houses as well.

Pick up information:

For the Tower end: Steve Lenertz at slenertz@yahoo.com or mobile; 612-594-2040.

For the Cook end: Julie Maki at BIC Realty at 218-666-5352.

Order online:

www.vermilionlakeassociation.org under "merchandise," then "Dock Signs." Pay through PayPal or credit card.

Crawdads for dinner...

otivated by an article from this very publication, my daughter and I built a homemade crayfish trap two summers ago. From that initial excitement, our curiosity grew more interested in how to catch these little critters from the end of the dock. Last summer we did buy a



Aaron Kania VLA Member

couple of rectangular traps and kept notes on what we learned throughout the summer. We learned

that fish carcasses are by far the best bait. One night vielded one hundred and forty four crawdads! Hotdogs worked okay, chicken worked well, it seemed that anything that was meat worked. With all that we were catching we needed to also learn some recipes and techniques for shucking the little buggers. We learned about low country boils and making chowder. These were fun ways to spend summer days with my daughter. We also had to learn what to

do with all of the shells and found that crayfish make excellent compost for the garden. Soil certified by the University of Minnesota soil lab as pretty darn good. By the end of summer we trapped a total of 860 crawdads. It definitely created a safe zone around our dock. This summer we will continue to learn more about this lake ecosystem we so enjoy. One thing we have already learned is that there are commercial efforts underway to harvest crawdads for people looking to enjoy their own low country boils or participate in events such as kräftskiva which is a Swedish summer gathering in August centered around crayfish.

Commercial fishing requires a permit from the DNR, trapping crawdads for personal use requires a fishing license. Crayfish cannot be transported to other lakes since rusty crayfish are an invasive species.

Recipes – Low Country boil – Corn, potatoes, sausage, Old Bay spice and crawdads





Amazon Smile Program Discontinued

Earlier this year Amazon announced the discontinuation of their Amazon Smile Program which made donations to charitable organizations their customers wanted to support. We would like to thank our Vermilion Lake Association members who participated in this program generating over \$2,200 for your associations use.

Possession Limits: What You Need to Know

Possession is defined as anywhere in your possession - refrigerator, freezer, live basket, boat livewell all count as your possession. Your possession limit is per each license that your family holds. If you have a limit of fish in your possession, you can not keep additional fish until some are consumed from your possession.

Possession limits on Lake Vermilion are:

- ➤ Walleye: Possession Limit is 4; all walleye 20"-26" in length must be immediately released. You may keep one walleye over 26".
- ➤ Northern Pike: Possession Limit is 2. All Pike 30"-40" in length must be immediately released. You may keep one Northern Pike over 40".
- ➤ Perch: Possession Limit is 40, you may keep a daily limit of 20.
- ➤ Largemouth and Smallmouth Bass: Possession limit is 6. You may keep any combination of bass to reach the possession limit.
- ➤ Rock Bass: Possession Limit is 30.
- ➤ Sunfish: Possession limit is 20.
- ➤ Crappie: Possession Limit is 10.

Frequently asked questions

What should someone do if they see someone taking too many fish?

There are a few ways to report a violation:

➤ Call 800-652-9093 24 hours a

- day, or key in #TIP on your cell phone.
- ➤ You may also call Minnesota State Patrol's Non-Emergency Line at 651-582-1544. This is also a great option, as it alerts the nearest Conservation Officer and may yield a faster response time.
- ➤ Include important information: All violations reported through our online form will be investigated. Please provide as many details as you can to help the Conservation Officer with the investigation.
- ➤ Identifying Factors: Pictures, number of people, location on the lake, boat registration number (if you can get close enough to them), boat color, motor color, State of boat registration, color and type of clothing the individual/s are wearing.
- ➤ Violator's identity: If you know the identity of the individual(s) committing the violation, please indicate their name(s) on the form.
- ➤ Contact information: If you'd like a call back, please provide State Patrol or the TIP Line with your contact information.
- ➤ Remain anonymous: If you wish to remain completely anonymous, you must contact TIP by phone.

- ➤ Stay safe! Never put yourself in a dangerous position, and never take the law into your own hands.
- ➤ Reward money: You may receive a reward of up to \$1,000 for reporting a violation that leads to an arrest. The reward amount is determined by the seriousness of the crime reported.

How important is timing in contacting you about suspected issue?

➤ Timing is everything. There's not much we can do if you lose sight of the suspect or if it's hours/ days later you decide to contact a Conservation Officer. Call as soon as you can with as much detail as possible.

Are there other violations that people should report?

➤ Noisy boats, reckless jet ski and boat operators, removal of aquatic vegetation such as cattails or lily pads near the lakeshore. Watercrafts and/or trailers with weeds still attached and being transported.

For more information: please visit the Minnesota DNR website or contact your local conservation officer for additional information.

Shane Zavodnik, Conservation Officer, Enforcement Division, Virginia Station, MN Department of Natural Resources

 $\underline{https://www.dnr.state.mn.us/enforcement/tip.html}$

When you update your membership or purchase merchandise on the Vermilion Lake Association website, you now have two payment options: Pay online with a credit/debit card or PayPal. You still have the option of sending in a check with your membership renewal.

Forever Chemicals and Fish Consumption

here has been quite a bit of commotion from Twin Cities news channels and newspapers recently. So, what's the big deal about PFAS and PFOS? PFAS and PFOS, also known as per-and polyfluoroalkyl and perfluorooctane sulfonic acid substances to science geeks, and perfluorinated or forever chemicals to the rest of us. This is a group of approximately 5,000 man-made compounds that do not easily breakdown over time. These compounds seem to resist destruction in incinerators, landfills, and waste water facilities. According to the United

States Environmental Protection Agency (U.S. EPA) in an October 2021 publication, studies in laboratory animals indicated that some PFAS can cause reproductive, developmental, liver, kidney, and immunological toxicity; in humans the most consistent findings are increased cholesterol levels, and more limited findings



Craig Beveroth
VLA Board Member

seem to indicate cancer (for PFAS), thyroid hormone disruption (PFOS), effects on the immune system,

and lowered infant birth weights. The U.S. EPA has even suggested that safe drinking water be limited to 0.02 parts per trillion (that's a decimal point followed by 12 zeros!) of PFAS.

PFAS (of which PFOS are a subset) have been around for about 80 years. At one time they were thought of as miracle compounds that resisted stains (Scotchguard), coated non-stick cookware (Teflon), waterproofed clothing, protected upholstery, and a firefighting foam. According to the MN Pollution Control Agency (MPCA), PFAS have been found in the blood of nearly all Americans, and according to the the U.S. EPA National Rivers and Streams Assessment and the Great Lakes Human Health Fish Fillet Tissue Study, fish with detectable levels of PFAS have been found in all states except Alaska and Hawaii.

The MPCA began testing Minnesota's lakes and streams in 2004 (it doesn't appear that Lake Vermilion has been tested yet) and now includes 26 water

Continued on next page

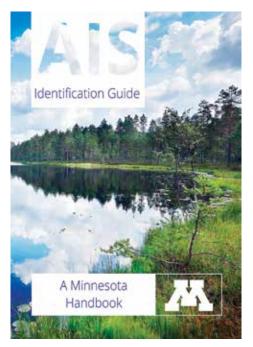
An AIS Identification Guide to Help You Help Our Lake

Lake Vermilion welcomes all the help she can get to protect against invasive species. If you're a cabin owner or frequent lake visitor and you'd like to become better at identifying aquatic species at Lake Vermilion, we suggest you obtain a copy of the same identification guide used by our trained AIS Detectors and volunteer access sentries.

The spiral-bound reference is water-resistant and called ... what else ... AIS Identification Guide. It's produced by the Minnesota AIS Research Center and is available in-person or online at UM Bookstores for about \$40. ISBN 978-0-692-90536-4. It's an outstanding reference which belongs on every cabin coffee table.

Questions? Please contact AIS Program Co- Coordinator Nancy Watkins at 320-291-2363, or email 2bitfarm@gmail.com.

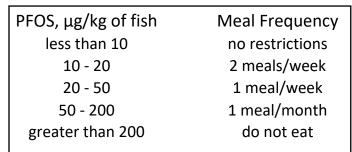
If you'd like to consider becoming a volunteer access sentry, please contact Volunteer Program Leader Pat Michaelson at plmichaelson@gmail.com, or 612-306-7702.



Forever Chemicals... from previous page

bodies impaired due to levels of PFOS. Current data for Lake Vermilion is lacking – as of 2020, there is no guideline from the MN Dept Health as to how many fish servings per week are deemed safe in Vermilion. However, in 2016, the MN Dept. of Health adopted the U.S. EPA advisory of up to 50 µg/kg for one meal per week and 200 µg/kg as a "Do Not Eat" advisory (this is a state wide advisory not specific to Lake Vermilion).

So how much Vermilion fish is potentially safe to eat? The Great Lakes Consortium for Fish Consumption Advisories (MN, WI, MI, IN, IL, OH, NY, PA) has suggested the following for levels of PFOS in fish (PFOS values are used since they account for roughly 74% of the PFAS per a 2023 Environmental Research publication):



µg – microgram (millionth of a gram), kg - kilogram (1000 grams or 2.2 pounds), meal/serving – not defined

PFOS are found in fish muscle tissue (like mercury, which is another story on its own), skin, and the liver so avoiding consumption of the skin and liver is a good idea. According to one U.S. EPA study, small-mouth and largemouth bass along with sunfish and some crappie species have the highest levels of PFOS. The MN Dept. of Health statewide safe-eating guidelines are 1 serving per week for walleye and north-



ern, and 4 servings per week for sunfish and perch. The catch to the consumption issue is that almost no one knows the level of PFOS they are consuming because analysis is expensive (roughly \$500 per sample), the size of a meal has not been defined, and no one has done the sampling. If you're truly concerned about PFOS consumption in your fish meal, then an argument could be made for catch-and-release.

Maybe Vermilion will get a bit of a pass for fish PFOS levels since it's a relatively pristine and somewhat remote water body subject mainly to atmospheric deposition. We're probably not to the point of asking PFAS to be banned as has been done by Denmark, Germany, the Netherlands, Norway, and Sweden, but we need to push our governmental agencies to do more research, agree upon guidelines, and do the sampling that's needed.

Spent the mornin' fishin'

e spent the mornin' fishin' And he was doin' pretty good Those fish were really bitin' Just like he hoped they would

Every time he'd cast out Every time he'd get a bite He was catchin' walleye, smallmouth bass,

Now and then a northern pike

And all those fish he caught were big uns'

Lunkers one and all His pole was really bendin' Cause not one fish he caught was small

Every cast he made was perfect Not one cast ere found a tree That ole' reel's drag was singin' To the key of B,I,G

He never had a bust off
Never hung a snag
Nothin' ever spit the hook
Yep, everything was perfect, specially his
drag

Fishin' is a pleasure
But catchin's way more fun
He'll never ever have a morn like this
Not 'til he's said and done

He was really, really reelin' 'em in From early mornin' up to lunch And when the sun said high noon Those fish well they just quit



Al Wade likes to fish and write poetry

I wonder did he catch em' all Gave the sore mouth to each one Or did they all just give up Said we ain't bitin' now til fall

Well we won't know for sure til next mornin' When he'll come fishin' once again Those casts might not be so perfect And those fish won't bite so good

But not goin' fishin' every mornin' Well not goin' That's a sin

He spent the mornin' fishin' And he was doin' pretty good Those fish were really bitin' Just like he hoped they would.

Recommended Conservation Limits are on a voluntary basis and do not reflect the regulations mandated by the DNR.

| SPECIES | MDNR Regulations Possession Limit | Recommended Conservation Possession Limit |
|----------------|-----------------------------------|--|
| Walleye | 4 | 2 (Min. 12", Max. 18") |
| Largemouth Bas | 6 (any combination) | 0 (Catch & Release Only) |
| Smallmouth Bas | 6 (any combination) | 3 (Less than 18") |
| Crappie | 10 | 5 (Less than 13") |
| Bluegill | 20 | 10 (Less than 9") |
| Perch | 40 | 20 (Less than 12") |
| Northern | 2 | 1 (Less than 30") |
| Musky | 1(54 inch or above) | 0 (Catch & Release Only) |
| WALLEYE SLOT | 20-26" | 20-26" |
| NORTHERN SLOT | 30-40" | |

Please consider these conservation fishing recommendations this summer. Thanks from the VLA.

Board of Directors and Officers 2023

Cook

Sheri Sawatzky, Secretary/Membership, 2750 Wakemup Village Rd W, Cook, MN 55723,218-666-5512, 218-780-8178, sherisawatzky@gmail.com

Eric Hanson, 2746 Vermilion Dr, Cook, MN 55723, 218-666-5478, 218-780-1563, eric@pehrsonlodge.com

Dwight Warkentin, President, PO Box 97, Cook, MN 55723, 651-269-0674, dhwarkentin@hotmail.com

Terry Grosshauser, 7307 Oak Narrows Rd, Cook, MN 55723, 218-666-0580, 608-207-1509, terrygrosshauser@gmail.com

Mark Schmidt, 8780 Raps Rd, Cook, MN 55723, 612-810-44570, bigwalleye55@gmail.com

Pat Michaelson, Vice-President, 2384 Deerwood Lane, Cook, MN 55723, 612-306-7702, plmichaelson@gmail.com

Tower

Bob Pearson, 5773 Puncher Point Rd, Tower, MN 55790, 218-753-4212, 218-348-1938, rpearson@duluthlaw.com

Gary Haugen, 1903 Westhaven Dr, Tower, MN 55790, 612-720-2853, 218-753-3021, ghmedrep@gmail.com

Lori Ptak, 3505 Downers Dr., St. Anthony, MN 55418, 612-247-3751, lori@ptak.org

Jerry Lepper, Treasurer, 3087 Old Hwy 77, Tower, MN 55790, 218-753-2629, 218-404,2320, jnclep4@frontiernet.net

Jill Korpela-Bontems, 4437 Big Rock Rd, Tower, MN 55790, 218-753-6324, jandjatbigrock@frontiernet.net

Nancy Watkins, 5981 412th St, Rice, MN 56367, 320-291-2363, 2bitfarm@gmail.com

John Yocum, 4102 Hoel Rd, Tower, MN 55790, 407-873-3883, snootman@aol.com

Craig Beveroth, 9416 Hearthside Dr, Tower, MN 55790, 952-428-9155, cbeveroth@comcast.net



Vermilion Lake Association PO Box 696 Tower MN 55790

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 Pat Michaelson, VLA Volunteer Program Leader, at 612-306-7702 (cell) or <a href="mailto:please.org/plea

| Vermilion Lake Association Sheri Sawatzky, Member Records • P.O. Box 696 • Tower MN 55790 sherisawatzky@gmail.com • 218-780-8178 | | | |
|--|--|--|--|
| Membership year runs from Jan 1 through Dec 31 ☐ 2023 New Member ☐ 2023 Renewal | | | |
| Membership level □ \$20.00 Household membership □ \$50.00 Business or Organization | | | |
| Member Name | | | |
| Spouse Name | | | |
| 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.