

THE LAKER

NORTH LAKE PROTECTION ASSOCIATION

www.northlaker.org

JULY 2023

NLPA MISSION: *To protect the ecological, recreational and aesthetic well-being of North Lake.*

ANNUAL MEETING

Monday, August 14, 2023 – 7pm
Inverness Club House

AGENDA

1. Review/Approve 2022 Minutes
2. Treasurer's Report
3. Old Business
 - a. SAD Update
 - b. Weed/Algae Issues
 - c. MICORP Update
4. New Business
5. Election of Officers
6. Adjourn

\$10 NLPA DUES

Please support your NLPA. Please make checks out to NLPA and send to Dick Frenndt in the enclosed envelope. **Please include your email address if you did not receive the recent test email. We keep the email address confidential and only use it for important lake notices.**

In 2022 we raised about \$2000 in dues to support NLPA operations. This was \$600 less than in 2021. In 2021 the average donation was \$21.92 and in 2022 it was \$16.94. 118 members contributed in 2022, and in 2020. For the past five years this number has varied between 118 & 121 members, less than half of the 257 NLPA members. Thanks for the loyal members who consistently support the NLPA.

MUTE SWAN COUNT

The 2022 state count of Mute Swans was 14,265, a 10% reduction from 2021. It still is a much higher count than we have seen in recent years since the reduction program was initiated in 2013. The 2022 count is about 5% lower than the baseline period of 2009-2013 population levels.

In related news, the Trumpeter Swan has been removed from

Studies

In 2022 some new initiatives were undertaken with the goal of better understanding the sources of phosphorus in North Lake. This knowledge would then inform the strategies to be employed in its control. Two programs initiated by Kieser Associates at the direction of Washtenaw County were implemented.

The first was North Lake Phosphorus Loading Mass Balance Analysis and the other was the North Lake 2022 Phoslock Pilot Study. The complete reports of these studies are posted on our website www.northlaker.org. Some of the key observations are discussed here.

Phosphorus is typically the "limiting" nutrient in most lakes and streams. There are enough of all the other nutrients to grow plenty of algae and plants. The amount of available phosphorus is limited and therefore the amounts of algae and plants are limited. Add more phosphorus and presto, more algae and plants.

Phosphorus comes from several sources. It is present in some industrial processes but we don't have any of these "point sources" nearby. Phosphorus is part of agricultural fertilizers and we may get some from the runoff of area farming operations. It is no longer permitted in lawn fertilizers. Organic material that falls into the lake is a phosphorus source (leaves and lawn clippings), and animal waste from geese and dog droppings are major contributors.

In most lakes, the primary source is in the lake bottom sediments. Aquatic plants and organisms die off each year and accumulate on the floor of the lake. The nutrients of which they are composed return to the lake sediments, providing a source of nutrients for next year's crop. The phosphorus mass balance study was conducted to determine the amount of phosphorus present and to identify its source. Is it primarily in the sediments or does it primarily come from runoff? The answer was a surprise. The Keiser study found lake sediments are not the primary source of phosphorus in North Lake, it is from runoff. This makes North Lake unique. In a vast majority of small inland lakes, phosphorus in the lake sediments is the primary source of the problem.

Identifying where the phosphorus runoff was originating from was a problem last summer due to the lack of heavy rainfalls that could be sampled. More work will be done on that front this year.

The second study, a pilot program on the effectiveness of Phoslock in controlling phosphorus, was conducted. Phoslock is a commercial granular product applied in a very thin layer over the lake bottom. It chemically combines with the phosphorus and forms a barrier to phosphorus in the lake sediments from escaping into the water column. It also combines with phosphorus during the application process removing phosphorus from the water column.

2.

Michigan's endangered species list.

The Mute Swan reduction program (a non-native species) was, in part, intended to encourage an increase in the Trumpeter Swan Population.

NO LILY PAD CONTROL

We are the only lake in Washtenaw County that has treated Lily Pads over the past few years. We will not be treating them this year due to multiple reasons. The Lily Pads are a "good" aquatic plant that provides good fish habitat. They also absorb excess nutrients in the water column reducing the available food for algae and other plants. Finally, our budget constraints force difficult choices on which programs to fund.

Next year, we will reevaluate our budget status and determine if there are sufficient funds to restore this program.

In 2022, we treated 8 properties. Over the years, we have had up to 35 properties enrolled in the program.

MICORPS UPDATE

The MICORPS program is back in business this year after a one year absence due to state budget cuts. Charlie Taylor leads this effort and collects lake samples for phosphorus and chlorophyll, measures lake clarity, dissolved oxygen, and water temperature. The samples and data are provided to the MICORPS program where they are compared to other lakes in Michigan. A report is issued each year.

The 2022 Report for North Lake includes the following statement: "While transparency has improved since monitoring began in the 1970s, spring and summer total phosphorous and chlorophyll have increased slightly over time."

Both studies detected low levels of phosphorus in general. The levels were much lower than our historical experience and this complicated the comparison process as noted above.

In 2022, the Special Assessment District (SAD) spent nearly \$22,000 on these studies. We also spent another \$11,500 on harvesting. This is nearly \$33,500 in addition to our normal outlays. The total spent was in the range of \$73,000. We take in only \$47,610 from assessments In a normal year but only \$12,310 was assessed in 2021. The balance was taken from surpluses built up over the years.

KIESER & ASSOCIATES LAKE REPORT FOR 2022

In addition to the studies discussed on the first page of this Laker edition, an Annual Report is prepared by Kieser using the LakeScan program developed by Dr. Pullman of Aquest. A few observations from that report are provided here.

The lake quality exceeded most management goals established for North Lake this past year with the exception of the Recreation Nuisance Presence goal. This goal was missed due to the excessive amount of tall pondweed that affected boating in some areas. The ratio of native plants to invasive species was positive as well as the diversity of the plant community. Harvesting 13 acres of nuisance plants alleviated some of the boating and recreation problems and may be used again this year, depending on need and budget limitations.

"ProcellaCOR was used on North Lake in 2022 to treat a 3 acre patch of Eurasian watermilfoil. ProcellaCOR is a relatively new herbicide on the market that has high selectivity. This product is capable of producing long-lasting control, potentially suppressing nuisance conditions for multiple years. However, the benefits of this herbicide also come with a higher cost compared to other traditional herbicides. The ProcellaCOR treatment in 2022 did successfully produce season-long control, but this particular treatment site should be monitored in 2023 and 2024 to determine whether multi-year control of EWM is successful." (quoted from the Annual Report)

It was reported that Milfoil, Stary Stonewart and Curlyleaf Pondweed, our three primary invasive plants, have been declining over the past five years. Native pondweeds proliferated last year causing the boating problems. Treatment of native plants is greatly limited by EGLE except for harvesting which basically cuts off the top of the plants and removes the mass from the lake.

OUR TREES COMMUNICATE

By Mary Lou Frendt

Most of us enjoy walking in the forest and enjoying its solitude. You might be surprised to know that right beneath our feet a cacophony of communication is taking place. The trees communicate. Not only do they communicate, but older trees, known as Mother Trees, can tell which seedlings are their own and even nurture them with food and water, just as we do for our own children.

If you have ever gone mushroom hunting in the forest, you probably noticed the fine web of yellow and white threads in the soil as you pull out the root. The tiny lines you see are mycelium, tiny threads of fungus forming an intricate web of organic and mineral particles that create part of the forest's precious soil. But the mycelium and other similar filaments

RIGHT HERE ON NORTH LAKE

We started this feature article last year to make folks aware of some of the interesting people who make up the North Lake Community. This year's guest in the spotlight is Charlie Taylor, PHD.

Charlie, along with his wife Jill and kids Nathan, Emily and Hanna have lived on the south side of North Lake since September of 1989. The kids are now grown and have provided Charlie and Jill with four grandchildren.

Charlie received a bachelor's degree in Zoology, and a PhD in Neuroscience at UC Berkeley in 1980. He started with Parke-Davis Pharmacology research in Ann Arbor in 1982 and then with Pfizer until retirement in 2007. He taught undergraduate Neuroscience classes at U of M from 2013 to 2015.

Charlie has been an active member and past president of NLPA since 1987 and has collected Secchi disk water clarity readings and other data for the Cooperative Lake Monitoring Program (CLMP), run by MICORPS, since about 1993. In that time he has seen a slight increase in water clarity and overall lake quality.

Charlie and Jill enjoy boating, fishing, sailing, bird watching and taking grandkids to the sand bar. They have noticed changes in fishing opportunities in North Lake, with the last 15 years showing somewhat smaller-sized bluegills, and perhaps a decline in large Northern Pike. The largemouth bass and crappie sunfish have stayed relatively constant. In the future, Charlie would like to see a decrease in lawn fertilization and more native plants adjoining the lake, to reduce nutrients entering the water.

Thanks Charlie, for all you do to keep North Lake a great asset for the community.

are much more than we once thought. Suzanne Simard, who would eventually become an expert in forest science, grew up in a logging family living in the rain forests of British Columbia. While studying for her PhD in Forest Sciences, she was employed by a logging firm in western Canada to assess the new seedlings that replaced the trees harvested during a clear-cut. Suzanne was shocked to find that the newly planted trees had a low percentage of successful regrowth. After noticing a small sapling from the original forest that had been left uncut during the clear-cut, she decided to pull it out to check its root system. After struggling to get it out, she noticed the roots were wrapped in a tight network of mycelium. It reminded her of the base of the mushrooms she often collected in the forest. After pulling out one of the young replacement trees, she found no such network attached to its roots. Could this mycelium have an important role in the forest? She drove to a nearby forest that had not been harvested. "I began to dig into the forest floor. The yellow mycelium seemed to coat every miniscule particle of soil. Hundreds of miles of threads. . ."1

This was the beginning of Suzanne's life work, discovering the astounding wisdom of the forest and its trees. For years logging firms and governments have been clear-cutting forests and planting more valuable or faster growing trees. They have spent millions trying to find the reason why the percentage of success was small. Mixed varieties of trees were planted together, special fertilizers were put into the soil, and even tons of new soil was brought in to help. Nothing seemed to make a difference. At first the scientific community showed little interest in Suzanne's work, but finally scientists and loggers began to take notice of the work Suzanne and her team were doing. It would change our understanding of the forest, and especially the trees.

Rather than clear-cutting, the logging business that Suzanne's family operated always left some of the larger trees standing. Was that the reason their replanting was generally successful? Could these older trees hold the key to the success of forest regrowth? If so, how?

The thickest and most intense growth of fungus filament is found under and surrounding the older trees. The testing of this filament began illuminating more and more secrets of the forest. One exciting discovery led to more experiments and more astounding revelations. The mycelium fungi that was once thought to only break down matter in the forest, is now recognized as a mycorrhizal network, a symbiotic association between a fungus and a plant.

The older trees, which are now called "Mother Trees", are the central hubs for the extensive underground mycorrhizal networks of communication in the forest. A mother tree supports her seedlings by connecting them to this mycorrhizal network and supplying them with the nutrients they need to grow. Suzanne discovered that Douglas fir trees provide needed carbon to the forest's baby firs. Even more interesting is that more carbon is sent to baby firs that come from her cone seedlings, than to random baby firs not related to the mother tree. Mother trees can even change their root structure to make room for baby trees.

Over the course of a season, fir trees were found to use the underground web to exchange nutrients with paper-bark birch trees. This is important because fir and birch trees were generally considered to be competitors. Yet the trees were sharing nutrition back and forth with one another. In fact, the birch trees often contributed more nutrients to the fir trees than



Mycellium: Wikipeddia
Originally Uploaded by Lex VB Dutch
Wikipedia



Mother Tree: Frendt Property
Mary Lou Frendt

DNR REPORT ON WAKE BOATING

In September, 2022, the DNR issued a report on wake boarding that outlined concerns and recommendations about this popular activity on Michigan Lakes. The following is a message from Joe Nohner, Ph.D Inland Lakes Habitat Analyst & Midwest Glacial Lakes Partnership Coordinator, provided here as well as a few comments relative to North Lake.

“Today DNR Fisheries Division is releasing [Fisheries Report 37, “Wake boats: concerns and recommendations related to natural resource management in Michigan waters.”](#) With 3000 miles of Great Lakes shoreline and more than 10,000 inland lakes, Michigan welcomes millions of boaters,

they received in return. Deciduous and coniferous trees need more energy at different times of the year, so when the trees share their nutrition during their low-need season, both trees benefit. The trees were cooperating.

As the research continued, mother trees were shown to contribute even more significantly to the forest. They use their deep roots to draw up water and share it with the shallow-rooted seedlings. They detect and send distress signals to warn of infestations and even send extra nutrients to help protect other trees. “Their presence increases seedling survival by as much as 400%, and thanks to the alliances they foster, entire forests are stronger and more resilient.”² When mother trees are injured, dying, or in their twilight years, they deliberately pass their resources on to their “children”, ensuring their genetic line will continue.

Studies and experiments continue to add to our knowledge of the true nature of trees. They are much like us: nurturing their offspring, contributing to the community, and supporting one another.

The Coast Salish people, the Native American’s of British Columbia, Canada, believe “trees have personhood”³. The Salish teach that the trees of the forest are “made of many nations living side by side, each contributing to this earth.”³ It appears that the Coast Salish are right.

¹ Suzanne Simard, *Finding the Mother Tree*; Alfred A. Knopf publisher, 2021

² Onetreeplanted.org

³ Jim Taylor, *If the Old Trees Could Speak*; The Vernon Morning Star, 08-12-2021

Green Lawn or Green Lake: It’s Our Choice

By Donald R. Zak Professor of Ecology
University of Michigan

My five-year-old granddaughter, Janie, absolutely loves swimming in our lake - it is her favorite thing to do during summer, except of course for the July 4 Boat Parade and fireworks. – You simply cannot keep her out of the lake during the summer. One day, I took her to Klave’s Marina (now Wonderland) to pick up some boat supplies, and they were running an advertisement video for Yamaha WaveRunners. In the video, there was a guy on a WaveRunner “tearing it up” on a chartreuse-colored lake somewhere in the South. Janie asked me in horror “Why is that water green?” – seeing that was way out of her realm of experience due to the clear, cool waters of North Lake.

There are good reasons why North Lake is not green, at least for now. Foremost, North Lake is a kettle lake, formed by retreating glaciers approximately 14,000 years ago. At that time, a large chunk of ice, a little bigger than the size of the present-day North Lake, broke off from the ice sheet and was subsequently buried by sediment in water draining off the melting and retreating glacial ice. When that ice block melted, it formed the basin that North Lake now sits in. As you may have noticed, there are no streams entering North Lake and there is only one small outlet stream. Consequently, North Lake water comes from ground water that reaches the surface of the land, and ground water is of high quality. That is why we use it as a source of our drinking water around the lake.

We are fortunate that glacial activity has left us with North Lake and its cool clear water, but this is not the situation for many other lakes. In our region, lakes that are fed by inlet streams receive nutrients from surrounding agricultural lands – water that runs over this land, picks up

anglers and other water based recreationists every year. Wake boating, and towing surfers or wakeboarders behind wake boats, is a popular activity. These boats use ballast and other technologies to generate significantly larger wakes for wakeboarders to jump. Over time, though, these types of boats can potentially harm the environment.

New research compiled in the report shows that operation of wake boats can potentially threaten lake health. Several recent studies show that wake boats can produce waves of 1.7 to 17 times the energy of those created by other comparably sized power boats, and these generated waves take much longer to decrease in size, too – between 225 feet and 900 feet from the boat. These larger waves can damage property and cause shoreline erosion, decrease water clarity and plant abundance, and add excess nutrients that contribute to poor water quality.

Another design feature on wake boats directs water from the boat's propeller toward the lake bottom. This water can generate turbulence that can kick up bottom sediments at much greater depths, which decreases water clarity and quality. Additionally, the water ballast systems in wake boats are easy places for aquatic invasive species, such as zebra mussels, to catch a ride and spread to other locations.

We know that wake boat operators want to enjoy time spent on clean, healthy lakes, just like everyone else who visits Michigan's waters. We've learned a lot in the last few years about the detrimental effects these boats can have on the environment, and these guidelines can help wake boaters do their part to protect our lakes.

To protect the health of Michigan waters, and the fish and plant life that rely on them, through this report DNR Fisheries recommends

sediment-associated plant nutrients (nitrogen and phosphorus), and sometimes manure (Yuck!). That is the case in the Maumee River basin near Toledo, in which agricultural runoff creates the chartreuse-green water in western Lake Erie and the harmful algal blooms that come along with it. The same is true for smaller lakes that are fed by inlet streams or larger rivers, like nearby Portage Lake which also has experienced a harmful algal bloom and beach closures. Further, we are fortunate to have a central sewer system, which eliminates the movement of nitrogen from septic leach fields into our lake; this is a notorious cause of algal blooms.

The answer to Janie's question is - green water is created by algal blooms, some of them harmful, which result from the over fertilization of agricultural lands and green lawns, and the nutrient-rich runoff that enters water bodies. Leaching from septic systems further contributes to this problem - this is true across our region and for most of the agricultural US.

Why is North Lake, not green – at least not yet? Because no agricultural runoff comes into North Lake, because there are no septic fields, it remains free of dramatic and harmful algal blooms. However, there are clear trends that both nitrogen and phosphorus concentrations in North Lake water have been increasing over the past decade or two. Where are these nutrients coming from, why are they increasing, and will they eventually turn North Lake green?

Where are these nutrients coming from? Given North Lake's geological setting, its source of water, and the absence of septic leach fields, there is only one culprit – lush green lawns – for some, the “American Dream.” While a manicured lawn can be a source of beauty and pride, it also is an incipient nightmare waiting to impact our lake. There is unequivocal evidence that lawn fertilization is an important source of excess nitrogen to surrounding water bodies. In preparing this essay, I called a national chain of lawn care experts and asked them for nitrogen application rates in our region – they apply 130 lbs. of nitrogen per acre per year, which keeps lawns looking green. Compare this to the amount of nitrogen annually applied to a crop of corn in the Midwest – that is 150-200 lbs. of nitrogen per acre. Even though there is much more plant growth and nutrient uptake in a corn field than in a lawn, approximately 30-40 % of the applied nitrogen is carried by rain below corn roots, eventually making its way to surface and groundwater. This nitrogen-rich water directly fosters algal growth, which makes lakes green. Now, consider a lush green lawn receiving an almost equivalent amount of nitrogen, and it's easy to understand that much of the nitrogen and other nutrients are lost after they are applied – if they are not taken up by the lawn, rainwater moves the nitrogen and other plant nutrients below the shallow grass roots, and, over time, they make their way through the ground and into our lake. Algae are plants too and their growth is enhanced by these nutrients, just as they enhance the growth and greenness of lawns on which they first were applied. Because of this fact, the State of Michigan has long banned the application of phosphorus in lawn fertilizers, but this is not the case for nitrogen.

Why have nutrients increased over time? As North Lake has been developed, trees have been replaced by our homes, some of which have large areas of lawn. Replacing mature forests with lawns dramatically reduces the uptake of nutrients by plants – big trees need lots of nutrients to grow, survive and reproduce. If lawns are fertilized as described

the wake boaters should remember these three simple steps:

- **When wakesurfing or wakeboarding, during which boat speed, wave shapers and/or ballast are used to increase wave height, operate at least 500 feet from docks or the shoreline – regardless of water depth.**
- **When wakesurfing or wakeboarding, never operate in water less than 15 feet deep.**
- **Completely drain ballast tanks before transporting a watercraft over land**

We will also be reaching out to the boating and lakes communities to discuss potential outreach and education approaches that can encourage these voluntary best practices.

We want to emphasize that responsible boating and fun on the water aren't mutually exclusive. We aren't trying to stop people from having fun on the water with family and friends; it's actually the opposite. By voluntarily following this guidance, wake boaters can help protect lake health and ensure these waters are here and healthy for everyone to enjoy.

If you have questions you are welcome to contact Joe Nohner (517-599-6825, noherj@michigan.gov) and/or Jim Francis (517-242-3593, FRANCISJ@michigan.gov)."

Comment on above article: North Lake's size and shape make it less than ideal for wake boats if the above DNR recommendations are followed.

The 500 feet minimum distance from shoreline coupled with the 15 feet minimum depth make the usable area of North Lake quite limited. About ¼ of the lake's sur-

above, this change in land use, in part, leads to the increases in both nitrogen and phosphorus that have been recently documented in North Lake.

Will it eventually turn North Lake green? While North Lake has not yet experienced an algal bloom, turning the water green, the long-term use of lawn fertilizer could change this situation. And, this does not need to be the case. Foremost, reducing the amount of fertilizer annually applied to our lawns can dramatically lessen the amount of nutrients entering North Lake – a single, small, early-season (late April) application of fertilizer will be rapidly taken up by the growing lawn, thereby reducing fertilizer loss to the lake. This would negate the need to apply fertilizer throughout the summer, especially when drought conditions decrease plant growth and nutrient uptake by roots. Further, replacing grass lawns with native vegetation, like a mix of prairie grasses is one choice, and another is replacing grass with white clover which fixes its own nitrogen, thereby eliminating the need for chemical fertilizers. To the extent we reduce lawn fertilization, we reduce nutrient inputs to our lake, keeping it clear and cool – I believe this is something we all want.

Green lawn? Green lake? It is our collective choice – we need to reduce or eliminate the use of lawn fertilizers around North Lake. We *all* share this lovely wonder of nature and this special place in which we have the privilege to live. Please make individual choices that collectively will keep North Lake from turning green.

North Lake Weed Report – Spring and Summer – 2023

Dave Preuss and Paul Lammers

It's interesting to note that the weed conditions of North Lake this spring and summer have similar results from past years. Most noticeable was the emergence of early spring slimy green surface algae which returned in immense proportions. Large accumulations shifted from east and west shores via wind direction that would not disperse causing nuisance conditions to lake occupants. In addition, light green globules ranging in size from about three inches to three feet floated either on the water surface or slightly below throughout many portions of the lake. And, upon observation, the algae comingled in the weed beds in many areas of the lake as well.

These conditions were reported to our county SAD, (Special Assessment District) representatives and Kieser & Associates who control the invasive weed treatment in our lake. Unfortunately, treatment for algae is limited due to EGLE (Michigan Department of Environmental, Great Lakes & Energy) regulations restricting use of copper compounds which is used to eradicate algae. According to Dr. Doug Pullman from the Kieser group, wind and rain can eventually diminish the surface algae. Too bad we did not have enough of either to lessen our problem.

On a more positive note, during a lake survey by county, Kieser, weed applicator and NLPA representatives, other former weed problems such as Eurasian milfoil were less apparent from past years. Broadleaf pondweed which will be approaching the water surface, was still thriving. Chara and starry stonewort (invasive) weeds are growing in shallow areas as in past years and is a nuisance weed affecting boat dockage.

face area meets these criteria; it is an irregular oval that extends from the line of the Camp Dock on the west end to the Sauer Drive Point on the east end of North Lake.

CAMP BURT SHURLEY

Another year will slip by without campers at the camp. The buildings are falling into disrepair with leaking roofs and other issues. The operator of the camp, Detroit Rescue Mission Ministries, is working on a month to month contract and is only doing minimal maintenance such as lawn mowing.

You may recall the camp had a \$4.5 million fund raising program just starting to get underway in 2019. Ken Myers, President of Consulting Resource Associates, was heading the effort on a voluntary basis. He unfortunately passed away in 2020 and despite several inquiries; we can't find any information on the fund raising campaign.

The camp was denied an operating permit for this summer due to the maintenance issues. There may possibly be use on a day camp basis but that is just speculation.

If you want to know more about the history and potential future use of this property, go to our website and look up the 2019 edition of the Laker.

FIREWORKS DAZZLE!

Dave did it again with the terrific show we experienced this year, in spite of the Saturday rainout. For many years Dave has blessed us with his talent, hard work and dedication. Except for the professionals hired by other lakes and municipalities, there are very few, if any, persons in S.E. Michigan with the skill and knowledge Dave brings for our benefit. Thanks to a great friend and North Lake neighbor.

The celery weed was not noted at this time. A weed treatment was conducted in early June for small areas which have some milfoil infestations and algae on the west shore. Pondweed cannot be treated in accordance with EGLE regulations.

As reported in a previous Laker Newsletter, to alleviate our spring time algae problem, last fall two small sections of the lake had a Phosloc experimental treatment conducted by the Kieser Group. The intention was to remove phosphorous from weed beds and, in turn, prevent algae formation. Results of this have yet to be reported. It should be noted that lawn fertilizer applications which will probably drain into the lake, contribute to the problem.

Considering the conditions in North Lake, Dr. Pullman again reiterated that the weed situation here is the best of all surrounding lakes that Keiser is working with.

Lauren Koloski, our Washtenaw County expert who manages several Special Lake Assessment projects in the county, responded to our request for help to understand the algae issues on North Lake this year with the following:

Seasonal algal blooms are a common occurrence in Michigan inland Lakes. North Lake is not alone in its struggles. Algae are a large and diverse group of organisms that use the sun's energy and available nutrients such as nitrogen and phosphorous to grow. Algae comes in many forms (globs, long stringy) and will experience rapid growth under the optimal conditions. Algae occurs naturally and are an essential part of a healthy lake! However, there is an overgrowth of algae in many water bodies throughout Washtenaw County.

*But why are we seeing so much algae in North Lake, and what can **we** do to help minimize the impacts of an overgrowth of algae?*

A 2022 study found that many of the nutrients feeding the algae blooms on North Lake are coming from human activities around the lake. A report summarizing this study can be found online.

The residents of North Lake can minimize their impact on the lake by:

1. *Dispose of car/house poisons properly*
2. *Don't use fertilizer or herbicides*
3. *Pick up pet waste immediately*
4. *Don't burn yard waste or throw it in the lake*
5. *Install a Raingarden or a natural shoreline*

Washtenaw County will provide a free consultation for your property!

Visit: bit.ly/VisitMyShoreline

Email: Bryans@washtenaw.org

Call: 734-222-3814

A pilot study using an experimental approach by using a mineral based substance, that has the potential to block available nutrients on the lake bottom was completed in 2022. Further use of this approach is currently being explored by the Special Assessment District (SAD). A report summarizing this study can be found online.

LAKE LEVEL

In 2022, the lake level started a little below average and declined throughout the remainder of the boating season. It ended up being the lowest level since the weir was installed. This year began somewhat lower than 2022 and has continued to recede at a faster than normal pace.

On July 15, we were about 4 inches lower than last year's July 15 measurement.

NLPA BOARD MEMBERS

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Webb's Landing: Dave Pruess

THANK YOU!

Thanks to the folks who contribute to the Laker publication, especially to Mary Lou for her *Trees Communicate* article and her great help in formatting, editing and just all-around expertise.

In addition to activities individual residents can take, the SAD is working to learn more about what actions can be made on a management level. Since 2007 when the SAD on North Lake was established, the program has continuously addressed the invasive plant population. We are now seeing the native plant population rebound! The rebound of the native plants is important to the algae management on North Lake. As the SAD looks to promote more/taller native plant growth less nutrients will be available for the algae blooms.

The above activities have the potential to have a positive impact on the spring algae blooms being experienced on North Lake. Copies of the above-mentioned reports and additional information related to the management activities on North Lake can be found at Washtenaw.org/NorthLake.

BOAT PARADE SAILS ON

More than a thousand years ago, Lief Erikson sailed the North Atlantic and established settlements in present day Newfoundland. One of those ships apparently lost contact with the remaining fleet and sailed on for a millennium, finally finding shelter in North Lake in 2023. Congrats to the winner of the parade!



The Viking Ship

Ice Fishing

Two good ole boys from Alabama had been hearing for years how much fun ice fishing in Michigan was and decided to go. They loaded up their fishing tackle and headed north. Finding a large frozen lake they immediately headed into a bait and tackle store to inquire about methods and tactics for ice fishing. The clerk was friendly and helpful and told them what bait was needed and what tackle they would need. He also suggested they buy an ice pick to chip away a hole in the ice. Off they went to the lake. About two hours later they returned to the store telling the clerk they needed another ice pick. The clerk was puzzled but was happy to make the sale. So he sold them another ice pick. Three hours later they came back and said they better buy every ice pick he had. The clerk asked, "Haven't you fellows caught any fish yet?" One of the good ole boys replied, "Caught any? Hell, we ain't even got the boat in the water yet."