SPRING 2023

BLACK LAKE NEWS



The BLACK LAKE ASSOCIATION was founded in 1928 by a group of volunteers focused on maintaining the quality of the lake and surrounding watershed, providing recreational opportunities and communicating information of interest to its members. That mission remains unchanged.

The purpose of the BLACK LAKE ASSOCIATION is still to monitor Black Lake for environmental and ecological changes and to promote activities that will enhance water quality, fishing, boating, safe navigation, swimming and other recreational activities. Membership in the BLACK LAKE ASSOCIATION is open not only to property owners, but also to others who want to support the quality, natural beauty and recreational opportunities of our northern Michigan gem. Everyone is welcome.



BLACK LAKE, located in Cheboygan and Presque Isle counties in northern Michigan has a surface area of 10,130 acres. There are four townships bordering the lake, Grant, Waverly, North Allis and Bearinger. It is the seventh largest inland lake in Michigan and the largest body of water in the Black River watershed. It drains through the Lower Black and Cheboygan Rivers into Lake Huron. At the deepest point it is approximately 55 feet deep.

LETTER FROM THE PRESIDENT

BRETT TREPANIER 989-370-4949

As February 4th approached, I was anxiously awaiting the opening of the 2023 sturgeon fishing season. Black Lake is one of the few lakes in Michigan that has lake sturgeon, and the only one that allows spearing of sturgeon in the state. I was anticipating the sturgeon I might be lucky enough to harvest.

Each year the popularity of the season grows. There were 630 anglers registered this year even with the sub par ice conditions. Presently the sturgeon population is estimated at 1200 adult fish and 300 juveniles. I was one of the registered anglers and readied my shanty for the event.

The quota for sturgeon allowed to be harvested is 1.2

percent of the population which equates to 14 fish. The Michigan tribes are allotted half of the quota, which is seven sturgeon. The other seven are for the registered anglers. Then, they take one away as a buffer to prevent going over the allowed amount. There is no size limit as they try to prevent all the spawning aged fish being taken out of the pool.

The DNR notified the anglers when the season was over by text alerts and visits from the DNR personnel. They (DNR) were very actively employed



all over Black Lake.

The 2023 Sturgeon Season lasted only 65 minutes of fishing. Only two of the harvested fish had been captured before by Michigan State University and the DNR during spring spawning runs in the Black River.

My family and I enjoyed the event. We spent many hours on the ice getting ready and then waiting for one of the mighty giants to show up. Needless to say, I wasn't successful this year, but all the work involved in participation, was well worth the effort. I plan to do it all over again next year.

Now, on to spring and all the fun activities enjoyed by all of us on beautiful Black Lake.

Have a fun summer.

VOLUNTEERS ARE VITAL TO THE BLA

Our thanks go out to everyone who volunteers to help the BLA, especially the Beach Representatives. They are as follows:

atives. They are as follows
GAIL SMITH
MARLENE GEORGE
HEIDE PENHALE
TERRI MUNDY
SARA LUCIER
CYNTHIA KLOSS
SUE MADDEN
CANDY/JEFF NIEUWKOOP
RON DULAK

CONNIE NADJARIAN

DANA BROPHY
MISSY BEARDSLEY
KAY HOEFFLIN
LYNNE HENZLER
SUE ROBERTS
LYNDA O'NEIL
JILL LEWIS
PATTI ARCHAMBO
MIKE KRETZ
JANICE WOOD
ROBERT WALTER
CHARLENE SWIHART
INGRID/NEIL SENDELBACK
DEBORAH/CRAIG REDDER

JULIE JOHNSON
SANDY SCHNAU
CASSIE COBB
JOCELYN BERGSTEDT
PAM SELVIG
EUGENE OSANTOWSKI
LINDA VAN SICKLE

If you would like to become a Beach Rep please contact Sharon Dulak at 989-733-2565.





BOARD OF DIRECTORS

PRESIDENT

Brett Trepanier 989-370-4949

VICE PRESIDENT

Roger Selvig 989-329-7882

TREASURER/SECRETARY

Dave Turzewski 517-881-3995

MEMBERSHIP NEWSLETTER

Sharon Dulak 989-733-989

AT LARGE

Roger Bergstedt 989-733-8337 Ron Dulak 989-733-2565 Erin Mc Lean 989-619-9146 John Roby 989-245-7204 Cindy Trepanier 989-370-7153

SUPPORT STAFF LAKE MONITORING

Roger Bergstedt Ron Van Sickle

WEBSITE

Linda Van Sickle Cindy Trepanier

FACEBOOK—BLACK LAKE CHEBOYGAN MICHIGAN

Jim Filipowski

BANQUET

Connie Nadjarian

LATEST NEWS FROM OUR FISHERIES DIVISION Neal Godby - Senior Fisheries Biologist

Sharon Dulak asked me to write a fisheries article for the newsletter, so I thought it would be a good opportunity to give an update on some recent changes in the Northern Lake Huron Management Unit (NLHMU0) of Fisheries Division managed from Gaylord. The long time supervisor, Dave Borgeson, retired last summer and Tim Cwalinski is now the NLHMU manager. We recently brought on board new biologist, Matt Klungle, to fill the vacancy from Tim's promotion. With the personnel changes we are shifting areas of coverage/responsibility, and Black Lake is now in my area of coverage. I am looking forward to working with you.

WALLEYE STOCKING

Black Lake has benefitted the last two years from good production from DNR walleye rearing ponds in the Northern Lake Huron Management Unit and our Southern Lake Huron Management Unit and our Southern Lake Huron Management unit (Bay City) A total of 388,463 spring fingerling walleye were stocked in Black Lake in 2021, and 151,922 were stocked in 2022.

Stocked walleye were present in our fall electrofishing surveys each of these years, with 100% of the age-0 fish (19/19) subsampled for marks of hatchery origin in 2022. We do not plan to stock walleye in Black Lake in 2023 unless there happens to be surplus of walleye available again beyond other regional needs.

LAKE STURGEON SURVEY 2023

NLHMU, along with DNR's Tribal Coordination Unit, Michigan State University, and Little Traverse Bay Bands of Odawa Indians, are planning to survey the lake sturgeon population in Black Lake this summer. The primary goal of this survey is to evaluate the survival and growth of sturgeon that have been stocked in Black Lake over the last 10+ years. The survey will take place in July, so you may see our crews out on the lake at that time. Please steer clear of our nets and buoys! We are planning to operate four netting boats following standard survey procedures. Gill nets are of large mesh size, which should primarily catch sturgeon, and will be tended in short time frames

during the day. No nets will be left out overnight.

NORTHERN PIKE REGULA-TIONS

Northern pike regulations will change on Black Lake starting April 1 of this year. The new regulations will include a no minimum size limit and five fish daily possession limit with only one fish greater than 24 inches allowed in the daily possession limit. This change was implemented to address angler reports (and past survey data) of pike numbers being higher, but very few of legal (24 inch) size. This regulation change was vetted through the Northern Lakes Citizens Advisory Committee in 2022, of which a number of Black Lake Association members attend.

I hope everyone has a good year fishing!



HOW, WHY AND WHEN

WAS THE NORTHERN INLAND LAKES CITIZENS FISHERY ADVISORY COMMITTEE FORMED by FRANK KRIST

Frank Krist has put together a very fantastic, well written, informative and interesting article about the formation of the Northern Inland Lakes Citizens Fishery Advisory Committee. It was originally set up to keep the recreational and Tribal walleye fishery open on Mullett Lake. A new survey in the spring of 2009 indicated that the walleye populations had dropped

significantly and the Michigan Department of Natural Resources was considering closing the recreational walleye fishery in Mullett lake.

At that point, Frank set up a public meeting at the Ocqueoc Township Hall near Onaway, had an overflow crowd attend and the new organization was born. The discussions that developed led to a walleye management plan for Mullett

Lake, which then led to further plans for additional lakes. It has become a most successful organization.

You may read of the work Frank and the group have done on the Black Lake Association website:

Www.blacklakeassociation.com DON'T MISS IT!





BLACK LAKE SPORTSMEN'S CLUB (BLSC) CHUCK THURSTON

Black Lake Sportsmen's Club located on 10 acres along Bonz Beach Highway has been around since the 1930s when the Club was incorporated. The Club is a non-profit organization dedicated to shooting sports, conservation and youth education. The philosophy is "If we respect and protect our forests, streams, fish and wildlife, they will be around for future generations to enjoy. The youth of today will be the fisherman, hunters and conservationists of tomorrow; it is our responsibility to teach them how to use and not abuse our natural resources."

In the early years, the Club House and the Ranges (up to 200 yards) were always busy. The Club held many community activities, such as Bingo and Potato Pancake dinners to name a few. We sponsored many youth activities: Hunter, Boating and Snowmobile Safety classes, archery and junior rifle classes. Club members participated in competitive pistol shooting with Northern Michigan Pistol League for many years. We still have inhouse Junior Rifle and have joined forces with local 4-H archers to hold archery classes in the Club House.

The Club held banquets for many years as a fundraiser to support our projects, charities, maintain the grounds, ranges and Club House. In recent years however, due to a significant drop in member participation, the Club sponsors gun raffles for their fundraisers. We have continued our 5-Stand Range activities from May through mid-

September, indoor pistol shooting and an Annual November Sight-In day (which are open to the community).

The Club also provides the Onaway Elementary 5th graders with copies of the MUCC Track Magazine and supports the MUCC Youth Camp. It provides Onaway High School with \$1,000 scholarships for senior students interested in the sciences/conservation. are supporters of the Sturgeon for Tomorrow Program and the Onaway Goodfel-Christmas Project (which Black Lakes Sportsmen's Club played a big part with the Toys for Kids portion of this wonderful community Program).

Black Lake Sportsmen's Club has been a member of the Black Lake Association for quite a while and continues to be interested in happenings with Black Lake and other lakes in our Northern Communities. The Club participates in keeping up with what's going on with the MUCC organization, which keeps Michigan State DNR actions in the forefront of the conservation community.

The meetings are held monthly, the second Wednesday each month at 7:00pm. A warm invitation is extended to anyone to come and participate and enjoy the ranges. For more information contact:

Mike Parrott, President 989-351-8256

FRIENDS OF THE ONAWAY STATE PARK (FOOSP) SUE MADDEN

Greetings from the Friends of the Onaway State Park. have been working to enhance the area around the new pavilion. Our open house was held on July 10, 2022. Attendance was good and several people involved in the building of the structure were present. We purchased chairs, tables, a wood rack, a fireplace grate, garbage holders., refurbished benches from the old pavilion and much more to allow the building to be rented for events. The DNR has installed a BBQ grill and an accompanying storage cabinet. The Chapman and McGinn families donated a beautiful shadowbox with an original steering wheel made by the Lobdell-Bailey plant in Onaway. The steering wheel was patented by Charles Fay Kendrick in 1917.

The display includes a bit of history as well.

Since it opened in late July,

there have been a dozen rental events. The rental fee goes to the DNR and will help with maintenance, cleaning and repairs. The pavilion closed for rental on October 9, 2022 and will reopen for rental on April 23, 2023. To reserve the pavilion you can go to:

https://midnrrreservation.com.

There is a \$200.00 fee/day for use of the pavilion and there may be some additional charges depending upon numbers and type of activities you will have. You can also call the park at 989-733-8279 and talk to Katie or Kim.

We are now working on getting the playscape from the monies so generously donated by the Black Lake Association, in memory of Robert J. Schoenhals. Some of his relatives were at the Open House Trustee Pam Beck attended a grant writing class and is preparing to write a matching grant to fund additional costs to the playscape. On January 17, 2023, Sinclair Recreation came out to the park to set up a site plan for installation of the playscape. They are in the process of making a conceptual drawing of the structure. Once that is complete, we can move ahead to installation. They will also help with this. A post will be erected with information about the donation. The site plan and conceptual drawing will be needed to submit the matching grant request. We are so grateful for this generous donation.

In other areas, FOOSP is working on getting funds for the restoration and repair of the



ONAWAY STATE PARK PAVILLION

lower bathroom building. It is an historical structure. The restoration specialist that helped to plan the pavilion is also involved in the project. We are also looking to install interpretive panels on the trails throughout the park. FOOSP sold sweatshirts and raffle tickets for donated prizes at the Shiveree 2023. Coffee and eight boxes of donuts also proved to be a great donation raiser. We also hosted a game of "Fish Hole" for the children. It was similar to Corn Hole, but they were tossing beanbag sturgeon into blue buckets.

Everyone is invited to join us in our next endeavors. You may contact Vanessa Dean at 989-307-9041 or me, Sue Madden at 586-770-5906. for information.

MICHIGAN SHORELINE STEWARDS

The Black Lake Association. (BLA) working in partnership with the Michigan Shoreline Stewards encourages all property owners to take advantage of their program. It is all voluntary, web based, and can help you to solve, manage and understand any problems you may have on your shoreline. You can go to their site and take a survey related to management practices of vour own, personal shoreland property and find answers to any problems you may have. They will also give you a rating.

Michigan Shoreline The Stewards promote lake friendly landscaping, sion control methods and policies. These practices work to help keep our beautiful lake clean, provide habitat for fish and wildlife and provide a wonderful place to enjoy nature. It is good to remember that the biggest threat to our lake is the loss of nearshore habitat. You will learn to provide the best management practices to protect your lake.

Www.mishorelandstewards.org



MAKING STRIDES FOR BLACK LAKE WATERSHED PROTECTION

LAUREN DEY

TIP OF THE MITT WATERSHED COUNCIL (TOM)

Our everyday actions have a direct impact on the health of the watershed in which we live. As rain water or snow melt moves across the surface of the land, it picks up potential pollutants and carries them into nearby waterbodies, like a stream, river or lake. The Black Lake Watershed covers 350,000 acres and is characterized by large tracts of forests which account for over 40% of the Watershed's area. Agriculture and urban areas account for about 5.5% of the Watershed area. The lake itself is more heavily developed, with 88% of the shoreline reported as developed (Tip of the Mitt Watershed Council, 2017 Shoreline Survey Report).

The greatest threats to the water resources within this largely undeveloped Watershed include sediments and nutrients from nonpoint source pollution. Sources of these pollutants include road/stream crossings, poor riparian management, streambank erosion, inadequate and inconsistent water source protection ordinances and stormwater. Water quality has remained high over the years, but since 2018, harmful algal blooms (HABS), testing positive for microcystin, have been observed. A watershed management plan seeks to protect Black Lake from further pollution and help

identify possible causes and potential solutions for the HABs problem.

The Watershed Council has actively been pursuing grant funding to develop a watershed management plan for the Black Lake Watershed that meets state and federal criteria for approval. A watershed management plan is a tool used to protect our waters from nonpoint source pollution and other threats. It encourages strong partnerships and communication, helps focus on environmental results, and provides a means for cost effective management.

To help us begin developing a watershed management plan, the Watershed Council created and facilitates the Black Lake Watershed Advisory Committee, comprised of various stakeholders, including the Black Lake Association, to strengthen partnerships as the management plan is developed and implemented.

This year the Watershed Council also applied to the University of Michigan's School of Environment and Sustainability (SEAS) to recruit Master's students for this project. We were successful in getting four students to sign up for the work of conducting some inventories and research in the Watershed, which will feed into the

The management plan. SEAS students will complete field surveys to document and evaluate nonpoint source pollution originating from urban stormwater. streambank erosion. road/stream crossings, agricultural activity and forestry management. They will also engage with local governments in Cheboygan, Presque Isle and Montmorency Counties through review of local water protection ordinances and other planning mechanisms. Additionally, they will be conducting social indicator surveys to determine attitudes. beliefs and behaviors of watershed residents related to water quality.

We are very excited that we have this opportunity to work with these Master's students and advance resource protection in the Black Lake Watershed! Stay tuned for further updates or email:

info@watershedcouncil.org
If you would like to be added to the email list for the Watershed advisory Committee, you may contact the Black Lake Association at:

Www.Blacklakeassociation.com



GREENBELTS ON THE SHORELINE KEEP BLACK LAKE CLEAN WITH GREEN

NOAH JANSEN-TIP OF THE MITT (TOM)

Most people who live on lakes care a lot about protecting water quality, and at the Tip of the Mitt Watershed Council, (TOM) we get a lot of inquires from lakefront property owners who want to know what they can do to protect their lake. One of the biggest threats to water quality at Black Lake is nonpoint source pollution, including excess sediments and nutrients flowing into the water from roads, yards, and other developed areas. Maintaining or creating a greenbelt as the last line of defense against this pollution is one of the best things shoreline property owners can do to maintain water quality on Black Lake.

A greenbelt, also referred to as a riparian buffer strip, is an area of diverse native vegetation that grows naturally or is planted along the shoreline. The plants in a greenbelt may include trees, shrubs, grasses, and wildflowers. Their dense, deep root networks prevent soil from washing away and help filter pollution before it reach-

es the lake, keeping wildlife and people safe and reducing the risk of algal blooms. Ideally, homeowners will have a greenbelt that will cover at least 75% of the shoreline and extend 10 to 15 feet inland from the water. For most, this will still leave room for getting kayaks, docks, and water toys into and out of the water, but even if you don't have room to accommodate a full-size greenbelt, a smaller greenbelt still offers some protection to the lake.

Greenbelts can also be beautiful. The can be designed in both naturalistic and more formal styles and can be used to create a privacy screen, maintain open views, or do some of Flowers bloom both. throughout spring and summer, attracting birds, butterflies, and other pollinators and providing valuable wildlife habitat. And if you are not a fan of geese in your yard, greenbelts provide an additional benefit. Geese prefer wellmanicured lawns with unrestricted views and easy access to the water. Planting or maintaining a greenbelt will help geese, (and their droppings) away. If you don't already have a greenbelt, creating one can be as simple as not mowing along the shoreline and waiting to see what native plants establish on their own. If you'd like a more controlled approach, you can create or expand a greenbelt by planting native plants, such as ninebark, little bluestem grass, wild columbine, red osier dogwood, obedient plant, blazing star, and sand coreopsis. If you still have questions bout greenbelts, the staff at TOM is here to help. When staff time allows, we can even do onsite consultations with homeowners. I hope you will join us in working for a more resilient future for the shorelines of Black Lake.



The Michigan Natural Shoreline Partnership has lists of additional species that can be used for greenbelt plantings. The lists are organized by how close you are to the water so you get the right plants in the right place, and there is also a regional list of nurseries near the bottom of the page. Some of the nurseries listed sell both native and non-native plants, so be sure you know which you are getting. You may visit them at:

Www.shorelinepartnership.org/plants-for-inland-lakes.htm



BLACK LAKE ASSOCIATION GENERAL MEETINGS

ALL MEETINGS ARE HELD IN THE GRANT TOWNSHIP HALL ON THE SECOND MONDAY OF THE MONTH AT 7:00PM

MAY 8— General Meeting

JUNE 12th – Potluck 6:00 Bring a dish to pass and table setting.

Speaker-Noah Jansen, Tip

of the Mitt- NATURAL SHORELINES HELP PRO-TECT BLACK LAKE WATER QUALITY

July 10th— Speaker—Lauren Dey, Tip of the Mitt— PLANT YOUR OWN RAIN GARDEN

August 14th— Speakers—SEAS students from the University of Michigan (School of Environment and Sustainability) reporting on their work on Black Lake this summer.

September 11th—General Meeting

October 9th—General meeting

NEEDED!
Beach Representatives for these beaches:
Douglas
Angle Haven 2
Hongore 2
Craig Acres
Contact Sharon
Dulak at
989-733-2565



THE BLACK LAKE ASSOCIATION

would like to thank all of you for your membership donations, and also those of you who have made special donations to the Association and the Fish Fund. These donations are much appreciated and allow us to continue to work to protect and preserve Black Lake and its Watershed. Thank you so much!

A special thanks goes to Alexis Fink who donated in honor of her parents,

GERDA AND BILL FINK

We have had so many wonderful volunteers help in so many ways. This year we were able to help Tip of the Mitt with four mobile boat washes, Jim Coleman and company. put in the buoys at the mouth of the Upper Black River and Dick Hopkins, Lynne Henzler, along with the Dulaks and their Grandson Ryan, decorated the Onaway Chamber of Commerce Christmas tree.

Thank you, once again to all who volunteered to help make the BLA successful in its endeavors. If you would like to volunteer, go to our website at

Www.blacklakeassociation.com



UPDATE ON LICENSE AMENDMENT PROCESS AT THE ALVERNO DAM TIFFANY HEON

On December 7, 2021, after four+ years of working with consultants, agencies and local stakeholders, Black River Hydro LP (BRLP, owner and operator of the Alverno dam), filed an application to amend its hydropower license with the Federal Energy Regulatory Commission (FERC). This application contained a detailed analysis of current and historical data and information, a hydrological study of the Black Lake and Black River system, and a proposed operating protocol for the Alverno dam moving forward.

In order for this license amendment application to be considered by the FERC, the Water Quality Certification under Section 401 of the Clean Water Act (401 Certifi-

cation) also required revision. Over the last year BRLP has been working with the Michigan EGLE and DNR to amend the 401 Certification. The draft 401 Certification was issued for public comments on October 27 and a second draft on November 27, 2022. A final 401 Certification was filed with the FERC by Michigan EGLE on January 4,

Following a year of continued analysis and negotiation, the protocol included in the 401 Certification is succinct, and keeps in mind the interest of the local residents, resource agencies and BRLP as a commercial business. Because it differs from that which was proposed a year ago in the FERC license amendment

2023.

application, the FERC has asked BRLP to revise the application so that it is consistent with the 401 Certification. This revised license application is due by March 24, 2023.

Stakeholders will have an opportunity to comment on the revised application before it is filed with the FERC. Following the March 24, 2023 submission, the FERC will review the application and eventually issue a new license for the Alverno dam. timeline for license amendment issuance is unclear and is dependent on FERC's review process. BRLP will continue to share the details of this process with the Black Lake Association as they unfold.

ZERO GRAVITY AERIAL SHORELINE SURVEY

DENNIS L. WIAND

The Black Lake Association has contracted with Zero Gravity to conduct an airline survey of Black lake.

Zero Gravity Ariel will use drone technology to perform a complete survey of approximately 18.4 miles of shoreline. Video of the entire shoreline area will be recorded by navigating the lake in a counterclockwise direction. Altitude will vary from approximately 25 feet to 45 feet above the water surface level to best reveal the slope, vegetation and water of the near-shore area and maintain a safe clearance of obstructions.

High elevation video of the

sandy shoals of the entire lake will be recorded at an altitude of about 300 feet. The coordinates of the high elevation flight paths will be archived for repeatability in any other future surveys. This project is planned to be conducted in the spring of 2023.

The purpose of the imagery is to generate statistical data for the use of education and environmental planning and to maintain an historical record of the lake environment.

The survey will target, but will not be limited to the following:

Greenbelts

Terrestrial Invasives

Shoreline use issues

New Construction Friendly Lake Practices

Erosion

Cladophora

Seawalls

Drainpipes

Detectable Algal Growth

Irrigation Systems

Sandbars/Shoals

Riprap

All of the information collected during this survey will be kept confidential, but individuals, who are members of the BLA, may request information concerning their own property at meetings or by special appointment.

BLACK LAKE NEWS

Page 7

LAMPREY ENCOUNTER? DR. ROGER BERGSTEDT

At this winter's meeting of the Northern Inland Lakes Citizens Advisory Committee meeting, Dr. Nick Johnson from the Hammond Bay Biological Station presented an update on efforts to remove parasitic Sea Lampreys from the inland waterway and tributaries to Mullet and Burt Lakes using sterile male release. He requested that any-

one capturing a Sea Lamprey should retain it, fill out the attached form, and make contact if you observe a wound on a fish.

It is possible to find Sea Lampreys or their wounds throughout the inland waterway, but only in the Black River up to Alverno Dam. Because the dam was built decades before Sea Lam-

preys entered Lake Huron, they are not present above the dam. However, the smaller, parasitic, but native Silver Lamprey could be encountered. Silver Lampreys are not a problem and you do not need to report them. The attachment shows how to easily separate the two species.



February 4, 2023

Black Lake sturgeon season lasts 65 minutes. The season opened at 8:00 am.

1st fish
Charles Jett
Male - 49 in. 30 lbs.

2nd fish Jerry Perrin Female- 55.5 in. 35.5lbs.

3rd fish

Jerry Hillis

Male- 54 in. 32 lbs.

4th fish
Brett Williams
Immature - 32 in.
6.4lbs.

5th fish Scott Archambo Male -54 in. 34 lbs.

6th fish Andrew LaLonde Male -39 in. 11.8 lbs.



Upper Cheboygan River Sea Lamprey Observation Program

Sea lamprey (Petromyzon marinus) Usual length to 24 inches Two dorsal fins distinctly separate Coloring typically blue-black, dark olive, bronze, or orange Body and first dorsal fin marbled or blotched with dark brown to black patches Silver lamprey (Ichthyomyzon unicuspis) Usual length to 13 inches First and second dorsal fins joined, cleft between not deep Coloring typically light tan or silvery tan

Questions or Collections?

Please contact:

Nick Johnson USGS - Hammond Bay (989) 734-4768 x128 njohnson@usgs.gov

Tim Cwalinski DNR - Gaylord (989) 732-3541 cwalinskit@michigan.gov

Catch a fish with a sea lamprey attached?

- 1. Remove lamprey and place lamprey in ziploc bag.
- 2. Fill out the Sea Lamprey Observation Tag below.
- 3. Place tag in the ziploc bag, seal, and freeze the bag (keep bag cool until frozen).
- 4. Call the phone numbers above to report collection.

Catch a fish with a lamprey wound?

- Take picture(s) of the fish and wound. Use the ruler on this form to provide a scale in the wound photos.
- 2. Fill out the Sea Lamprey Observation Tag below.
- 3. Call the phone numbers above to report the wound or email photos.

Data	
Date	9
Location	
	(lake, stream, GPS coordinates, nearest road crossing, etc.)
Host species	2
Host size	2
	(length and/or weight, please include units)
Name	
Phone	
Email	

	4-
- 2	
6	_
— ∞	_ =
	<u> </u>
<u> </u>	
-2	~=
7	Ξ
<u> </u>	_ =
E ~	~ = <u>2</u>
	inches 1/8
	_ <u>-</u> _



TREES, WOODS AND WATER

Trees are a vital part of that equation. In fact, a healthy, 100 foot tree can uptake 11,000 gallons of water from the soil, filter it and release it into the air in a single growing season. Trees also increase groundwater filtration. On a landscape scale, forests are an important source of clean drinking water for millions of people in the United States providing over half of the national water supply, according to the U.S. Forest Service. In Michigan, 20 million acres of forests, covering about half the state, clean and cycle rainwater through the watershed, which eventually ends up in your home as clean drinking water. Trees and healthy forests also help maintain habitats for fish by keeping the water clean, cool and covered.



BANQUETE MENU

APPETIZER

Meat and cheese board served with crackers

SALAD

Mixed green salad

ENTREES;

Prime Rib
Parmesan encrusted whitefish

SIDES

Garlic mashed potatoes Seasonal Veggie Buttered Dinner Rolls

DESSERT

New York Style Cheesecake served with a herry Coulis

BLACK LAKE ASSOCIATION TO BEGIN ENHANCED WATER SAMPLING DR. ROGER BERGSTEDT

Harmful blue -green algal blooms have been observed more frequently in Black Lake recently, particularly in late summer and fall. However, the causes behind those blooms are not obvious. Because the blooms seem to be occurring later in the fall here than is normally seen, one theory has been that a buildup of nutrients is occurring below the thermocline if oxygen levels are The nutrients are then released when the thermocline begins to break down in late summer or early fall when the lake turns over. For a long time, volunteers from the BLA have measured water quality and taken samples twice each month to measure chlorophyll-a as a measure of algal production through the zone of light penetration above the thermocline.

Working with the Tip of the

Mitt Watershed Council to expand and improve this sampling, the BLA obtained a grant to cover half of the equipment costs to engage in a much more comprehensive program to look at seasonal changes in nutrients and temperature throughout the water column. To do so, we ordered a probe that can be lowered to the bottom and back while continuously measuring and recording depth, water temperature, and dissolved oxygen. We also purchased a device that can take water samples at discreet depths for analysis of nutrients. The sampling depths will be determined by the observations of temperature and dissolved oxygen with depth. A sample will be taken above, within, and below the thermocline at least once a month. Samples will be analyzed by an independent laboratory for

the important nutrients nitrogen and phosphorus. We will also continue to take secchi disk readings for water clarity and water samples for chlorophyll-a The nutrient analysis. samples will produce a much better picture of the seasonal and vertical pattern of nutrient concentration and dissolved oxygen. The dissolved oxygen profiles will also be of interest to fisheries managers dealing with Black Lake fish populations. The data produced by the BLA will provide important current information to evaluate nutrient, temperature, and oxygen levels throughout the water column relative to any harmful algae blooms observed. They will also provide a baseline relative to any future changes in nutrient inputs, seasonal temperatures, or effects of invasive species.



BLACK LAKE ASSOCIATION BANQUET PRESENTS "A NIGHT AT THE CHATEAU AT BLACK MOUNTAIN" THURSDAY, JULY 20TH, 2023

MUSIC

APPETIZERS 5:00 TO 6:00 PM DINNER 6;00 PM

\$45.00 PER PERSON (INCLUDES TAX AND GRATUITY)

PLEASE RESERVE _	DINNERS FOR JULY 20, 2023
I HAVE EN	NCLOSED \$

NAMES			



Please return payment along with this form before July 13, 2023

Mail to: The Black Lake Association, P.O. Box 302, Onaway, Michigan 49765

Questions? Please call Connie Nadjarian at 248-561-7174