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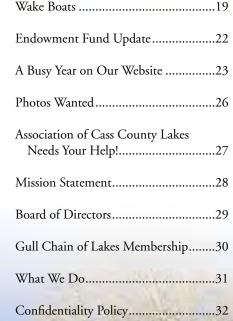
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CHAIR'S MESSAGE

Chuck Herrig, Chair

As I write this, our leaves are near their peak color but it has been tough to get and enjoy with our cold and rainy weather. I am still holding out for Indian Summer! I'm glad my wife and I picked up extra firewood for the fireplace. Looks like we'll need it.

I've been out on Gull Lake for some walleye fishing this past week. I must be getting older as my time spent in the boat is getting shorter as the weather gets colder. Based on my marginal success, the walleye population have nothing to fear from my presence on the lake, so far this fall.

In this issue, you can learn about a three-year research project underway at the Minnesota Aquatic Invasive Research Center (MAISRC) on the impact aquatic invasive species (AIS) is having on our fisheries. This is really critical work and is near and dear to my love of fishing. On another AIS topic, Steve Allex recently completed a procedural action plan to follow, if a new invasive species such as Eurasian milfoil or starry stonewort is discovered in our chain of lakes. Every minutes counts to take action quickly in term s of AIS verification, determine a treatment plan and coordinate appropriate

channels of communication. People involved in nearly every step include the DNR, Cass and Crow Wing Counties, and the GCOLA Board. Thanks Steve for your important work in having this plan ready. Let's hope we do not need to use it!

Also in this issue checkout an update on our website (gcola. org) usage. Our webmaster, Dave Anderson, will share which topics within our website receive the most visits and trends in viewership over time.

I recently accepted a board membership with the Association of Cass County Lakes (ACCL). Representatives from many lake associations meet monthly from spring to fall to share lake association best practices and the latest news impacting our lakes. I hope to share what I learn from this valuable group in upcoming newsletters.

Enjoy the rest of the fall season in the North Country or, if you are so inclined and able, somewhere warmer!





WHAT HAPPENS TO WALLEYE WHEN AIS INVADES A LAKE

Chuck Herrig, Fisheries Committee Chair

The Minnesota Aquatic Invasive Species Research Center (MAISRC) has begun a research project to understand the impact that AIS has on food webs in our lakes, so that fisheries managers can better project realistic levels of walleye production and safe harvest levels. Specifically, the study is looking at the impact zebra mussels and spiny water fleas have on walleye and other fish. We know fish rely on zoo plankton as a primary food source during the first year of their life. Zebra mussels and spiny water fleas also consume zoo plankton. What is not known is if young fish are able to switch to other food sources if zoo plankton is not readily available.

The study is being conducted on nine major walleye lakes in Minnesota: Cass, Kabetogama, Lake of the Woods, Leech, Rainy, Vermillion, Red, Mille Lacs, and Winnibigoshish. The scientists are collecting samples of fish, macro invertebrates

and zoo plankton to study their chemical composition. This analysis will allow researchers to characterize each lakes food web with a high degree of accuracy. Researchers will also look at young walleye and yellow perch growth rates on these lakes over the past 25 years.

We are fortunate in Gull Lake to not have spiny water fleas (as yet) but as you know, zebra mussels are wide spread in our lake chain.

The project began in 2017 and completion date is 2019. We will share learnings in this newsletters as they become available. If you would like to learn more, find additional details on this project and other valuable work underway by the Minnesota Aquatic Invasive Research Center at maisrc. umn.edu.





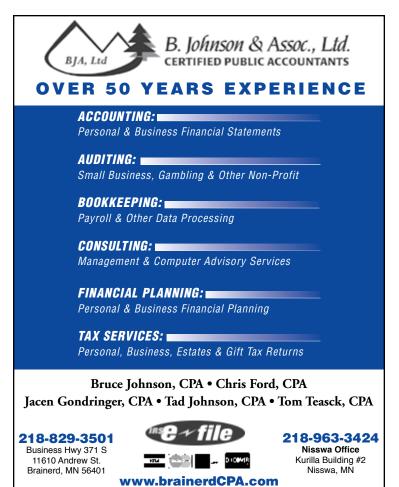
From local author Steven A. Carr

The quest for the Ojibwa treasure

Available from: Amazon, Outskirts Press, and Madden Bros. Store.









AQUATIC INVASIVE SPECIES

Steve Allex, GCOLA AIS Committee Chair



Fall is definitely here, and the open water boating and fishing season is rapidly coming to a close. I have provided a summary of GCOLA's AIS prevention activities for this season. We have made progress in our efforts to stop AIS infestations into Gull Chain of Lakes, but we have also had some close calls this season.

• Boat Inspections:

For the season, we will have conducted over 10,000 boat inspections at the three public accesses located at County Road 77 at Zorbaz, Hole-In-The-Day access off of Hwy 371, and Government Point access located at the Corps of Engineers Dam site. The good news is that a high percentage of boaters are in compliance with the law to remove drain plugs, drain all water, and remove any weeds when leaving or before arriving at the access. At the Zorbaz access, we have collected data on the boat inspections. To date, from the 3000 boats inspected, we have a 2% non-compliance rate with the "Clean, Drain and Dry" requirements. Most of violations are for forgetting to remove drain plugs and not draining all water from the boat.

A number of resorts on the Gull Chain of Lakes are also inspecting the boats that their customers are bringing to the lake for a weekend or vacation. The larger resorts will launch or load 50-100 boats on a typical weekend, so their boat inspections and awareness of AIS species and rules is well appreciated. For next year, GCOLA is planning to work with

all of the resorts and owners of private accesses to increase the number of boat inspections at these locations.

Unfortunately, some boaters are not following the laws. Shown here is a boat that was stopped at the Government Point access. The weeds that are covering the bunks on the trailer are Eurasian Milfoil and if this boat had been allowed access, an infestation would have likely occurred. This was a close call.

Annual Survey for AIS weeds

GCOLA contracts with PLM Lake and Land Management for an annual survey across the Gull Chain of Lakes as a means to provide early detection of any AIS weeds or vegetation. Early detection of any AIS vegetation significantly improves the outcome of any treatment plan.

The annual survey is conducted twice a season, usually early July, when lake vegetation is in full growth and again in early September at the end of the growing season. Survey sites are at 23 specific locations across the chain of lakes, with particular focus on public accesses, resorts, or any areas where an AIS infestation would likely occur. For 2018 from the samples taken from the 23 locations, we have not found any infestation of AIS vegetation. Shown below is a map of the annual survey sites.

AIS Education

GCOLA has supported AIS research and education at the

FALL SUMMARY

Minnesota AIS Research Center (MAISRC) located at the University of Minnesota. The Research Center is leading efforts to develop means to control or eradicate a number of AIS species such as Eurasian Milfoil, Starry Stonewort, Zebra Mussels, Spiny Waterfleas and other species. They also are a repository of best practices used by the DNR and lake associations to treat infestations of AIS species. A number of GCOLA board members have attended AIS symposiums sponsored by MAISRC and have met with the MAISRC Director and scientists to review the status of the research projects.

In addition to working with MAISRC, next year GCOLA AIS Committee are preparing plans to work with the DNR and owners of private accesses to provide education and training on the correct way to conduct boat inspections and identification of AIS species.

• GCOLA AIS Response Plan

If an infestation of an AIS species were to occur in the Gull Chain of Lakes, the GCOLA board has approved an AIS response plan. This plan is designed to quickly work through the steps of:

- o Verification of AIS species
- o Determine size and location of infestation
- o Prepare treatment plan
- o Execute treatment plan and monitor results

The plan requires coordination between the DNR, Crow Wing County and Cass County AIS Coordinators, treatment suppliers, and GCOLA. Treatment for Eurasian Milfoil over a 20 acre site will cost approximately \$30-40,000 and require yearly follow-up with additional treatments. Starry Stonewort treatments are still being developed, but it is estimated that controlling or eradicating this invasive species could cost over \$100,000. The GCOLA board has created a fund to help pay for possible AIS treatment plans and makes annual contributions to this fund. To date we have reserved \$130,000 targeted for treatment of an AIS infestation.

My thanks to all who conducted our boat inspections, the DNR for their support of boat inspections and shoreline surveys for AIS vegetation and finally private owners and resorts for monitoring their accesses during the open water season. We all need to work together to prevent introduction of AIS species into the Gull Chain of Lakes.



2018 Access Site Survey
Gull Chain of Lakes Association
Crow Wing/Cass County
July 9 & September 5/10

PLM Lake & Land Management Corp.

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DNR FISHERIES REPORT

Marc Badgalupi, DNR Brainerd Area Fisheries Supervisor

The Brainerd Fisheries Area Office of the Minnesota Department of Natural Resources has been closely monitoring the walleye population of the Gull Chain of Lakes for many years. Current fishing success for walleyes has been quite good despite the weather. Check out "Fishing to End Hunger" on Facebook: hundreds of walleyes were caught and released in Saturday's tournament.

Those results were encouraging to see, but we will continue to adapt our management strategies to fit the changing conditions in the lake. Every year, Gull Lake gets 2.8 million walleye fry (newly hatched walleye) stocked. But this year, approximately 40,000 to 60,000 walleye fingerlings (4-8 inchers) will be stocked by the MN DNR, in Gull this fall for the first time since 1997. This fingerling stocking was triggered

because walleye fry

survival was poor for two consecutive

electrofishing gear. This contingency stocking is consistent with the Fisheries Management Plan. A similar scenario has played out in Round Lake this year, where an additional 9400 fingerling walleyes will be stocked.

I expect the survival of these fingerling to be above average, because there appear to be good numbers of yellow perch (walleye food) and low numbers of northern pike (which eat and compete with walleye). Walleye fingerlings are expensive (about \$1 per fish) and in limited supply, but we are committed to taking all reasonable steps to keep the Gull Chain of Lakes a prominent destination for walleye anglers.





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DEFINING "INVASIVE SPECIES"

By Dr. Peter Sorensen*

To solve any problem that impacts society, folks must agree on what the problem is and define it clearly. Unfortunately, the definition of an invasive species used by Minnesota's (and most states') government is neither precise nor the one accepted by many research scientists.

Examples of the problems resulting from lack of a precise definition abound, such as the passionate debate about whether or not to restrict stocking of muskellunge (muskies), Esox masquinongy, into Minnesota lakes. A favorite of many fishers, the muskellunge has been present in a small number of lakes in the Upper Mississippi River watershed since the last glaciation ended about 12,000 years ago. But are muskies a native or an invasive species? The problem is with the legal definition. The Minnesota DNR (echoing a presidential executive order) defines invasives as "species that are not native to Minnesota and cause economic or environmental harm or harm to human health."

Although that may seem straightforward, there are two major issues. The first is the meaning of "native." In determining what makes a fish native, what matters is not the state (fish are apolitical) but the watershed that fish, like the muskie, swam into on their own, are now naturally evolving in and presumably in balance with. The second concern is related to the term "damage." It is unclear what this means or how it should be evaluated. In particular, the term "environmental damage" lacks scientific relevance. Ecosystems simply are what they are; they cannot be damaged, although they can change (especially because of things folks add to them), often in ways that people dislike.

Additionally, and perhaps most importantly, agencies and research organizations dealing with invasive species are not actually assessing economic damage. They aren't collecting data on the economic value of the resources they are managing and protecting or on how those values are being harmed or changed (or could be). Lacking objective metrics and data about ecosystem value, assessments of damage become largely a matter of conjecture. So administrators and managers decide what is native (and presumably innocuous) or invasive in our state, and what sort of effort is needed to address them, largely based on personal experience, which is by definition subjective and limited by who happens to be in the room. The end result? Unfocused, inefficient, scientifically indefensible, and unsatisfying policy.

Where does this leave us? We seem to have two options: we

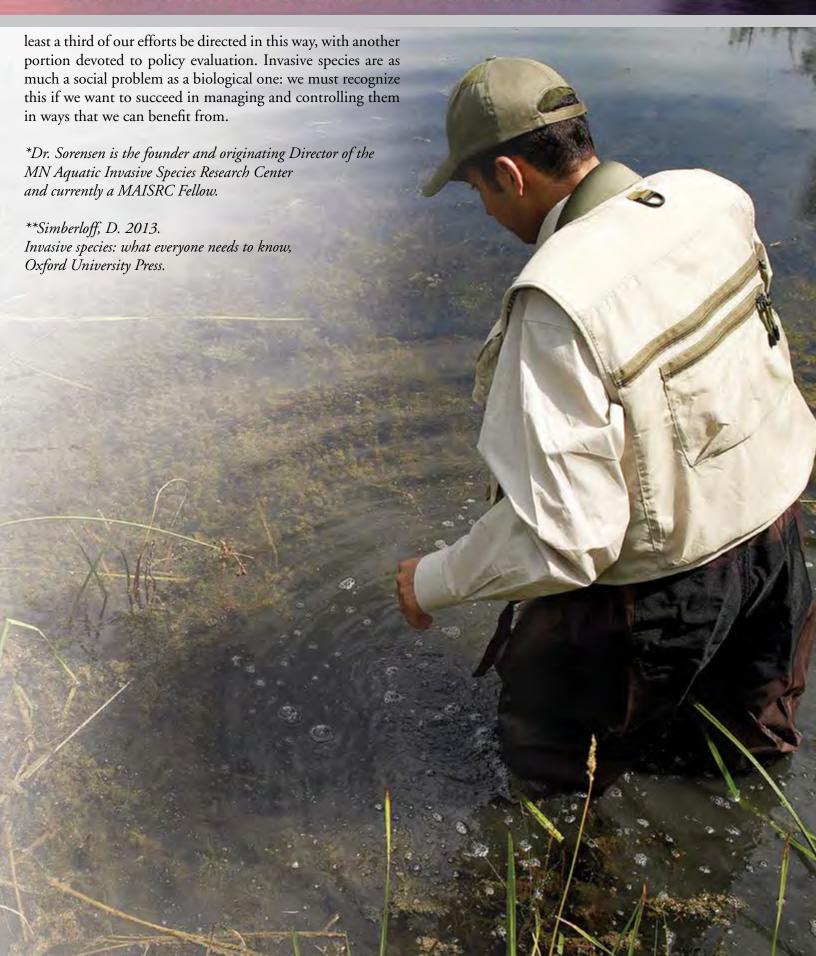
can either adopt a new definition or correct and then follow the present one. Most basic scientists, including me, use the definition coined by Professor Dan Simberloff (considered the father of the scientific discipline of invasion biology**): "species that arrive with human assistance, establish populations and spread." Simberloff's definition is objective, scientific, and quantifiable, focusing on the specific role of humans (vs. natural processes) in determining the presence a species. Using this more scientific definition, stocking muskies (or any species) into lakes and rivers where they were not naturally found is tantamount to introducing a non-native, invasive species if these species eventually breed and become established.

However, as appealing as Simberloff's definition and its focus on natural processes is, it does not address "damage," something many feel passionately about, especially if they are being asked to fund invasive species research and control. This is understandable and can easily be alleviated in a scientifically-rigorous manner simply by specifying that invasive species (as defined by scientific criteria) must by scored (or assessed) by how damaging they are (or are likely to be) in economic terms. For this, a rigorous socioeconomic evaluation of individual ecosystems would be conducted by applied economists to evaluate all aspects of ecosystems and roles of species in them and their combined economic values to all facets of society.

In this way, both the value of and damages to ecosystems could be assessed in quantitative and repeatable manners, and our efforts to target invasive species and systems could then be focused objectively and productively. Companies perform fact-based assessments of resource values all the time-why shouldn't resource managers and scientists?

In summary, if politicians will not or cannot adopt the scientific definition of an invasive species, the present legal definition should be modified (it's easy) and followed. The economic data that would be produced should then be used to determine exactly how damaging introduced (non-native) species actually are (or are likely to be) to all segments of society (i.e fishers, lake shore owners, resort owners, nature-lovers, canoeists, water-skiers, etc.) so reasonable decisions can be made at both the local (e.g. a biologically relevant scale) about whether and how particular species should be studied, regulated and / or controlled. Either way, it is high time that we used applied economics to inform invasive species research, management and control. I suggest that at

NOT AS EASY AND PROBABLY MORE IMPORTANT THAN YOU THINK!



By Sheila Johnston

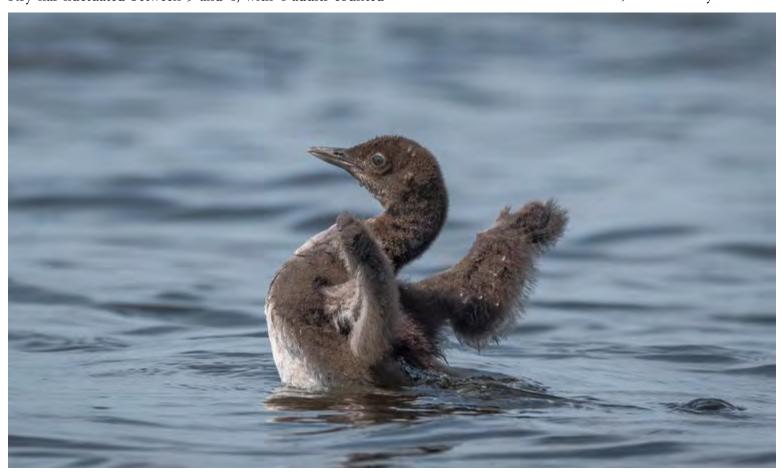
2014 TO 2018



Thanks to the efforts of 23 dedicated GCOLA Loon Watch volunteers, we had a successful 2018 loon count. We were able to cover all areas of the Chain to get a good count.

In reviewing the data for the past five years, we are seeing some positive changes in the Gull Chain of Lakes loon population. From 2014 to 2017, Nisswa Lake had 0 chicks, and 1 to 2 adults. This year there were 2 adults and 2 chicks counted on Nisswa Lake. On Roy Lake, the number of chicks has held steady at 2 for the past three years. The number of adults on Roy has fluctuated between 9 and 4, with 4 adults counted

on the lake in 2016 and 2018. The number of chicks on Bass and Spider Lakes has ranged from 0 to 2, with typically 1 to 2 chicks except in 2017. In 2017, the Bass Lake nest was washed out. Adults on the same lakes ranged between 2 and 4, with 4 adults in 2018. On Upper Gull the number of chicks ranged from 1 to 6. There were 5 chicks in 2018, and two of the chicks were the offspring of a new pair on the north end of Upper Gull. These two chicks were observed on the lake in late September, and will hopefully have a safe migration. Adults on Upper Gull ranged from 6 to 9, with a five-year average of 8 adults per year. There was good news on Lake Margaret! After three years of no chicks, there were two chicks in 2017 and one chick was counted in June in 2018. However, the pair from the north end of Lake Margaret had a chick late in the season that was not recorded in the 2018 count. Lake Margaret's adults ranged from 2 to 4, with a fiveyear average of 3. There were 0 chicks recorded on Love Lake during the five years of record keeping. There were 6 adults counted in 2014, and 0 adults in the following years. On Gull Lake the chicks have ranged from 6 to 11, but the average is over 8 over the course of the five years. Adult numbers ranged from 29 to 81. Due to the size of the lake, an accurate count of chicks and adults is more difficult, and it is likely that there

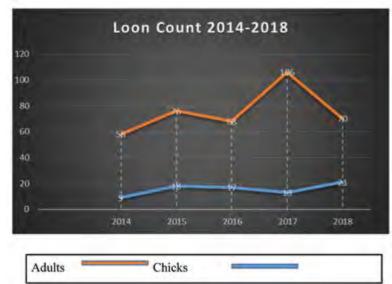


LOON COUNT RESULTS

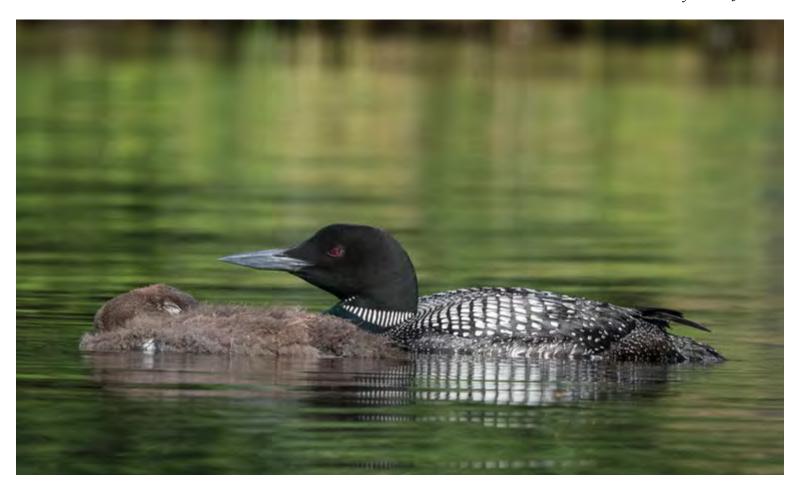
was an error in the adult count in 2017. In 2018, we had 21 chicks counted on the chain. With the additional late comer on Lake Margaret, we had a total of 22 chicks in 2018. In previous years the total ranged between 9 and 18.

It is great to see our chick numbers increasing! You can do your part to protect our adult loons and chicks by staying away from nesting sites, using caution, keeping distance, and reducing speed when boating near loon families. Please do not feed loons! Loons that are fed, then go after baited lines and can become hooked. If you are a fisher person, please use lead-free fishing tackle. Loons often swallow lead sinkers discarded by anglers when they scoop up pebbles from the bottom of a lake to help grind their food. Eating just one lead sinker can fatally poison a loon. The MPCA maintains a directory of companies offering lead-free tackle. It can be found at www.pca.state.mn.us. Never cut your line and leave it in the water. Loons become entangled in the fishing line and get hooked by the lures. Please be on the lookout for cut fishing line when you are boating or paddling and retrieve fishing line that you find in the water. Let's all work together to protect our loons!

In 2019 we will be expanding our Loon Watch to include loon protection activities. If you would like to volunteer for the Loon Count or Loon Protection team, please email gcola. loonwatch@gmail.com, or sheilafjohnston@me.com.



Photos by Sheila Johnston



THE BALD EAGLE By Sheila Johnston



The Gull Chain of Lakes is fortunate to be home to a thriving population of bald eagles. No matter where you are on the chain, you are likely to see an eagle soaring overhead or perching in the top branches of a tall white pine. But this was

not always the case. Following World War II, a proliferation of pesticides like DDT resulted in a toxic environment for eagles and other raptors. DDT passed through the food chain from fish and other organisms to bald eagles. The chemicals concentrated in the eagles' bodies, and caused their eggshells to become so thin that the eggs were crushed during incubation. As a result, our national bird became an endangered species.

Thanks to the efforts of many agencies and individuals, the recovery of the bald eagle has been tremendously successful. The recovery of the bald eagle first began in the Chippewa National Forest in north central Minnesota where U.S. Forest Service biologist John Mathisen pioneered the campaign to save nesting eagle populations. University of Minnesota and St. Cloud University scientists, Dr. Dan Frenzel and Dr. Al Grewe, banded eagle chicks on their nests and studied eagle ecology. Many of their students went on to become national eagle experts and contributed to the recovery efforts.

Beginning in the the 1970s, The Raptor Center at the University of Minnesota became a major contributor to the recovery of eagles by treating and releasing eagles that were found sick or injured. Through a cooperative effort between The Raptor Center, the DNR Non-Game Wildlife Program, and the U.S. Fish and Wildlife Service, it was discovered that bald eagles were eating sick and dead Canada geese and mallard ducks that had lead shotgun pellets in their bodies. This threat to bald eagles was a significant factor in the decision to ban lead shot for all waterfowl hunting in Minnesota.

Minnesota has been instrumental in the recovery of the eagle population nation-wide. Each year the Minnesota DNR captures four eagle chicks in northern Minnesota and transports and releases them in other states. Only one chick is taken from each of four different nests, so one or two chicks are still left for the parents to raise.

In order to support our Minnesota population of bald eagles, regional DNR non-game wildlife specialists prepare bald eagle nest management plans for state, county, and private lands throughout the state. The plans are prepared free of charge for landowners.

Bald Eagle Fun Facts and Viewing Info:

- The bald eagle wingspan is 6.5 to 8 feet!
- Immature bald eagles are all dark with white mottled in the wings and tails. The eyes and beak are dark. As the birds mature at around four to five years of age, they begin getting the white head and tail, and the eyes and beak start turning yellow.
- An eagles' vision is at least four times as sharp as a person with perfect vision. An eagle can probably identify a rabbit moving almost a mile away.
- In winter and during migration they can be found where there is open water. On the Gull Chain, eagles remain on Upper Gull where there is open water in the channels.
- Bald eagles build large stick nests that sometimes weigh over a ton! They are usually about six feet in diameter and more than six feet tall, and are built near the top of the largest trees near a lake or river.
- Eagles start nesting in Minnesota in March when the female lays one to three eggs. The parents share incubation duties and the young hatch after 35 days. They are ready to leave the nest between 10 and 12 weeks of age.
- Bald eagles feed on fish during late spring and and summer.
 They will hunt waterfowl, including loon chicks, and small mammals. Excavated eagle nests have been found to contain dog collars, so it is wise to keep an eye on small dogs when eagles are in the area.
- The Read's Landing floodplain forest is one of the best places to watch bald eagles in the Midwest. The flow of the nearby Chippewa River emptying into the Mississippi River helps keep the water open in the winter. The best eagle viewing is November through March. The town of Read's Landing is five miles north of Wabasha on The Great River Road, Hwy 61. There are three pull-offs north of Read's Landing on Hwy 61.
- The National Eagle Center is a world-class interpretive center located on the banks of the Mississippi River in Wabasha, MN. Phone is 651 565-4989.
- The bald eagle was removed from the endangered species list on July 9, 2007.

You can help preserve eagles by donating to the Nongame Wildlife Check-Off on your Minnesota tax forms or by sending a donation to the The Raptor Center, University of Minnesota, 1920 Fitch Avenue, St. Paul, MN 55108.



GRASSY POINT AQUATIC MANAGEMENT AREA

Grassy Point is designated as an Aquatic Management Area (AMA) by the DNR. AMA's protect lands, wetlands, streams and rivers that are critical for fish and other aquatic life, for water quality, and for their intrinsic biological value. Public fishing, and other compatible non-motorized outdoor recreational uses are allowed.

Grassy Point is one of a number of AMA's on Gull. It is comprised of 15 acres near the northern end of Gull Lake. The western half is wetland, but canals were cut into the eastern half decades ago, creating dry land that is quite scenic. When one home was built in the '90's, the rest was put into protected status. Uses are restricted to angling, non-motorized travel, and wildlife observation.

About four years ago nearly 1000 white pine and tamarack saplings were reintroduced by DNR personnel and volunteers from the City of Lake Shore. Each fall volunteers have gone back to Grassy to bud cap the pines in hopes of preventing depredation by deer. Over winter and spring the top shoot of the pines is a favorite food for local deer.

The "caps" are merely pieces of paper folded around the top shoot and stapled onto the needles. The method is not foolproof, but this year many trees were found with the last year's paper bud-cap still attached or on the ground nearby. Six inches of new growth was showing above last year's cap. The tamarack's have grown even faster than the pines and many had shoots at least two feet long.







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LAKE LEARNING

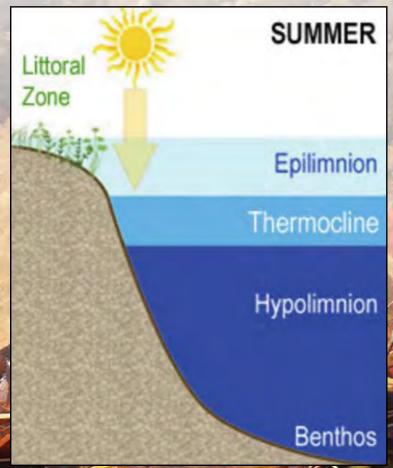
The temperature has cooled lately and the wind has picked up. These are the ingredients needed for fall turnover in our lakes. In the summer, the lakes separate into layers which is called stratification. The layering of lakes has to do with the relationship between water density and temperature.

Water is most dense at 39 Fahrenheit (4 degrees Celsius), and as water warms or cools from that mark it gets less dense. This has implications for a lake's structure because the denser water is heavier and will be at the bottom of a lake while the less dense water is lighter and will generally be at the top of the lake.

In the summer in Minnesota, the sun heats the top layer of a lake (called the epilimnion) which causes it to become less dense. The bottom layer of the lake (called the hypolimnion) does not receive sunlight and therefore remains cold. Since the top layer of the lake is less dense, it floats on top of the bottom layer and the two do not mix. The metalimnion is the middle layer of water. The metalimnion also encompasses the thermocline, the area of the most drastic change in water temperature.

In the fall in Minnesota, the sunlight is not as strong and the nights become cooler. This change in season allows the top layer of the lake to cool off. As the water cools, the density difference between the top layer of the lake and bottom layer is not as great. Wind can then mix the layers. Eventually the top layer fades and mixes with the middle layer. The thermocline sinks in the water column as the heavier upper water layer forces it deeper. Soon, though, the temperature in this mixed upper layer equals that of the bottom layer; wind easily mixes the entire water column because similar temperature and density exist throughout. This mixing allows oxygen and nutrients to be distributed across the whole water column again, and is called fall turnover.

The timing and duration of fall turnover depends on the size and depth of the lake. Sometimes it can occur in a couple days and sometime it takes a week or more. The deeper the lake, the longer the water column takes to become uniform in temperature since the bottom stays cooler. Most lakes in Minnesota that are deeper than about 20 feet turnover in early to mid October.





FALL TURNOVER IN OUR LAKES

You can track fall turnover in an individual lake a couple different ways. The easiest way is with a Secchi disk and a water thermometer. A Secchi disk measures water clarity. During fall turnover, the clarity of a lake usually decreases because mixing brings up nutrient rich water from the bottom of the lake and causes the lake to look cloudy. Sometimes there is even a distinct smell as decomposing plants, algae and other matter surfaces. Then, when turnover is complete, the clarity increases dramatically. If you take Secchi disk readings and surface water temperature readings every day or every other day in late September and early October, you can track fall turnover. Once the surface is 39 degrees F and the water clarity is deeper than it's been all summer, you will know that turnover is complete.

A more precise way to track fall turnover and the sinking of the thermocline is to take the temperature at 2-foot intervals from the surface of the lake to the bottom. You can tie a rope to a thermometer and mark 2-foot intervals on the rope. If you graph a line of temperature versus depth in the lake, you can see how the lake cools off and becomes uniform in temperature after turnover.

Some people report that fishing is not as good during fall turnover. The main reason fishing is harder is because the fish move and are more dispersed. In the summer, walleyes school in high oxygenated holes and structures. When the lake mixes, the oxygen levels become uniform throughout the lake so fish can roam anywhere. For information on how to fish during fall turnover, visit:

http://fishingminnesota.com/fishinfo343.html.

Most lakes in northern Minnesota are considered dimictic, meaning they mix twice a year - spring and fall. Shallow lakes, less than 15-20 feet, behave differently and can mix more often throughout the summer.

Enjoy the lakes! This article was written and shared by Moriya Rufer at RMB Environmental Laboratories as part of continuing education for their Lakes Monitoring Program (218-846-1465, lakes@rmbel.info).

To learn more, visit www.rmbel.info.







WAKE BOATS

Steve Frawley, Board Member

We are continuing to receive comments and complaints regarding the increasing number of Wake Boats throughout the Gull Lake chain. The major concerns continue to be shore erosion, safety concerns of kayak users, paddle boarders and other recreationalists, coupled with the loud and sometimes vulgar lyrics broadcast from the speakers on these boats. I have noticed a continuing trend on my lake with the arrival of more of these boats as new homeowners arrive replacing longer term residents.

My thinking is that this issue will continue to grow in the future due to the popularity of these boats. One boat sales person informed me this summer that they can't keep these boats in stock because they're selling so quickly. While dealing with this growing problem offers several challenges, I believe there are several options to consider including:

- By forming a coalition of interested GCOLA members who share in our concern
 - Encourage the GCOLA Legislative committee to promote this issue as a key priority. Keep an open dialogue with the DNR boating regulatory organization
 - Continue outreach efforts to other lake associations and advocacy groups such as Minnesota Lakes and Rivers to raise concerns on this topic
 - Help educate our neighbors on the chain to be thoughtful and courteous when operating Wake boats



Stay at least 150 feet away

from the shoreline. docks, or other structures.

Keep music at reasonable levels.

Sound travels well over water. If it's loud enough to hear at 80 feet back, it is likely loud enough for homeowners to hear, too.

Minimize repetitive passes

on any one portion of shoreline. Once you've run the same line for a while, move on to another area.

REMEMBER. YOU ARE RESPONSIBLE FOR YOUR OWN WAKE.





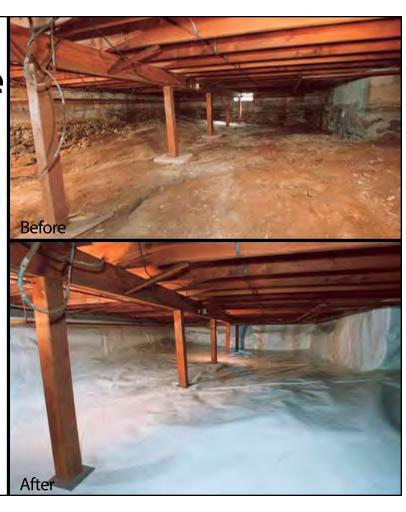


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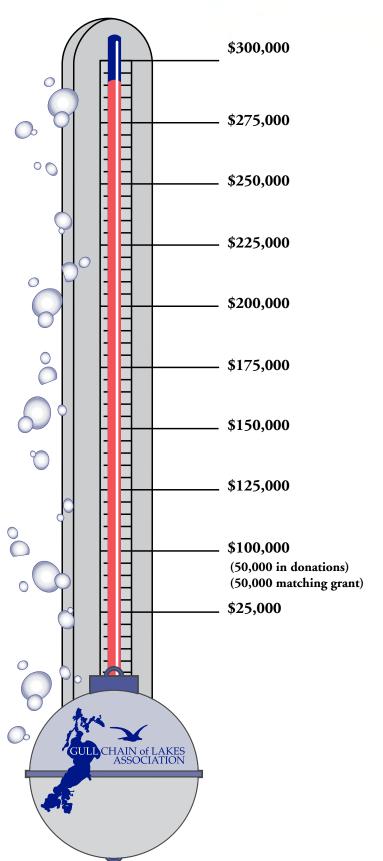


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In partnership with the Initiative Foundation, GCOLA established a perpetual Endowment Fund. The fund is intended to provide long-term funding to support the stewardship activities of GCOLA to preserve and improve the ecosystem of the Gull Chain off Lakes. It's also a wonderful opportunity to leave a legacy for those who will enjoy this area for years to come.

We currently have just over \$292,000 in the fund, which includes a \$50,000 matching grant from the Initiative Foundation. It is great to know that there is a long-term base of financial resources through the endowment to be able to carry out projects designed to enhance and protect our beautiful chain of lakes.

The Board again wants to thank all the many members and friends of GCOLA for the generous support of our endowment fund.





ABUSY YEAR ON OUR WEBSITE

As of September 30th, we have had 7,695 pages views at gcola.org since January 1st.

The most popular pages were as follows:

- 1. Home Page
- 2. Annual Gala
- 3. News & Events
- 4. Shopping Cart
- 5. About Us
- 6. Gull Lake Dam
- 7. Contact Us
- 8. Newsletters
- 9. Get Involved
- 10. Our Lakes

We had a number of new photos posted on our Photo Gallery page. You can find a link to this page near the bottom of the home page. We are always looking for more photos from the area. Please send them to webmaster@gcola.org and include your name and a suggested caption.

Dave Anderson – Website Manager

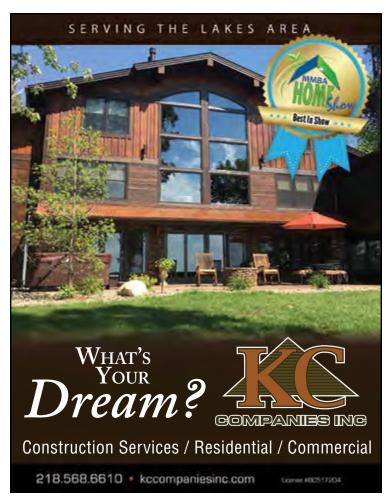


















PHOTO'S WANTED

Do you have photos you've taken around the Gull Lake chain you'd like to share with other members? We're putting together a library of photos to be used in the GCOLA newsletter. You will be given credit for any photos printed in the newsletter. Putting a caption with the photos is also helpful. Photos can be sent at full size to Rosemary Goff at togogt@charter.net.

Pileated - Dave Anderson

All photos should be supplied at the highest resolution/largest size possible, thank you.

CUSTOM HOMES - RENOVATIONS - ADDITIONS - LAKE HOMES



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Sledding – Jay Fifield



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Ice skating – TJ Bonnett

ASSOCIATION OF CASS COUNTY LAKES NEEDS YOUR HELP!



IT'S ILLEGAL TO...

TRANSPORT aquatic plants, water, or prohibited invasive species (e.g., zebra mussels, Eurasian water milfoil).

DUMP live bait into state waters, on the shore, or on the ground.

LAUNCH or attempt to place, watercraft or trailers with aquatic plants, zebra mussels, or prohibited invasive species into any waters of the state.

IT'S THE LAW!

CLEAN visible aquatic plants, zebra mussels, and other prohibited species off of watercraft, trailers, and equipment before transporting from any water access.

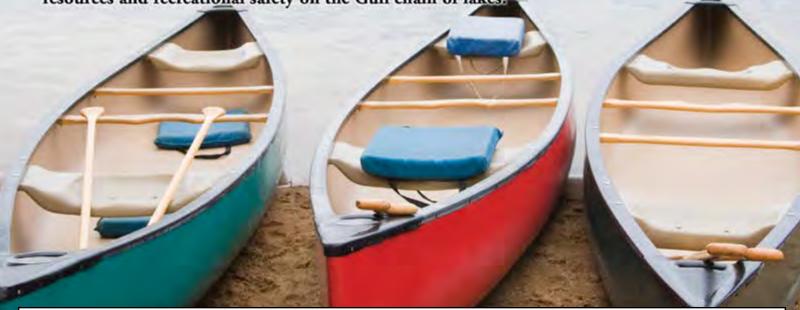
DRAIN water from the boat's bilge, livewell, motor, ballast tanks, and portable bait containers before transport from water access site or shoreline property.

KEEP drain plug and water draining devices open while transporting watercraft.

THANK YOU....CASS COUNTY SHERIFF'S OFFICE

MISSIOISTATEMENT

The Gull Chain of Lakes Association is an alliance of individuals, families and business owners in the Gull Chain of Lakes in Cass and Crow Wing Counties. The Association is devoted to the restoration and continued preservation of the highest water quality and environmental standards achievable, promotion of the responsible use of land and water resources and recreational safety on the Gull chain of lakes.





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Steve Frawley



Sue Friedrichs



Rosemary Goff



Linda Harrier



Chuck Herrig



John Ingleman



Sheila Johnson



Marv Meyer

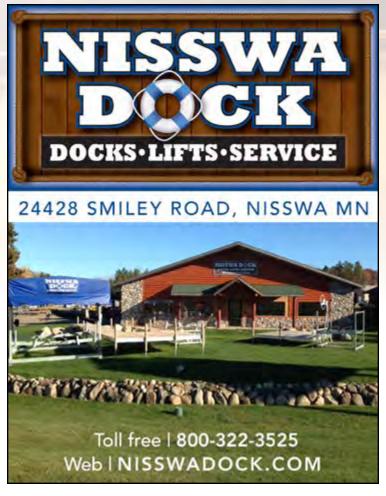


Bob Toborg

You are all welcome to join us at our monthly Board of Directors' meetings. We meet at Grand View Lodge on the 2nd Wednesday of the month at 8:30 a.m. Upcoming 2018 meeting dates are November 14 and December 12. We usually adjourn around 10:00 a.m.

Come see what we do.





GULL CHAIN OF LAKES ASSOCIATION 2018 MEMBERSHIP DUES STATEMENT

Dues for the lake association are \$50 per year. They are payable anytime from January 1 – December 31. We are a 501(c)3 nonprofit corporation which means that all money donated by you over and above the \$50 dues amount is tax deductible. If you have not sent in your dues for this year, now is a great time to do so. Contributions above the \$50 dues are greatly appreciated. You can get membership forms on our website at: gcola.org. Dues can be sent to Box 102, Nisswa, MN 56468

PLEASE USE THIS FORM: Please provide the information requested below and send with your 2018 dues to the address indicated. We have also provided a space for any additional contributions that you would like to make to the Invasive Species Fund.

Name:	
Mailing address:	Lake address:
Home Phone:	Lake Phone:
Email address:	Cell Phone:
2018 dues: \$50.00	
Additional donation designated to:	
+ Invasive Species Fund + Endowmen	nt Fund + Buoy Fund + Board Discretion
= Total Contribution:	



WHAT WE DO

YOUR LAKE ASSOCIATION IS WORKING FOR YOU!

- Purchases, installs and maintains one of the premier navigational buoy systems (90 buoys) in the State of Minnesota. This system is NOT provided by local law enforcement. We also install the no wake enforcement buoys for the sheriff's department.
- Provides free maps with boating rules and regulation at three public landings.
- In partnership with Cass and Crow Wing county sheriffs, provides free boat safety training for approximately 50 youth per year. The lake association also gives each participant a life jacket.
- Provides matching funds for a DNR grant to hire interns to monitor water craft at the three public boat landings on the Gull Chain for invasive weeds and aquatic species.
- Entered an agreement with the City of Lake Shore Police Department to fund additional monitoring of water craft for invasive species at the County 77 boat landing using police officers.
- Monitors lakes and streams running into the Chain for water quality. The samples are being taken by GCOLA member volunteers, with testing completed by licensed environmental labs. With the testing completed we have established a data base which will help us identify problems now and in the future and provide guidance for action plans.
- Conducts inspections twice in the summer at 24 locations to look for invasive species.
- Takes weekly secchi disk readings during the summer to test the water clarity.

- Promotes lakeshore restoration projects. We are currently providing matching grants for restoration projects through grants received from the DNR and the Initiative Foundation.
- Since 2010 donated over 1200 white pine seedlings to members.
- Works with county sheriffs on safety and enforcement issues. We have donated
 to the sheriff's department night vision equipment, a range finder, life jackets
 and have made our buoy barge available for emergencies.
- Donated \$15,000 to the University of Minnesota Aquatic Invasive Species Research project to be specifically used for zebra mussel research.
- Conducts a yearly loon count in the spring and late summer.
- Issues four newsletters per year to keep members informed about association programs and important issues affecting lake quality and property owners.
- Maintains a web site (gcola.org) and a member group e-mail service.
- Through the Initiative Foundation, established a perpetual Endowment Fund for ongoing support. With a \$50,000 Initiative Foundation matching grant, the fund is now well over \$292,000.
- · Holds an annual meeting and gala in July.
- Entered a partnership with the Corps of Engineers to establish a boat power wash station at the corps' Gull Lake Recreation Area public access ramp.
- In order to keep apprised of lake issues and programs, maintains memberships with the Crow Wing Lakes and Rivers Alliance, the Association of Cass County Lakes, Minnesota Conservation and Minnesota Lakes & Rivers Association.



LAKES PRINTING 'CONFIDENTIALITY POLICY

Lakes Printing in Brainerd is the only business that is allowed access to our Association member list and only for the purpose of mailing our newsletter. They have issued the following confidentiality policy.

We have a strict policy of confidentiality. We will not sell, trade, swap or in any other way use your list for anything except mailing your newsletter. We understand fully that you are the owner of the list and we simply have an electronic copy on our system for your use. This policy is not just for the Gull Chain of Lakes Association, it is applied to all customers.











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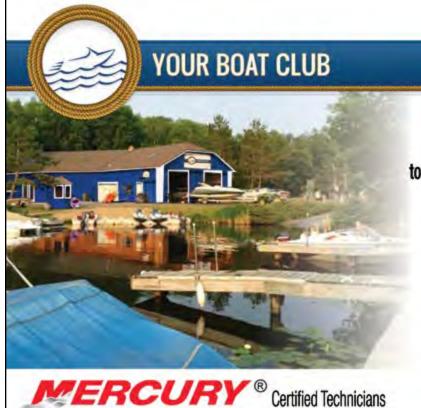
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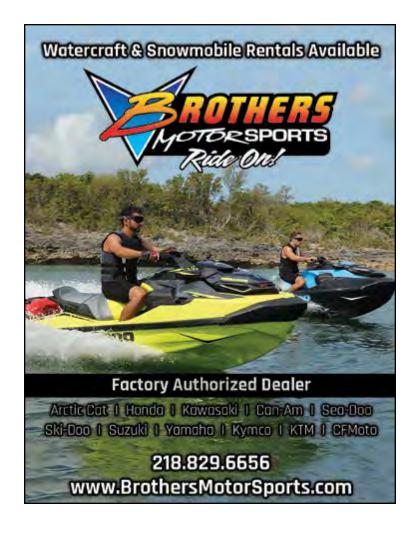
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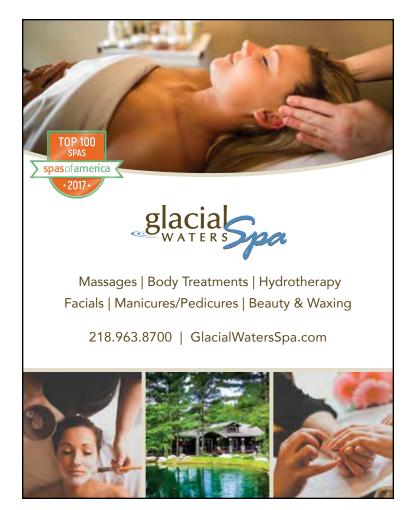


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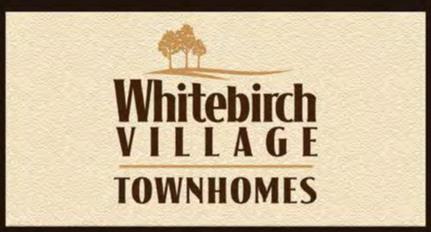




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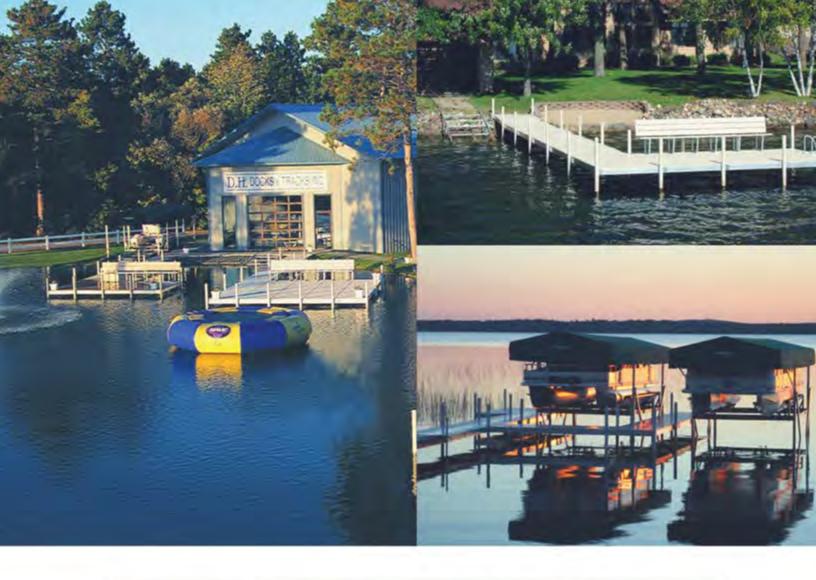
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