



STAR LAKE PROPERTY OWNERS' ASSOCIATION

FALL 2019 NEWSLETTER

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President's Letter by Gary Miller

What happened? I am writing the President's letter for our Fall 2019 newsletter. What happened to summer? It seems like I just did the spring 2019 letter to you. Our summers on Star Lake certainly do pass quickly. Overall, it was a good summer, although a bit cooler than normal.

One thing we all share regardless of time is the development of memories. We all carry memories of our growing-up times. Our children have memories of their summer vacations at Galaxy Resort (they still talk about catching fish off the dock and having some spirited family volleyball games). Now we are trying to build memories with our grandchildren. I will always carry the memory of the HUGE smile on my oldest grandson's face from catching his first walleye this summer; and the kids playing "lab shark" being pursued by our yellow lab as they swam and tubed in the water. Ah yes, memories to be filed awaiting memories to come. After all, isn't that a primary reason why we hold property on a Minnesota lake? Good times, good fun, and terrific memories made.

Your lake association has worked hard during its 2018/2019 year (see listing of accomplishments in this newsletter) to help insure we are making good memories on Star Lake by monitoring water quality, providing water safety buoys, trying to improve the fishery, and holding social/ educational gatherings. Things we hope to

avoid are memories of stepping on sharp zebra mussel shells along the shoreline or having our boat lanes clogged by one of several invasive weeds. Memory plays a part in that as well. Remember to clean your boat, trailer, lift or recreational toys if you have used them in a lake with known invasive species problems. Remember to report any growth that appears suspicious, as timely treatment can be very important for some invasive weeds. Remember this is your lake! Do your part to maintain the fishery by keeping the smaller northerns and releasing the bigger ones. Release the larger sunfish and keep the medium/smaller ones for the fry pan. Remember to observe limits and report those abusing the fishery.

By working together as an effective association of members, we truly can build memories that will last a lifetime for ourselves and our families! May the fall be with you!!!

- Gary P. Miller, SLPOA President



SLPOA Membership Update

Happy Fall to all of you who maintain your membership in the SLPOA. We ended the 2019 year to date with 210 members. We believe this is an extremely good number but as the saying goes there is "Strength In Numbers". So as an association we strive to increase that number in the upcoming year. As you recall our membership number last year was 170 so with that being said thank you again for your continued support of our beautiful Star Lake.

As a new member to the Board and recent home owner it amazes me what a true treasure we all have a piece of. We are making memories for ourselves, our children, grandchildren and some of you- even great grandchildren! Owning a little piece of heaven in northern Minnesota is not something we should take lightly and that is why we need to support the SLPOA.

The membership dues are only \$30. With those funds the SLPOA maintains the buoys, monitors the water quality of the lake, updates the membership with 2 annual newsletters, maintains an updated website, promotes projects for the betterment of the

lake, sends out emails on urgent matters concerning our lake, monitors our fishery, hosts a Lake Wide Picnic, hosts an annual meeting which allows you to vote on projects and issues concerning our lake. This year you will be receiving an updated 2020 Membership Directory. A \$30 membership goes a long long way. (A membership form can be found on our website).

The SLPOA board meets monthly from May to November and as needed during the winter months. The meetings are open to ALL property owners. This is the members voice and it has been proven that the voice of the SLPOA members is being heard! Together we can keep our beautiful Star Lake an amazing place to live and enjoy for generations to come.

So, if you are a current member, thank you. If you have friends and neighbors who are not, please invite them. With our 501(3)c status your dues and contributions are tax deductible.

-JoLene Jean Kerr, SLPOA Treasurer

Treasurer's Report

SLPOA 2018 fiscal year ended December 31, 2018

Our balance as of October 4, 2019 is as follows:

Regular Checking	\$ 7,111.01
Money Market Checking*	<u>\$10,000.55</u>
TOTAL MONEY ASSETS	\$17,111.56



*A Money Market Account was set up August 23, 2019 so that the SLPOA members dues would earn an interest rate of .25% instead of the standard checking account at .05%. As an association we feel we should be good stewards of your membership monies.

-JoLene Jean Kerr, SLPOA Treasurer

Accomplishments 2018/2019

What Has SLPOA Done for Me Lately?

As President, I spend time thinking about why many property owners are not members of our lake association. I'm sure there are many reasons. One may well be that some people do not see a \$30.00 membership providing much value for them. Just another fee to pay, right? What follows is a listing of what your lake association has accomplished during its 2018/2019 operational year:

- 1) Upgraded its website (thanks to Brenda Ebanks) and added a CLASSIFIED ads section that is free for members to use
- 2) Completed an Amazon Smile program registration and is receiving funds for use in lake protection from members that support the effort
- 3) Completed a tax-exempt organization mailing permit filing that allows SLPOA to save money on postage (thanks to Gail Hagen)
- 4) Put together two excellent newsletters to keep members updated on happenings
- 5) Increased our "lake protection" fund through member donations
- 6) Provided input on several proposed lake projects involving shoreline variance requests (our association is NOT opposed to development on the lake but we are pro orderly and proper development that insures development meets current codes and requirements)
- 7) Began a lakescaping grant program for shoreline restoration. Camp Joy was the first to receive approval for a grant under the program.
- 8) Renewed our buoy permits and continued to put out (23) safety buoys through the efforts of several volunteers.
- 9) Continued our water quality testing and monitoring (thank you to Carolyn Herron for her diligence with water quality testing and monitoring)
- 10) Provided input on the WEN casino project and environmental concerns
- 11) Developed a plan for a small northern tournament to be held in June 2020 and had the plan approved by the Minnesota DNR
- 12) Held a successful annual meeting breakfast and educational session for members with a live fish cleaning demo and great door prizes for those in attendance
- 13) Held a fun "all lake" fall picnic hosted by Gail and Mike Hagen
- 14) Began bi-weekly water level reporting reported on our website
- 15) Continued to clean a section of Hwy 41 in the spring and fall under the "Adopt-A-Highway" program supported by the Minnesota Dept of Transportation
- 16) Began discussion with the Minnesota DNR and fisheries management on the pros/cons of stocking walleye fry in the years that the DNR does not provide fry stocking for Star Lake.

My thanks to our Board members and volunteers who truly put in the time to make things happen for your association!!!

The answer to the opening question is.....A LOT!!!

As we move into 2020 and beyond we need your continued membership and, more importantly, your involvement to keep Star Lake the tremendous resource that it is. Take good care!

-Gary P. Miller, SLPOA President

Water Quality Update

What happened to Spring this year?! Yikes, it was cold, it was bleak, was it hard to see how the snow could be melted?! Ice out finally came April 26, but...but...was the water going to ever warm up? Where are the usual lake weeds?! Was Star laying in a "wait and see" mode to see when it could spring back into its summer action?! Cold or lack of sun or both can sure have an influence. For good!! My gosh, when I did the water quality testing on June 23rd, I got one of the best water quality readings ever (with the white Secchi disk lowered into the water) of 25 feet!! We've had one other similar reading in June of 2015, and 23 and 24 foot readings in June's of 2018, 2010, and one rare July one of 24 feet in 2009. This means, out of 21 years of Star Lake being tested for water quality and 101 months of readings, we've had these 5 gold star water quality measures. And our average is about 15!! But wait! It isn't just about a late ice out, since 2 of the readings were from earlier open water years, in 2015 (April 12) and 2010 (April 2!).

What else can influence our water clarity, how much Phosphorus (the lab calls it "TP," or Total Phosphorus), we're taking on, and our production of algae (yuk!) are factors like temperature throughout the summer and amounts of sun and rain. Rain itself contains TP, and when it falls, it can wash loose soil, which contains TP, into the water. So our May and September TP readings were higher than is our average in the upper teens (thus providing food for the hated algae). And it did bloom green or brown (we have both colors of algae in Star) bigger in May and September! Isn't there a lot of plain old logic to why Star looks and acts (and smells!) like it does!

But! The big picture for this summer was that, in 5 different months of testing, we ended up with one of our better average water clarity readings of 16.1 feet! Not only that....we're now considered to be officially, scientifically improving in our water clarity at the 95% level of confidence that it is real from the averages of the 21 years of testing!!! Wow! This was in a big way helped by the fact that

both our TP levels and algae levels came back to lower levels in the middle of the summer. I've always believed, as I've looked at all this information about the chemistry of Star Lake over the years, that it has quite a capacity to settle itself back down after turnovers in the Spring and Fall, after big rainfalls, after the heavy boat traffic of summer. I'm pretty sure an important part of this is the depths we have not only in the main bay, but in the North and West arms as well. Our TP laden sediments settle into the bottoms, our healthy lake vegetation takes up the Phosphorus and holds it away from the algae, and we have so many dang feet of clear water above all that!!!

On another, less positive note, we've now been designated as an infested water based on West McDonald Lake upstream from us, now having zebra mussels. We should probably call ourselves "potentially infested," since I've walked out to the little stream that exits that lake and seen the path those AIS have to take to get to Star: a couple of muddy marshes, winding grassy trickle flowing parts of Ditch 25 (remember that thing?!), gushing into Round lake, then ponds/marshes that eventually drop through cattails into the North shore of our lake. Since the veliger larvae of ZM's are microscopic and so fragile, I'm thinking they'll get beat up and destroyed on their route to us! I do agree with our President, Gary Miller, that boat access into Star remains the more likely way we'll pick up this alien, so our vigilance about our and others boats, equipment, on board water, bait, etc., will be crucial. These are the actions we can take that really do have an effect, and it feels so much better to feel empowered to each do something, than to resign ourselves to what feels inevitable at times.

Have a fun Winter enjoying Star in its frozen state!! Thanks to Bruce Due for helping with our water sampling when I'm away!

-Carolyn Herron, SLPOA Member, Water Quality

Water Quality and Zebra Mussels

With invasive species alert signs going up around the lake (*NO there has not been any confirmed zebra mussels in Star Lake as yet. They are posted due to the zebra mussels being present upstream in West McDonald Lake*) ...you may find this of interest. Think that zebra mussels work to make lake water clearer, think again! Based on research, they cause water quality to be distorted.

Review the following article submitted by Steve Henry, Freshwater Sciences Project Manager, steve.henry@rmbel.info. RMB Environmental Laboratories. (website: rmbel.info)

“Recent studies have confirmed that if a lake has zebra mussels you cannot compare your past water quality samples to current water samples (2011 Higgins, Vander Zanden, et al.) By filtering all lake water weekly zebra mussels consume the algae and pollutants that used to be found in the middle of the lake and deposit their excrement in the shallow waters where they live. Water samples taken from the middle of the lake can show dramatic declines but these are “false positives” simply a reflection of how much pollution is being diverted to the shallows. Water sampling in zebra mussel infested waters, especially for total phosphorous, is still useful in detecting post infestation changes, environmental impacts such as bigger rain events, and water quality trends. Some zebra mussel infested lakes in RMB’s Lake Program have developed proven trends of decreasing water quality several years after infestation.

Scientists describe the effects of zebra mussels on pollution distribution and expression as the “nearshore shunt” and note it causes “the nearshore zones of the lake to exhibit evidence of eutrophication including some very negative symptoms previously associated with excess nutrient loading” (Hecky et al, 2004) A common assumption is that increased light is the factor in this decline in recreational quality, but when the rocks in one foot of water get covered in green slime that isn’t due to an increase in light. The first negative consequence of nutrient enrichment in the shallow water is the growth of rooted green algae known as Cladophora which feeds on the nutrients in the zebra mussel deposits. Next is the dense weed growth and the development of a murky lake bottom. The final stage is the water turning murky which doesn’t happen until after the shallows get murky and weedy. After zebra mussel infestation lake aging, eutrophication, doesn’t start with murky water and end with slime instead it starts with slime and ends with murky water.

RMB Environmental Laboratories is proud to be your partner in lake preservation. RMB is always striving to ensure lake advocates have the best possible understanding of lake aging and preservation. We thank all the lake associations and sampling volunteers for their efforts, without them we would never get the big picture of Minnesota’s lakes. As new ideas for lake monitoring and management develop, we will work to keep you informed.”

Based on this article and other recent research, it is evident that zebra mussels are a species we need to continue to try to delay from entering our lake. Unfortunately, it may be a matter of when, not if. The more we can do to delay their start, the better the odds that a true measure of control or eradication can be found!

-Gary P. Miller, SLPOA President



What's New on the AIS Front

What's New on the AIS Front?

That was the primary focus of conversation at the 2019 Minnesota Invasive Species Research and Management Showcase conducted on the St. Paul Campus of the University of Minnesota on September 18, 2019.

A day-long event of breakout sessions and discussions covering NINETEEN different aspects of current research being conducted at the UofM – yes, that's 19! No, we're not going to try to topline all of them, but for those interested go to maisrc.umn.edu/news/showcase-presentations-2

A key point we want to recognize here is the tremendous progress our state has made in the last 10 years regarding scientific research of Aquatic Invasive Species (AIS). In 2009 the Minnesota Aquatic Invasive Species Research Center (MAISRC) was in its infancy – two staff members, a non-functioning lab, and no boat!!

The research presented at this Showcase Event was the work of 27 staff, from PhD's. to Grad Students across multiple universities and research companies. There now is a fully functional lab complete with sanitary sewer, and they have boats!! Each of breakout sessions we attended were standing room only. The technical level of the presentations and the comprehensive questions clearly supports the assertion that "science is the only real answer" to our AIS challenges.

As you can imagine, scientific research costs money and lots of it. Research conducted at MAISRC is made possible through support of the Environment & Natural Resources Trust Fund, the MN Legislature, watershed districts, lake associations, and private sources. *At the October SLPOA Board meeting, a motion was made to make a financial donation in support of this work.*

As you likely know West McDonald Lake was designated as infested with ZM late summer 2019. Since Round, Star, Dead, and Walker Lakes are downstream from West McDonald the DNR has now classified each of these as also being infested with ZM. One watch-out of this development is to avoid any public perspective of "well, we have ZM now, so at least we don't have to do all that inspection stuff"!

There are plenty of other AIS threats out there, so continued vigilance is still called for. Of particular note, are Curly-Leaf Pondweed and "Starry Stonewort" which is an invasive algae that is highly problematic for shallow water bays. Remember that 60% of Star Lake water surface is 15' or less in depth so both species present a very real threat.

Refer to MAISRC web site maisrc.umn.edu/news/showcase-presentations-2 for more detail on these and other AIS. An interesting event that may be a good fit for the SLPOA is "Starry Trek" scheduled for 8/15/2020, go to StarryTrek.org for more information on this.

-Submitted by Lee & Becky Mindemann

HOW CAN YOU HELP? REMEMBER TO:

Clean-Drain-Dry when removing your boat from water – minimum of 5 days dry time before putting in another body of water

Water related equipment transport – Obtain permit from Otter Tail County (OTC) Land & Resource Dept. to transport any water related equipment from one lake to another (e.g. docks, lifts, slides, etc.), and observe the 21-day minimum dry time before placing the equipment into the new waterbody. This can be done by phone (218-998-8113)

Fishermen - properly dispose of bait fish – put bait fish in trash bin at landing, or bring fresh water with you to “refresh” your minnow bucket

Infested waterway list - Have and review a current copy and remind friends, family, and neighbors to do the same. Always available on the MN DNR website (and a link is provided on our SLPOA website)

Support the anti AIS effort - While good progress is being made on the scientific front, we need everyone’s support to combat AIS with volunteer help and financial support

Be informed - Continue to educate yourself and others. Public awareness & science are the best defense against AIS.



Reporting AIS:

Now that we have invasive species alerts posted around our lake due to the zebra mussel infestation at West McDonald Lake, you should know the process for reporting.

You are out and about in the water and you find something that you are not sure if it is an AIS, follow these steps:

- 1) **Map It.** Note where you found it (where on the lake, which access it is near, which road, or better, if you have a GPS unit, mark the GPS coordinates.
- 2) **Take photos or collect samples.** If you have a digital camera, take photos of the plants, include close-up of their leaves, their attachment to the stem, and any flowering structures that might be present. For invertebrates (mussels, snails, etc.) collections are necessary. Positive identification cannot be made with photos alone.

When making a collection of an aquatic plant:

- * keep it in a plastic bag with lake water
- * label with the specific location, date, and your name, and contact information
- * Refrigerate the sample

When making a collection of an aquatic invertebrate:

- * Label with the specific location, date, your name and contact information
- * Place the species in a jar with RUBBING ALCOHOL
- * Deliver to an invasive species specialist asap
- * If it turns out you don't need to submit the sample to a DNR invasive species specialist, please dispose of the sample properly by sealing the aquatic plant or species in a plastic bag and disposing of it in the trash.

- 3) **Identification.** Do you know what you have? To help identify aquatic plants and animals go to the MN DNR website: dnr.state.mn.us/invasives/aquaticplants

If you need more help with your identification, contact the invasive species specialist and email your photos. If you have a collected sample, they may ask that it be delivered to them for closer inspection.

If the species is one that should be reported and has not been reported for your lake, please contact the invasive species specialist in the Fergus Falls office: Mark Ranweller, 218-739-7576 ext. 254 or email Mark at Mark.ranweller@state.mn.us

We hope there is nothing unusual or that needs reporting for a long time!!!

Reprinted from "Lake Shore News" of the Otter Tail Lakes Property Owners Association, July 2019

Small Northern Tournament

SWAMP SHARK TOURNAMENT—June 2020

If you ever watched the TV series COPS you may remember the theme song and wording (if not just try Googling it). It went “Bad boys bad boys, what you going to do, what you going to do, what you going to do when they come for you?!” Well, try overlaying the music to “Swamp sharks, swamp sharks, what you going to do, what you going to do, what you going to do when we come for you?! Answer..... have a fishing tournament to take advantage of their aggressive nature!

The SLPOA Board has been working on organizing a small northern (aka swamp shark) tournament for June 2020. We will be releasing full details in the spring of 2020. But, to get you thinking about the tournament, here is some of the format:

- 1) It will be a tournament of (25) two person teams
- 2) At least one team member must also be a current SLPOA member
- 3) The tournament will be a catch and kill format. The fish will not be released back into the lake
- 4) Prizes will be awarded for first through seventh place (ie: \$200.00 for first place, \$100.00 for second, \$50.00 for third and \$25.00 for fourth through seventh place based on who presents their (20) fish limit at the tournament check-in site first. There will also be a \$50.00 prize for the SMALLEST northern brought in)
- 5) All northerns must be 22 inches or less to qualify
- 6) Advance registration will be required, but there will be no fee for entry
- 7) If you do not want to keep your fish, they may be donated to the SLPOA to be given to a local non-profit (to be identified). SLPOA volunteers will be available to help clean the fish to be donated. If you want to keep and clean your fish, you may certainly do so. They just cannot be returned to the lake.

Currently, Star Lake has a large number of small northerns (85% of the northerns in our 2018 test netting were 22 inches or less) Research has shown that too many small northerns impact other fish populations like perch, sunfish, whitefish, and walleyes. This is one step in trying to improve our fishery along with promoting the release of large northerns (those that exceed 28 inches).

Full details for this event are still being worked out. If the event proves successful, we will consider expanding its size through the Minnesota DNR permitting process. Any tournament over 25 boats and \$500.00 in prize money must go through a DNR permit process.

Smaller northern pike provide excellent table fare in many different forms from straight filleting, to pickling, to making them into fish balls. Try some! There are lots of recipes available through the internet to help you. Also, northern pike are especially good through the ice. So, look for complete details in the spring of 2020. Just keep humming the swamp shark theme until then!!!

-Gary P. Miller, SLPOA President



Fishery - Walleye Stocking (MN DNR)

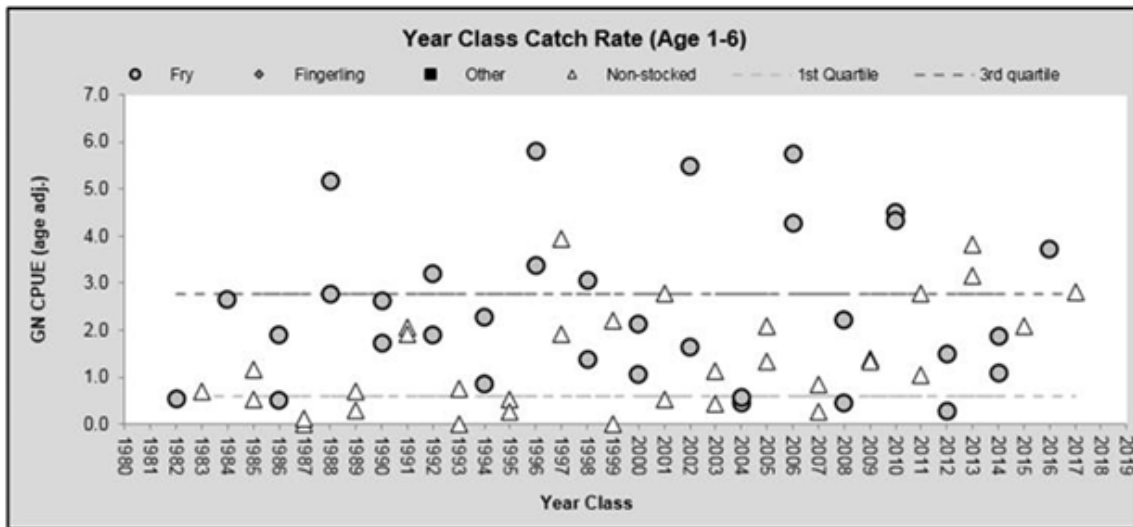
Walleye Stocking - Jim Wolters MN DNR, Area Fisheries Supervisor | Div of Fish & Wildlife

DNR Fisheries has been stocking walleye fry (2.8 million) in even years since 1990. From 1979-1988, various amounts of walleye fry were stocked, ranging from 1.0 million to 6.7 million. Walleye fingerlings were stocked at various times up to 1978. In fact, both walleye fry and fingerlings were stocked in most years back in the 1970's. This stocking practice did not, however, lead to more walleye in Star Lake according to our fish surveys. The past seven surveys have shown walleye gill net catches at about 10 walleye per net, with a slight increasing gill net catch rate trend since 1973. Ten walleyes per gill net is considered a very good catch rate in our Area, especially when it can be maintained for a long period of time which it has in Star Lake. This is unique especially since there are a number of small northern pike which complete for food with walleye.

In addition to stocking, there is walleye natural reproduction occurring in Star Lake. We know this because we see year classes of walleye in our surveys from years we do not stock walleye fry and in some years this can be significant. One would expect this as there are a lot of areas with suitable habitat for walleye to spawn successfully in Star Lake.

I included a table below to show how walleye natural reproduction is contributing to the walleye population.

STAR LAKE



This figure plots year class specific gill net catches for stocked and non-stocked year classes using the age 1-6 dataset. Stocking types are symbolized and described in the legend. Fry or Fingerling (F) stocking types indicate that **only** fry or fingerling stockings could have contributed to the year classes. "Other" stocking type is used for any other stocking type or a combination of stocking types. Dashed lines represent the interquartile or "typical" range for year class specific catches. Gill net catches may be age corrected to reflect age specific differences in gill net catchability.

This is a complicated table but basically the circles represent years when walleye fry were stocked by DNR Fisheries and triangles represent years when no stocking occurred (natural reproduction). Years with circles or triangles above the top line indicate very good year classes and those within the lines represent good year classes. You will note the number of triangles within the lines are very similar to the circles, indicating the points I have made regarding the contribution of walleye natural reproduction.

Due to this information I feel that the current Walleye fry stocking strategy by DNR Fisheries is adequate for Star Lake and would not support additional stocking at this time.

That said, if for some reason we see the walleye gill net catch rates begin to decline, we would likely change our walleye stocking strategy which may include approving private stocking. We may be seeing some negative impacts from zebra mussels on some of our other larger walleye lakes as walleye gill net catch rates have declined. Some lakes have had zebra mussels since 2009.

MN DNR - Star Lake - Status of the Fishery

Star Lake is a 4,721-acre mesotrophic (moderately fertile) lake located in north-central Otter Tail County approximately four miles west of Dent, MN. Star Lake is connected to Dead and Round Lakes via non-navigable streams. The immediate watershed is composed primarily of agricultural land interspersed with hardwood woodlots. Extensive marsh areas are located in the south bay and the west arm of the lake. The maximum depth is 94 feet; however, 59% of the lake is 15 feet or less in depth. The secchi disk reading was 9.8 feet. Previous secchi disk readings have ranged from 5.8 to 14.0 feet.

Development is scattered around the entire shoreline of Star Lake. Homes, cottages, and resorts compose the majority of the development. DNR owned public water accesses are located along the north and east shorelines. Stands of hardstem bulrush, wild rice, and common cattail are scattered along the shoreline of the entire lake; however, the largest stands are located in the south bay and the west arm. Emergent aquatic plants provide valuable fish and wildlife habitat, and are critical for maintaining good water quality. They protect shorelines and lake bottoms, and can actually absorb and break down polluting chemicals. Emergent plants provide spawning areas for fish such as Northern Pike, Largemouth Bass, and panfish. They also serve as important nursery areas for all species of fish. Because of their ecological value, emergent plants may not be removed without a DNR permit. To maintain the excellent water quality and angling that this lake has to offer, it is imperative to preserve the quality of the aquatic habitat.

Walleye and Northern Pike are the dominant gamefish species in the fish community of Star Lake.

The long-term trend has been an increase in Walleye abundance. Walleyes ranged in length from 7.4 to 29.0 inches with an average length and weight of 14.5 inches and 1.2 pounds. Walleyes attain an average length of 14.6 inches at four years of age.

Northern Pike abundance has remained high in recent surveys. Age and length data indicate that Northern Pike reproduction is consistently good. Northern Pike ranged in length from 13.9 to 31.9 inches with an average length and weight of 20.3 inches and 1.8 pounds. Pike attain an average length of 25.5 inches at five years of age.

Anglers can maintain the quality of angling by practicing selective harvest. Selective harvest encourages the release of medium to large size fish while allowing the harvest of more abundant smaller fish for table fare. Releasing the medium to large fish will ensure that the lake has enough spawning age fish on an annual basis and will provide anglers with more opportunities to catch large fish in the future.

Star Lake is not listed as an infested water. Aquatic invasive species are threatening Minnesota waters. Aquatic invasive species can potentially harm water quality, water recreation, aquatic habitat, native species, and fish populations. Anglers can help prevent the introduction and spread of invasive species by following watercraft transportation laws.

Source: MN DNR - Targeted Survey (7-16-2018)

Fisheries Update

LAKE SURVEY REPORT TARGETED SURVEY DATED 07/16/2018 FOR DOW NUMBER 56-0385-00


Discussion

A target survey (special gillnetting) was conducted to analyze the Walleye, Northern Pike, and Yellow Perch populations of Star Lake. Twelve gill nets were utilized to obtain a standardized fish sample. The initial survey of Star Lake was conducted in 1961 and fifteen surveys have been conducted since then. Star Lake is included in lake class 22 of the MN DNR lake classification scheme.

Northern Pike gill net catch per unit effort (CPUE) was 8.6 per net, which exceeds the third quartile of the normal range for lake class 22 (interquartile range = 3.0 - 7.9). Historically, Northern Pike gill net CPUE has ranged from 3.8 to 12.6 per net. Age and length data from recent surveys indicate that Northern Pike recruitment is consistent and that total annual mortality (A) is low to moderate. Pike ranged in length from 13.9 to 31.9 inches with a mean length and weight of 20.3 inches and 1.8 pounds. Eleven percent of the pike were within the 22.0 to 26.0-inch protected slot limit while 11% exceeded 26.0 inches. Northern Pike attain a mean length of 25.5 inches at age-V. Growth rate estimates exceed mean Northern Pike growth rates for class 22 lakes in the Fergus Falls Management Area.

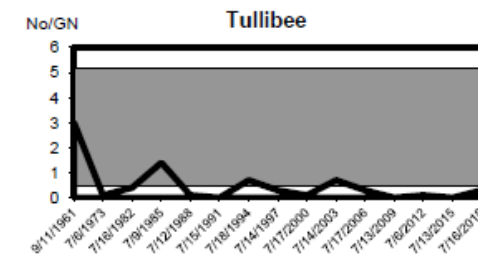
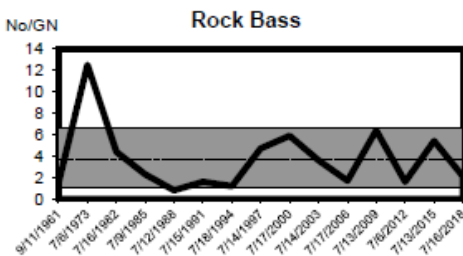
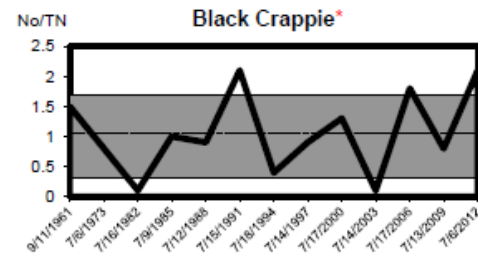
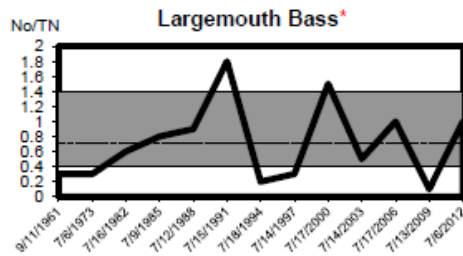
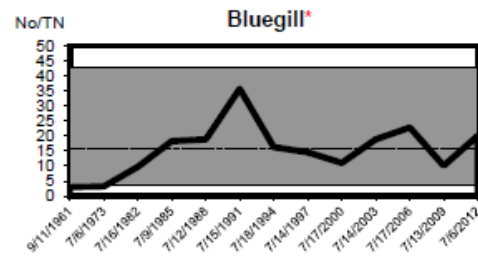
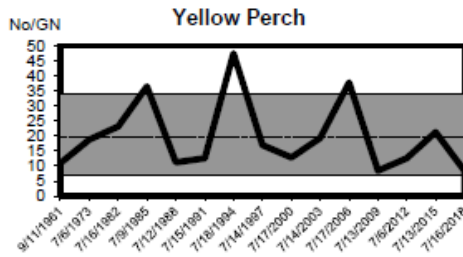
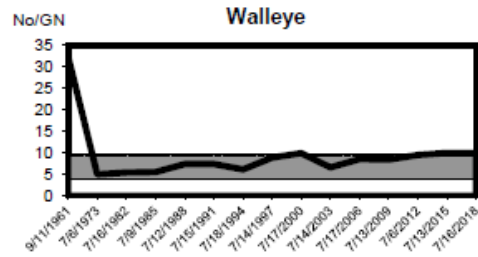
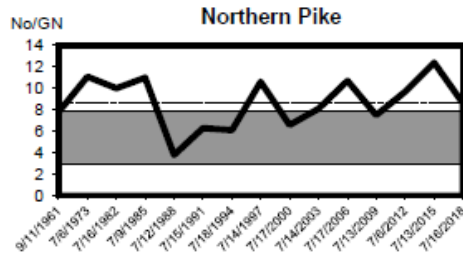
Yellow Perch gill net CPUE was 8.4 per net, which slightly exceeds the first quartile (interquartile range = 7.1 - 33.9). This is the lowest Yellow Perch gill net CPUE recorded for this lake. Historically, Yellow Perch gill net CPUE has fluctuated, ranging from 8.5 to 47.5 per net.

Walleye gill net CPUE was 10.0 per net, which is equivalent to the third quartile (interquartile range = 4.0 - 9.6). Since the 1973 lake survey, the general trend has been an increase in Walleye gill net CPUE. Age data from recent surveys indicate that Walleye natural reproduction and recruitment can be substantial in some years; however, it historically has not occurred consistently. The strongest year classes have consistently corresponded to years of fry stocking/natural reproduction which suggests that fry stocking is supplementing natural reproduction by increasing abundance or by offsetting weak natural year classes. Walleyes ranged in length from 7.4 to 29.0 inches with a mean length and weight of 14.5 inches and 1.2 pounds. Walleyes attain a mean length of 14.6 inches at age-IV. Growth rate estimates are equivalent to mean Walleye growth rates for class 22 lakes in the Fergus Falls Management Area.

		LAKE MANAGEMENT															
OTTER TAIL COUNTY		Twp., Range, Sections nearest town Dent												Waters Star		DOW# 56-0385-00	
FISH STOCKED								FISH REMOVED									
Year	Species	Size	Number	Pounds	Strain	Source	Remarks	Year	Species	Size	Number	Pounds	Strain	Source	Remarks		
1982	Walleye	FRY	2,930,000														
1984	Walleye	FRY	6,735,000														
1986	Walleye	FRY	6,270,000														
1988	Walleye	FRY	5,115,000														
1990	Walleye	FRY	2,813,000														
1992	Walleye	FRY	2,817,000														
1994	Walleye	FRY	2,813,000														
1996	Walleye	FRY	2,813,000														
1998	Walleye	FRY	2,813,000														
2000	Walleye	FRY	2,813,000														
2002	Walleye	FRY	2,813,000														
2004	Walleye	FRY	2,813,000														
2006	Walleye	FRY	2,812,000														
2008	Walleye	FRY	2,813,000														
2010	Walleye	FRY	2,213,027	23													
2012	Walleye	FRY	2,813,000	24													
2014	Walleye	FRY	2,813,000	24													
2016	Walleye	FRY	2,813,000	24													
2018	Walleye	FRY	2,813,000	24													

Star Lake Historical Net Catch

Lake Class 22



* No summer trap nets used in 2015 & 2018 survey

President's "Drop-Offs"

Just some brief items to share.

- **LAKE LEVEL:** If you have not noticed, we added a part to our website on the lake level. Lake level readings will be taken and posted every two weeks during open water periods.
- **ADOPT-A-HIGHWAY:** As part of our services, SLPOA volunteers cleaned the road ditches from Bell's Resort to 380th Street on Saturday, September 28th, 2019. THANK YOU to all the volunteers that helped!
- **MEMBER DIRECTORY:** Do you want to help? We could use additional volunteer help in updating our 2020 Star Lake Directory and selling advertising for it. Contact Gail Hagen or myself and we will gladly put you to work!
- **BUOYS:** A special THANK YOU to our safety buoy placement and removal volunteers! Through their efforts, Star Lake is a safer place for us all.
- **AIS ALERT:** If you have seen the Invasive Species Alert signs at the public access, understand that Star Lake does NOT have any identified zebra mussels (yet) They were posted by the DNR because of the presence of zebra mussels upstream in West McDonald Lake. So, don't let your guard down. We are still zebra mussel free as of fall 2019!
- **SLPOA BOARD:** Finally, SLPOA needs your involvement at the Board level. If you are interested in joining our Board, please let me know. We have a great mission and some exciting events to build on for 2020!



-Gary P. Miller, SLPOA President

2019 Lake Picnic

As I sit here writing this, my view from the window is kind of contradictory! The grass is green, the waves are lapping on the shore, the leaves are golden with splashes of green and red, my flower planters are still colorful with blooms – but there are snowflakes flying and the radio is announcing winter storm warnings, blizzard warnings and road closures! Only in Minnesota... but I love Minnesota – and I especially love Star Lake!

We were fortunate to have great weather for the Star Lake picnic in late August. With the exception of a strong southerly wind, it was a perfect day for a picnic! We had a great turnout with over 90 of our Star Lake neighbors joining us for great food, fun games – but mostly enjoying the conversation and meeting new friends. Thank you to everyone that were able to come. And to those that couldn't make it – hopefully we will see you next year!

I hope you will consider hosting the next Star Lake picnic – or co-host with a few of your neighbors! You will have lots of help for preparations, and the value you reap from building relationships with new friends that share your love of Star Lake is PRICELESS!

-Mike & Gail Hagen

SLPOA is pleased to announce that we have added a section to our website titled CLASSIFIEDS where you may list items to sell, trade, or find the owner if you have found an item that needs to be returned.

The listing can contain one picture and up to a fifty word description. Your request should contain:

- Your name
- Your contact information (phone number, email, etc.)
- Description of the item (fifty words or less)
- One picture of the item (in digital format)
- Asking price if for sale



Ads

Please be aware that SLPOA is not responsible for the condition of the item, the payment or exchange of funds for any transaction agreed upon, the items title or rightful ownership by the poster, or accepts any liability for what is posted in this CLASSIFIEDS section of its website. The section is strictly provided as a free service for members.

Please email your ad/item to SLPOA President at: president@starlakeassociation.com. If approved, your item may remain on the website for up to 30 days. Please notify us if the item has sold or been claimed and no longer needs to be listed.

-Gary P. Miller, SLPOA President

Amazon Smile Program



“It’s Free, It’s Free!” How many times have you heard that and thought – SURE- what’s the catch? Announcing a new program that truly is free and has no catch for you. Want to support SLPOA? You can now do that by simply ordering items through Amazon Smile. Amazon Smile is a simple and automatic way for you to support your lake every time you shop, at no cost to you. You will find the exact same low prices, vast selection, and shopping ease as Amazon.com with the added bonus that Amazon will donate a portion of your purchase price to SLPOA!

If you currently use Amazon.com or Amazon Prime, you can order the same products at the same prices, but benefit your lake by selecting STAR LAKE PROPERTY OWNERS ASSOCIATION (identifier number 80-0594188). The value of your purchase will be credited to SLPOA and, at the end of each month, Amazon will donate a percentage of the total purchase value to our lake association. Any donations received will be credited to our “lake protection fund.” That fund is restricted to projects that directly benefit the lake.

That’s it! No fees, no obligations, no catch for you to help support your lake. All you need to do is select SLPOA as your charitable organization when you first sign in to Amazon Smile. After that, shop away!

We have put a link on the SLPOA website to enable you to access the Amazon Smile site as well. EASY, SIMPLE, IMPORTANT as we continue to try to find ways to increase our revenue and our ability to have the funds needed to help maintain Star Lake as the tremendous resource it is.

THANK YOU for your support!

Star Lake Property Owners' Association, Inc.
P.O. Box 155
Dent, MN 56528-0155

Star Lake Property Owners' Association
2019 FALL NEWSLETTER



An infographic showing four levels of ice thickness on a dark blue background. From left to right: a person ice skating on 4 inches of ice, a person in an orange suit on a sled on 5-7 inches of ice, a purple snowmobile on 8-12 inches of ice, and a red car and a black pickup truck on 12-15 inches of ice. Below the levels, the text reads: "4" 5-7" 8-12" 12-15" MINIMUM GUIDELINES FOR NEW, CLEAR ICE Ice is never 100% safe!"

For more info on ice safety, see MN DNR website: <https://www.dnr.state.mn.us/safety/ice/index.html>