



SAND LAKE PROPERTY OWNERS ASSOCIATION, P.O. BOX 690, DEER RIVER, MN 56636-0690 • WWW.SLPOA1.COM • FALL 2017

Bernie Troje
New Board Member

We bought the western-most cabin of Chapel Hill in 1972. We're here because I taught with Bill Eggar a cousin to Fred Eggar who established Chapel Hill in the late 30's. We've renovated, put on an addition & added some out buildings since. In 1999, when I retired we started making this our 6 month home from May through October. Our three sons & now their families have enjoyed many good times together up here. I started sailing in the early 90's which has been the way I've found pleasure in using the lake. Right now the boat is in Duluth for repair, & this summer I recovered the mooring I had used for it. Now with a repaired boat & an operational mooring, I plan to get back to sailing next summer. Mostly, I enjoy sitting in a comfortable chair, looking at the lake, & reading. Each morning I walk our springer along Co. 4. I try to make as small a footprint on this planet as possible.

CAROLE OLSON

Another summer has come & gone. Now we enjoy the beautiful fall colors & much needed rain. After watching the lake level drop throughout the season, how grateful we are to see it finally starting to rise. I spoke with the DNR about

the possibility of beaver dams affecting the lake level, but they did not feel this was the cause this year, they felt it was low precipitation.

As we enjoy the beautiful fall weather we watch nature prepare for winter. The squirrels hoard nuts & pine cones, the beavers have been busy taking down trees in yards & at the public access. Our beautiful hummingbirds are gone & many other birds are heading south, I haven't heard a loon in days. Oh the quiet & solitude of fall & winter. I love the seasons.

This year our emphasis was on keeping additional invasive species out of our lake & stopping the spread of those already here. County as well as DNR staff check boats & trailers at the public access several days a week from early spring through the late fall. We have also been fortunate to have the decontamination unit on many of these days to power spray boats & trailers. Once again through dues, grants & donations we have been provided the funds to pay for a matching grant with the county to provide this service.

Several association members along with board members have taken active rolls in the identification of invasive species. Some have taken classes & become certified in invasive identification. Many participated in going on treks with county staff to other lakes. We learned to identify & look for new types of invasive species. For those interested in learning to better identify invasive species, Bill Grantges from Itasca County has agreed to provide a workshop for us next spring. Our website will have info when it's available. We encourage everyone to learn to identify native plants & invasives-. Be spotters & help keep the lake healthy.

A couple yearly programs continue. The ditch cops clean up the Hwy.4 & 35 roadside with refreshments following. Also the greeters program is alive & well. Remember to contact a board member if there is someone new in your neighborhood so the greeters can welcome them. Remember without members we wouldn't have an association.

The annual fish fry was once again a great success, we had a full house & plenty of great food. A Big Thanks to all who caught, cleaned & cooked the fish. An increase in door prizes made the event more fun.

August was here before we knew it & time for the Annual Meeting & elections. I'd like to welcome Bernie Troje to the SLPOA board, our newest member. Then a big Thank You to outgoing board members, Pat Sievertsen, & Vic Warnement for their years of service, working hard to make the lake association great. This organization has had so many hard working & energetic volunteers over the years & we as an association are recognized throughout

the area for those efforts. I am proud to be on the SLPOA Board again this year, working side by side with all of you.

Once again we had a full house for the annual meeting. We had a lot of fun, food & fellowship along with a DNR fisheries update from Dave Weitzel. Lunch was catered from Sportsman's Café in Deer River. Door prizes were increased along with a full day guided fishing trip as the grand prize donated by Carl Berquist. Thanks to those who made suggestions & shared ideas as to how we can better use our resources as an association. Here are a few things that were brought up.

A suggestion of giving a scholarship to a student who may make a difference to our lake through his or her education in forestry or water management was made. Mushgee Creek was also brought up as a possible spawning area for walleye & the question if this area could be improved as a spawning grounds. Late breaking news on Birdseye...

The Board has unanimously approved a binding agreement to spend up to \$30,000 for the purchase of land around Birdseye Lake. The money will be coming from grants received from our membership and the grant sponsors have approved this purchase. We will try to keep you informed.

The board is looking at all of these suggestions as they apply to our mission statement & goals. Your input is appreciated...continue to watch the website for new information & updates.

As the year winds down we are coming to the end of our latest lakes management plan. Dave Weitzel has provided us with some results of the 2017 lake survey which are published in this paper. The results will be helpful in creating the new lakes management plan. A group of 6 or 8 members will meet with the DNR in January to start this process. After the DNR writes the draft plan, it will then be published & public input will be requested before for the final plan is finalized. We continue as an association to work towards improving our lake & fishery all year long.

The spring & fall SandPaper has board member contacts... please share your ideas & with us. We are volunteers freely giving of our time & talents.

I would like to share our mission statement with all:

Sand Lake Property Owners Association Mission Statement: Protecting the environment of Sand, Little Sand, Portage, & Birds Eye Lakes & surrounding area. This includes a program to prevent aquatic invasive species (AIS) from entering or leaving the lakes, catch & release emphasis, Adopt-a-Highway, new lake resident's orientation, & ongoing public education. All of this is coordinated with association members & the MN Dept of Natural Resources.

Have a safe & healthy winter & holiday season.

Carole Olson SLPOA President



From left to right: Chuck Baker, Bernie Troje, Gary Weaver, Carole Olson, Myron Hahn, Stafford King..

Minnesota DNR

Dave Weitzel

Sand Lake Fishery Update

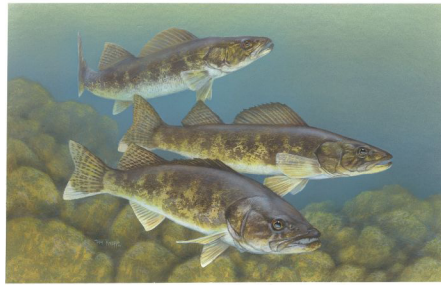
Fall 2017

DNR Fisheries Update- By Dave Weitzel, MN DNR Grand Rapids Area Fisheries Supervisor

A fish survey was conducted in 2017 to evaluate the Northern Pike experimental regulation, evaluate Walleye reproduction & fry stocking success, & to determine the overall status of the fish community. Information collected during this assessment will be used to develop a new fisheries lake management plan in the coming months.

Sand Lake is undergoing a period of change. Exotic zebra mussels have become well established in the lake. Zebra mussels are a very effective filter feeder that contribute to notably increased water clarity. Water clarity averaged 8.1 feet in nine surveys from 1975 to 2011. Water clarity increased to 15 feet in 2017. Increased water clarity changes sampling conditions in the lake & may make survey nets less effective for some species. Because the lake has changed so much, results from the 2017 survey can't be directly compared to past surveys but do provide some important insight into how the fishery is doing.

Walleye were sampled in typical numbers when compared to lakes with similar habitats, but at a lower rate than in the three previous surveys. The Walleye catch in Sand Lake appears to be influenced by water clarity, however, with higher catches associated with years with Secchi disk readings of less than eight feet. The 2017 catch rate may indicate a shift in sampling efficiency, more so than a significant population decline. Poor size quality & low numbers of spawning age females have been identified as potential limiting factors in previous surveys & management plans. The 2017 size structure was similar to past surveys, as few sampled fish exceeded 20 inches. Lengths ranged from 7.8 to 23.7 inches with an average length of 14.3 inches & several year classes were present. A 17 to 26 inch protected slot limit was implemented in 2016 & is expected to result in improved size quality & increase numbers of spawning aged fish.



Sand Lake has a history of relatively high Northern Pike catches & poor size quality. A 22 to 36 inch protected slot with one over 36 inches (including a liberal bag of 9 fish) was implemented in 2007 in an attempt to help improve size quality. Reduced pike numbers on Sand Lake is desirable because growth is slow & size quality is often poor when pike numbers are high. The

2017 catch was typical for lakes with similar habitats, but was lowest observed on Sand Lake. Overall size quality remained relatively poor despite the reduced gill net catch, but showed improvements compared to past surveys as the average length increased to the highest observed. Lengths in 2017 ranged from 13.5 to 32.4 inches & averaged 19.3 inches. Good pike angling opportunities appear to exist, given the current catch rate & size distribution.

Yellow Perch catches on Sand Lake appear to have declined since 2001, but remained within the expected range when compared to similar lakes. The 2017 catch was similar to the previous three surveys, although it was the lowest recorded. Size structure was modest & similar to the previous survey. Lengths were from 5.4 to 11.0 inches with an average length of 7.5 inches. Yellow Perch are an important prey species & may provide some angler opportunities on Sand Lake. Smallmouth Bass appear to have increased in Sand Lake in recent years.

Smallmouth Bass have been present since at least 1975, but were sampled infrequently until 2017. The 2017 catch was high compared to lakes with similar habitats. Size structure was good as bass ranged from 9.4 to 19.3 inches & averaged 15.4 inches. Increased water clarity & recent climatic patterns may be benefiting

Smallmouth Bass in Sand Lake, & they appear to be increasingly important component of the fishery. Good angling opportunities appear to exist.

Black crappie were sampled at a historically high rate in the previous assessment, but declined to a more typical rate in 2017. The 2017 catch was typical compared to similar lakes & average for

Sand Lake. Summer trap net sampling has generally resulted in poor catches of Bluegill & crappie in Sand Lake. A special Bluegill & Black Crappie assessment was conducted in the spring of 2016 provides better information of these species. This survey resulted in moderate catches & good size structures for both species, suggesting good angling opportunities exist.

Tullibee, another important prey species, were not sampled in 2017. Tullibee are an important prey species for Northern Pike & Walleye. Tullibee are often difficult to sample in summer surveys, however, & Tullibee were not sampled in three of the eleven surveys conducted on Sand Lake.

Other species sampled include Bluegill, Black Bullhead, Bowfin, Silver Redhorse, Shorthead Redhorse, Pumpkinseed, Rock Bass, Yellow Bullhead, & White Sucker.

To learn more about fisheries management in the Grand Rapids Area, contact us at 218-328-8835 or email us at... GrandRapids.fisheries@state.mn.us.

David Weitzel

DNR Grand Rapids Area Fisheries Supervisor

Compliments of Sand Lake Property Owners Assoc.
See the full Minnesota fishing regulations for complete info.

SAND LAKE

Keepers... How Many & What Size

Walleye... total in possession

0"..... 17"	17"..... 26"	Over 26"
Limit... 6	ZERO	ONE

Northern Pike... total in possession

0"..... 22"	22"..... 36"	Over 36"
Limit... 9	ZERO	ONE

Perch... 20 Per Day
40...total in possession

Sunfish...
20...total in possession

Crappies...
10...total in possession

Bass...
6...total in possession
(Combined Large & Small Mouth)

Turn In Poachers 800-652-9093

Good News... Arrowhead Island Update



I spoke with Christine Brown, US Forest Service in Bemidji she informed me that Arrowhead Islands can be used as any National Forest Service land can. The Forest Service cleared away all building material last fall & the island is ready for hiking & primitive camping. Unfortunately the US Forest Service has no current plans to improve this recreation site. I asked if SLPOA could provide resources to improve the site, she said not at this time. We cannot even provide a picnic table, it would be removed. Before any cutting, clearing or improvements can be

made the US Forest Service must conduct a study/survey for environmental impact. She apologized but did not foresee this happening in the next several years, due to budget cuts. She took my name & invited me to stay in contact. **Check the National Forest Service website for additional information regarding land usage.**

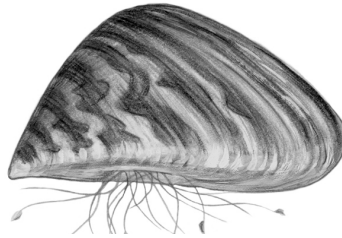
Sand Lake Zebra Mussels Are Under DNR Study

During the spring of 2017 the MN DNR invasive species program conducted a third season of data collection on Sand Lake. The data collection is associated with the zebra mussel population that has established in the lake over the past several years.

Zebra mussel adults are not affected by cold water. They have lower activity levels & eat less but live just fine through the winter. However, reproduction does not occur during the winter months so there are no immature microscopic larval mussels (veligers) present in the water.

Boat & dock installation & commercial bait harvesting often begin shortly after the ice goes off the lakes in Minnesota. As a result of these & other spring activities there is an increasing interest in the calendar date & water temperature when zebra mussel reproduction begins & veligers first begin to appear in substantial densities. Early scientific literature that was published after zebra mussels appeared in North America in the mid-1980's reported temperatures as low as 53 – 55o F as key triggers for spawning & veliger appearance. Recently, studies have suggested these critical temperatures might be warmer, with research results ranging from 59 – 68o F, depending on the study. Thus, the temperatures that lead to large numbers of veligers, while likely warmer than initially reported, is still uncertain.

Sand Lake is part of a three lake study currently being done in Minnesota. The study will provide a better understanding of the relationship between water temperature & veliger density in Minnesota lakes. Sand Lake was chosen because of its location in northern Minnesota & because it has supported a reproducing zebra mussel population for a number of years. The other two lakes are in central & southern Minnesota & both have mussel populations similar to Sand Lake. In the study, zebra mussel (*Dreissena polymorpha*) veliger densities & water temperatures are collected at 3 – 4 day intervals in May & June as water temperatures begin to warm. Veligers are collected from shallow & deep sites in each lake & temperatures



are recorded from surface to bottom at two foot intervals.

The scientific tools & methods used in the study are quite basic but have been proven effective through time.

Veliger collection: Veligers are collected using a 30 cm diameter, 80 micron mesh simple plankton net. Samples are collected at two sites from each lake – one site at 15 – 25 feet, & one site on a nearby shore or shallow site (6 – 8 feet). At the deep site, one vertical tow is taken. At the shallow site, two vertical tows are combined into a single sample. Samples were preserved in the field with reagent ethyl alcohol. The preserved samples are taken to the lab where veligers are counted with cross-polarized microscopy. Calculations are then made to determine veliger density throughout the water column.

Water temperature: Water temperature is collected using a digital temperature meter (ClineFinder®). Water temperature is taken at one foot below the surface & then at two foot intervals until isothermal conditions are found. One temperature reading from one foot above the bottom is also taken.

In the first two years of the study it was learned that the dates when veliger densities showed significant increases varied from south to north. Dates from south to north ranged from the first of June to the twentieth of June. Temperatures associated with these increases generally ranged from 64 – 69oF. While extremely low densities of veligers can be collected in early summer the start of significant reproduction appears to be tied to temperatures in the mid-60oF range.

The first two years of this study have been quite useful but another year is planned to ensure good statistical results. Knowledge from this study may be used for management decisions throughout Minnesota.

Richard Rezanka
Grand Rapids, 218-328-8821



Phil Thompson - Our Go-To Invasives Guy

As a trained AIS detector I am ready to answer any questions or check out plants or invertebrates that you think may be an invasive. We all have the same goal of keeping any additional invasives out of our lakes. In addition, there is ongoing support from the County AIS & DNR inspectors at the Sand Lake access. Next spring at the Sand Lake Community Center there will be a class on identifying invasives, especially starry stonewort. The class will be coordinated with Itasca County AIS personnel. More information will be available as we get closer to the that time. Thank You...Phil Thompson...218-659-2136.



We had our ditch-cop cleanup, 10-7-17 a good size group showed up as did some sunshine. Cleanup was followed by refreshments & fellowship at Staff & Julie Kings home. A good time was had by all.

Treasurer's Report
July 1, 2016 through June 30, 2017

Cash on Hand July 1, 2016 \$65,900.08
Income

Dues Received	2,085.00
Undesignated Donations	7,844.00
Stocking Donations*	610.00
Interest	100.37
Grant - IBM, Microsoft, Direct TV & Itasca Co.	11,058.00
Total Income...	\$21,697.37

Expense

Comm. Printing & Office Supplies	1,365.73
Postage	366.04
Insurance	271.00
Meeting Expenses	653.29
Gifts Given	283.08
Promotional Items	1,512.00
Bank Fees	-
P.O. Box Rental	-
Website	215.28
Subscriptions	100.00
Misc.	165.21
Total Expenses	\$9,431.63

Transfers

From checking to savings \$10,000.00

Cash on Hand June 30, 2017

Checking: \$18,077.26
Savings: \$60,158.56
Total Cash & Investments \$78,235.82

*SLPOA stocking donations balance \$9,403.16

Respectfully Submitted: Chuck Baker, Treasurer

Sand Lake Property Owners Association

Board of Directors, Officers & Volunteers 2017/18

President: Carole Olson, Phone: 218- 659-4757
 Email: cncolson7@yahoo.com

Vice President: Gary Weaver,
 Phone: 218-659-2707 or 612-240-0378
 Email: buckmangary@gmail.com

Treasurer: Chuck Baker, Phone: 218-659-2955
 Email: cbaker@paulbunyan.net

Secretary: Bernie Troje, Phone: 218-659-2709
 Email: bpcan@comcast.net

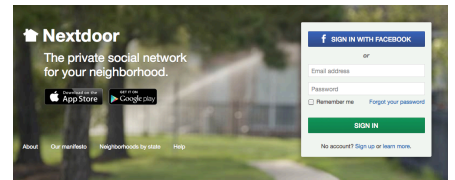
Directors:

Myron Hahn, Phone: 218-659-2668
 Email: myron@paulbunyan.net

Stafford King, Phone: 218-659-2146
 Email: Sking@paulbunyan.net

Immediate Past President: Victor Warnement,
 Phone: 218-659-4788
 Email: vicwarnement@yahoo.com

Volunteers: John Perkins: Sand Paper Editor & Web:
 Phone: 218-659-4754 or 828-698-5897
 Email: jfpc2@paulbunyan.net



Join our Sand Lake Social Network.

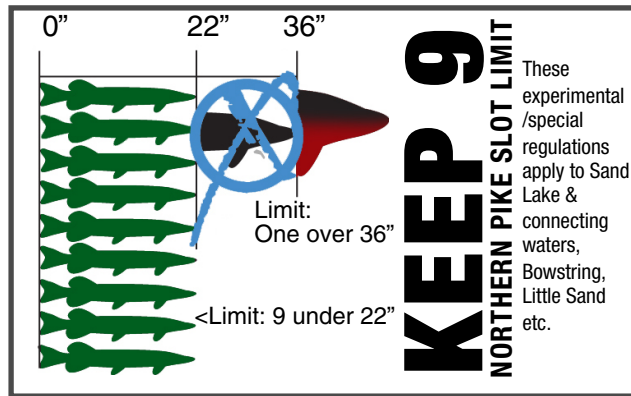
Nextdoor... It's the place where we share what's happening around the lake... summer & winter.

Go to the website & start posting!
www.nextdoor.com

Don't Forget To Check In To
www.slpoa1.com

Your SLPOA website continues to be an asset to our community. We hope you'll visit the new site often. As always we look forward to your feedback.

...John Perkins



Member Email Address... PLEASE

We're doing better but we haven't got everyone's email address yet. Please include it on the Membership Application or send it to me direct... jfpc2@paulbunyan.net. Thanks... John Perkins



If you want your mail delivered to the lake... write that address. If you have a different address... write that one. **Thanks...Vic Warnement**

Remember... This is your 2018 membership. Not 2017 or 2019

TEAR OFF ON DOTTED LINE

MEMBERSHIP APPLICATION FOR 2018 CALENDAR YEAR • RETURN THIS PORTION WITH YOUR PAYMENT

Voting members must be property owners on Sand Lake, Portage Lake, or Little Sand Lake in Itasca County. Sand Lake Property Owners Association is a tax exempt, non profit association whose purpose is to represent the



members' common interest in the Sand Lake area & its environment. Our association is managed 100% by Lake Owner volunteers. There are no salaries. We operate completely on Dues & Donations.

HELP!

When you send us this form, please volunteer for activities that maintain the health & beauty of our wonderful Sand Lake area.

Yes. Contact me... I'd like to help with:

- Weed Cops, Invasive species monitoring at the public landings
- Adopt a Highway... Trash pickup on Rt... 35 & Rt.4... twice a year.

MAIL TO: Sand Lake Property Owners Association PO Box 690, Deer River MN 56636
Your check is your receipt • Signed receipt sent on request.

Name(s) _____

MAILING Address _____

E-Mail: _____ MAIN Phone # _____

2018 DUES... \$15.00 Alternat/Lake) Phone # _____

DONATIONS \$ _____ STOCKING DONATION \$ _____