TLWA

SPRING 2019

THREE LAKES WATERFRONT ASSOCIATION

LAKE STEWARDS SINCE 1967

President's Forum

By Fred Knoch

Busy In Winter

I sit here in my cozy cottage with the fire warming me, looking on the landscape outside my window, a fairly monotonous visage of brown, white, and green. And so, it is winter, with snow and hard water. Quite a change from our active season of warm weather with the leafy greens of the forest contrasting with the blue waters of our lakes. A movement has caught my eye, a red fox descending the hill on my right. My Cocker, Porter, has also seen the fox, and must go out. He runs up the hill as fast as his short legs can take him, thrilled with the chase. He comes back winded, but ecstatic.

The reader might think that this time of year would be a "down time" for the Three Lakes Waterfront Association. On the contrary my friends. Although the Association's pontoon boat is in winter storage, the SCUBA tanks are asleep in the garage, the tents for purple loosestrife are folded up, and no volunteers are staffing the landings, we are still active! Each month the TLWA board of directors is meeting vigilantly, planning next year's campaign.

Over the winter we have been active in meeting with the Mole Lake Sokaogon Chippewa Tribe and their fisheries biologist to learn more information about the state of fisheries in the Three Lakes Chain. Members have responded to the request issued in the Fall newsletter to volunteer their shoreline for the placement of "fish sticks" and for shoreline restoration, both of which may improve the fisheries, if not the ecology of the lakes in general. The dive team are steeling themselves to the coming assault on the EWM on Virgin Lake. With two seasons of harvesting the team is planning

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Prez Forum (Continued from Page 1)

more efficient methods of harvesting, and recording results to satisfy DNR requirements to gauge effectiveness. The program for raising beetles used to control purple loosestrife is planned to double its efforts with the addition of a second tent for incubation of the beetles, so twice the numbers can be released this season. The water quality monitoring program has been expanded to include five streams in addition to the usual lakes previously monitored, with the addition of Thunder Lake to the list. Two board members have been working diligently on the authoring of an extensive treatise on the state of the Three Lakes Chain of Lakes ecosystem, anticipated for publication this summer. The ongoing monitoring of boat landings will continue with recruitment of interns and volunteers, and motion activated cameras are being considered for additional surveillance on unstaffed landings. Educational programs have been scheduled for this coming season for Adopt a Shoreline volunteers and for refreshing identification of AIS. In short, we are working hard on the behalf of the membership in the performance of our mission. Identification of our "brand" has been very successful with the continuing programs of plaques and long sleeve T-shirts, both of which are proudly displayed by our members.

Of course, not all of our time is spent on Association matters. Most of us are actively engaged in the enjoyment of winter activities, including but not limited, to skiing, snow shoeing, snowmobile riding, ice fishing, wolf tracking, snow shoveling and blowing, eating out, and keeping warm, which has been made more challenging as the temperature this morning was minus 20 degrees. Don't be misled, however, we are all looking forward to warm weather. In fact, when the Spring newsletter goes to publication, the ice would have melted, so in anticipation of this, I will see you, On the lake!

TLWA board meetings are now held at the new Demmer Library. In April, the board members (seated from left to right) Stan Wargolet, Paul Matthiae, Norris Ross, Ed Jacobsen, Fred Knoch, speaker Scott Lee, Ed Cottingham, Bob Agen, and taking picture, Lynn Zibell, appreciated the cozy atmosphere of the Tamarack Room as they listened to Police Chief Scott Lee describe the past and future work of the summer water patrol.

Lake Management Plan Update

The Work Continues

By Norris Ross

TLWA, together with our limnologist professionals, has been gathering and analyzing data on each unique Three Lakes Chain lake over many years. The Lake Management Plan (LMP) report is being finalized and will be submitted to the DNR in 2019. TLWA is in the process of preparing a condensed version of the LMP for submission to TLWA members and the general Three Lakes community. Completion of this project will be a real milestone for the residents of Three Lakes.

Since most of the work on the lakes will be five or more years old when this lengthy project is completed, the cycle of data collection should be started again beginning in 2020. The repeat studies will allow scientific comparisons to determine if any measurable changes have occurred in the intervening years. Initial data from the repeat of the Long Lake study has already indicated that changes have occurred since 2012. These changes are not alarming and are easily explained based upon recent weather-related patterns. The results of this repeat study on Long Lake will be available later this year.

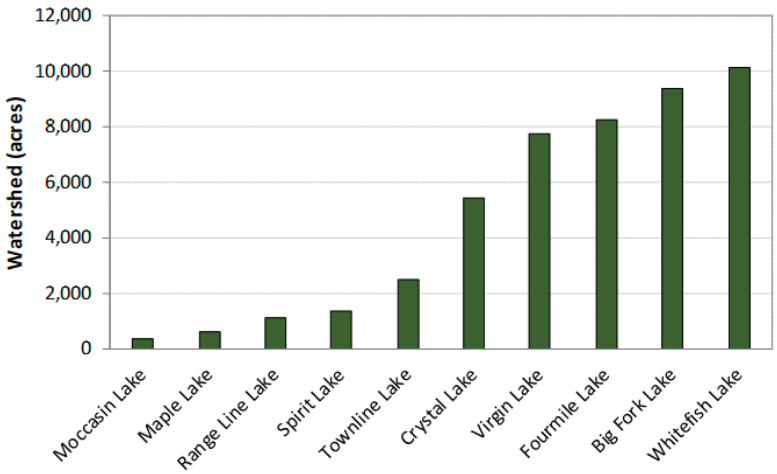
In order to gauge the health of each lake in the Chain, baseline data needs to be established. This comprehensive project will have documented a set of data for each lake which includes fish habitat considerations, aquatic plant population locations and densities, watershed condition and analysis, shoreline development patterns, and water quality (chemical) analysis. Repeat of these studies in future years will reveal any changes that might occur. Implementation plans to improve the results found in the baseline studies have already been started and will be the focus of future TLWA activities.

Fortunately, the water quality in the Three Lakes Chain is good for the most part and the watershed is so large that small incremental changes may not be immediately measurable, but they can be maintained or improved with persistent vigilance and effort on the part of all lake residents and users.

Here's a sample of the type of data (watershed size per lake) that will be included in the final LMP report.

THREE LAKES CHAIN – WATERSHED SIZE

Headwater Lakes



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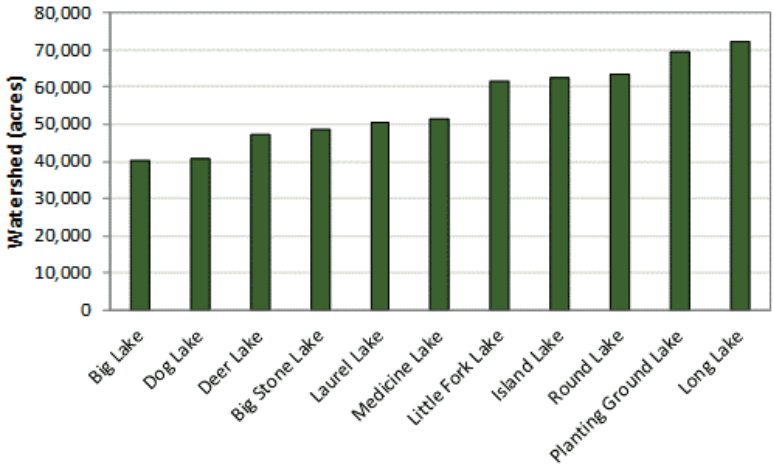
Main Channel Lakes



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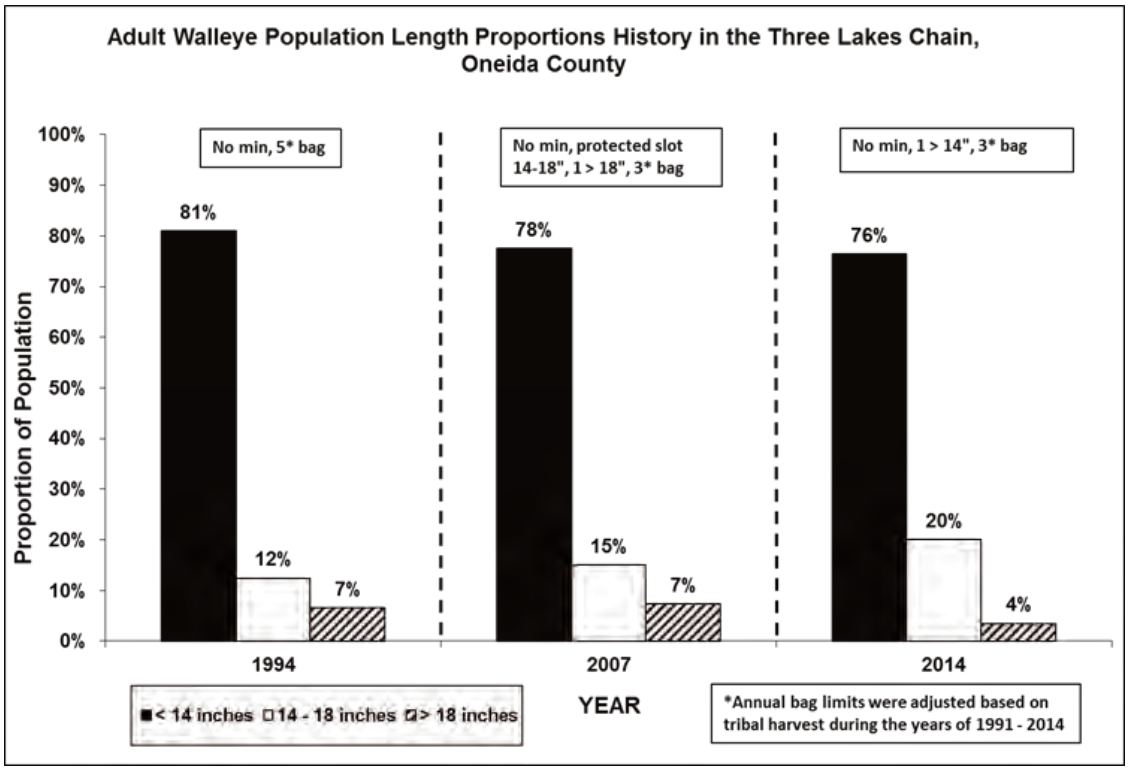
Status of Three Lakes Walleye Fishery

By Zach Woiak, WDNR Oneida County Fisheries Biologist

The Three Lakes Chain is somewhat unique in terms of its naturally reproducing walleye fishery. Anglers who pursue walleyes on the Chain likely notice the relatively high number of small walleyes. The adult walleye population within the Three Lakes Chain is characterized by its high-density and small size. Some would call it a "walleye factory" due to the high numbers of young walleye produced every year. But why is this the case? How can high numbers of walleyes be produced every year but few big fish are found in the system? The Three Lakes Chain provides excellent walleye habitat with its dark water, gravel shorelines, moderate level of vegetation and ample forage base. The perfect conditions for sustaining a healthy naturally reproducing walleye fishery with high recruitment. Although high natural recruitment is a good thing, it sometimes comes with a cost of slow growth. Slow growth and small size is not a problem for the health of the walleye population, but most anglers would prefer fewer, but larger fish.

The WDNR, in cooperation with Mole Lake Band of Chippewa and Great Lakes Indian Fish & Wildlife Commission, has surveyed the natural recruitment of walleyes in the Three Lakes Chain annually for over two decades. Natural recruitment of walleyes is measured by number of age-0 walleye (fish born the previous spring) collected per mile of shoreline during the fall. These are fish that have survived their first summer in the Chain, and they are typically about 5 to 7 inches in length. The average number of age-0 walleye per mile of shoreline from 1998-2018 is 27.9, which represents strong natural reproduction. Fish growth is density dependent which means that the more fish in a water body the slower they grow. In relation to the Three Lakes Chain, this simply means because there are a high number of mouths to feed and only so many groceries to feed them, the Chain can either support a lot of small fish or fewer but larger fish. The abundant younger and smaller fish also dominate the walleye numbers, so that an angler will usually see many small fish for every larger walleye caught.

Adult walleye population estimates have been conducted on the Three Lakes Chain during 1994, 2007 and 2014. Each of these surveys documented a high-density walleye population with relatively small size. Over the years, several different walleye regulations were tried on the Chain. Prior to 1996 the walleye regulation consisted of no minimum length limit and a daily bag limit of 5*. The regulation changed in 1996 to a protected slot limit consisting of a daily bag limit of 3* walleye, no minimum length limit but walleye 14-18" could not be kept and only 1 walleye could be over 18". The goal of that regulation was to try to promote harvest of over-abundant small walleyes and increase the overall size structure of the population by protecting fish from 14-18". The impact of this protective regulation was evaluated dur-



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Walleye Fishery (Continued from Page 4)

ing the 2007 walleye population survey which showed minor differences in the size structure of the population between the different regulations. It was concluded that either the slot limit regulation or a regulation of no minimum length but only 1 fish over 14" would yield comparable results for structuring the size of the walleye population. Both regulations promote harvest of small walleyes with the goal of improving size. Angler interest showed a preference for implementing the no minimum length but only 1 fish over 14", because it is less restrictive on harvest. This is the current regulation for walleyes in the Three Lakes Chain and has been in place since 2011. The walleye density remains high and size structure has shown minor change as documented by the 2014 walleye population survey. There is no surefire solution for improving the size of walleyes in the Chain but following the current regulation and harvesting walleyes under 14" is one way to help the chances of it occurring while enjoying a tasty meal of fish.

*Annual bag limits were adjusted based on tribal harvest from 1991 to 2014.

A Moment In Time

By Norris Ross

This is NOT a test. This is a preview of a document ("A Moment In Time") that you will receive later this year. All of these statements will be clarified and/or amplified when you receive your personal copy. Meanwhile, have fun!

<u>True or False</u>:

1. The Three Lakes Chain of Lakes is more than 6,000 acres in size.
2. The water in the Three Lakes Chain flows south into the Eagle River.
3. During normal weather conditions, a Federal license specifies that water levels be kept at a very constant level.
4. The deepest lake on the Chain is Planting Ground with a maximum depth of 67 feet.
5. The smallest lake on the Chain is Rangeline.
6. All of the lakes in the Chain have the same size watershed.
7. The type of land cover in a watershed determines the amount of phosphorus that runs off the land and into the water.
8. There are 14 public boat landings on the Three Lakes Chain.
9. The Town of Three Lakes has contributed funds which have assisted in securing DNR grant funds.
10. All the lakes in the Three Lakes Chain are classified by DNR the same way.
11. Phosphorus is the nutrient that controls the growth of plants in the vast majority of Wisconsin lakes.
12. Since all the water is connected in the Chain, the phosphorus levels are all about the same.
13. All lakes in the Chain undergo lake stratification and form temperature gradients.
14. Water clarity (clear water) always indicates good water quality.
15. Water clarity readings are similar in all the lakes in the Chain.
16. One of the most important areas in a lake's watershed is the immediate shoreland zone (approximately 35 feet from the ordinary high-water mark).
17. Developed shorelands are more stressful on lakes than those that are left natural.
18. There are over 100 different plant species in the Three Lakes Chain of Lakes.
19. Eurasian Water Milfoil (EWM) is in half the lakes on the Three Lakes Chain.
20. Coarse woody habitat contributes to a positive aquatic ecosystem in many ways.
21. Each lake in the Chain has its own unique ecology as well as both positive facets and known challenges.
22. The Three Lakes Chain is heavily visited and utilized and thus shows a degree of human disturbance that could be restored.

"A Moment in Time" is a condensed version of the final document being prepared to summarize the findings of the Comprehensive Lake Management Plan which has spanned a study over many years. To determine your knowledge score regarding the Three Lakes Chain, watch for "A Moment in Time" and read about the details of the true/false points and other interesting data.

Fish Sticks

What Are Fish Sticks?

By Jerry Oehmen

The following is the WI DNR definition:

What are fish sticks?

"Fish Sticks" projects are intended to restore woody habitat in lakes by adding trees to the near-shore area. They are large woody habitat structures that use either single trees or trees grouped together. Fish sticks structures are anchored to the shore and are partially or fully submerged near the shoreline of a lake. Fish sticks projects are completed to provide additional fish habitat, as well as to expand fishing opportunities by anglers and provide protection to shorelines. Additional information on fish sticks and the fish sticks implementation process can be found in the website. Https://dnr.wi.gov/topic/fishing/outreach/fishsticks

The TLWA has been investigating the use of fish sticks to improve fish habitat. In December we had a very productive meeting at Mole Lake. The meeting included representatives of the WDNR, specifically the fisheries biologist of Oneida County, a representative from Fish and Wildlife Improvement Association of Three Lakes, Three Lakes Waterfront Association, and the Mole Lake Tribal biologist along with Mole Lake Tribal leadership. The discussion of these participants centered on the premise of improving the fisheries of the chain, specifically the walleye fishery and attempts to improve adult harvest

Future Fish Sticks

size.

We did learn some interesting facts about the chain and walleye population.

- Three Lakes Chain is very high in walleye recruitment in comparison to many other lakes and chains.
- Data shows an abundance of small walleye 1-2 years old.
- Male walleye 2-3 years old average 11-13"
- Female walleye 5-6 years old 15 -16"
- The slot size regulation has not proven to be effective to increase size of the walleye population
- Walleye need the right size perch to feed on when they switch from plankton to meat food source
- Walleye compete with crappie for the same food sources
- It was suggested to harvest smaller walleye to enable the remainder of population to flourish

More Cover, More Food

The Three Lakes Fish & Wildlife Association has expressed a desire to work together with the TLWA to start this process to hopefully improve the fishery and shoreline restoration. Mother Nature has always added course woody habitat on our shorelines but typically this is looked upon as debris and property owners have removed it to "improve" their shoreline. Of course, we all want to be able to navigate our watercraft and have nice swimming areas for the family and friends. However, at the same time we want to allow nature to create the correct habitat to promote our shore restoration and improve the fishery at the same time.

Since the publication of the fall TLWA newsletter we have had several inquiries on the project. We have had three board members that have volunteered to start the permit process to place fish sticks on their shoreline. This process has begun and we hope to hear soon if our permits will be granted. We must ensure it does not inhibit

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Fish Sticks (Continued from Page 6)

navigation and fish sticks are placed in an area that has the correct bottom structure and water depth. The process requires a permit via the DNR and the site is inspected by our local fish biologist for Oneida County, Zac Woiak, to ensure these requirements are met.

If we are granted the necessary permits, we hope to start small with a few sites as soon as possible. We doubt that we can measure results in the short term but we have taken the attitude that increasing the course woody habitat is a good approach to help our beautiful lakes.

If you have an interest please feel free to contact me for information or even to volunteer your time and/or talent.

Bits & Pieces

NEW! Three Lakes Chain T-shirts with the TLWA logo are now available in a short sleeve style along with the long sleeve style! Both styles are sold at Northland Clothing Co. in Three Lakes. Get yours now!!

Purple Loosestrife

We Are Expanding the Attack

By Paul Matthiae

Our pilot project efforts to contain and eradicate purple loosestrife (Lythrum salicaria) got off to a good start in 2018. This year we are doubling our effort by adding a second nursery tent for rearing Galerucella sp. (Cella) beetles, a species-specific plant predator. Unfortunately, Cella beetles alone cannot effectively control all of the scattered purple loosestrife found along our shorelines.

In past newsletters we have asked for your help in removing or herbiciding scattered individuals or small clusters of purple loosestrife that may have taken root along your shoreline. To be honest response has been slow. So, here are some suggestions. The Adopt-A-Shoreline leaders have developed a purple loosestrife/yellow iris removal kit with all the tools needed to dig out an invasive plant. There is also an herbicide applicator filled with Rodeo, an herbicide ideally suited for use over or near open water. Rodeo will kill the plant when properly applied and not require digging. There is a protocol for each eradication method in the kit with step by step instructions. The method you prefer to use is your choice. The kit is kept at Anchor Marine on Hwy 32 south of Three Lakes.

Courtesy: WI DNR

Many of you already have the tools necessary to remove the plant(s) by digging. So here are a few tips to having a successful removal. If it's a first-year plant, dig it out with an 8-10" root ball, move it well away from the shore and gently remove the excess soil, then bag the entire plant and dispose of it in your garbage. The plant or plant parts will reroot if thrown on the ground or a mulch pile. If you have a plant that has been established for more than a year the root mass will be larger, require more effort and a larger root ball to extract. In that case, the root ball can be split into smaller sections, just be sure to get all of the root material removed.

If you have or know of a well-established clump of purple loosestrife contact your Lake Captain or a Board member and give them your name and contact information so that the beetle team can locate and inoculate the site with Cella beetles. Beetles are released in mid to late July.

If your neighbor(s) has a purple loosestrife or yellow iris problem, offer to give them a hand and let them know what they can do to help us control these aquatic invasive species. And don't be surprised to see plants pop up even after removal or herbiciding.

Adopt A Shoreline

Aquatic Invasive Demo and Workshop

By Bruce Renquist

The Aquatic Invasive Informational Session for the summer of 2019 is planned for June 14th, 1:00 pm on Virgin Lake. The TLWA Rapid Response Dive Team will be in action. Working from the deck of the customized dive platform, SCUBA divers will be harvesting the new growth of Eurasian Water Milfoil. A full crew of volunteers on the platform along with a clean-up crew on the water will demonstrate the intensive effort underway to control EWM on Virgin Lake. The workshop will be conducted by Stephanie Boismenue, AIS Coordinator, Oneida County and Sandy Wickman of the Wisconsin DNR. You will be provided with a hands on experience in identifying Aquatic Invasive Species in an open classroom setting and on the water. Handouts to aid in the identification of Eurasian Water Milfoil and other invasives will be available. Directions: 6524 Safar Road. Take HWY 32 south from Three Lakes. Turn right onto Col. Hines Rd., Follow the signs. Easy access, ample parking. Friends, neighbors and especially kids are all welcome to come and learn.

Adopt-A-Shoreline 2019

Adopt-A-Shoreline is the TLWA program which organizes and equips volunteers to monitor a section of shoreline on their lake. Monitoring consists of being trained to identify Aquatic Invasive Species and then on a few sunny days in the summer and early fall to meander the shoreline of their lake in search of invasive species. An altogether satisfying experience. If a suspect plant…something new, out of place or doesn't look like it belongs, is found it is placed in a Ziploc bag and turned into the Three Lakes Winery. An expert is called in to inspect and identify the specimen. If it turns out to be of concern, a rapid response protocol is initiated and hopefully, a full fledged infestation is averted. Along with the trained volunteers any person on the water who picks up a suspicious plant sample is encouraged to note the location of the find, the name and contact information of the finder and drop it off at the winery. The more eyes on the water the better. In that regard, any person wishing to join the over 125 Adopt-A-Shoreline volunteers is needed and welcomed. Call your Lake Captain or Bruce Renquist, 715-546-2401 for further information on how you might help.

What are Boat Hours?

The Adopt-A-Shoreline program requires a simple one page form to report the monitoring hours spent during the season. There is a line for 'Boat Hours'. The DNR has a policy which allows Boat Hours to be reported by the monitors and those hours are a valuable component of our TLWA grant writing process. Last season there was some confusion on how to calculate Boat Hours. Here, hopefully, are the guidelines which will be useful… A boat of any type used to monitor the shoreline qualifies. Paddle powered boats such as row boats, kayaks, canoes all qualify along with power boats like pontoon boats or fishing boats. If a boat is used in the monitoring process the boat receives credit under boat hours for the amount of time it is used. (it follows that 1 hour of monitoring = 1 hour of Boat Hours). If a couple or a team is monitoring out of the same boat, the boat operator uses the 1 of monitoring = 1 hour of Boat Hours as the rule, the others in the same boat just record their monitoring hours but no Boat Hours.

Ex. 1 Bill and Mary go out to monitor for 2 hours with Bill, also, operating the boat for both hours. On the form, Bill enters 2 hrs. in both columns, Monitoring Hours and Boat Hours Mary enters 2 under Monitoring Hours only.

Ex. 2 Sally goes out to monitor for 1 hour in her kayak. Sally enters 1 hour in both columns, Monitoring Hours and Boat Hours.

ADOPT-A SHORELINE

LAKE CAPTAINS

BIG	Ed Cottingham	715-546-4298	ecottingham@frontier.net
BIG FORK	Kathy Olkowski	715-546-3759	kathleenrunner@yahoo.com
BIG STONE	Rob Jahnke	602-460-5362	r26jahnke@gmail.com
CRYSTAL	Mike Donovan	715-550-8282	usflyguyat1@aol.com
DEER	Jay Teagle	630-460-5362	jay.teagle@yahoo.com
DOG	John Rothwell	843-271-6455	jcrothwell1@gmail.com
FOUR MILE	Bob Pfeffer	262-284-2333	rpfeffer@aol.com
ISLAND	Doug Scheffen	715-546-2732	dougscheffen@aol.com
JULIA	David Mitzner	715-546-2583	david.mitzner@gmail.com
LAUREL	Mark Wallesverd	920-344-0698	walsvrd@gmail.com
	Charles Brady	651-408-2505	bradycharles@msn.com
LITTLE FORK	Bob Lee	715-546-3674	rlee1170@gmail.com
LONG	Jack Werner	715-479-9094	wildwoodjack59@gmail.com
MAPLE	OPEN		
MEDICINE	Bruce Renquist	715-546-2401	bruce.renquist@gmail.com
MOCCASIN	Ryan Lamon	715-546-8101	ryan@watercraftsales.com
PLANTING GROUND	Norris Ross	715-546-2250	norrisross@frontier.com
RANGE LINE	John Folaron	414-687-5900	john@air-instruments.com
ROUND	Gwen Hutchins	608-556-1234	hutchmutz@tds.net
SPIRIT	John Lake	619-980-7654	jrlncal@sbcglobal.net
THOROUGHFARE	Paul Matthiae	715-546-3453	pjmatthiae@gmail.com
TOWNLINE	Lou Bruckmoser	715-546-3083	annlou@frontier.com
VIRGIN	Bob Borek	715-546-3457	bobborek18@gmail.com

THIS IS WHY

THEY CALL IT

AN

INVASIVE!

Clean Boats/Clean Waters

Volunteers Needed

By Bob Agen

Soon, we will begin another year of checking boats and educating boaters on the importance of vegetation- free boats. Keeping invasives out of our lakes is priority number one!!

We plan on hiring three paid student interns, but still need volunteers. Volunteers allow us to cover more landings and help secure much needed grant money. For every hour a landing is worked by a volunteer, $12 in grant money is earned. Please give volunteering a couple hours a week some thought.

We have not gained any new volunteers for the last two seasons. You can read or work on your hobby, or my favorite --- just enjoying the solitude.

Volunteers are needed at the Big Lake landing near CW Smith road, the landing next to Sunset Grill, and the landing on County X.

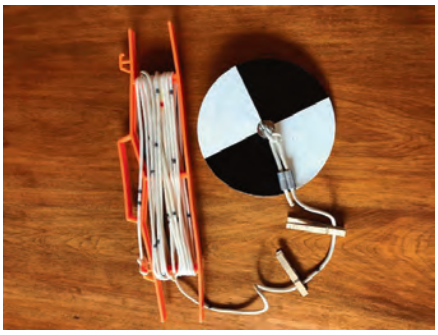
Call Bob Agen at 715-546-3893 and leave a message.

Secchi Testing

How You Can Do It Too!

By Lynn Zibell

You're sitting in your boat, looking over the side, gazing down into the water. Do you ever wonder how far down you are seeing? The Secchi disc was created in 1865 by Angelo Secchi to answer that question. It is a 12" wooden disc with black and white quadrants attached to a rope marked off in inches. By just using something as simple as a clothespin to pinch the chord at the water's surface, one can measure water clarity.



From spring through fall, Citizen Monitor volunteers on the Three Lakes Chain do a "Secchi Test" once every 2 weeks. They lower the disc at the deepest part of the lake, stopping at the point they can no longer see the disc. Doing this twice, the average measurement is entered into the WI DNR website. For more information one can go to https://www.uwsp.edu/cnr-ap/UWEXLakes/Pages/programs/ or see the data collected by our volunteers at https://dnr.wi.gov/lakes/clmn/Stations.aspx?location=44

This 10 minute exercise, which can be done while fishing or boating, has many implications. Since water clarity is affected by the amount of material suspended in water, the more material suspended, the less light can pass through. Less clarity promotes solar heating and reduces light penetration. Both of these contribute to lower dissolved oxygen levels which, in turn, affects aquatic life.

Currently we have 12 volunteers, including Ed Cottingham who tests Big, Big Stone, Deer and Dog Lakes. We do not have any one testing Round, Laurel, Moccasin, Rangeline, and Townline Lakes. If you are interested in becoming a Citizen Monitor on these lakes or relieve Ed Cottingham of a lake or two, please contact Lynn Zibell at lzibell@gmail.com.

Three Lakes Winery

Ahoy "Lake Captain"

By Mark McCain

Three Lakes Winery has been a part of the Three Lakes community for almost as long as the TLWA has been in existence. The Grand Opening took place on July 1st, 1972...47 years ago this coming summer. My family and I have always understood that the value of Three Lakes, be it economic, aesthetic or emotional, resides primarily around the lakes. It is the devotion, appreciation and, dare I say, love for the lakes that makes the Three Lakes Chain as well as the other lakes, the best!

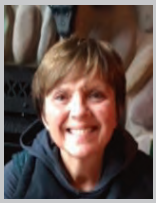
We have offered support for the hard work of the volunteers of the TLWA, with gifts from the Winery and we will continue to do so but we're excited to introduce something that will, we hope, take that support to a new level. Increasingly, more pressure is being applied to the local communities, the waterfront associations and even the waterfront property owners, to self-fund the important work of keeping the lakes in pristine condition.

To do our part to contribute to that fundraising, we offer Lake Captain! The wine is still under development as is the label, but as you can see from the illustration, we have some of the elements in the works. The label is far from complete but we're excited to be on our way to creating a blend (it may not be the blend on the draft label) that has broad appeal and a package that will showcase the Chain of Lakes with a nautical theme. We hope to sell thousands and thousands of bottles each year and for each bottle sold at Three Lakes Winery at retail, we will contribute two dollars ($2.00) to the TLWA. For each bottle sold to our distributors at wholesale, we will contribute one dollar ($1.00) per bottle. If sales go well, we'll look at making additional contributions. Stay tuned….

Membership

All of You Make A Difference

By Ann Oehmen



I'm excited to report that as of 2019 our TLWA has reached 1,185 members. Because of your support there are programs in place that have protected our lakes from the threat of Aquatic Invasive Species.

Watch for our membership drive to begin this spring and encourage friends and neighbors to join with us to help keep our waters safe and clean.

Feel free to contact me with any questions regarding membership and dues at aoehmen@gmail.com

TLWA
THREE LAKES WATERFRONT ASSOCIATION
LAKE STEWARDS SINCE 1967

JOIN OR RENEW YOUR
MEMBERSHIP
TODAY!

Protecting Turtle Nests

Courtesty of Bureau of Natural Heritage Conservation, WDNR

Turtle Nesting - Wisconsin is home to 11 species of turtles, all of which nest annually in late spring through early summer (nesting can begin as early as May 20 and often extends through July 7). Turtle nests may be found in a

variety of locations where sandy and/or well-drained soil is exposed to sun for most of the day (e.g., sand banks along rivers and lakes, gardens, gravel driveways, road shoulders). Some turtle species nest within a few feet of open water, while others will travel up to 1,000 feet or more away from open water to nest. Depending on the species and weather conditions, turtles may begin to hatch in as little as 2 months, although 3-4 months is more common. In addition, some species, such as the painted turtle, may overwinter in their nests and will not emerge until the following spring. After a successful hatch, there is often a small hole where the hatchlings emerged from their nest.

Nesting Predation - If you find a turtle nest on your property, it is best to leave the nest where it is and protect it from predators by putting a "nest cage" over the area. Predation of a turtle nest can occur at any time so ideally the enclosure would be installed immediately (e.g., within minutes of the female leaving the area) and kept up through the fall or spring. However, if the cage is in an area where you cannot leave it installed for an extended period of time (e.g., gravel driveway), leave the cage in place for at least 1-2 weeks.

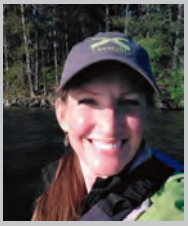
Constructing a Nest Cage - A nest cage should be constructed with wire fencing material (similar to chicken wire but larger) with openings of 1 in x 3 in. The cage will consist of one top piece (approximately 2 ft x 2 ft) and four side pieces (approximately 2 ft x 10 in). The five fencing pieces can be assembled together with metal fencing clips. Once completed, the nest cage should be placed over the nest with the lower 1-2 in buried into the soil and staked down. This will prevent predators, such as raccoons, opossums and skunks, from getting into the nest, but the openings will allow for solar exposure and will be large enough that the hatchlings can emerge and exit on their own through the holes in the fencing.

Bureau of Natural Heritage Conservation, Wisconsin Department of Natural Resources
PUB-NH-939 (Last Updated October 2016)

Threats To Our Waters

By Stephanie Boisemenue

AIS Coordinator, Oneida County Land & Water Conservation Department



Aquatic invasive species (AIS) are becoming a growing threat to Oneida County's 1,100 lakes and rivers, and our water resources are a large part of our lifestyle! Why are AIS a concern? Because the native plants, animals, and organisms in Oneida County's ecosystem are intertwined. They have adapted to one another for thousands of years, giving each species a place and a role. Unfortunately, replacing a native species with an AIS does not keep the picture intact…it weakens the entire ecosystem. Each change to our native habitats, fisheries, and riparian environments results in an altered ecosystem, disrupting the delicate balance that keeps this system intact.

AIS are a direct driver of biodiversity loss and disruption of ecosystem processes, yet also hinder economic development, serve as vectors of disease, decrease the aesthetic value of nature, and prevent recreational activities. Not to mention they are very costly, time consuming, and nearly impossible to eradicate. A number of AIS such as Eurasian water milfoil, Curly-leaf pondweed, Purple loosestrife, Yellow iris, Phragmites, Rusty crayfish, and Chinese mystery snails have already moved into several Oneida County waters.

Phragmites

Rusty Crayfish

Unfortunately, combating the AIS that are already in Oneida County is not the only concern. It is what is not here that is even more alarming! Emerging threats of zebra mussels and spiny water fleas are at our doorstep, waiting for an opportunity to make their silent assault into Oneida County waters. It may take only one infested watercraft or piece of equipment to establish a new AIS population.

The Good News is that it is possible to prevent the introduction of AIS! Just a few minutes of prevention can protect our beautiful and valuable water resources for generations to come! Remember to always follow the required AIS prevention steps: **before launching and before leaving you must INSPECT, REMOVE, DRAIN, NEVER MOVE.** This is a reasonable precaution and effective method for reducing the risk of spreading AIS. Other ways you can help protect our waters is to learn to identify AIS, monitor your lake for AIS, report new occurrences of suspected AIS, volunteer for a local Adopt-A-Shoreline program, become a volunteer Clean Boats, Clean Waters watercraft inspector, and become a member of your local lake association.

Here is a snapshot of the AIS verified in Oneida County waters and species-specific threats.

Banded and Chinese mystery snails:

- Compete for food and habitat with native snails and other grazers or filter feeders.
- Prolific reproducers and can form dense aggregations.
- Cause mortality of largemouth bass embryos by invading bass nests.
- Die-off in large numbers, fouling beaches and shorelines.
- Chinese mystery snail serve as a secondary host for a parasite that has been killing large numbers of waterfowl.

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Threats (Continued from Page 13)

Eurasian water milfoil and Curly-leaf pondweed:

- Decreases property value.
- Form dense stands that displace native plant communities and radically changes the biodiversity and ecological functions of invaded habitats, including a decline of fish spawning habitat and native species abundance.
- Form floating mats of tangled vegetation on the surface, which increases water temperature, reduce water movement, clog boat propellers, hangs on trailers, and interferes with boating, fishing, swimming, waterfowl hunting and other recreation.
- Die-off of Curly-leaf pondweed in summer often leads to algae blooms.

Flowering rush, Phragmites, Purple loosestrife, and Yellow iris:

- Populations can spread quickly.
- Form dense stands in streams, lakes, river channels and wetlands.

Flowering Rush

- Displace native plant communities and radically changes the biodiversity and ecological functions of invaded habitats, including decline of fish spawning habitat, bird nesting habitat, and native species abundance.
- No food value to wildlife.
- Phragmites dead stems increase the risk of marsh fires.

Rusty crayfish:

- Destroy aquatic plant beds causing a decline in aquatic vegetation and native species abundance.
- Aggressive towards native species.
- Consume large amounts of aquatic invertebrates, fish eggs, small fish, and plants.

Here is a snapshot of AIS knocking on Oneida County's doorstep and species-specific threats:

Brazilian waterweed, Hydrilla, Starry stonewort, Water hyacinth, and Water lettuce:

- Form thick mats that can clog boat propellers, hang on trailers, and interfere with boating, fishing, swimming, waterfowl hunting and other recreation.
- Displace native plant communities and radically change the nature of the habitats they invade.

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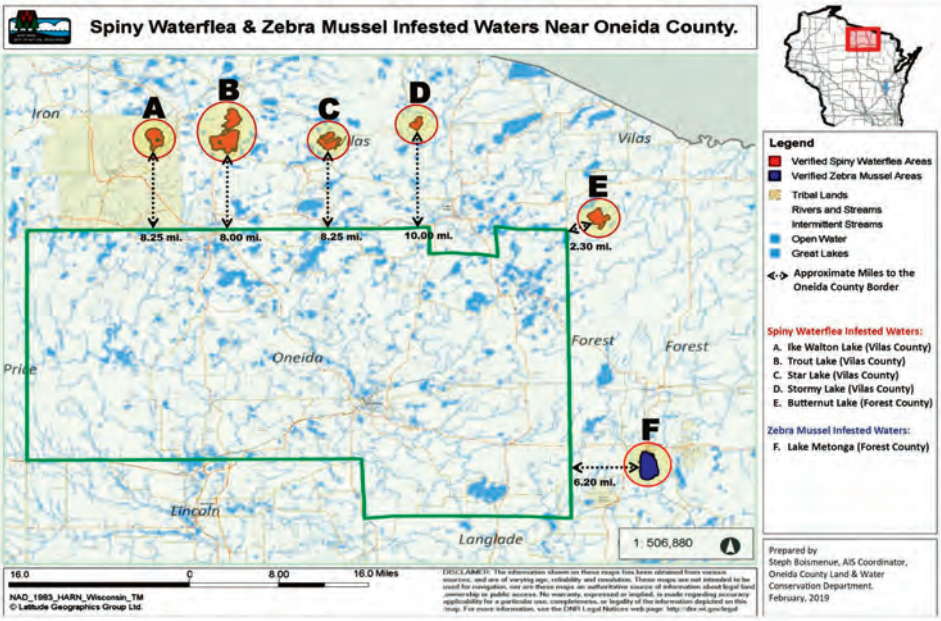
Water Hyacinth

Water Lettuce



Threats (Continued from Page 14)

- Impact spawning activities of some fish species.
- Compete with native snails for food and habitat.
- Clog water intake pipes and other submerged equipment.

Didymo (Rock snot):

- Alters stream ecology by forming dense algal blooms that can cover up to 100 percent of stream bottoms.

Faucet snail:

- Intermediate host for three intestinal trematodes that cause mortality in ducks and coots.

New Zealand mudsnail:

- Threaten the food webs of trout streams by competing with native invertebrates for food and habitat.

Red swamp crayfish:

- Outcompete native crayfishes for shelter and food.
- Compete with fish directly for prey and indirectly by consumption of fish eggs.
- Disturb shoreland areas through the construction of burrows.

Ruffe, Round goby, and Sea lamprey in the Great Lakes:

- Cause decrease in native fish populations in the Great Lakes and reduced revenues to natural resources based businesses.
- Compete for the same natural resources and life requirements (food, water, space, shelter) as native species and degrade local ecologies by disrupting the food chain.

Spiny and Fishhook water fleas:

- Undrained live wells, bait buckets, and bilges allowed the Spiny water flea to hitch a ride into Butternut Lake in Forest County, the Gile Flowage in Iron County, and four Vilas County Lakes: Trout Lake, Star Lake, Stormy Lake and Ike Walton Lake.
- Reproduce rapidly through asexual reproduction.
- Consume native zooplankton, including Daphnia, causing the decline or elimination of some species of native zooplankton.
- Adversely affect the growth rates and survival of young fish, due to the competition for food.
- Their long tail and sharp spines make them difficult for small fish to eat.
- Collect in masses on fishing line, downrigger cable, and rope. Masses clog eyelets of fishing rods, damage a reel's drag system, and prevent fish from being landed.

Zebra mussels and Quagga mussels:

- Zebra mussels infested Lake Metonga, located in Crandon (Forest County). They are a harmful bioengineer and pose the biggest threat to the structure and function of the lakes ecosystem.
- Reproduce rapidly through asexual reproduction. Thousands of larvae can be found in a single teaspoon of water, making them easy to transport.

Zebra Mussels

Quagga Mussels

- Heavy filter feeders (strain water for food), filter more than one liter per day. Results in removing the base of the food web, changes the ecosystem, and provides ideal conditions for algal blooms and botulism-causing bacteria.
- Bioaccumulate PCBs and heavy metals due to heavy filtering, which affect fish consumption and buildup in waterfowl.
- Firmly attach themselves to hard surfaces such as rocks, native species, docks, boat lifts, hulls, motors, and water intake structures such as municipal water drinking and manufacturing plants, irrigation facilities, and power plants.
- Reduce pumping capacity and clog cooling water inlets resulting in boat engines overheating. Damage to industry and recreation cost the U.S. more than $1 billion per year.
- Swimmers cut their feet on zebra mussels attached to rocks, docks, swim rafts and ladders and shells on shore.

Annual Meeting July 3rd

Mark **July 3rd at 3PM at the Reiter Center** to attend the TLWA annual meeting as you begin your 4th of July weekend. You'll be brought up to date on the association's activities: shoreline restoration including the placement of fish sticks in several of the chain lakes, remediation of Purple Loosestrife and Pale Yellow Iris, our dive team's efforts against EWM, partnering with Fish and Wildlife and current membership numbers.

This year our main speaker is, Trisha Moore, a conservation specialist with the Northwoods Land Trust. She will give us a description of this non-profit member and volunteer-supported conservation organization. Established in 2000, it helps private landowners conserve their property through a land trust. Living in Three Lakes, Trisha Moore has been working on special projects for Northwoods Land Trust since 2009.

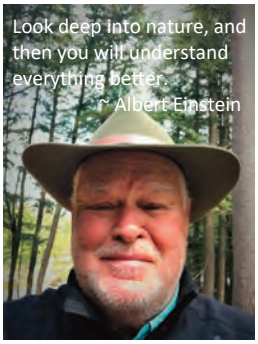
Also, Oneida County AIS Coordinator, Stephanie Boisemenue, will speak about the pervasive yellow iris and Three Lakes Town Chairman Jeff Bruss will give us a town update.

We hope to see most of our 1185 association members at this annual meeting on July 3rd even if it means putting out more chairs!

Bits & Pieces

By Lynn Zibell

Do you notice any changes in this newsletter? If not, that means I'm doing all right as I follow in the footsteps of Larry Swanlund. Longtime editor and TLWA board member, Larry, resigned from the board this past January. He spent many hours chasing down articles, finding inspirational pictures and quotes and organizing the newsletter lay out. We will sorely miss all his efforts working for TLWA as he pursues other adventures including being on the road in his camper. Thank you Larry.



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For information regarding important issues impacting our lakes and your own lake property, visit the TLWA website at:

www.TLWA.org