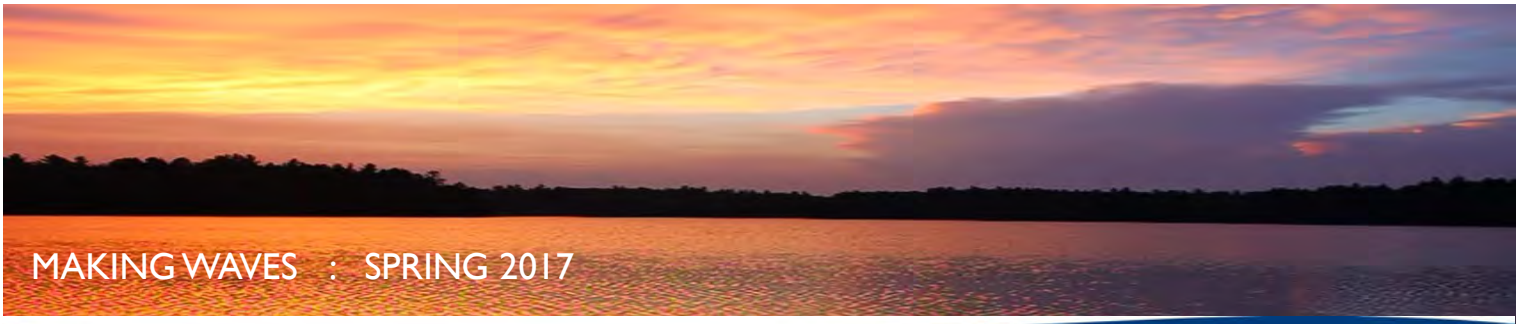


TLWA

THREE LAKES WATERFRONT ASSOCIATION

LAKE STEWARDS SINCE 1967

50TH ANNIVESRSARY

President's Forum

By Ed Jacobsen

Well, this is quite a milestone year for the waterfront association. We were organized in 1967 and have been operating ever since. Our mission has always been to protect our waterways and I feel that all the volunteers who have served on our boards over the years have done just that. Things changed in 2006 & 7 when invasive species first started appearing in northern Wisconsin. Because we were already operating and monitoring our lakes the board at that time jumped into action and slowed down the spread of things like Eurasian Water Milfoil. We are now fighting about ten types of invasives threatening our precious waterways.

Our board has great things planned for the recognition of our 50th year as a lake organization. You will see those plans as you peruse the 19 pages that follow. Yes a 20 page newsletter, largest in our history. There was just too much good news to report to keep the 16 page format.

You will see that we have our own dive team so we no longer are at the whim of outside divers to clear unwanted invasives, we can do it on our own and quickly. We also have a new board member in Lynn Zibell. More on her in the following pages. We will be offering free boat washes for anyone all summer so as to keep the boats entering our waters clean and free of hitchhikers. There is a new plaque program which will identify our loyal members and it will be free, included in your ridiculously low membership rates. New floating key chains as well as small handy maps of the chain will be available all summer. Watch for us in the Three Lakes 4th of July parade.

We have some new members of the Three Lakes town board and we're looking forward to working with them. A note from our new town chairman, Jeff Bruss is included in this newsletter.

All in all it is a good time to be a member of the Waterfront Association. Thanks to all the volunteers and members who make this job easy. Now read on.

TLWA Observes 50 Years

A vision came true.

When that group of folks gathered back in 1967 to discuss starting the Three Lakes Waterfront Association (TLWA), they had a vision for what could be done if people got behind the idea. That vision, along with a lot of work by a lot of people has resulted in one of the most successful waterfront associations in Wisconsin.

Today, nearly 900 members make up the TLWA, quite a leap from where it started. With hundreds of volunteers over the years… and tens of thousands of volunteer hours later, we can look at what has been accomplished with a great deal of pride. Oh yes, we've got some nasty infestations of Alien Invasive Species in our waters, but nothing compared with what some of our neighboring lakes have endured. Due to the efforts of our volunteers and our professional partners, we've been able to manage those infestations fairly successfully; and the battle continues.

Please join us at our annual meeting at the Reiter Center on July 6th at 6PM for a glass of champagne

and some fun. In addition, we've come up with a couple of things that will help to keep our waters clean as a good way to observe this anniversary.

FREE Boat Wash

You can get your "feet wet" this summer as one part of our 50th observance. We would like you to wash your boat and trailer **FREE** this summer to get rid of

> It is the volunteers
>
> that make it successful.

all those unwanted invasive species. It will be easy. Take your boat to the Three Lakes Chamber of Commerce office, or the Three Lakes Town Market (formerly Bakers) and pick up your **FREE** boat wash token. Drive across the street to the Scrub Hub wash area and power wash your boat. TLWA is buying your wash time in cooperation with the owners of the wash facility. See you at the boat wash!

AIS Rapid Response Dive Team

Late last summer a group of TLWA volunteers took part in a test to see if we could use volunteer SCUBA divers to hand-harvest Eurasian Water Milfoil. Based on that successful test, the TLWA board has moved forward with establishing an AIS Rapid Response Dive Team for future years. More on how this program is rolling out is in the following pages.

Show Your TLWA Pride

Volunteers from the TLWA have been working during the winter months to produce a cedar plaque with an engraved TLWA logo to be given to each member of the association.

The TLWA collaborated with the Fab Lab, students from the Engineering Club at Three Lakes High School and Kwaterski Brothers Wood Products to produce the plaques. The association will provide the finished product

to each member this summer. It is one more element of the year-long observance of the TLWA

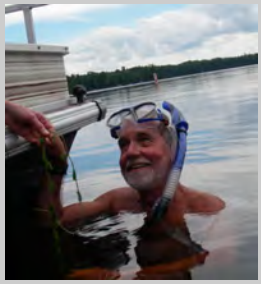
(Continued on Page 3)

50th Anniversary. These elegantly crafted membership plaques are designed to fit naturally into our Northwoods environment, and will be a great symbol of your support for the lake stewardship efforts you and your fellow members of the TLWA are part of.

TLWA has received permission from the Town of Three Lakes to mount these plaques on the structural post below your fire number. The installation will take place this summer. If for some reason you wish to opt out, and not have a plaque installed, please notify TLWA at PO Box 145, Three Lakes, WI 54562.

Special recognition should be given to Bruce Renquist, Ed Cottingham, Ed Jacobsen, Kwaterski Brothers and the Fab Lab staff for their efforts to produce these membership plaques.

Update on SCUBA AIS Rapid Response Dive Team



TLWA Dives In

By Fred Knoch

As some of our readers may remember from the fall newsletter, the Board of the TLWA put out the word indicating the need for volunteer SCUBA divers to initiate a new AIS Rapid Response Dive Team program for the control of aquatic invasive species in our lakes. To date, we only have one young volunteer who has already been working as a volunteer on other TLWA programs. We had hoped to find at least three volunteer divers for the purpose of hand removal of Eurasian water milfoil from our waters. In the past the TLWA has hired professional divers to do this same task at a cost to the association. We thought with 900 members, some of them would be certified divers willing to volunteer time for this effort. The association planned to acquire at least three complete sets of equipment for this program, including tanks, BCD vests, wetsuits, weights, masks and snorkels, fins, etc. With a lack of at least three volunteers, we seemed to hit a wall in our start-up efforts.

Enter the Watercraft Sales, Inc., a highly successful local business enterprise to the mix. You are all familiar with Watercraft Sales, having probably purchased gasoline for your boats, water sports equipment, boats, etc. from them at some time in your enjoyment of the Northwoods. As it happens, 2017 is the100th anniversary of Watercraft Sales, nicely dove-tailing with the 50th anniversary of the TLWA. In celebration of the 100th and 50th anniversaries, Ryan Lamon, Vice President of Watercraft Sales, has graciously offered to donate a used pontoon boat

(Continued on Page 4)

Scuba (continued from page 3)

with motor and trailer to the TLWA for the specific support of our proposed SCUBA program.

Additionally, Ryan has pledged monetary support for the program indicating his recognition of the mission of the TLWA in lake stewardship. Monitoring and helping maintain the quality of our water resources is of vital importance to the success of his business and to the success of tourism in general.

With this "kick start" to the SCUBA program, the board of directors of the TLWA has pledged monies to train additional SCUBA divers to staff the AIS Rapid Response Dive Team. It is the goal of the program to train and equip at least three divers in the hand pulling of EWM from any identified infestation within the aegis of the association's influence. The association anticipates the procurement of three complete sets of SCUBA equipment for this purpose. We also plan on recruiting additional prospective divers from the Three Lakes High School population, with the intent to subsidize the cost of training in return for their agreement to be available for hand pulling whenever the TLWA requires the work. In this way, we will have a ready cadre of divers available to hand pull EWM whenever needed. The method of hand pulling is especially applicable to the situation of relatively sparse infestations of EWM which currently exist on both Virgin Lake and the channel from Long Lake to the Burnt Rollways Dam.

This program will be designed for high school students locally as their availability will be almost guaranteed for the entire pulling season. However, it has been suggested that we open the field to seasonal residents also if they can guarantee availability for the entire pulling season which is reasonably thought to be June through August. If this program succeeds, we may be able to sustain a reliable way of controlling EWM in our waterways within our own organization, which is entirely in concert with our mission statement. We already have local support in the community, including Ryan Lamon of the Watercraft Sales, Inc., Gene Welhoefer, principal of the Three Lakes Jr. and Sr. high schools, and the board of directors of the TLWA. It isn't too late.

Watercraft

Sales

Steps

Up

If you would like to volunteer for this program please contact me at longlake@newnorth.net.

1917-2017 Watercraft SALES, INC.

Celebrating 100 Years of Delivering the Boating Dream!

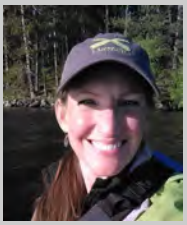
Watercraft Sales in the 60's

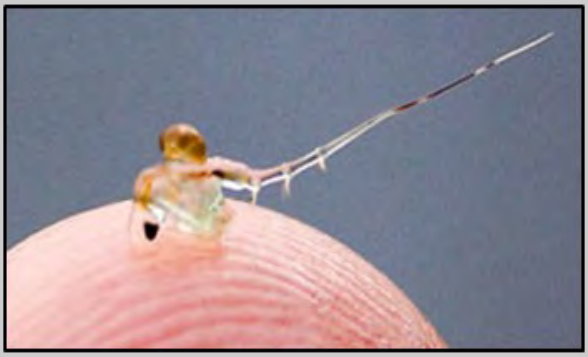
Dive Team Trials

Team Trials on Virgin Lake

A New Threat To Our Waters

It is lurking right next door





(Photo courtesy of Donn Branstrator)

By Stephanie Boismenue,
AIS Coordinator, Oneida County

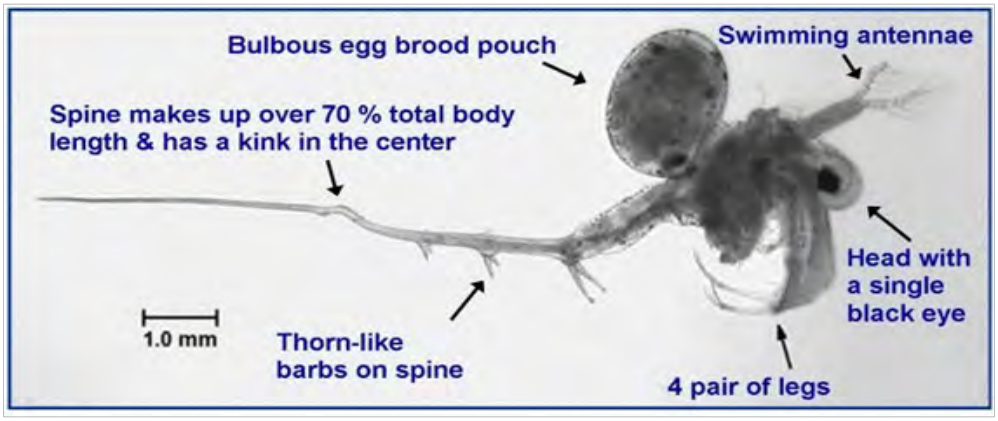
Meet the AIS, spiny water flea *(Bythotrephes longimanus)*. They are not fleas, as the name suggests, but rather a tiny, predatory crustacean (a relative of crayfish and shrimp) that swims freely through the water. Despite their small size, anglers find them extremely frustrating and they have the potential to cause serious damage to a lake or river's ecosystem, food web and fisheries. They are not native to the United States, but have made their way through the Great Lakes and inland waterbodies. Luckily, the spiny water flea has not been found in Oneida County, but they have been confirmed in waterbodies that are awfully close to the county line such as: Butternut Lake in Forest County (near Three Lakes), Vilas County's Trout Lake, Star Lake, Stormy Lake and Ike Walton Lake as well as the Gile Flowage in Iron County. With your help, Oneida County's waterbodies can continue to be free of spiny water fleas.

Anglers are usually first to detect and report new infestations of spiny water fleas after experiencing frustrating issues caused by a gelatinous glob on their equipment. This glob is actually hun-

(Photo courtesy of Donn Branstrator)

dreds of individual spiny water fleas accumulated on fishing lines, lures, downrigger cables, and nets. Additionally, the globs make it nearly impossible to reel in fishing line, they clog the first eyelet on fishing rods, damage a reel's drag system, and prevent fish from being landed. Anglers have reported having to cut their lines because they are unable to reel in a fish. That spells disaster for the fish at the end of the line!

This predator devours zooplankton (small animals) more so than all the fish and other invertebrate predators in our lakes and rivers, resulting in an average of 30 to 40 percent decline in native populations of zooplankton. Its favorite target species is Daphnia, a native zooplankton that is prominent in the freshwater food pyramid and an important food source for small fish and young sport fish such as bass, walleye, and perch. Additionally, Daphnia are very



(Photo: NOAA, Great Lakes Environmental Research Laboratory)

(continued on Page 6)

New Threat (continued from Page 5)

important ecologically because as filter feeders, they consume vast amounts of a waterbodies organic waste, debris, and algae. As the Daphnia decline, the fish decline and the algae thrives!

The spiny water flea is recognizable by its translucent body and an elongated, sharp, barbed, tail-spine that extends from its abdomen. Adults have three to four thorn-like barbs at the base of the spine, while juveniles have only one pair. The adult body length, including the spine, averages 1 cm (.4 inches) and is much larger than most native freshwater zooplankton. It possesses one large black eye, a pair of swimming antennae's and four pairs of legs, of which the first pair is used to catch prey. They swim in a rapid jerky manner by flipping their antennae and appendages.

Although the water fleas can fall prey to fish, their unique tail-spine frustrates most small juvenile fish, which tend to choke on the tail-spine. The fish also experience great difficulty swallowing the animal and have difficulty ingesting the tail-spine. They are not a risk for people walking in the water or swimming.

The majority of the spiny water flea population is female and capable of asexual reproduction as well as sexual reproduction. Asexual reproduction facilitates explosive population growth and sexual reproduction facilitates genetic clones. They reproduce from spring till early fall. Female water fleas will die out of water. However, under certain conditions, their eggs can resist drying and freezing and will remain dormant for long periods of time. In fact, the eggs can overwinter and hatch the following spring and can establish a new infestation. Additionally, eggs consumed by fish survive passage through the digestive tract.

The spiny water fleas rapid spread is likely the result of adults and eggs hitching a ride in ballast transfers, currents, and recreational boating carrying bait buckets, livewells, ropes, cables, fishing lines, downriggers coated with both eggs and adults, and other sources of water dumped from boats. They can even invade a new waterbody if an infested fishing line is cast into a new lake.

Wash and dry your boat and fishing gear before reintroducing them to new waters.

How can you help? Learn to recognize them. Inspect your boats, trailers, and all equipment including fishing gear, anchors, anchor ropes, nets, and inside bait buckets. Remove any attached plants, animals, sand, mud, gelatinous globs, and organisms. Drain all water from boats, motors, livewells and equipment. Don't move live minnows away from a waterbody unless they have been isolated from the water you are fishing on.

Purchase minnows only from a WI bait dealer. Please report new infestations to the DNR.

Editor's Note: Stephanie reports that extra steps are important if we are to keep this nasty invasive from our waters. If you happen to fish any of the nearby waters that contain spiny water fleas, it is important to completely dry your boat, trailer and fishing equipment for 5 days after cleaning with soap and water, or high pressure water. Lures that are dressed with bucktails, marabou, mylar or tinsel and other similar materials make great hiding places. These lures should be carefully inspected and cleaned thoroughly before fishing again. The special program the TLWA has initiated this summer for cleaning your boat at the Scrub Hub car wash in Three Lakes will help to eliminate this threat.

Looking Back To Compare

Down to the Core

By Norris Ross

Phase VIII of your TLWA Lake Management Planning project includes some rather unique scientific techniques. These techniques will be used to collect data that might help us design follow-up procedures for studying and rectifying findings in earlier phases of our studies.

One technique that will be employed in this phase of the project involves taking core samples deep below the bottom of the lake. These samples can be preserved, studied and analyzed, using established dating techniques. Conditions from historical records can be retrieved and compared with conditions revealed in the core samples.

Top-bottom paleocare collection in Big, Crystal, Townline and Rangeline Lakes and the lab analysis will allow for a clear understanding of how a lake's nutrient content, specifically phosphorus, has changed since European settlement in each lake's watershed. If nutrient levels have changed significantly, that change is likely anthropogenic (caused by human activity), so there may be an opportunity to reverse the effect or at least minimize it. Further, and maybe more importantly, if there is strong evidence that current nutrient conditions are similar to those found before European settlement, then TLWA would know that the current conditions are natural and the opportunities to lower nutrient levels are very limited.

The collected sediment core samples will cover a time period of the last 130 years. The top one centimeter of sediment represents present day conditions. A sample near the bottom of the core represents pre-European settlement conditions. To assure that the bottom sample represents pre-settlement conditions, a portion of it will be analyzed for the isotope, lead 210. This isotope remains at detectable levels for about 130 years, so, if concentrations are negligible, we know that the sediment was deposited over 130 years ago. Diatoms (microscopic algae with a cell wall made of decay-resistant silica) will be analyzed in the samples top to bottom. Diatom species can be differentiated based upon their elaborate silica shells. Different species of diatoms grow under different environmental conditions, shedding light on how a lake has changed over time.

The analysis will be useful in determining specific environmental changes that have occurred in the lake, especially changes in phosphorus concentrations over time. The diatom analysis can also shed light on changes in general macrophyte coverage (plants that grow in or near water), pH, nitrogen and phosphorus at the present time compared to pre-settlement times. Understanding how phosphorus concentrations and other conditions have changed or not changed since pre-settlement, aids in the development of realistic goals for controlling nutrients and plants within the lake as a part of the management planning process.

Three Lakes Waterfront Association

Adopt-A-Shoreline Program

By Bruce Renquist

Adopt-A-Shoreline is organized to monitor the 109 miles of shoreline on the Three Lakes Chain of Lakes. The focus is on early detection of Aquatic Invasive Species. Once AIS is identified, a rapid response protocol is initiated to curtail unlimited spread and colonization.

The monitoring process involves an individual or team of volunteers being responsible for a designated section of shoreline on their lake. Using a small boat, pontoon boat or kayak, on a calm and sunny day, they carefully search the water from the shallows out to a depth where aquatic plants no longer grow. They also note the shoreline where Purple Loosestrife or Pale Yellow Iris might be present. Using a patterned and a slow meandering course, the area is thoroughly inspected. This procedure is carried out five or more times over the course of the summer, beginning early in June and ending in September when aquatic plants begin dying off. The tools commonly used are polaroid sunglasses, garden rake, a small butterfly net or scoop, a bucket or

pan of water, ziploc bags and a notebook. Laminated graphic sheets clearly illustrating various plant species are provided to aid in the identification of both native plants and harmful invasive species. Suspect samples are placed in a water filled bag and the location of the find is carefully noted. The sample along with the location is dropped off at a local bait shop, Joking Joe's. It is prescreened by a local biologist and if it remains a concern is turned into the DNR for further analysis.

Annual professionally staffed workshops are coordinated and conducted by the Oneida County Land and Water Conservation Department to sharpen identification skills and inform volunteers on the science behind the fight to prevent the spread of invasive species. Information is also provided on the ever growing list of new species which threaten the Northwoods lakes. Continuing education is available throughout the summer to individuals and small groups wishing to maintain a high level of confidence in their ability to identify AIS.

There are currently 123 volunteer monitors on the Three Lakes Chain.

Studying Eurasian Water Milfoil

Lake Captain Program

Each lake on the Three Lakes Chain has a designated Lake Captain and in some cases the responsibility is shared by co-captains. These volunteers have an essential role in the success of Adopt-A-Shoreline and have been identified as leaders on their lake. The scope of their work includes the long term health of their lake. They are the all important conduit between the Three Lakes Waterfront Association, volunteer monitors and lakefront property owners in issues regarding the ongoing Lake Management Program and other initiatives regarding their lake.

Lake Captains are responsible for recruitment of volunteer monitors, aiding monitors, establishing workable shoreline zones for monitoring, maintaining up-to-date educational materials, informing monitors about workshops and organizing continuing education opportunities on their lake. The distribution of end of the year reporting forms and making sure the forms are filled out and properly submitted at the conclusion of the summer is an important function of each Lake Captain.

TLWA

Anticipation of Spring

Whoops!

LAKE CAPTAINS:

BIG - Ed Cottingham	715-546-4298
BIG FORK - Kathy Olkowski	715-546-2002
BIG STONE - Rob Jahnke	602-885-0136
CRYSTAL - Mike Donovan	715-550-8282
DEER - Jay Teagle	630-460-5362
DOG - John Rothwell	414-403-7396
FOUR MILE - Bob Pfeffer	262-284-2333
ISLAND - Doug Scheffen	715-546-2732
JULIA - David Mitzer	715-546-2583
LAUREL - Mark Wallersverd	420-344-0698
- Charles Brady	651-408-2505
LITTLE FORK - Bob Lee	715-546-3674
LONG - Jack Werner	715-479-9094
MAPLE - Jim Skelton	715-367-6638
MEDICINE - Bruce Renquist	715-546-2401
MOCCASIN - Ryan Lamon	715-546-2401
PLANTING GROUND - Norris Ross	715-546-2250
RANGE LINE - Kelly Wranosky	715-546-8178
ROUND - Bob Bichler	715-546-3481
- Mike Freehill	715-546-3059
SPIRIT - John Lake	715-546-2117
THOROUGHFARE - Paul Matthiae	715-546-3453
TOWNLINE - Keith Mueller	715-546-3688
VIRGIN - Bob Borek	715-546-3457
WHITEFISH - Charlie Volk	715-546-3845

Clean Boats/Clean Waters

By Bob Agen

For the past 12 years, the TLWA has been checking boats and educating boaters and fishermen about invasive species. This coming summer will be no different, and we'll work to cover the busiest landings as much as possible with a combination of volunteers and our paid interns. I am looking for volunteers to work two-hour shifts at the following landings: Big Stone Lake on Hwy 32 (Sunset Grill)…Big Lake on North Big Lake Loop…The Laurel Lake Campground, and the Medicine Lake landing on Hwy X. If you can give us some hours this coming season we'd all appreciate it. I can be reached at 715-546-3893.

For those of you who are interested, we will be holding a workshop for CB/CW volunteers with Oneida County AIS Coordinator Stephanie Boismenue on May 25th from 5-6:30PM at Cy Williams Park in downtown Three Lakes.

Unfortunately, we've had a shrinking volunteer base in recent years. We could use your help.

Unfortunately, we've had a shrinking volunteer base in recent years, but we've been able to make that up by employing summer interns from the Three Lakes school system. We've been very lucky to have had a couple of interns that are on course to graduate with degrees in fields related to natural resources.

Derek Thorn is seeking a double major in Water Resource Management and Wildlife Ecology at the University of Wisconsin-Stevens Point. Jenna Miles is making the study of shoreline plants and their impact on the ecosystem her area of study at Northland College in Ashland.

The TLWA and its members can all be proud of what Jenna and Derek have accomplished.

Mark Your Summer Calendar

- FREE boat wash anytime this summer - Memorial Day through Labor Day
- Clean Boats/Clean Waters workshop with Oneida County AIS coordinator Stephanie Boismenue…. Cy Williams Park shelter. May 25th from 5-6:30 PM
- Shoreline Native Plants Seminar...Three Lakes Center for The Arts, June 14th at 7:00 PM Sponsored by Demmer Memorial Library
- Fourth of July Parade – get your floating boat key ring
- TLWA Annual Meeting – join us for 50th anniversary champagne – Thursday, July 6th Reiter Center, 6:00 PM
- Adopt-A-Shoreline Workshop: Aquatic Invasive Species – Friday, July 7th, Bonnie's Lakeside – 1:00 PM
- Three Lakes Historical Museum: Special interactive display "Great Lakes, Small Streams" July 18th-29th
    - How water has shaped Wisconsin's past and will continue to shape its future.
- Lake Management Planning Meeting – Planting Ground and Rangeline Lakes – Wednesday, July 26th, Reiter Center – 6:00 PM
- Watercraft 100-year anniversary celebration Saturday, August 5th, Watercraft

Lake Management Plan

By Norris Ross

In order to gauge the health of a lake over time, baseline data for the lake must be documented. This can include many types of data such as fish population trends, aquatic plant population locations and densities, watershed condition analysis, shoreline development patterns and water quality (chemical) analysis. Once documented, the findings provide the necessary data for comparison for future generations as studies are repeated.

Since 2005, TLWA has been working on a comprehensive lake management plan for the Three Lakes Chain and each individual lake within the Chain. To date, the reports for Long, Virgin, Whitefish, Thoroughfare, Big, Dog, Crystal (Mud), Deer, Big Stone, Laurel, Four Mile, Big Fork, Moccasin, Spirit, Maple, Round, Island and Townline Lakes have been completed. Planting Ground and Rangeline Lakes will be completed in 2017. Trends for the entire Chain are being incorporated in an overall Chain Management Plan as work continues north up the Chain in Phase VIII of the overall plan.

Grants have been secured to offset major portions of the project costs to date. Professional limnologists, experts in Northern Wisconsin lakes, are doing the field work and drafting each lake plan in collaboration with citizen committees from each lake. Each lake plan identifies important issues for that lake, and future action plans are outlined. Follow-up studies and action plans have now been started on some of the earlier completed plans. This project is very ambitious and complex, and, when completed, will likely exceed the million dollar level.

The plans complete to date are available for review at the Three Lakes Demmer Library and on the web at *tlwa.org*.

Wanna' Raise Some Beetles?

Galerucella calmariensis
Black-margined loosestrife beetle

A few bugs go a long way

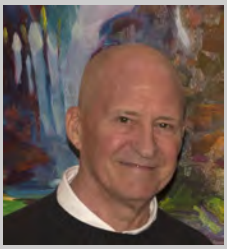
You will recall an article in the TLWA Spring 2016 newsletter regarding efforts to control the populations of purple loosestrife on the Three Lakes chain… Big Lake, Big Stone, Island, Planting Ground, Round, and Spirit Lakes. This is a reminder that TLWA has a kit available for removal of wetlands invasives including tools for digging and pulling, as well as protocols for the included herbicides.

Larva of Galerucella calmariensis Black-margined loosestrife beetle

The kit can be checked out at Anchor Marine for personal use.

In addition, the Oneida County AIS program is looking for volunteers to help rear the calla beetle as part of the state-wide effort to control purple loosestrife. You can read about it in the article "Help Wanted, Raise Beetles". If you are interested in raising some beetles, contact Stephanie Boismenue at the Oneida County AIS office at: sboismenue@co.oneida.wi.us or at 715-369-6293. The article is available at the following link: http://lakes-l.blogs.govdelivery.com/2017/03/help-wetlands-raise-beetles.

Membership Strong But Growth Is Slowing …



By Mike Freehill

TLWA sends an enthusiastic "Thank You" to all of our members. Your support is greatly appreciated.

Membership growth has been excellent over the past 5 years. Paid-Up memberships grew from 657 in 2012 to 900 today. That's great news, but diminishing returns have been stepping in. As a result, we experienced our first decline of -2% this past year.

Encourage Friends and Neighbors to Join!

We plan to reinvigorate our outreach for new members with particular focus on those lakes where TLWA members represent less than 50% of total lake property owners. You can help by encouraging your friends and neighbors to join. (See Membership Charts on next page)

Dissolved Oxygen and Temperature Meter

By Fred Knoch

I would like to take this opportunity to provide information about the scientific device that the Three Lakes Waterfront Association has purchased thanks to the successful receipt of a Small Lakes Grant from the Wisconsin DNR. The grant monies were used to acquire a Dissolved Oxygen and Water Temperature Meter. The association has had the device available for public use beginning with the Summer season of 2016. The meter, although it is a highly sophisticated scientific instrument, is easy to use for even the most casual of users with no prior knowledge of scientific instrumentation.

The meter is available for public use at the Edward Demmer Memorial Library in the town of Three Lakes, Wisconsin. All one needs to do is check out the device from the library much like checking out a book. An instruction sheet is provided with the meter to make it easy to use by individuals of any age or experience. Since the meter has been available, five individuals have used it for a total of 33 sampling hours. The association hopes that in the future more people will take advantage of this unique opportunity.

So why would anyone be interested in using this instrument? The data taken from the meter can be useful in identifying the thermocline of water temperature in any body of water. This data is

(continued on page 15)

End of Year	# of Paid-Up Members	Yr-to-Yr Increase (Decrease)
- 2012	657	-
- 2013	803	+22%
- 2014	905	+13%
- 2015	922	+2%
- 2016	899	-2%

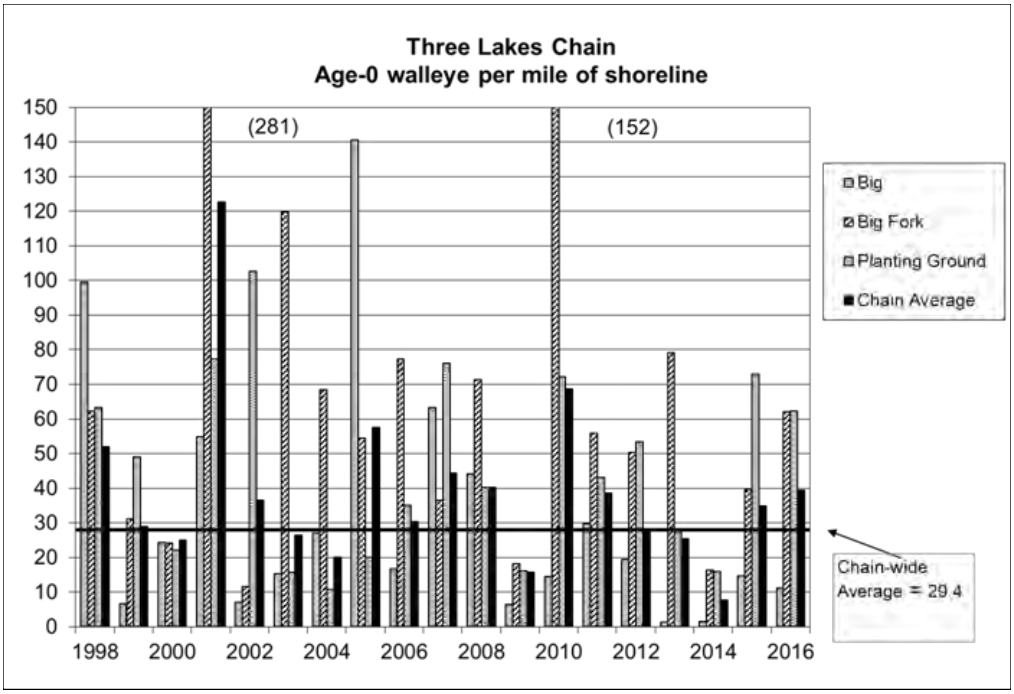
	Total Lake Property Owners	Number of Paid-Up TLWA Members	Paid-Up TLWA Members as % of Total
Virgin Lake	81	58	72%
Townline Lake	56	34	61%
Long Lake	120	70	58%
Little Fork Lake	77	43	56%
Four Mile Lake	22	12	55%
Round Lake	36	19	53%
Big Fork Lake	127	65	51%
Laurel Lake	105	53	50%
Maple Lake	34	17	50%
Whitefish Lake	48	23	48%
Medicine Lake	88	42	48%
Planting Ground	233	107	46%
Island Lake	98	45	46%
Dog Lake	63	26	41%
Spirit Lake	32	13	41%
Big Stone Lake	139	54	39%
Crystal Lake	33	12	36%
Range Line Lake	42	14	33%
Thoroughfare	51	15	29%
Deer Lake	146	42	29%
Big Lake	244	60	25%
Other Lakes	na	46	na
Off-Water Businesses	na	29	na
TOTAL	**1875**	**899**	**48%**

How's the Fishing?

Spend more time on the water

Like most endeavors, fishing success usually goes to those who spend the most time doing it. And, spend their time doing it during the best times of the day. Nothing new there; but many of us go out and flail away at high noon, when we should be going out in the low-light periods of early morning and evening.

Wisconsin DNR Fisheries Supervisor John Kubisiak has provided some insight into what is happening on our waters in terms of walleye and muskie reproduction success, and stocking. The DNR does not stock walleyes in the Three Lakes chain, as there is good natural reproduction in our chain, but they do stock muskies. According to Kubisiak, either the DNR or the Great Lakes Indian Fish & Wildlife Commission has a fall shocking survey each fall on Big Lake, Big Fork and Planting Ground lakes to look at what they call recruitment…how many young fish are coming up. Data for other lakes on the chain is not available every year, so he used whatever lakes were available to create a chart showing "chain average".



John says Young-of-Year walleyes (YOY) are typically 5-7 inches in length, born the previous spring. Each bar on this chart represents a boat (or sometimes two boats) shocking the lake shoreline at night. The height of the bar is the number of YOY walleyes captured per mile. He says they like to see YOY catch somewhere in the low-mid teens per mile as an indication of a yearclass that will produce a good fishery down the road. According to Kubisiak, we need one moderate to strong walleye yearclass every 3-4 years to maintain a good walleye popu-

Fishin' with Grandpa

Photo courtesy of John Kubisiak DNR

Photo courtesy of John Kubisiak DNR

(continued on page 15)

How's Fishing (continued from page 14)

lation. The fall survey shows consistent strong recruitment for walleye, and he says we know there is a high-density walleye population with somewhat slow growth. The current angling regulation for walleye (at the time of this writing in early April) is no minimum length limit, but only one fish over 14 inches may be kept. This is designed to focus harvest on over-abundant small walleye, and provide some protection to the fish that make it to a little larger size. In this type of high-density fishery, harvested walleye typically average about 12 inches in length. During the 2014 angler creel survey on the Three Lakes Chain, average size of harvested walleye ranged from 11.7 to 13.4 inches.

We have a high density walleye population with slow growth.

What about muskies you ask? The DNR is stocking the chain every other year with one large fingerling muskellunge for every 4 acres of water. These large fingerlings are 9-12 inches in length. They stocked 1,562 muskies in the Three Lakes Chain in 2016. Kubisiak says this is a bit lower than his usual goal, but it has been producing an action fishery. The chain has good numbers of fish, but moderate size. With muskies, he says you can have either size or numbers of fish, but you rarely see both. The chain still produces a few trophy-size fish (in the 50 inch range) but average overall size of 320 fish in the 2014 survey was 34.1 inches. He adds that in addition to the stocking, there is a moderate amount of natural reproduction in the chain.

Muskie Stocking 2016

Fish average 12.4 inches

Big Fork Lake	315
Big Lake	260
Big Stone	137
Island	111
Long	154
Medicine	151
Range Line	161
Townline	161

Photo courtesy of John Kubisiak DNR

So, it appears as if the fish are there. Now we all just have to commit to spending a little more time on the water this coming season to catch them.

Dissolved Oxygen(continued from page 12)

applied to determine the depth at which dramatic changes in dissolved oxygen occur. Above the thermocline abundant oxygen is present, below, oxygen levels are significantly reduced. This data can be used to evaluate where fish may be located in a lake system. During the summer, the depth at which the thermocline forms changes as lake water temperature warms, therefore the depth at which fish may be located changes. The device may therefore be useful to anglers. People who are interested in the trophic state of lakes will also find this instrument valuable. The determination of dissolved oxygen levels defines the trophic condition of a lake, which in turn can be useful in identifying patterns of environmental contamination influencing the lake ecosystem. The meter has, therefore, many potential uses and applications, attractive to a broad base of interested persons, and is easy to use.

It is the intent of this article to generate more interest in the use of the dissolved oxygen and temperature meter. The first season of use was successful, and we hope more individuals would take advantage of the availability of the instrument as offered by your association.

Safe Boating On The Chain

National Safe Boat Week May 20-26th

By Captain Jon Willman

Before you and the family hop aboard your boat this summer, it's always a good idea to take a few minutes to check it over - make sure it's in good mechanical condition. It's also important for you, as the skipper to know the basics of boating safety and "rules of the road" as they apply to the waters of the Three Lakes Chain. There is plenty of good information available from the Wisconsin DNR covering just about everything you need to be informed and legal. And a big thanks to the Town of Three Lakes for the manpower and resources to place more than 170 channel markers every year to help keep us "off the rocks." All that being said, following are a few thoughts based on my thousands of hours on the water running just about everything that floats - and surviving lots of dumb mistakes.

The US Coast Guard keeps track of boating accidents and the numbers are sobering. 2015 saw over 4,000 accidents nationwide resulting in 626 deaths and 2,613 injuries - $42,000,000 in damage. Think it can't happen here? Wisconsin leads the midwest in boating accidents and is ranked number 11 nationally. Pretty sad when you consider our boating season is only about five months long.

Top Ten Causes of Boating Accidents:

- Operator Inattention
- Operator Inexperience
- Improper Lookout
- Excessive Speed
- Machinery Failure
- Alcohol Use
- Navigation Rules Violation
- Wake Related
- Hazardous Waters
- Weather

Look around and be aware.

When operating a boat, what's going on behind you is just as important as what's happening out front. A good captain has always got his, or her, head on a swivel - aware of other boat traffic. Here's an example we can all relate to: You're on the pontoon slow cruising with friends, tunes playing and you're just about to deliver the punchline of a great joke when suddenly, from out of nowhere, a metal flake missile blows by you at just under the speed of sound. 99.9% of the time the other boat or PWC passes without incident - except for maybe you shaking your fist and muttering a few choice expletives. No harm done right?. But, what if you had decided to turn your boat around at that exact moment - without looking behind you? Believe it or not, you could be responsible for the accident. As your boat is being overtaken, you have an obligation to

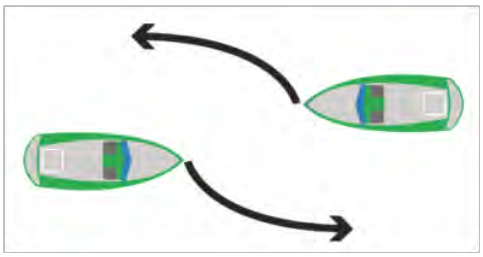
maintain speed and heading until the other boat is safely past. Seems every year, we read about some unfortunate skipper and his passengers who pay an awful price for a few seconds of inattention.

(continued on page 17)

Passing and being passed.

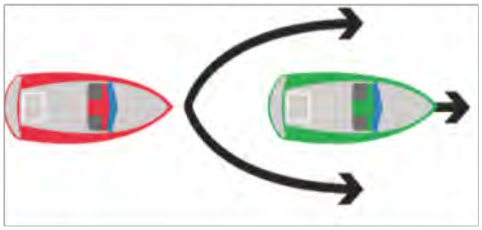
On the water, we don't use the term "right of way" to determine who should do what when we encounter another boat. The terms "stand-on" and "give-way" vessels are used to determine who must maintain course and speed and who must take early and substantial action to avoid collision. The important thing to remember is all operators are equally responsible for taking action as necessary to avoid collisions.

Head-on situtations - neither boat is the "stand-on" vessel so both operators must alter course to the right. It's always a good idea



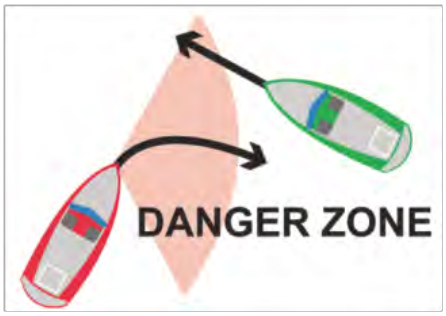
to make your course change very obvious and early. Playing chicken with tons of fiberglass or aluminum traveling 30 miles an hour is just plain dumb.

Overtaking and passing another boat in a narrow channel can be challenging and requires extreme caution. Never ever assume the other operator knows you are there and your intentions. In a narrow channel, the rules of the road state you should announce your intention to pass another boat with a sound signal and the other boat should acknowledge their agreement with the same sound signal. The reality is almost no one uses sound signals to warn other boats - especially on



inland lakes. The boat being passed is the "stand-on" vessel and should maintain course and speed. The passing boat is the "give-way" vessel and is required to make course and speed changes necessary to avoid collision while maneuvering to pass. You need to consider the possible actions the other skipper could take while you are passing including suddenly turning, slowing or stopping. Remember, his wake will affect your maneuverability. One last thing on passing - don't be in a hurry to cut back over in front of the boat you just passed.

In crossing situations, a boat approaching from your left is the "give-way" vessel and you are



the "stand-on" vessel and should maintain course and speed. If you are approaching a boat and they are on your right, you are the "give-way" vessel and required to change course, slow down or stop in order to avoid collision. In other words, if you are approaching a boat ahead and to your right, stay out of their way. It's a good time to make a significant course change and slow down or stop if necessary.

The Laurel Lake Channel

Just because you can run through it, does not mean you always should..!

Overtaking and passing other boats in confined areas presents a whole different set of boating safety dynamics. Chances are you've been through the stretch

of water between Big Stone and Medicine Lakes known as the Laurel Lake Channel. The west end of the channel can be particularly challenging. At any given time during the summer, right or wrong, you may find pontoons cruising, wakeboarders waking, waterskiers waterskiing, performance boats performing, PWCs

(continued on page 18)

Safe Boating (continued from page 17)

doing what they do and fishing boats running, drifting or anchored on the sides of this curvy, narrow stretch. Not to mention the occasional sail boat, paddleboat, canoe or kayaker trying to stay out of the way and make it through without incident. You get the idea. That's a lot of fiberglass, wood and aluminum all occupying the same confined area while moving in different directions, at different speeds and operated by individuals of widely varying experience, abilities and disposition. Common sense, courtesy and caution should tell us to slow down and stay close to the markers on the right side of the channel. It's not a great area to be pulling a tube or waterskiier, wakeboarding, passing or wake

jumping either. Just because you can legally run through this area on plane does not mean you should when it's packed with boat traffic.

The Town of Three Lakes has not posted speed or wake restrictions for the Laurel Lake Channel in effect turning it into a "every man/woman for him or herself area." In the absence of speed limits, it's up to all of us to exercise common sense, caution, courtesy and control in this area.

A few things to remember -

1. Remember to always check your six before changing course or slowing down.
2. Remember when in doubt or a situation looks scary, check your six and slow down.
3. Remember never assume anything on the water - especially what the other guy is going to do.
4. Remember to always approach a dock or another boat very slowly - like your motor was about to quit. Keep hands and feet in the boat until safely stopped - fiberglass is cheap compared to broken body parts.
5. Remember the law of gross tonnage - doesn't matter who is right or wrong or who has the right of way. The bigger boat always wins.
6. Remember the four C's - Common sense, Courtesy, Caution and Control.

Jon WIllman has worked in the boating business for more than 40 years and holds a USCG Master Near Coastal license. He's delivered yachts from Florida to New York, to the Great Lakes and points in between, served on the staff of the Wellcraft Offshore High Performance Boot Camp, captained a 50' trawler in the Bahamas for several seasons and worked as a marine photography photo boat captain. He spends summers on Virgin Lake and winters in Southwest Florida with his partner Linda Woiak. Together they fish a 22' Sea Hunt center console both inshore and offshore.!

Meet the New Director

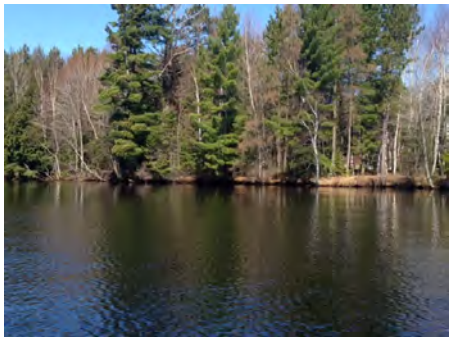
TLWA is happy to announce the appointment of Lynn Zibell of Virgin Lake to fill a vacancy on the board of directors. Lynn has been coming to the area since she was 5 years old. She and her husband Larry bought a timeshare at The Northernaire years ago, and followed that up with a permanent home on Virgin Lake. She will be working on the Adopt-A-Shoreline and AIS Rapid Response Dive Team programs as well as volunteering with the buoy program on Virgin Lake marking the patches of Eurasian Water Milfoil.

Three Lakes Town Tidbits

By Town Chairman Jeff Bruss

Proposed Big Lake Public Swimming Beach

The Town of Three Lakes is working with the Wisconsin DNR to transform state-owned property on North Big Lake Loop into a public swimming beach and recreational area. The property already offers a public landing with restrooms and blacktop parking lot. The proposed plan would improve property west of the boat landing to include a permeable parking area, picnic tables, pavilion, grass recreational area and swimming beach. The property lies on the north shore of Big Lake and features just over 720 feet of prime sand swimming frontage. Former Town Board Supervisor and current Plan Commission member Pat Volk is spearheading the project.



The Buoys of Summer

The town has been busy positioning channel and marker buoys for the upcoming boating season.

While everyone appreciates the navigational aids, the budget for maintaining and replacing buoys has been increasing at an exorbitant rate. Each season the town is forced to replace buoys that have been damaged, vandalized or stolen.

The current annual town budget for buoys is approaching $10,000. A single lighted buoy runs approximately $400 and the town replaces several each season. A

common problem also includes theft of the lights from the tops of the buoys. Thanks to the Three Lakes Waterfront Association for its continued donations to maintain and replace these buoys.

The town is actively looking for ideas, input and assistance from homeowners and boaters in reducing the amount of theft and damage. One possible solution is an "Adopt a Buoy" program where individuals, businesses or associations could adopt buoys and be responsible for their care and replacement. If you have other ideas or suggestions, please contact the town offices at information@townofthreelakes.com or 715-546-3316.

Laurel Lake Campground

The Town of Three Lakes renewed its agreement with the USDA Forest Service to maintain operation of the Laurel Lake campground. This agreement allows the campground and boat landing on Laurel Lake to remain open. The Town of Three Lakes absorbs the general maintenance responsibilities while the Forest Service continues to promote the facility through its available resources. Despite the majority of the operational burdens being passed on to the town, the Forest Service still collects the revenue. It is the town's position that the campground is an asset to the community and welcomes donations to keep the current arrangement possible.

Native Plants:

Landscaping Options for Enhancing Water Quality and Life

Join Patrick Goggin, Lake Specialist from UW-Extension Lakes College of Natural Resources on Wednesday, June 14th at 7PM at the Three Lakes Center for the Arts theatre in downtown Three Lakes for this informative program. Sponsored by the Demmer Memorial Library, this presentation will teach you why lakeshore habitat is important to lake health and how we all can go about living in a more lake-friendly way. Discover which native plants are best suited to improve water quality and enhance property.

For those interested in a lakeshore habitat improvement project, funding to help your project may be available by applying to:

Patrick.Goggin@uwsp.edu or Michele Sadauskas at msadauskas@co.oneida.wi.us.

Scholarships:

The TLWA Board of Directors has elected to award each of our past summer interns, Jenna Miles and Derek Thorn, with Directors Scholarships in the amount of $1500. We are glad to contribute to their continuing education.

Interns Jenna & Derek

2017 Board of Directors

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Vice President	Norris Ross
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Directors

Bob Agen	Bruce Renquist
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AIS Rapid Response Dive Team	Fred Knoch/ Lynn Zibell
Clean Boats / Clean Waters	Bob Agen
Terrestrial Species	Paul Matthiae / Jerry Schiedt
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Website	Paul Wussow
Scholarship	Jerry Schiedt
Shoreland Zoning	Norris Ross
Water Safety	Ed Cottingham

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

www.TLWA.org