THE RAG

SPRING / SUMMER 2023

NEWS BITES

VITAL INFO ON OUR AREA EMS

from the Winchester Town Board

As our neck of the Northwoods grows, the ability to provide consistent, sustainable, high-level Emergency Medical Services (EMS) is a necessity. After careful study and collaboration between Presque Isle, Winchester, Boulder Junction and Manitowish Waters, a plan has been developed to achieve this. To learn more, please plan to attend one of these meetings:

WHERE:	Manitowish Waters Community Building
DATE:	Tuesday, June 6 — 6:00 pm
ZOOM link:	CLICK HERE
CALL-IN #:	646.931.3860
MEETING ID:	878 7526 7768
PASSCODE:	285817

WHERE:	Presque Isle Community Building
DATE:	Thursday, June 8 — 6:00 pm
ZOOM link:	CLICK HERE
CALL-IN #:	312.626.6799
PASSCODE:	fmZ3TQ

UPCOMING TLCA EVENTS

2023 TLCA MUSKY CONTEST
June 17
7:00 am - 4:00 pm

2023 TLCA ANNUAL MEETING
July 1 — 9:00 am
Winchester Town Hall

2023 TLCA FUN DAY
July 22
Golf or paddle in the am; picnic at Winchester town park starts at 5:00 pm
GOLF SPOTS ARE LIMITED; RESERVE TODAY!

To reserve your place and for more info, visit
thetlca.org/events

CALLING ALL VOLUNTEERS!

ROAD CLEAN-UP
May 27 — 10:30 am
Junction of New O and Old O

FLOWER BOX WATERING
May 27 - October 21
The bridge at the Divide

INVASIVE SPECIES MONITORING
Ongoing!

For more info and to volunteer, visit
thetlca.org/tlca

CLEAN WATER EFFORTS

TURTLE CHAIN WATER QUALITY

by Gary Engstrom & Steve Budnik

The water quality of our lakes is important to all of us who are members of the TLCA. We are fortunate that previous residents took an active role in monitoring the Chain's water quality through the Wisconsin Department of Natural Resources (WDNR) Citizen Lakes Monitoring Network (CLMN) program. We have water quality data (Secchi Disk Clarity, Chlorophyll A, Total Phosphorous) going back for several decades on North and South Turtle. We added Rock Lake to the CLMN program in 2020 and are now collecting water quality data on Rock Lake in addition to historical water clarity (Secchi Disk) information.

Many residents and TLCA members are interested in how the Lake water quality on the Chain has changed over the past few years. This article will address that question by looking at three (3) key water quality parameters that are measured by the State, Secchi Disk (Water Clarity), Total Phosphorus (Critical Nutrient) and Chlorophyll A (Algae Component) over the past three (3) years on Rock and North Turtle Lakes.

Water clarity is measured by lowering a Secchi Disk (to right) into the water until the disk can't be seen (black and white zone contrast). The depth in feet is recorded as the "Secchi Disk" reading.

Table 1	2020	2021	2022
June	6.0	6.5	6.25
July	5.5	6.75	5.75
August	5.5	6.0	5.5

Table 1 shows the Secchi Disk (SD) readings for Rock Lake over the past three years. The readings are taken at the deep hole in June, July and August at a minimum.

Table 2	2020	2021	2022
June	-	8.0	7.5
July	7.25	8.5	7.0
August	8.25	9.0	8.0

Table 2 shows the corresponding data for North Turtle, also taken at the deep hole.

All of these readings are in feet.

There are a number of variables that can affect these annual clarity readings including sampling date during the month, water level, rainfall, temperatures and wind conditions. The Turtle chain also has natural tannin staining from the watershed which colors the water to a tea color. Although this has no impact on the water quality, it does reduce the SD values.

Looking at the SD data, it is apparent that Rock Lake is consistently between 5.5 and 6.75 feet with no significant trend. North Turtle appears to stay relatively consistent in the 7.0 - 9.0 range.

CLEAN WATER EFFORTS

Total Phosphorus (TP) is the limiting nutrient in our lakes which controls bacterial and algae growth. Bacteria consume oxygen which can impact other aquatic species and high levels of green or blue-green algae can cause aesthetic problems. Blue-green algae can also be toxic to some aquatic species and animals.

Table 3	2020	2021	2022
June	24.5	24.0	19.7
July	28.6	23.8	26.4
August	27.3	23.2	30.4

Table 3 shows TP in parts per billion (ppb) for Rock Lake over the past three years. The TP levels appear to be fairly consistent in the mid to high 20s. Rock being the smallest and shallowest of the lakes, it sees a significant contribution of P caused by annual organic loading such as falling leaves in the fall.

Table 4	2020	2021	2022
June	16.7	18.0	11.9
July	17.4	14.9	14.4
August	15.7	13.0	

Table 4 shows the corresponding Total P levels for North Turtle Lake, in parts per billion. The Phosphorus levels for North Turtle are stable and consistently below 20 ppb which is considered excellent.

The last major water quality parameter that we monitor is Chlorophyll A which is an indication of the algae suspended in the water column. The analysis is performed on the filtered residue. Algae contains chlorophyll while other suspended material and microorganisms do not.

Table 5	2020	2021	2022
June	4.76	10.1	6.97
July	10.7	10.9	8.8
August	15.8	15.4	18.8

Table 5 shows the Chlorophyll A in Rock Lake in parts per billion (ppb). The results show the increasing levels that would be expected as summer progresses and the water warms with more sunlight entering the water (longer days). The Chlorophyll A levels are still very consistent from year to year and relatively low. Even though Rock Lake is relatively shallow, the tannin staining prevents sunlight from penetrating much below 6 feet. Algae requires sunlight to grow so this helps regulate algae growth.

Table 6 shows the corresponding Chlorophyll A results for North Turtle Lake, again, in parts per billion (ppb).

Table 6	2020	2021	2022
June	2.56	5.35	4.84
July	3.76	2.92	6.06
August	5.07	4.02	

The Chlorophyll A levels in North Turtle are again very stable and low as would be expected in the cooler and deeper waters of the lake. The tannin staining helps to limit the penetration of the sunlight beyond depths of about 8 feet.

Overall, the water qualities for Rock and North Turtle have been stable and are in the good to excellent classification for comparable lakes in Wisconsin. We did not have access to complete data for South Turtle at this time, but we would expect similar results based on the numbers generated for 2020 and 2021.

CLEAN WATER EFFORTS

WATCH OUT FOR AQUATIC INVASIVE PLANTS THIS SUMMER!

by Melinda Myers

In February, I asked for your help spreading the word about the impact aquatic invasive plants have on Wisconsin lakes and waterways. Now that summer has arrived and we are spending more time outdoors, you may encounter gardens and natural spaces where these plants are growing. So once again, I am asking for your help.

Start by familiarizing yourself with the more common aquatic invasive plants — you may be surprised to discover some beautiful plants are actually problem plants that need to be removed.

• See **Regulated Aquatic Invasive Plants in WI** and **Common Wetland Invasive Plants in WI** for pictures of restricted and prohibited species.

• The Wisconsin Invasive Species Calendar from the University of Wisconsin - Madison First Detector Network provides a timely reminder of invasive plants to watch for throughout the season based on their life stage and visibility.

• A new video "Identifying Eight Aquatic Invasive Species in Wisconsin" provides images and identification clues you may find helpful as you enjoy the outdoors and tour gardens.

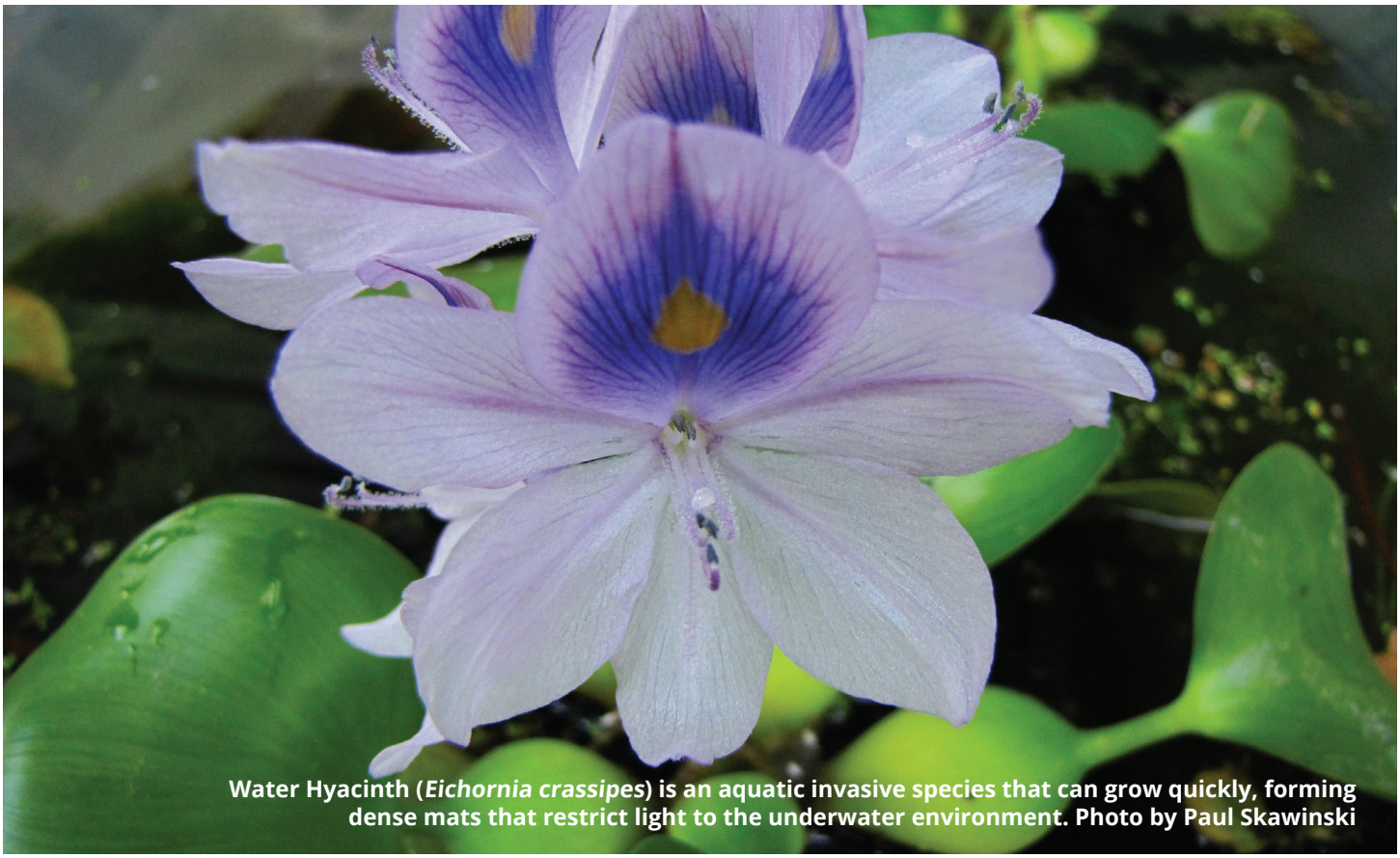
• For more detailed information and images of native and invasive aquatic plants, see Paul M. Skawinski's book ***Aquatic Plants of the Upper Midwest – Fourth Edition.*** It is available from the **Extension Lakes Online Bookstore** where you can also find the updated Wisconsin AIS Early Detector Handbook.

• To learn more about the control methods for invasive plants, contact your regional WI DNR AIS Coordinator **here.**

If you discover aquatic invasive plant populations in public spaces and waterways, report them to the Wisconsin DNR so they can contain and manage the problem. You'll find the details for documenting and reporting aquatic invasive species on the **WI DNR's Invasive Species Reporting page.**

Also, watch for invasive plants as you visit and consult with gardeners this summer. When invasive plants are found be sure to make it into a learning opportunity. Assure the gardener that many people have purchased plants, unaware they'd eventually become a problem for native plants, wildlife, and beneficial insects. More gardeners are purchasing plants online, increasing the risk of prohibited and restricted plants finding their way into Wisconsin.

CLEAN WATER EFFORTS



Water Hyacinth (*Eichornia crassipes*) is an aquatic invasive species that can grow quickly, forming dense mats that restrict light to the underwater environment. Photo by Paul Skawinski

And there are many new gardeners that may not be aware this problem exists. Help them understand that how we plant and manage our gardens has an impact on Wisconsin's natural spaces. Growing even one or two invasive plants in your garden, shoreline planting or pond can have an impact.

Invasive plants tend to be vigorous growers, reproducing faster than our native plants, and are more tolerant of adverse conditions. This allows them to quickly spread, take over and cause harm. Advise gardeners on how to dispose of invasive plants properly. Composting is usually not the best option. Most of us do not create compost piles that reach high enough temperatures to kill these weeds, insects, and diseases. To prevent them from invading natural areas it is best to bag and dispose of invasive plants in the trash.

The more people you reach with this important message, the more gardeners there will be helping in the containment and management of these plants. My AIS partners at UW Madison Extension and the WI DNR AIS remind us that "maintaining and restoring our waters and landscapes can reduce the impacts even when we don't have other management options for an invasive species. Reporting invasive species is a first step in containing their spread."

OUR COMMUNITY

JOIN US FOR ROAD CLEAN-UP, MAY 27!

by Laura Giffin

Come join the fun!!! Our association has adopted a section of County O from Old O to Star Lake Road. Let's meet at the intersection of Old O and County O at 10:30 AM. Wear boots if you have them, and gloves. Mosquito protection recommended. Safety vests and bags are provided. Many hands make for quick work and more fun! Please put it on your calendar and email me if you're planning to help out, but come even if you don't RSVP if it works out for you!
Sign up online HERE, email Laura, or just show up! Laura's email is ml.giffin.1984@gmail.com

COMING SOON TO THE DIVIDE: COLOR, JOY, SMILES!

by Laura Giffin

Bridge flower watering signup is available on our website. Please consider helping out for a week or more this season! There is now a pump at the bridge, so no more carting jugs from home or hauling a pail from the water's edge! If you can only do a partial week, feel free to contact me and we'll work it out! Can't wait to see what blooms will be in the boxes this year! Find me at ml.giffin.1984@gmail.com
Sign up online RIGHT HERE! Any questions?
Laura's email is ml.giffin.1984@gmail.com

SHOOTING FIREWORKS — PLEASE CONSIDER THE IMPACT.

By Laura Giffin

For many of us, celebration of the 4th of July just isn't complete without a grand fireworks display! But if you live on a lake and fire your display over and into the lake, please consider if, when and how many:

Quiet hours: Fireworks beyond 10 pm can be stressful and irritating to those who want to turn in. If you do fire them, please be considerate of your neighbors and the time.
Water quality: Fireworks debris can litter the local lakes, and ammonium perchlorate (a chemical released in fireworks) is known to contaminate ground and surface waters and threaten aquatic creatures.
Pets and wildlife: Many pets are afraid of loud noises, particularly fireworks. And the weeks surrounding the 4th are critical times for our nesting loons. Loud explosions can frighten them away from their chicks and nests.

So, a few suggestions: As an alternative, try taking in one of the fantastic shows done by the surrounding communities. Or limit when, where and how many you shoot, in consideration of your neighbors and our lakes. Thank you!

OUR COMMUNITY

WINCHESTER PUBLIC LIBRARY UPCOMING PROGRAMS

JUNE

1 Rose Page at 4 from WHIP-Invasive Species

2 Dick Logan, Vilas County Supervisor, answers questions

8 History Walk with Blaze

16 ADRC Elder Specialist Susan Corrieri 10 - 12

21 Scott Spoolman author of Wisconsin Books at 2

27 Discovery Center program for kids and adults 10:30 - 12

29 Bill Jamerson 90th Anniversary of the CCC at 4

JULY

6 Ted Ruhseh author of Ripple Effect at 4

7 Dick Logan, Vilas County Supervisor, answers questions

11 Discovery Center program 10:30 - 12

Blood Drive 12:30 - 4

13 Bob Kovar, photographer and author at 4

18 Blaze's program for kids 10:30 - 11:30; Set up Batik

19 Batik Class with Jeannie Schaffer

20 History Walk with Blaze

25 Discovery Center program 10:30 - 12

27 Jim Bokern, History of Area at 4.

AUGUST

1 Blaze kid's program 10:30-11:30

3 Lenelle Scholl Community Impact Group leader 4

4 Dick Logan, Vilas County Supervisor, answers questions

8 Diane Mockler Block Cube Bracelet class 12 - 4

10 Darrell Smith Pairing Beer and Wine with Cheese

SEPTEMBER

1 Dick Logan, Vilas County Supervisor, answers questions

15 ADRC Elder Specialist Susan Corrieri 10 - 12

OCTOBER

15 - 21 Wisconsin Science Week

NOVEMBER

17 ADRC elder Specialist Susan Corrieri 10 - 12

BOOK CLUB

June 19 — The Book Woman's Daughter
by Kim Michelle Richardson

July 19 — The Life and Times of Grandpa Charlie
by Leslie Allenspach

Aug. 21 — Miss Benson's Beetle
by Rachelle Joyce

Sep. 18 — The Thursday Murder Club
by Richard Osman

OUR COMMUNITY

THANK YOU to TLCA members for taking these amazing photos when the Aurora showed up late this winter.

Photo credits (and bragging rights): page 8 and lower page 9, photos courtesy of Mike and Rosemary Martin (Rock Lake).

OUR COMMUNITY

Top photo on this page courtesy of Bernie and Penny Klotz (Rock Lake).