

The newsletter of the Turtle Flaubeau Flowage and Trude Lake Property Owners' Association, Inc.

Whither the Flowage Walleye?

By Zach Lawson, WDNR Fisheries Biologist-Senior and Mike Hittle

The present status and future prospects for the walleye fishery on the Turtle-Flambeau Flowage are perennial topics of conversation among those who value this iconic fish. Anglers, members of the Fish Management Committee of the TFF-TLPOA, the WDNR, guides, local businesses-all have a stake in how the walleye fares. The issue was given a full airing at the most recent meeting of the association's Fish Management Committee, and we think that our readership might be well-served by a review of the main points that emerged during that discussion. This review will assess the walleye fishery as it now exists, including problems it faces, and then explore possible management practices designed to support a continuing, prominent role for flowage walleyes. The dominant perspective here is that of local WDNR fisheries personnel, though many other individuals and groups have actively participated in what has been an ongoing conversation. (That is not to say that everyone agrees with every aspect of what is in this article.)

The flowage conundrum: where we are now

The declining walleye population in the flowage is an established fact, known equally well to anglers and to WDNR fisheries personnel. According to survey data, in 1989 the flowage had 5.4 mature walleyes/acre. By 2016, that number had fallen almost by half, to 2.8 walleyes per acre. While the latter number compares favorably with numbers from many other walleye lakes, it remains part of a troubling downward trend--a trend not confined to the TFF and Trude Lake. Declining walleye populations are occurring across most of their range in the upper Midwest

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and even across the border in southern Canada. This bigger picture is surely helpful in gaining some perspective on what otherwise could seem to be a localized problem. That said, some caution must be exercised in seeking answers to flowage walleye problems by looking beyond our own waters. One primary reason lies in the very nature of the flowage.

The TFF falls into the category of impoundments, which the WDNR defines as artificially created standing waterbodies produced by dams on streams or rivers. These are, in effect, a particular form of drainage lake, and they differ in characteristics from seepage lakes or spring fed lakes, for example. Impoundments typically go through a three-step aging process. Immediately after their creation, they are excessively nutrient blessed thanks to newly flooded land areas. That phase is followed by a decline in nutrition, as excess nutrients break down, settle out, or are flushed from the system. The third phase is marked by a rise in nutrients, in effect a re-eutrophication. (As Jeff Malison has noted, this pattern is closely replicated in fish farms.) The flowage is most surely in the second or third phase of this process. Evidence to that effect can be found in sedimentation on some traditional walleye spawning sites, in the dramatic increase in vegetation in areas that previously had little or none, and in the burgeoning of panfish populations that find weedy haunts much to their liking. Put most starkly, the lake we have today is not the same lake that once sustained walleye populations of five or more fish per acre.

If the lake is changing, the same cannot be said of angler preferences. Via surveys and other forms of stakeholder input, anglers have made abundantly clear their preference for a flowage with a high-density walleye population. Indeed, the current WDNR Fisheries Management Plan embodies that objective, and fisheries staff feel obligated to do all in their power to create favorable fish community dynamics and habitat for walleyes. This task is not an easy one, given the complex dynamics of any lake and in this case, the changing nature of the flowage.

President's Letter

By Randy Schubert



As I prepare this President's Letter and wrap up 2022, we have already experienced our first snowfall of the season – such is life in Wisconsin. It was a spectacular summer and fall. Our annual meeting in June was well attended and we welcomed a few new members who recently purchased property in the area. We also kicked off our 2022 membership survey which was a great success (90% response to email survey). Thank you to everyone who participated and provided some very honest feedback. Please make sure that you take a minute to read the article in this newsletter. We learned a lot and will utilize the feedback and information in future planning to continue to improve our association. Here are a few other highlights of our work I would like to share.

- Our association was invited to provide input to the Regional Master Plan for the WDNR North Central Forest Region. Those familiar with the original master plan for the Scenic Waters Area will know that we have been operating under that plan since 1995. Currently, the WDNR is using a regional master planning approach which combines management plans for state properties within ecological regions rather than doing stand-alone plans for separate properties. This was an excellent opportunity for our group to provide our ideas, priorities, and local knowledge to the department as a partner in the planning process, hopefully improving the visitor experience for future generations who will enjoy the area.
- Invasive species control continues to be one of the most significant program areas our association is involved with. As various invasive species continue their expansion and spread through the watershed area, our association will continue to take a proactive and aggressive approach to respond to this.
- We continued our work on water quality and quantity and loon population monitoring all important data collection programs we support.

In conclusion, I am very excited about our association's contribution to the stewardship of the scenic waters area and collaboration with the local WDNR. We continue to encourage participation by our membership in the board of directors, chairing committees or our general workdays. Thanks for everyone's continued support and contributions to our association. Enjoy what is left of the beautiful fall as we transition to the colder months. If you spend your winters in the area, enjoy all the fun wintertime activities, before we know it we will be starting another season in the beautiful Northwoods. Thank you!

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The new walleye regulations, introduced in 2020, are an important step toward the goal of a high-density walleye population. Though it is too soon to make any definitive judgment on the longer-term effectiveness of these regulations (a comprehensive survey of the walleye

population is not scheduled until 2026), anecdotal evidence suggests that there are lots of walleyes around 12 inches present in the flowage, along with some larger fish as well. This evidence points to improving densities of the core of the population and improving size structure on the "top end." Although fall surveys do not target adults, an awful lot of 14-18" walleyes were seen this fall. Surveyors have seen this before and it aligns with observations we make in other strong walleye populations we survey. This is all to say that we hear anecdotal reports of improving numbers and size, and observations from the front of the work boat corroborate those claims.

The regulations in place are designed to make the most out of the current walleye population by restructuring the bag limit, but they do not directly address what might be one of the root causes of declining flowage walleye numbers. For some time, fisheries personnel have observed lower survival to maturity of what seemed like satisfactory numbers of newly hatched walleyes. In looking at data pertaining to different stages of the walleye's life cycle, and making some plausible inferences where data are lacking, it seems walleyes are holding up their end of things in terms of fertilized eggs and the fry that hatch from them. There are annual variations, of course, which may relate to water levels and temperatures, but on balance these even out. There is likely enough plankton for them to feed on in their earliest days, but what happens when they become fingerlings and begin feeding on fish? Is there enough food for them? Are there

too many competitors for the amount of forage present? Is suitable forage in the wrong place? Or perhaps the problem for juvenile walleyes is not a food shortage but predation on them by other fish. The competitor/predator relationship is complex, and no definitive data exist to help sort it out. We do not know to what extent predation on larval/juvenile walleye is occurring. However, potential predators/competitors have definitely increased in recent times. Looked at more broadly there is only so much fish food in a lake. The amount of total food will determine the biomass of fish in that lake. If you increase the pounds of bass, or muskies, or perch, or bluegills in a lake, it will lead to a decrease in the pounds of walleye. Managing for walleyes necessarily has implications for other species in the flowage ecosystem.

Looking ahead

As the preceding paragraphs suggest, the current positive and negative influences on the walleye population can best be described as mixed. Indeed, responses to the recent change in walleye regulations point to a better walleye fishery in the coming years. However, we probably shouldn't stop there; our bar for the TFF walleye fishery should be higher. Given that there are still many ways we can facilitate walleye over competing species and knowing that we will be forever fighting the shift in habitats that come with an aging flowage, now may not be the time to sit idle. If we really do want the TFF to be the best walleye fishery it can be, we still have a few concerning trends we might consider addressing.

For the last 20 years, we've documented booms in bluegill, black crappie, largemouth bass, and smallmouth bass populations. Recent research definitely suggests that increasing panfish and largemouth bass populations spell trouble for walleye fisheries. These species compete with or prey on walleyes at various stages of life, and at the end of the day simply make it harder for walleyes to thrive. And although studies suggest walleyes and smallmouth generally coexist without issue, we also have some diet data from the TFF that does show some limited diet overlap (thus smallmouth aren't exactly helping walleyes). Importantly, there is one commonality among these components of the fishery: they all have special protective regulations. Since the early 2000's, panfish have enjoyed a reduced 10 fish daily bag limit (and 10" minimum on black crappies). Largemouth and smallmouth benefit from a 14-18" protected slot, and smallmouth are additionally protected from harvest through the third Saturday in June on top of the conservative size limit. One might wonder: if we are trying to increase walleye numbers, why would we be protecting their competitors? No doubt the flowage's panfish and bass fisheries afford quality opportunities much prized by anglers; but if we really want walleye numbers to be closer to historic levels (i.e., 6 adults/ acre), the balance would need to come from somewhere, namely, competing species abundances would also have to shift toward historic levels. Although we aren't likely to ever see the fish community completely return to historic conditions due to changing habitats, there is an obvious change that could be explored: relaxing some of these very conservative bass/panfish regulations to reduce competition with walleyes.

These 'other' species are not flourishing by happenstance, but rather are responding to shifting habitat availability and environmental conditions. As mentioned earlier, the TFF habitats are changing through the natural process of 'aging' impoundments. Since 1926, wind, waves, and water have been working on breaking down the shoreline, and the dam slows the transport of sediment downstream, allowing it to settle in the flowage. This is not a phenomenon you'd expect to observe over the course of five years, but over the course of 100 years, you can expect there to be more expansive nearshore areas (more shallow water as the shoreline erodes), and slightly less 'open water' as sediment is deposited on the bottom of the flowage. As this process unfolds, the flowage has an increasing amount of shallow water harboring finer substrates--a ripe environment for vegetation growth. While we can't do much about the reduced transport of sediment downstream or warmer water temperatures, we could absolutely do more about protecting the shoreline from erosion. This not only slows the 'aging', or creation of habitat conducive to bass/panfish populations but would also help protect critical walleye spawning habitat from being filled in with eroded shoreline sediment.

As most of the items discussed above make abundantly clear, increasing vegetation promotes many species that compete with walleyes. Although we have little hard data to support this shift towards increases in vegetation, notes from fish surveys over the years document a slow progression towards increased vegetation in nearshore areas. Experienced guides, anglers, and many flowage frequenters have made this same observation in recent years, making expanding vegetation the focal point of many conversations at recent Fish Management Committee meetings. While combating this shift is a monumental task, there are a few important steps that can be taken to slow growth of aquatic vegetation. First, controlling erosion would help to curtail the expansion of vegetation. As most of the TFF shoreline is in state ownership, we are exploring financially and logistically feasible options to implement erosion control on a larger scale. And although there is more limited private riparian ownership on the TFF, conducting smaller-scale projects with existing cost-share programs (i.e. through Iron County Land and Water Conservation program) make these projects more affordable and practical for focused efforts in critical areas. Preventing further vegetation advancement is imperative in the long-term, but controlling existing vegetation levels can be most acutely and effectively addressed in the near term through water level management. Water level management, of course, is conducted by Xcel Energy and maintaining favorable habitats for walleyes is but one of many competing stakeholder interests regarding water levels on the TFF. Since water-level management is an ongoing conversation, perhaps now is time to bring the walleye habitat concern to the table for the next water-level discussion.

Tipping the scales in favor of flowage walleyes in the complex and dynamic environment that is the Turtle-Flambeau Flowage is no easy task. The authors hope that in addition to providing some insights into the status of many people's favorite food fish, the article will provide some food for thought.



TFF-TLPOA Member Survey

By Joanna Vodicka

In the spring of 2022, the Turtle Flambeau Flowage and Trude Lake Property Owners Association (TFF-TLPOA) Board sent out a survey to its members, the first survey completed in approximately seven years. We received many responses with 127 completed online and seven completed by mail which is an excellent response rate. And we couldn't have done it without Amy Nosal, Community Development Educator with UW-Madison Extension, Iron County. We appreciate all of the input and commentary from our members, and we will do our best to address comments and questions during future issues of Driftwood, meetings, and various association activities.

For this issue of *Driftwood*, we wanted to highlight some learnings from our survey.

Who are our members?

Over 50% of our members have owned their property for 20 years or more, however 15% of our members are "new", owning their property for five years or less. I myself am part of the "newbies".

What type of recreation is most enjoyed by our members?

Summer fishing, motor boating and hiking/walking are the top three recreations enjoyed on our lakes and in our scenic waters area.

Walleye, crappie and perch are the most sought-after species for our angler members, with most of our members releasing fish, but keeping a few to eat (63.5%).

For those members who like motorboating, like my family, it is to explore the various islands, find wildlife or just enjoy "cruising" on the lake (and hopefully not encountering a stump).

And if you haven't checked out the trails, you are missing out. There are many places in the scenic waters area to take a stroll, photograph deer, birds, pick wild raspberries, blueberries or maybe build a bouquet with some wildflowers.

What is important to members in terms of priorities?

Fishing was the top priority of our members, with the top three priority species being walleye, muskie and crappie. The Fish Management Committee, led by Jim Kohl, in cooperation with our WDNR Fisheries Biologist, Zach Lawson, continue to investigate whether there are steps we can take to improve the walleye fishery. They have discussed projects such as hatchery walleye stocking, localized walleye stocking using portable hatcheries with TFF walleyes, stocking perch to produce more young perch as walleye forage, placing brush piles in the TFF to aid natural perch spawning. With respect to the musky population, the WDNR musky stocking program continues, however, with limited allocation numbers. musky fishing continues to be "CPR" (Catch, Photo, Release) so we should continue to see the population experience less impact.

Aquatic invasive species continue to be priority two and we stay vigilant with prevention of curly-leaf pondweed and purple loostrife. In this years' purple loosestrife volunteer event, Zach Wilson (Iron County LWCD) reflected that the location and density of the purple loosestrife was improving, and we were even getting some help from our deer population, who were biting off the flowers before bloom, resulting in less growth of new plants (thank you deer!) Look for more events in the spring of 2023 to continue to keep our waters free of invasive species.

Water quality was the third priority for our members. A number of verbatim comments reflecting concern with the increase in boating on our waters and water quality were tied to concerns about water levels. When higher water temperatures coincide with lower water levels (usually in the late summer) conditions increase the incidence of algae blooms. This year, although we had a drier summer season, the board worked with the WDNR and Xcel Energy to minimize water level fluctuation in the later summer. We will continue to address and communicate about water levels. A quick tip from Todd Jirous, our Water Quality Committee chair: "Homeowners can help with water quality by allowing for a buffer along the shoreline to help reduce the growth of natural weeds, and allow rainwater to soak into the soil, rather than run into the flowage directly." We will feature some more tips in a future Driftwood newsletter article.

What else did our members tell us?

There are so many other topics that were drawn out in the survey results. One general theme was an opportunity for the board to reflect and lean into the mission of "maintain, protect and enhance the quality of the Turtle Flambeau, Trude Lake and surrounding areas." As the years have passed, we have seen more recreation coming to our waters, and need to stay vigilant with the WDNR so that we can balance the needs of members, businesses and visitors on our lakes. We have been actively working with the WDNR on their revisions to the regional master plan and in the late summer 2022, we provided input on topics related to shoreline erosion, recreational use, WDNR staffing, amongst others (see related article in this issue).

Another theme that came out of the comments was for the board to do more education for its members and share proactively things happening "behind the scenes" with the WDNR, other associations and within the committee meetings themselves. As a result, the board has agreed to expand its communications efforts, leveraging many of the comments as a starting point, starting in spring 2023. We look forward to using communications as a way to meet and engage with more of our property owners.

These are just some of the many highlights from the survey. You can read the full survey results https://tfftl.org/ links/2022 or just visit our website at www.tfftl.org, go to "Links" from the menu and scroll all the way to the bottom of the page and select "2022".

Invasive Species Report: Purple Loosestrife and Curly-leaf Pondweed

By Randy Payne

Our purple loosestrife control effort was similar to previous years, with the usual volunteer "search and pull" for large sections of the flowage. The workday concentrated on the north section of the flowage. We are succeeding keeping the loosestrife under control, with fewer large mature plants being found, but there are still seeds in the soil that continue to sprout. When we pull, we need to carefully look around the surrounding area searching for small, immature, non-flowering plants. There are lookalike plants, one of which is called monkey flower (Mimulus ringens), a beneficial native plant, that can make identification of immature loosestrife difficult.

Curly-leaf pondweed (CLP) is an aquatic invasive that is in the Turtle River watershed, and is drifting downstream from Rice Lake. The good news is that additional effort was aimed at control this summer. An anonymous donor gave generously to the Rice Lake Association and our organization



Discovery Center staff snorkeling for CLP.

hired a crew from the North Lakeland Discovery Center to hand pull CLP from the south bay of Rice Lake. Four Discovery Center staff spent two days for a



Discovery Center staff with bagged CLP.

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total of 56 hours of hand pulling. As in previous years, Rice Lake Association. had the "Great Pondweed Pull" on Rice Lake. Iron County Land and Water Conservation Department and volunteers from Pike Lake and Lake of the Falls Associations helped monitor and pull CLP downstream from Rice Lake.

Unfortunately, later this summer, CLP was discovered to have spread to the Turtle River between Pike Lake and Lake of the Falls. This is basically another step downstream toward the flowage.

Volunteers from Pike Lake and Lake of the Falls were extremely motivated and responded with many days of searching out and pulling late season CLP at these new locations.

Looking ahead, I'd like to see more volunteers next year. Please consider supporting CLP monitoring and control in the new areas as well as established areas

by volunteering with our neighboring lake associations upstream, and Iron County Land and Water Conservation Department. They need our help. Iron County obtains a large trailer stacked with canoes for CLP pulling on the Turtle River, while Pike Lake may use pontoons. Either way, you probably have your boating logistics taken care of. We use waders or just wear swimsuits and water shoes and look for CLP wearing polarized sunglasses. When found, we hop out of the watercraft and rake the plants up and into bags. I will send out details next year of upcoming events as they are scheduled.



Regional WDNR Master Plan Update

By Savanah Roy, Property Planner - WDNR Bureau of Facilities and Lands

In Summer 2022, the WDNR held a scoping public input period where the public was invited to share their thoughts on the future use and management of WDNR properties in the region and to help identify topics that should be addressed in the plan. A summary of the input received is now available on the North Central Forest Regional Master Plan webpage.

The department is now in the process of developing the North Central Forest Draft Master Plan. When complete, the public will have the opportunity to review and comment on the document. Be sure to sign-up for project email updates via the North Central Forest Regional Master Plan webpage.

Additional questions or comments regarding this planning process may be submitted to: Erin Rieser, WDNR Property Planner at ErinE.Rieser@wisconsin.gov or 608-400-6171

Editor's note: As readers may know, the association provided comments to the WDNR on its regional master plan. There is also an internal WDNR planning effort underway updating the original TFSWA Master Plan. Look for more information on that process in future issues of Driftwood.

Message in a Bottle

By Chad McGrath

Walking to my back porch on the way into the house from my vegetable garden, I noticed several insects buzzing around various types of flowers that were blooming along the path. I pivoted around and faced the plants, quickly seeing two insects alight on the skyward-pointing dark blue blossoms of the bottle gentian (Gentiana andrewsii). But when I bent down to inspect the insects further, they were gone. Then, just as I started to stand up, a bee flew past me, brushing my arm as it darted off to who knows where. Standing still I watched the gentian. It only took a few seconds and I saw another insect. It was a bumblebee and it landed on the tip of the gentian blossom. As I watched, its front legs tickled the gentian's flower tip, opened it, and disappeared by crawling inside. Amazed, I continued watching until after about 30 seconds the bumblebee crawled back out and flew away.

I called out to family in the vicinity, and we watched this demonstration of nature's wonder, worthy, I thought, of a National Geographic moment, for twenty minutes. MJ, my wife, even took a video. If you'd like to see it, go to the TTF-TLPOA website.

I saw my first gentian 15 years ago or so on the shore of Boot Lake here in Springstead. It was not the bottle gentian, which is blue, but the cream gentian, (*Gentiana alba*, formerly *flavida*) whose flower is an off white. As I examined it, I wondered when it opened and what it looked like when it did. Turns out, it doesn't open, and neither does the bottle gentian. (Unless you're a bumblebee).

The cream and the bottle are not the only species of Gentian that grow in Wisconsin. Another closed petal gentian is the Great Lakes or red stemmed gentian (*Gentian* rubricaulis). As implied by its first common name, it's found most often near Lake Superior. The closed flower is white with blue blotches. One other Wisconsin native gentian I'll mention is the prairie gentian (Gentiana puperulenta). Its pretty blue flower is found in the southern and southwestern part of the state, in and around remnant prairies there. As with most of the over 400 species of Gentiana worldwide, the prairie gentian opens its petals.

As a group, gentians in Wisconsin are below 2-2.5 feet in height and less than that in width. They all tolerate or even need moist soil, often found near lake shores and riverbanks and tolerate or need

some shade. For more pictures and information about these plants, go to: https://wisflora.herbarium.wisc.edu/index. php and type *Gentiana* into the search box. And if you want one of the finest and most complete books on perennials, including nice coverage of *Gentiana*, buy or find via a library: *Herbaceous Perennial Plants*, fourth edition, 2020, by Allan M. Armitage.

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Check out our Social Media Presence!

By Sue Payne

Our association's Facebook page was started in July 2018. Despite having limited knowledge of how to go about it, I volunteered to set up and administer the page. Brett Johnson agreed to help with content. Over the years since its start, the page has accumulated close to 1750 followers. I don't have data for how many of those are TFF-TLPOA members, but the numbers suggest that many more are area visitors.

The "post reach" metric, the number of people who saw any single post at least once, is 4046. "Post engagement", interaction such as comments, likes or shares to any single post, is 945. These numbers are for the past 28 days. The posts that get this kind of reach or

engagement are typically photos and articles about wildlife, fishing, or vivid scenery. That doesn't, however, negate the value of other types of posts.

An interesting and unexpected aspect to the page is the relatively frequent number of direct messages I get from users who are looking for some specific help or information, such as getting the word out about a lost dog, help with lodging, or how to join the association. I feel particularly pleased when we've been able to efficiently resolve those concerns for people.

The Facebook page has grown and developed beyond my expectations. And despite the often negative opinions about Facebook, the informational and educational opportunities it offers to the association are valuable and could be developed further. This will require more involvement from others who can provide me with potential posts, or possibly become a co-administrator. Anyone, regardless of whether or not you personally use Facebook, is always welcome to send me information relevant to the flowage or the association – events, activities or photos. This can be done via a direct message (the "message" button on the page), by making a comment to a specific post, or by emailing tfftlfb@ gmail.com.

Behold the Power of Native Plants

by Mary Nelson

It wasn't until I became a Master Gardener in 2010 that I became fascinated with native plants. Prior to that, my yard, like so many other landscapes, was predominantly turf grass and hybridized plants with very few natives. A native



plant is defined as one that arrived, established and survived in an area without direct or indirect human intervention. A hybridized plant, on the other hand, is one that is produced by human cross-breeding of two genetically different varieties

> or species. Frequently, one of the plants used in the hybridization is native. When native plants are hybridized to create new varieties with perhaps brighter color, more petals, or shorter stature, the hybridization process frequently changes their nectar and pollen value, making them less valuable to pollinators.

> Pollinators of all sorts, including native bees and butterflies, are declining. There are numerous reasons for this, some of which we can rectify and others which we can't. Loss of habitat is one thing we can fix. Pollinators require good sources of both pollen (for native bees) and nectar (for both native bees and butterflies) from early spring until late fall. So, if you want pollinators in your garden, choose mostly native varieties, with no more than 10% of the total plant number being hybridized.

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Shoreline pollinator garden on the flowage, photo by Mary Nelson.

Statewide Shoreland Stabilization Tour Comes to The Turtle Flambeau Flowage

By Heather Palmquist, Iron County Land and Water Conservation Department

On November 3-4, conservation technicians from various land and water conservation departments from across the state toured different properties in Bayfield, Sawyer, Oneida, Lincoln, Price, Vilas, and Iron Counties. These tours were a follow up to a webinar training held last winter following the release of a new publication, *Shoreline Stabilization – A Guide for Homeowners & Conservationists on Island Lakes & Flowages*. The publication was created by several Land & Water Conservation staff from across Northern Wisconsin. The intent of this booklet was to provide both landowners and

conservation staff with a better understanding of the many stabilization techniques that are used, the benefits and limitations of the practices, as well as technical drawings and photos. The booklet was well received across the state and has been a valuable tool for addressing shoreline erosion and understanding how and when the different techniques are selected for a site.

November 3 participants were shown sites where log revetments were installed along the shoreline toe to protect the shoreline from erosion. A log revetment is the use of a log that is installed and anchored parallel to the shoreline to break wave action. Another property on the tour showcased fish sticks, a method where numerous trees are piled up, like the game pick-up sticks, creating a wave break as well as providing fish habitat. Fish sticks are great practices under the guidance of a fisheries biologist but they are only appropriate for certain conditions.



Log revetment, photo by Healther Palmquist.



Geobags on the Willow Flowage, photo by Heather Palmquist.

The tour held on the fourth showcased two different properties in Iron County on the Turtle Flambeau Flowage. Participants learned about planted rock riprap on one property as well as riprap and planted geobags which protect steep eroding slopes on the adjacent property. A geobag is much like a sandbag, made of a non-woven geotextile fabric that is filled with native soil. On sites with a long fetch and moderate to high wave action, rock riprap at the bottom of the bank is often used. To make the riprap look more natural a geobag can be placed within the riprap every four to six feet with a native plant installed into the bag. In areas where you have higher banks that are failing, riprap is placed at the base of the slope with geobags installed above the rock forming a living retaining wall to hold the slope in place. Two

plants are inserted into each bag. Eventually, those plants will fill out to create a living wall or vegetated slope to cover the bags from view within a few years.

Each day the groups were also shown sites where geogrids were used to stabilize the shoreline. Geogrids are a practice similar to the geobags but differ in the fact they are continuous soil lifts created using synthetic geotextile materials with native plantings installed between each created lift. These are often used when you have good access from the top of the bank to work with heavy equipment and open areas.

If you are interested in reviewing the *Shoreline Stabilization Guide*, you can view it on the Iron County Land and Water Conservation's website by visiting https://www.ironcountylwcd. com/resources-reports or for more information contact Heather Palmquist at lakes@ironcountywi.org or by calling 715/561-2234 ext 2.

Riprap and plantings, photo by Healther Palmquist.



Behold the Power of Native Plants *Continued from page 7*

In addition to benefiting pollinators, native plants are great in shoreline gardensbecause of their amazing roots. When you look at a native plant, what you see above ground is typically only a third of the overall plant. Roots can reach anywhere from 4 to 14 feet below soil and can be either taproots (large, central, and dominant roots from which other roots sprout laterally) or fibrous roots (formed by thin, moderately branching roots growing from the stem). Many native plants tend to develop their root systems before their foliage. So while a young native plant may appear puny, its root system would surprise you. These extensive roots systems make native plants excellent choices for shoreline gardens for two reasons. First, the roots help stabilize the soil to slow erosion and, second, they mitigate the chemicals in water run-off from lawns. These roots also make native plants more drought tolerant, which is a real benefit during seasons of patchy precipitation.

If you choose to plant a native pollinator garden along your shoreline, you need to be aware that any work below the high-water mark, such as erosion control measures and planting native aquatics, requires a permit from the WDNR. Also, if you choose to participate in cost-sharing or grant funding programs for shoreline restoration through various organizations, there will be specific guidelines, rules and regulations which must be followed. This will include things such as plant varieties (trees, shrubs, grasses and wildflowers) and the proportion of each variety. If you are not planting below the high-water mark or relying upon funding, you are less restricted. However, preplanning your garden is crucial to ensure the plants you choose will thrive on your site and that the process of preparing the site and planting the garden are done carefully in order not to imperil the waterway.

To be honest, the process of planting a native shoreline garden can be daunting for a novice gardener. Numerous excellent resources are available on the internet to help you through the process. The Flora of Wisconsin website at (https://wisflora.herbarium.wisc.edu/index.php) will help you determine if a specific plant is native to Wisconsin. Other resources will help you determine which plants will do best on your site (based on soil texture, moisture and light exposure), tell you how to prepare your site safely, and how to maintain your garden after planting. Check out the native planting companion guide from Wisconsin's Healthy Lakes and Rivers. (https://erc.cals.wisc.edu/healthylakesgrants/ files/2021/10/NativePlantCompanionGuide.pdf)

Planting a native plant garden is a powerful way to help support the bees and butterflies, not to mention beautify your yard and strengthen the shoreline. But remember, it takes longer for native plants to attain their full beauty. Patience will go a long way when gardening with natives.

Thanks to Volunteers!

By Beth Feind, WDNR Scenic Waters Area Manager

Volunteers make the flowage function! We have over 40 volunteers that contribute direct time to the flowage and surrounding areas! These dedicated citizens came from a number of area groups including the TFF-TLPOA, Mercer Cross Country Ski Club (MECCA), and Iron County Outdoor Enthusiasts (ICORE) to name a few. I am thankful for the high regard everyone holds in their hearts for the Turtle Flambeau Flowage and surrounding lands and waters. Without all of our volunteers and the passion they show for the health of nature, this place we dearly love would be much different. I am in awe of the number of hours each volunteer puts into this property and outlying areas each year.



Mike Shouldice, MECCA volunteer, planting oak at Little Turtle Flowage workday, photo by WDNR Staff.



Boot Brush installation, ICORE volunteer, at Hidden River Trail, photo by WDNR Staff.

Whether it is spending time as a group or individually, it is beyond amazing each volunteer strives to reach a common goal in preserving this landscape and securing this special place for all to enjoy.

I thank everyone for that.

The dedication each volunteer has is incredible. Here are some examples of work our volunteers do.

- Spending over 200 hours on trail maintenance and grooming for hiking and skiing trails.
- Adopting trails and participating in worker bee days, reporting tree damage after storms, picking up trash, building boot brush units, often committing to 25 hours of work a season but putting in well over that amount.
- Becoming a campsite steward, overseeing campsites, picking up trash, painting tables, putting in more than 40 hours of work throughout the summer.
- Being a portage steward, routinely keeping the trail clean for tired kayakers or canoers.
- Spending over 80 hours pulling, and pulling and pulling and pulling, bags and bags and bags of purple loosestrife from the flowage.
- Building and installing multiple bird houses at the Little Turtle Flowage.
- Conducting and surveying water quality on the flowage.

Perhaps you took part by planning and organizing workdays, tracking water levels on the flowage, organizing meetings with the WDNR, offering innovative ideas to better the property, searching out eagle nests, educating the public, being eyes and ears for law enforcement, observing and offering a lending hand for fish habitat or erosion control projects.

My list could go on, but I think you get the idea that ALL volunteers make this property function and work. No matter, I cannot express how much I and the department appreciate all that is done. So, thank you for your knowledge, your help, and your drive.

"Volunteers do not necessarily have the time; they just have the heart" - Elizabeth Andrew



Jeff Wilson volunteers his boat and knowledge at the Natural Resource Foundation Tour, photo by WDNR Staff.

With Appreciation for the Eloquence -Thank You Mike!

Readers may notice that longtime editor and *Driftwood* writer Mike Hittle's name is gone from our masthead. Mike's prose, editorial savvy, and even poetry have added depth (and humor) to our newsletter for many years. We hope to continue to feature articles from Mike periodically, but he decided he'd answered enough grammatical usage questions from the rest of us. We already miss him.

Thanks for the many years of service Mike!





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- Mission Statement -

The purpose of the association is to maintain, protect and enhance the quality of the lake and its surroundings for the collective interest of members and the general public.

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If you would like to contact the association electronically, please visit our website www.tfftl.org and search under "CONTACT US"