Wisconsin Council of Trout Unlimited 1423 Storytown Road Oregon, WI 53575 wicouncil.tu.org NONPROFIT ORG. U.S. POSTAGE PAID PERMIT NO. 1723 MADISON, WI



Wisconsin Trout

Winter 2022

Council goes to work identifying Priority Waters

Strategic Plan calls for identifying a national network of shared priority waters for native and wild trout and salmon, and take strategic action to care for and recover them.

The 2021 TU National Strategic Plan sets the stage for organizational growth over the next five years. Specifically, the Plan states as Goal #1: to identify a national network of shared priority waters for native and wild trout and salmon, and take strategic action to care for and recover them.

Wisconsin Trout Unlimited has started work on the first phase of identifying priority waters in our state. This is no small task, given that Wisconsin is home to more than 13,000 miles of trout streams and a world class concentration of spring ponds. Many of these waters currently harbor native and/or wild trout

The strength of our organization has always been at the local chapter level. Our chapters are at the front lines in protecting our trout streams. Nothing in this new plan is going to change that. Supporting our local chapters in their efforts to be good stewards of their home waters is priority number one for Wisconsin TU. Period.

Identifying the next level of priority waters has been tasked to the State Council. We've put together a workgroup of volunteers from around the state to participate in the process. TU's Great Lakes Stream Restoration Manager Chris Collier is leading the workgroup.

We expect a preliminary list of priority waters to be presented to the Council at our annual meeting in Oshkosh on February 5. We'll then refine the list and create an action plan to guide conservation in these watersheds.

As of right now, the workgroup seems to be leaning towards identifying larger watersheds as priorities rather than individual trout streams. For example, the DNR has broken the state into 24 drainage basins (https://dnr.wisconsin.gov/topic/Watersheds/basins). Selecting larger watersheds would allow more trout streams to be included in the plan while still allowing us to choose specific watersheds or regions to focus on over the next five years.

Take, for example, the Lower Wisconsin River basin. This area includes streams most trout anglers know like Black Earth Creek, the Blue River and the West Fork of the Kickapoo River. In addition, there are lots of smaller streams that could offer climate-change-resilient habitat for our native brook trout.



Like all strategic plans, this exercise is meant to be a recurring one, not just a one-off job to be put on the shelf. We'll revisit the process in five years, make adjustments and set a new list of priorities for future restoration.

This blueprint of priority waters will become a shared conservation agenda for TU and our partners. We're trying to find out where the

opportunities for conservation are and where we can do the most good. This will maximize the potential of our already strong grassroots organization.

If you would like more information about the Priority Waters process, please contact Council Chair Mike Kuhr at mikek.trout@yahoo.com or Chris Collier at chris.collier@tu.org.

Omicron variant came on fast

Check before attending a meeting or event

Between the time that many of our writers and chapter leaders submitted their articles and chapter reports for this issue and time you receive it in the mail, the Omicron variant began reaching new highs and hopes are that it will peak in January and begin a downward trend.

Some upcoming events and activities mentioned in this issue may end up being cancelled or postponed. So, before attending any events, meetings, work days or other chapter or council activities, be sure to check for the most up-to-date information via websites, Facebook pages, other social media platforms, or by calling, texting or emailing your chapter leaders.

Banquet cancelled

Due to the recent surge in Covid-19 cases, and concerns about the health and well being of our amazing members, volunteers and supporters, we decided to cancel the State Council Annual Awards Banquet scheduled for February 5, 2022

Those who have purchased tickets and would like a refund should contact Council Chair Mike Kuhr at mikek.trout@yahoo.com or 414-588-4281. If you choose not to seek a refund, the State Council is grateful for your donation.

As the banquet is our largest annual fundraiser, we will be exploring other fundraising options.

Watch for more information in the Spring issue of *Wisconsin Trout*.

Friends program has exceptional year

The Friends of Wisconsin Trout Unlimited grant program had an exceptional year in 2021. Exceptional may be an understatement. Record setting would probably be a better way to describe it. The program was able to assist 12 chapters with important habitat work in 2021.

A total of \$23,400 was awarded to the 12 chapters who applied for grant funding. The awarded grants covered the entire geographic area of Wisconsin. By using Friends funding to leverage other funds, work was completed on many different trout waters around Wisconsin.

None of that successful habitat work would be possible without the support of our loyal donors. The Friends program has developed a very generous and loyal group of donors who continue to support the program. Because the Friends pro-

gram is supported 100 percent by voluntary contributions, we want to say THANK YOU to the many donors who believe this grant program is worthy of their support.

Looking ahead to 2022 there is one important change to the program that all of our chapters will need to keep in mind. Previously the program operated with two request deadlines. Chapters could submit requests by January 15 or April 15. Because of the growing popularity of the program and the possibility that all available funds could be used before the April 15 deadline, we felt that, in order to have all of the chapters continue to have equal opportunities to obtain a grant, we needed to discontinue the April deadline and change to a single deadline date going forward. So, beginning in 2022 and into the future, any

chapter requesting a Friends Grant will need to have the application completed and submitted by January 15.

Chapters should also keep in mind that there is now a Friends Grant Application Form on which the grant requests need to be submitted electronically. Copies of the application form have been sent to all chapter leaders. Completed grant applications should be submitted electronically to Kim McCarthy at kjmccarthy75@gmail.com.

2022 promises to be another very good year for trout habitat work in Wisconsin. Please consider supporting the Friends program with a donation so that we can continue making trout fishing better in Wisconsin.

YOU'RE INVITED

To Celebrate Cold, Clean, Fishable Water with Us

2022 Wisconsin TU State Council Banquet Saturday, Feb. 5, 2022

Best West and Conve 1 North Ma

Room rese (920) 230-1

Banquet cancelled

Due to the recent surge in Covid-19 cases, and concerns about the health and well being of our amazing members, volunteers and supporters, we decided to cancel the State Council Annual Awards Banquet scheduled for February 5, 2022.

Those who have purchased tickets and would like a refund should contact Council Chair Mike Kuhr at mikek.trout@yahoo.com or 414-588-4281. If you choose not to seek a refund, the State Council is grateful for your donation.

As the banquet is our largest annual fundraiser, we will be exploring other fundraising options.

Watch for more information in the Spring issue of Wisconsin Trout.

Doors & C

Dinner Seaming w 0.50 pm

Tickets just \$35

Order online at:

http://witrout.brownpapertickets.com or use the form below

For more ticket information, contact Jen Kuhr at [kuhr101@gmail.com (414) 588-7077

Name:		Marie May
Phone or Email:		
# of tickets @ \$35 ea.:	W TO	

My check (payable to Wisconsin TU) is enclosed
I am unable to attend but will support Wisconsin TU
with this donation

AND THE REPORT OF THE PARTY OF

Mail to: Jen Kuhr 6103 Queens Way Monona, WI 53716

Chair's Column

For the Trout

Oh these fish. All fins and colored scales. Flicking tails, keen eyes and lateral lines. These fish drive people to their wits end and keep them coming back for more.

These fish make us think. These fish make us feel. They force us to stop and look closer, analyze our surroundings. It's now a symbiotic relationship. For as much as we need them, they need us.

There are very few truly wild places left for these fish to thrive. Most trout populations now depend on us to survive. Our actions have implications for the fish we hold dear. They feel the effects that we humans have had on landscapes all over the world.

These fish are resilient. They know how to find refuge. Patiently waiting for us to figure out that what we do on this land affects the water they call home.

Cold, clean water is a drastically undervalued resource in our society today. How quick we are to think of value in monetary terms instead of something a little less tangible. Can you put a dollar amount on seeing your child or grandchild catch their first trout? What about sharing time on the water with the military veterans and first responders in our communities?

It shouldn't cost any more to do business in a manner that preserves this cold, clean water because doing less shouldn't be an option. That's easy enough to write, but we humans are quick to let things slide.

A runoff-related fish kill here, an already depleted groundwater aqui-

fer suffering from drought there. And that's when we start coming together. Each on our own terms and at our own pace. Collectively swimming against the current, following the trout's lead.

A movement of people. Coalescing around a simple idea that we can do better. For the trout.

Trout Unlimited is the organization leading this upstream migration in a downstream world. Through TU we have the ability to engage members of our community and offer ways to be a part of the solution. We have the tools to make positive change in our local watersheds.

The foundation is in place. The "One TU" model prioritizes collaboration between chapters, councils and the national office. TU is an organization of doers. Every day our dedicated volunteers are stepping up and bringing the ideas, time and talent needed to protect and restore our rivers.

Through this volunteer work we form the bonds that sustain this organization. We build partnerships and find new friends. We motivate each other. We lift each other up. We find our common ground on the cobblestone just beneath the water's surface.

The stream reminds us that diversity leads to a higher quality of life. Riffles and runs, the feeding lies. Slow, deep pools for longer periods of rest. Boulders, cobblestone, spawning gravel – each serving a distinct purpose. Logjams and backchannels, flood plains and spring



seeps. Happy trout.

Often when we come across an impaired stream, it is lacking in much of its original diversity. And we as TU set out to make sure the headwaters are protected. Then we take up the work of reintroducing the features that the stream is missing in a restorative manner.

Along the way, we form relationships with landowners, government agencies and other conservation organizations. For we are not alone in our mission to improve the rivers that run through our lands.

We use science to monitor the results of our labor and we make sure to keep a watchful eye on the restored habitat. Often times our sampling efforts resort to more primitive methods – hook and line. Companions and solitude, whichever it is you seek that day, are both welcome on these waters.

We educate our neighbors about the value of cold, clean water. We teach our children about the joys of spending time recreating on these waters. We advocate for policies that protect and enhance these waters.

We share our experiences, learn from our mistakes, celebrate our victories and sustain TU's legacy in the process. We shape the future for our coldwater friends, the trout.

It is a noble thing to hold a creature in such high regard as to spend hours of your life working for the betterment of their life.

We who have been fortunate enough to stand knee deep in a Wisconsin trout stream understand exactly why we volunteer, advocate, work, organize, educate, plan, speak, write and mentor. It's for the trout

Much Respect, Mike Kuhr



The 2022 Fly Fishing Film Tour

Is Coming to North Central Wisconsin!



February 2, 2022

The Center for Civic Engagement Theater

UW-Stevens Point at Wausau - 625 Stewart Ave, Wausau

Brought to you by Wisconsin River Valley Chapter of Trout Unlimited, and these major sponsors

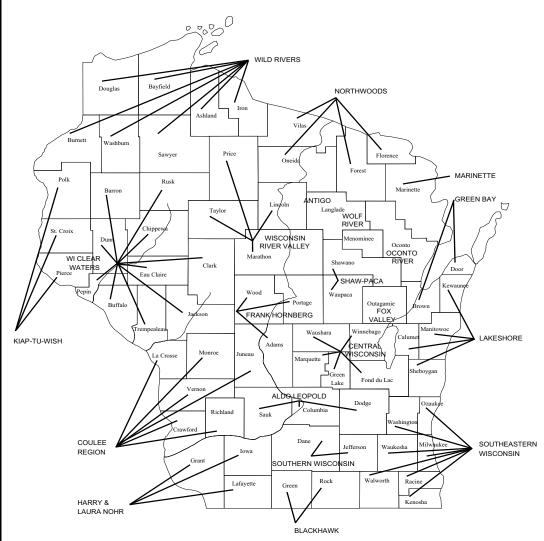






Tickets and information are available at Fall Line Outfitters, wrvtu.org and flyfilmtour.com

Wisconsin TU Chapters, Presidents, and Websites



Visit the Wisconsin State Council's web site at **wicouncil.tu.org**, or find us on Facebook.

Aldo Leopold (#375): Mike Barniskis, 805 S. Center St., Beaver Dam WI 53916; barniskis@yahoo.com; aldoleopold.tu.org

Antigo (#313): Scott Henricks, 213 Mary St., Antigo, WI 54409-2536 715-623-3867; henricks51@yahoo.com

Blackhawk (#390): Dave Brethauer; 17348 W. Gepler Road, Brodhead, WI 53520; 608-897-4166; dave.brethauer@gmail.com; www.BlackhawkTU.org

Central Wisconsin (#117): Wayne Parmley; 1663 MIchigan St., Oshkosh, WI, 54902; 920-540-2315; wparmley@gmail.com; cwtu.org, Coulee Region (#278): Fred Spademan; fred@spademan.com; 429 2nd St. North, LaCrosse, 54601; 248-408-3873; Coulee Region-TU.org

Fox Valley (#193): Graeme Hodson;, 6622 N. Kurey Drive, Appleton, WI 54913; (920) 750-9780; graemehodson@gmail.com; www.foxvalleytu.org

Frank Hornberg (#624): Doug Erdmann, 1523 Rosewood Ave., Wisconsin Rapids, 54494; 715-712-3134; Derdmann55@charter.net; www.Facebook.com/HornbergTU

Green Bay (#083): Adrian Meseberg, 315 S Michigan St. De Pere, WI 54115; 920-562-6129; christinaandadrian@hotmail.com; greenbaytu.org

Harry & Laura Nohr (#257): Don Pluemer; www.NohrTU.org Kiap-TU-Wish (#168): Greg Olson; Driftless23@gmail.com; 612-300-8970; P.O. Box 483, Hudson, WI 54016-0483; kiaptuwish.org

Lakeshore (#423): Myk Hranicka, N2766 Hopeman Heights, Waldo, WI 53093; 920-627-5779; jdrflooring@gmail.com; www.Wisconsin-TU.org/Lakeshore

Marinette (#422): Dale Lange, N2095 CTH BB, Marinette, WI; 715-582-1135; dhlange@centurytel.net, marinettecounty.tu.org.

Northwoods (#256): Jay N. Joppa; 5631 Mohawk Shores Drive, Rhinelander, WI 54501; 715-499-1022; jayjoppa@gmail.com; northwoods.tu.org

Oconto River (#385): Wayne Czypinski; 920-590-2748; wczypinski@yahoo.com; ocontorivertu.com

Shaw-Paca (#381): Kyle Kossel, E2392 Cardinal Court, Waupaca, WI 54981; 920-379-5741; kylekossel@yahoo.com; shawpaca.tu.org Southeastern Wisconsin (#078): Andy Avgoulas; andyavgoulas@yahoo.com; 262-893-4965; sewtu.tu.org; www.facebook.com/south-

eastwisconsintroutunlimited; SoutheasternWITU on Instragram Southern Wisconsin (#061): Jim Hess; jim.hess@tds.net; P.O. Box 45555, Madison, WI 53744-5555; www.swtu.org

Wild Rivers (#415): Kevin Seefeldt; Ashland, WI; 715-292-1614; kseef09@gmail.com; www.wisconsintu.org/wildrivers

Wisconsin Clear Waters (#255): Bill Heth; wlcaddis@gmail.com; WisconsinTU.org/ClearWaters

Wisconsin River Valley (#395): Kirk Stark; 811 2nd Street, Rothschild, WI 54474; 715-432-0560; kfjgstark@gmail.com; wrvtu.org Wolf River (#050): Chuck Valliere, 5040 Hardy Trail, Waunakee, WI 53597; 608-836-1908 or 608-332-9652;

woodtickchuck1950@gmail.com; WolfriverTU.org

State Council Leadership

Chair: Mike Kuhr, 6103 Queensway, Monona, WI 53716; (414) 588-4281;mikek.trout@yahoo.com

Vice Chair: Scott Allen; E4835 N. Stoney Ridge Road, Reedsburg, WI 53959; 608-495-1482; jscottallen12@gmail.com
Secretary: Bob Rice 74355 Kaukama Road, Iron Piver, WI 54847;

Secretary: Bob Rice 74355 Kauka mo Road, Iron River, WI 54847; (715) 292-1143; bobrice723@gmail.com

Treasurer: Gary Stoychoff, 1326 14th Ave., Green Bay, WI 54304 garystoychoff@att.net

Vice Chair, Central Region: Tom Lager, 1700 Spring Hill Ct., Neenah, WI 54956; tomkarinlager@new.rr.com

Vice Chair, Northeast Region: Dale Lange, See Marinette County above.

Vice Chair, Southern Region: Jim Wierzba, 2817 Country Club Drive, Mequon, WI 53092; 414-688-3606; hoke4me@aol.com

Vice Chair, Western Region: Gary Horvath, 623 W. Pine Street, River Falls, WI 54806 (715)425-8489; garyjhorvath42@comcast.net

National Trustee: Henry Koltz, 2300 N. Mayfair Rd., Ste. 1175, Milwaukee, WI 53226 (414) 331-5679 (H); hek@sdelaw.com

Awards: Todd Franklin; Contact info at right

Education: Bob Haase, W7949 Treptow Ln., Eldorado, WI 54932 (920) 922-8003 (H); flytier@milwpc.com Friends of WITU and Watershed Access Fund Grant Coordinator: Kim McCarthy, 736 Meadow-brook Court, Green Bay, WI 54313; 920-639-3697; kjmccarthy75@gmail.com.

Advocacy Chair: Henry Koltz Membership: Chair Paul Kruse, 500 Saint Jude St., Green Bay, WI 54303 (920) 639-2361); kruser2@new.rr.com;

National Leadership Council Representative: Linn Beck, 160 W. 19th Ave., Oshkosh, WI 54902 (920) 216-7408; chlbeck@att.net

Trout In the Classroom Coordinator: Greg Olson, 16370 Division St., Lakeland MN, 55043; driftless23@gmail.com

Veterans Services Partnership Coordinator: Mike Johnson; 1070 Bonnie Brae Lane, Lake Geneva, WI 53147; 262-327-0849; Mike@thosejohnsons.com

Website: Brandon Schmalz schmalz.dev@gmail.com

Diversity Initiative: Heidi Oberstadt, 456 Wadleigh St., Stevens Point, WI 54481; 715-573-5104; heidi.oberstadt@gmail.com

Legal Counsel: Open **Communications: Open**

Are you getting emails from TU?

If you are currently not receiving news and event-related email messages from your chapter, the state council and TU National, then you are truly missing out on what's happening at all three levels. TU National manages the mailing list for the council and chapters, so update your address by going to www.tu.org, log in, then go to "Email Preferences." You can also call 1-800-834-2419 to make these changes, or to ask questions about making the changes via the web site.

WISCONSIN TROUT

Vol. 34, No. 1 — Winter 2022

Wisconsin Trout is the official publication of the Wisconsin Council of Trout Unlimited and is distributed to the members of Wisconsin's 21 TU chapters. Non-member subscriptions are \$12.50/year. Publication dates are the first weeks of January, April, July and October. Deadlines for articles and advertisements are the 10th of December, March, June and September. For a current advertising rate sheet, contact the editor.

Photo/article contributions, letters to the editor and advertisements are welcomed. Submit to:

Todd Franklin, Editor 1423 Storytown Road Oregon, WI 53575 (608) 516-3647 toddfranklinwistrout@gmail.com

State Council Officers

Executive Committee includes officers and vice chairs

Mike Kuhr, Chair Scott Allen, Vice Chair

Bob Rice, Secretary Gary Stoychoff, Treasurer

TU CARES: Relationships make a difference

By Tom Lager

Relationships are essential to the success of projects. Following a successful collaborative 2020 culvert replacement project with the Town of Wautoma, DNR and TU CARES, the Town of Wautoma reached out to TU CARES regarding a project they needed to pursue within the West Branch White River (WBWR) watershed.

This request from the town directly demonstrated the value of our collaborative relationships. The project involves replacing the road crossing over the WBWR, a Class I trout stream, at 13th Avenue in the upper reach of the watershed. The project consists of two phases — dam removal and a road crossing replacement.

The hydro-dam was constructed in the early 1900's and was integrated with a mill structure. After the mill closed, the 13th Avenue crossing was built over the top of the dam and mill foundations, thereby maintaining an impoundment upstream of the road crossing. The trout stream flows over the dam cascading down through the interior mill structure and falls into a long channelized out-flow that eventually merges into the original stream bed further downstream.

TU CARES had informed Jeff Nett of the Town of Wautoma of our interest in supporting efforts to restore the WBWR to its natural flow through 13th Avenue, while we collaborated together on the 2020 culvert project. Based on that project's success, Jeff invited TU CARES to facilitate multi-functional meetings with the Town of Wautoma, the town's engineering firm, several

DNR departments, landowners and TU to plan, design, fund and implement the 13th Avenue Dam Removal and Road Replacement Project.

TU CARES' interest in the project is based on the fact that the 13th Avenue dam blocks trout migration and forms an impoundment that elevates the stream temperature. The town's interest is based on their ownership of the structures and the need to replace the road crossing. This project got under way in December 2020 via on-line SKYPE meetings and a few outside in-person site meetings.

The importance of relationships was revealed in how effectively these multi-functional groups have worked together during the last 13 months. Jeff Nett represented the town, Brian Freimark the highway department and road crossing structure and Gregg Borucki, the MSA engineering company.

Within DNR, Bobbi Jo Fischer of the Bureau of Environmental Analysis & Sustainability and those she works with, Casey Jones and Brad Betthauser, defined the approach to the initial stream-crossing surveys, information needs for the project and they conducted field work, wetland and archeological guidance, permitting and guidance of road-crossing structural criteria.

Jared Seidl (water regulation and zoning) provided permit guidance and discussions with landowners. Hanna Johnson (water regulation and zoning engineer) and Wendy Peich (environmental & natural resource grants section) guidance on structural inspections and sources of grant funding.

Shawn Sullivan and Steve Devitt of the DNR's Trout Habitat Resto-



HABITAT DAY AT THE YOUNGLOVE EASEMENT

Central Wisconsin Region volunteers work on the Younglove Easement Project at a habitat day organized by CWTU in June 2020.

ration Team provided insights for stream protection during construction and post-replacement restoration planning.

Dave Bolha (water resources management) represented water quality guidance and ongoing options for restoration grants.

Within TU, Great Lakes Stream Restoration Manager Chris Collier is providing guidance on grant funding

The TU CARES members are engaged as John Tucker represented our expectations of a fully restored, free-flowing trout stream and organized an on-site meeting. Environmental consultant Chris Firkus offered assistance. Mike San Dretto is working on easements and Scott Bahn and others are supporting grant developments.

The project team will draft the removal plan and associated costs shortly and apply for a municipal grant for funding removal of the old structures. Phase two, addressing replacement structure and stream restoration, will follow. Field work is planned for summer of 2023.

While this project is progressing,

TU CARES continues to closely work with the DNR Trout Habitat Team, implementing the Younglove Easement Project scheduled for completion at the end of 2023 at a cost of about \$170,000. Last summer, two habitat workdays yielded more than 260 volunteer hours from the combined efforts of the Central Wisconsin, Fox Valley, Shaw-Paca and Hornberg chapters. They cut brush and invasive buckthorn to create and position brush bundles to narrow and deepen the stream and to enhance angler access and trout habitat.

TU CARES members John Tucker, Mike San Dretto, Doug Erdmann, Chris Firkus, Linn Beck and Tom Lager are participating in the Priority Waters initiative led by TU's Chris Collier and Jeff Hastings. The trout waters from 11 counties in the central region are being considered. The final recommended watersheds are expected to be defined by January.

Follow TU CARES at https://www.facebook.com/centralsandsregionTU

2022 Youth Camp is a go

After setbacks the last two years, we hope the heartbreaks are behind us. This year's camp will be unique. All the students who were signed up last year were offered the chance to come to the 2022 camp, and most plan to attend, with support from the chapters that are sponsoring them.

The camp this year will be August 18-21 at the Pine Lake Bible Camp in Waupaca. This year's enrollment for the remaining open positions will become available after the annual meeting in February. So, if you didn't have a youth signed up last year and are thinking of sending someone, please contact me for the application and waiver forms after the annual meeting.

Some chapters that aren't able to

find a student to sponsor are encouraged to find students from other chapters. Just reach out to me and let me know if you interested in sponsoring someone.

We would like to add some more of our great members to our Youth Camp committee. We usually meet about once a month starting in January to go over all aspects of the camp to make sure we have everything covered. It is a very fun and rewarding aspect of Trout Unlimited.

If you are interested in helping out for this year's camp as a mentor or joining our Youth Camp Committee, please contact me at chlbeck@att.net or 920-216-7408 or Wayne Parmley at wparmley@gmail.com or 920-540-2315.

Trout In the Classroom update



AMERY TROUT IN THE CLASSROOM STUDENTS ENJOY HATCHERY TOUR Amery Intermediate School students observing a raceway and taking notes at the St. Croix Falls Hatchery during a tour and egg pick up.

The 2021-22 Trout In the Classroom program is under way with numerous chapters around the state, with eggs being delivered from the St. Croix Hatchery in early November.

Some classrooms near the hatchery picked up their eggs in person and got a tour of the hatchery as well. Most programs took advantage of the free eggs and shipping, courtesy of the State Council. The classrooms report that the eggs arrived in great shape and many eggs are already hatching. With Covid restrictions hopefully easing by this spring, chapters are hopeful that they will be able to participate with the fry release at the end of the school year.

With a new system in place this year, whereby the DNR took over TIC registration, there was some confusion, with some classes still registering with DATCP. Programs should all go through the DNR next year and we are working with them to further streamline the process, hopefully in time for next year. As always, if you have any questions or concerns, please contact Greg Olson at driftless23@gmail.com.

Letter to the Editor

Mike Kuhr's article in the Summer 2021 Wisconsin Trout on dam removal projects touched on some advantages to removing dams on trout streams. Although most streams' water quality would benefit from removal, especially since many of these impoundments were formed by flour grist mills, any of these smaller impoundments have no, or few homes on them.

Presently in Wisconsin there are approximately 3,900 dams with 60 percent being privately owned, 9 percent state owned, 17 percent owned by municipalities. In addition to altering the natural variability of a river's flow, dams fragment continuous river systems into a series of largely disconnected segments. River fragmentation diminishes the natural connectivity within and among river systems, limiting species migration and dispersal, as well as the transport of organic and inorganic matter downstream and into riparian zones and floodplains.

One of the advantages with dam removal on trout streams would be increased trophy trout numbers in stream orders 3, 4 and even 5. Not only would trout streams benefit from dam removal, but all rivers would benefit. I would encourage TU to form a standing committee to prioritize and work with local governments and the state to start reducing the number of dams on streams, especially trout streams.

Bruce Markert, Slinger, WI

Council creates CAFO guide

By Jason Freund

The concentrated animal feeding operations (CAFO) ad-hoc committee for Wisconsin Trout Unlimited has had the rather unenviable task of producing a review of CAFO issues in the state. While the kneejerk reaction is that Trout Unlimited should simply be against CAFOs, the reality of the situation is that position is rather untenable, as it does not recognize the reality of the situation as it pertains to laws and regulations around CAFOs in the state.

Over nine months, the committee (Linn Beck, Bill Heth, Mike Kuhr, Kim McCarthy, Michael Williamson, the late Tim Fraley, and myself) researched the topic, reached out to experts in the field and met with agency personnel to better understand the topic.

Holding

permitting

agencies to their

responsibility of

upholding the

public trust

doctrine and

Clean Water Act,

particularly given

recent supreme

court rulings, is

our responsibility.

As we met with individuals from the Department of Agriculture, Trade and Consumer Protection (DATCP) and the Wisconsin Department of Natural Resources (DNR), the two agencies most responsible for perand mitting oversight of CAFOs, it became quite clear that the laws in place make preventing CAFOs from being permitted quite difficult. Greater flexibility occurs at local level,

where local ordinances can regulate CAFO siting.

The timeline

Beginning in October of 2020, the committee was tasked with reviewing the State Council's CAFO Policy, suggest changes and develop a "playbook" or "guide" for local chapters to use when dealing with threats to our coldwater resources from CAFOs and industrial agriculture.

We met with representatives from DATCP in early December, and in mid February we met with representatives from the DNR. These meetings, along with our own research, provided the background for writing the document. Over the next several months we outlined what the paper would look like and we charged members with writing different parts of the document.

By June of 2021 we had a mostly finished document that we were comfortable presenting at the State Council meeting. With that feedback, the committee made final changes and presented the final product at the October State Council meeting in Westby. Since then, the document has been available online for membership to provide feedback, which the committee will use to edit and enhance the document

Officially titled "CAFO Information and Strategies for Protecting Trout Streams," the document is available on the coldwater advocacy page of the Council website at wicouncil.tu.org. I provide the executive summary here, but interested members should read the document and provide feedback to what we hope is a "living document" that will change over time.

Executive summary

Wisconsin Trout Unlimited focuses on our coldwater resources, and agriculture presents the single largest source of degradation, groundwater withdrawals and threats of significant fish kills. WITU is not opposed to agriculture or all CAFOs, but we are concerned with the threats that they present to coldwater resources in the state, as evidenced by recent fish kills and studies that have demonstrated their environmental impacts.

Additionally, CAFO density (number of CAFOs per watershed) and their associated groundwater wells have proven to pose significant impacts on trout and trout streams. As CAFOs continue to increase in the state – an average of 13 new CAFOs per year have been ap-

proved – we expect an exponential increase in issues associated with industrial agriculture.

CAFOs are regulated by local units of government in accordance with livestock siting regulations established by DATCP and the DNR through their oversight of the National Pollution Discharge Elimination System (NPDES), as required by the U.S. Environmental Protection Agency (EPA) through the Clean Water Act (CWA). Wisconsin state statues that regulate CAFOs are NR 150 and NR 151,

which manage runoff, and NR 243, which regulates animal feeding operations.

As the laws are written, it is very difficult to prevent a CAFO from being sited and permitted. In some situations, local municipalities are also involved in the regulation of CAFOs.

Recommendations

These are our recommendations for individuals and Trout Unlimited chapters concerned about the impact of CAFOs:

- Reduction of demand for CAFO products. Industrial agriculture exists because of supply and demand for inexpensive meat and dairy products. Buying your meat, eggs and dairy products from local farmers decreases demand for industrial agriculture products.
- Stay informed. CAFOs are regulated by DATCP and the DNR through NR 150, NR 151 and NR 243, and NPDES applications are published by the DNR. If you decide to get involved in this issue, it's a good idea to get to know your regional CAFO specialist.
- Partner with like-minded organizations. Wisconsin is home to a host of conservation organizations that are actively working to reduce the human health and environmental issues associated with CAFOs.
- Name of the objective o

ing CAFOs in your area.

Emphasize impacts to human health. Due to how the laws are written and enforced, impacts of industrial agriculture on the environment are generally not considered in the siting or permitting process, but human health impacts can be considered.

CAFOs in Wisconsin

There are approximately 320 CAFOs in Wisconsin, of which 90 percent are dairy, the greatest concentration of which are in eastern Wisconsin.

Another concentrated area is in Barron and Dunn counties, where turkey farms are numerous. As disease issues continue to plague hog farms in Iowa, the industry is looking to decouple their birthing facilities from their growing operations to minimize disease issues. Several efforts to move these facilities to Wisconsin have occurred recently. And there are a number of other areas with higher densities of industrial agricultural facilities.

The two issues that most commonly make the news in Wisconsin are the groundwater issues in Kewaunee County and the fish kills that have been caused by manure spreading by CAFOs. The karst geology of Kewaunee County is at least partially responsible for the ground- and surface-water issues that area is experiencing.

The karst of the Driftless Area is of a different geologic origin, but the concerns are much the same, as the Southwest Wisconsin Groundwater and Geology (SWiGG) study reports. Several high-profile fish kills have occurred in the state.

The Department of Justice (DOJ) has recently been active in

assigning fines for recent fish kills caused by CAFOs. The largest was the \$242,000 fine for fish kills on Otter Creek near La Vernon Farge in County, which occurred in 2017 and 2019 and for a third kill on Bostwick Creek in La Crosse County. A quick search of DOJ news releases shows five settlements with CA-FOs and food-processing facilities totaling approximately \$770,000 in 2021 thus far.

Much of
Wisconsin suffers
from phosphorus
enrichment of
surface waters
and groundwater
impairment by
fecal bacteria,
nitrates and other
agricultural
compounds.

The future

It remains to be seen how these rulings will affect how the DNR and DATCP will regulate the siting and permitting of CAFOs and their high-capacity wells. CAFOs have increased in Wisconsin and agricultural economics are increasing the pressures on non-organic, non-CAFO farms. As CAFOs increase, approximately 3,000 small farms in Wisconsin have ceased to exist.

"Get big or get out" was poorly received in 1970's when Earl Butz, then Secretary of Agriculture, first said it and it is an increasingly common refrain today and generally equally disdained by many. Proponents of large farms will tell you that the economies of scale do not support smaller operations and that regulations on CAFOs provide environmental protections that are not required of farms with fewer than 1,000 animal units.

Environmental impacts of agriculture are primarily, but not entirely, a function of their density on the landscape. Obviously, fish kills and unsafe drinking water draw a lot of attention, but issues of nutrient over-enrichment, pesticides, herbicides, neonicotinoids and other agricultural chemicals are all significant and are tied to CAFOs as well as agriculture in general.

I grew up in nearly trout-less Dodge and Jefferson counties where there are relatively few CAFOs, but the landscape and waters are as agriculturally impacted as most anywhere in the state. The "brownwater" rivers I grew up fishing, hunting, and canoeing – the Rock, Crawfish and Maunesha Rivers – are probably as impacted as any rivers in the state. Little of that degradation would be linked with

industrial agriculture. We used to marvel how in the fall while duck hunting, the rivers suddenly cleared as the water cooled and suspended sediments and algae that plague these rivers dropped from suspension. Our greenish-brown rivers were suddenly clear until they gave way to ice cover.

Recent Wisconsin Supreme Court rulings provide an opportunity to ensure that our water resources are better protected. One of the most im-

portant things local chapters can do is keep themselves abreast of CA-FOs proposed in their area. As we look across the state, it is important to understand the impacts of agricultural density and things that can be done to lower the density of manure on the landscape.

Lobbying for manure to be spread over a greater number of acres, greater storage capacities and spill mitigation regulations, and the continued uptick in holding polluters responsible for fish kills is a good start. Holding permitting agencies to their responsibility of upholding the public trust doctrine and Clean Water Act, particularly given recent supreme court rulings, is our responsibility.

And we need to better understand the broader impacts to our surface and ground waters, be they acute spills that result in fish kills, chronic sources of degradation, im-

Two important supreme court rulings

In addition to fines that have been levied since our report was completed, two Wisconsin Supreme Court rulings are of great importance. Both cases were brought to the court by Clean Wisconsin and the rulings affirm the state's authority to place permit restrictions on large livestock farms and to regulate the density and effect of high-capacity wells on ground and surface waters of the state.

The rulings establish not only the state's ability but their responsibility to regulate CAFOs and groundwater withdrawals. Much of Wisconsin suffers from phosphorus enrichment of surface waters and groundwater impairment by fecal bacteria, nitrates and other agricultural compounds.

pacts of specific chemicals on fish and macroinvertebrates and effects of groundwater withdrawals. CA-FOs are far from the only source of degradation to our coldwater resources and the groundwater that feeds them.

We are accumulating the information that is held by state agencies on fish kills, CAFOs and agricultural density, groundwater and surface water impairments and withdrawals, and biotic integrity of fishes, macro-invertebrates and other biota. This accumulation of information will help better inform us about how sources of degradations, both agricultural and non-agricultural, correlate with the fish and insect communities we all care about.

We face more issues than just agriculture, and I would make the argument that for much of the state, these are the good old days for trout angling. My home waters of the Driftless Area are loaded with wild trout and a number of streams have had great rebounds in brook trout numbers. Similar reports can be written about many other waters of our state, but we continue to face challenges of water quality and quantity that require us to remain vigilant so we do not lose the gains we have made over the last several decades.

Jason Freund is a Ph.D. fisheries ecologist who teaches Biology at the University of Wisconsin - La Crosse and is a chapter leader with the Coulee Region Chapter. He is a member of the CAFO and Priority Waters committees of Wisconsin Trout Un-

Big news at the Back 40

By Johnson Bridgwater, River Alliance of Wisconsin

As reported in the Summer 2021 issue of Wisconsin Trout, Aquila Resources, the company that has been working to open the Back 40 mine, was making moves indicating a shakeup might be on the horizon regarding their company. Since that last report, Aquila Resources entered into a sale agreement with Gold Resource Corporation ("GORO") based in Denver, Colorado, allowing GORO to purchase Aquila Resources outright following the meeting of all regulatory requirements related to the sale. We expect this sale will be finalized.

Also, the finalization of another Aquila Resources sale, the Bend Deposit in Taylor County and Reef Deposit in Marathon County to Green Light Metals Inc. ("GL"), a Canadian Company, was completed at a sale price of \$7 million.

So, while it appears the current driver of mining projects in Wisconsin and on the Wisconsin-Michigan border, Aquila Resources, is "going away," by no means does this indicate that the concern over places like the Bend Deposit, the Reef Deposit and the proposed Back 40 mine should lessen. It simply means that attention will now turn towards the new owners and following their actions and communications. We do know GORO is selling the idea of the Back 40 mine to its investors and stockholders, so stay tuned as we await its next steps.

The Menominee Tribe and organizations such as the Coalition to Save the Menominee River, Inc. are closely following these developments, and they came together last fall at a "No Back 40" water celebration event to reaffirm what the Menominee Tribe has been asking all along. The tribe has stated, "The Menominee Nation is steadfast in its opposition to the proposed mine and its commitment to preserving the Menominee River. We ask you to stand in solidarity with us as we continue our fight to protect our place of origin, our sacred sites, the wildlife, water and environment for future generations.'

Back to the Flambeau mine

A brand new action item is emerging from the Flambeau mine in Ladysmith, Rusk County. The Flambeau Mining Co. is applying for its Certificate of Completion, which would allow the company to walk away from the Flambeau mine site completely, with no liability nor further remediation required. It would also release back to the company a bond valued at \$ 2.2 million.

However, ongoing concern of mineral contamination, which is well documented via testing and monitoring and acknowledged in previous legal filings, coming into the Flambeau River via a stream at the south end of the mine site, is cause for concern and reason enough to pause to allow for input from relevant stakeholders, DNR and local residents.

Known as "Stream C," it flows through the final piece of the former Flambeau mine site that still requires a final closure order, which the Flambeau Mining Co. is seeking at this time.

Fortunately, there will be opportunities for public input and public dialogue as a formal part of the final Certificate of Completion review process that will be conducted by the Wisconsin DNR.

For those who wish to learn more or make a comment on the Certificate of Completion, visit the Wisconsin DNR website and search for "reclaimed flambeau mine." This process will unfold over a period of months, with the first opportunity for public review and comment to take place in late winter or early spring of 2022.

More information on these mining issues can be found on the websites of the Menominee Tribe, River Alliance, Coalition to Save the Menominee River and Wisconsin Sierra Club. River Alliance has updated its mining section, and the Wisconsin Sierra Club has updated its online Wisconsin mining map.

My name is Johnson Bridgwater, and I am the new Water Advocates Organizer for River Alliance. I come to River Alliance with more than 20 years of experience in conservation and environmental advocacy, and I look forward to meeting and working with many of you in the future. Feel free to reach out to me any time 608-257-2424 (ext. 115) or jbridgwater@wisconsinriv-

For more information visit https://wisconsinrivers.org/mining/

Watershed Access Fund: Obtaining public access

The Watershed Access Fund continues to help acquire public fishing areas around the state. As a donor to the Watershed Access Fund you will have your name added to the list and will see it appear in Wisconsin Trout for a year following your generous donation.

Our WAF Contributors

Charles Barnhill Madison, WI Jeffrey Bartynski Eau Claire, WI Jim Bayorgeon Appleton, WI Mark Beilfuss New London, WI Trego, WI Scott Berglund Blaine BiedermannMadison, WI Jav. ME Steve Bien Stephen Born Madison, WI Dave Brethauer Brodhead, WI Ed Brockner Beaver Dam, WI Linda and Dennis Buzzar

DeForest, WI Don Clouthier Appleton, WI David and Jill Coenen

Combined Locks, WI Bruce Davidson Marinette, WI Katherine Duplessie Eau Claire Tom Ellis Pewaukee WI John & Kathlee Ewen

Neenah, WI Paul Feldhake Port Washington Tim Fraley Madison, WI Daniel Geddes Appleton, WI Gary Gillis Suamico, WI Tony Goldberg Gordon Grieshaber

Mineral Point, WI Robert Haglund Green Bay, WI Ricky Hancock Milwaukee WI Henry Haugley Sun Prairie, WI Mark and Janis Heifner

Appleton, WI Bob Hellyer Boulder Jct., WI John & Judith Hutchinson Sun Prairie, WI

R. Patrick Irvin Mt. Pleasant WI Appleton, WI i nomas janssen Paul Julius Cross Plains, WI Grace & John Keneally

Waukesha, WI Steven Kennedy Amery, WI Keven Kramer Plymouth, WI Peter Kurtz O.D. Menominee David Lange LaCrosse, WI James Laudon Rochester, MN Ben LubchanskyMazomanie, WI Thomas and Larissa Lyon

Janesville, WI Douglas McFarland

Rhinelander, WI Christopher Marowski Bruce Markert Slinger, WI Larry Martin Mequon, WI Paul and Nichelle Martin Baraboo, WI

Jeanne & Kim McCarthy Green Bay, WI Caroline McGuire Marinette Rodney & Paula McKenzie

Madison, WI

Tom Mertens Green Bay, WI Chris Meyer Middleton, WI Robert Moser Milwaukee, WI Thomas Mrazek Fond Du Lac Gene Mueller Monona, WI David Muresan Middleton, WI Paul Neuman, in Memory of Chuck Wineland

Bailey's Harbor WI Herb Oechler Wauwatosa, WI Jerry Osborn Madison, WI Cheryl and Winston Ostrow

Viroqua, WI William Pearson III Eau Claire Randal Rake Helena, MT Cedarburg, WI Bob Retko Ken Rizzo Oconomowoc, WI Mosinee, WI James Ruether Rosholt, WI Mike Ryan Charlie Sanders Middleton, WI Jack Saunders Beaver Dam, WI Stephen Scott Belmont, WI Middleton, WI David Soens Gregory Sonzogni, in memory of William Sonzogni Michael Staggs

Poynette, WI Mike Stapleton Pardeeville, WI Warren Stern West Bend, WI Ronald Suslick Peshtigo, WI John Tweddale Madison, WI

Dennis, Becky Vanden Bloomen Eau Claire, WI

Richard Wachowski Eau Claire David Wahl

Lakewood Ranch, FL Raymond Weiss, in memory of Todd Durian Grafton, WI Donald Wellhouse Kaukauna **Paul Williams** Madison, WI Bill & Jane Wisler

Dodgeville, WI Robert Wyman Beaver Dam, WI

TU CHAPTERS

Antigo Chapter Antigo, WI Coulee Chapter LaCrosse, WI Marinette ChapterMarinette, WI

BUSINESSES

Great Lakes Eco Monitoring Fitchburg,WI

Here is my co	ontribution of \$3	100 or more to
the Wisconsin	n TU Watershe	d Access Fund

Make your check payable to Wisconsin Trout Unlimited

MAIL TO: Kim McCarthy 736 Meadowbrook Court Green Bay WI 54313

Name

Address

City, State, Zip

Phone

TU mourns loss of adventurous leader

Nohr Chapter, Council will deeply miss Tim "Grizzly" Fraley

By Todd Templen

Adventure... Alive! Vibrant! Uplifting! New! Pursuit of the unknown due to a curious mind.

Adventures are experiences which have an impact on people, and people feel compelled to share those experiences with others. I have been lucky enough to have many adventures. The excitement of sharing them bubbles out freely as some who know me will attest to! I shared many of those adventures with a good friend, Tim S. Fraley, or "Grizzly," as some knew him.

I last spoke to Tim in person at our September board meeting for the Harry and Laura Nohr Chapter of Trout Unlimited. He had just retired that week from working for the State of Wisconsin. Tim was our president and I the past president on the board. The tense topic of the night was whether we should we go through with our annual banquet, which we had postponed from May 2021 due to the pandemic. The banquet was now planned for Saturday, October 9. Tim, me and most of our membership had been vaccinated. After a lengthy discussion, the board glumly concluded we could not in good conscience hold a fundraiser when it may put longtime supporters at risk. The banquet could wait. The banquet would have to wait.

Meeting on the Prairie River

I met Tim at a gathering of fly fishermen at the Prairie River in northern Wisconsin in 2001.

A rag-tag group of fishermen from the Midwest who had met on the internet in the days before Facebook took a chance and got together for a weekend of fishing and sharing experiences. I believe Tim had his son with him. There were about 15 to 20 who attended that weekend, and I never would have imagined the friendships that would blossom and grow from that event and how large the circle of friends would grow.

Tim and I went on to share many adventures after that weekend.

He shared the Brule with many of us, introducing many to the challenges of north-shore steelhead.

He invited people to share his explorations of southwest Montana and northern Idaho.

In return, I introduced him to the spring creeks of southwest Wisconsin, along with morels, watercress, streamside mint juleps and more.

Tim was a proud father who shared the accomplishments of his son and daughter on the hockey ice and soccer fields as they grew up. Tim glowed when speaking of his children.

When college came for the kids, Tim had more time to explore. I did not have children yet and still fished much, often with Tim. We attended Flyfishing Conclaves with groups of anglers from the Wisconsin Fly Fishing message board where we would explore new areas in Wisconsin and raise money for local conservation clubs performing stream work.

Many of these conclaves were held at the Westfork Sportsman's club from 2000 to around 2011. Others were held on spring ponds in northeast Wisconsin, both Brule rivers, chasing exceptional Sulphur hatches from Martel to Gleason in Wisconsin and even venturing in to the UP to chase brook trout and rainbows.

Tim and our friends were amazed at the diverse coldwater opportunities in the state of Wisconsin and often these resources were the primary subject of our conversations. Trying to tease out the secrets the state's cold water held. Were there wild/feral rainbows in Wisconsin? How did the spring ponds come about and what was their potential? Hex? Are there hex waters that few know of yet and what prizes could they yield? Mousing? Articulated streamers? Tricos from Vernon County to the south shores of Lake Superior? Caddis, oh the caddis. Cased, emerging, fluttering, elk hair, CDC, wet flies, dries and Quigley's. Sporadic hatches to clouds of them getting in your ears and nose.

Tim's and our friends' wonder grew as we experienced and learned more, and we shared with each other what we had learned. With that wonder grew a desire to do more to protect and restore these valuable resources

In that time, I had become active in the Harry and Laura Nohr Chapter and encouraged Tim to join TU. Tim was a TU member, but he didn't feel connected to the chapter he was with at the time and would rather be part of a chapter that supported the area he most often fished.

Tim joined our board around 2013 and assumed the responsibility and honor of president in 2015.

Like many new presidents, he was uncertain of himself and the direction to take the chapter. I assured him he had dedicated members who would help carry the load and he would find more motivated individuals who would be willing to step forward as his term progressed. There was a strong project leader and team in place, which consistently knocked out a mile of habitat improvement each year, a mature internship process with the UW-Platteville campus, a local education support process and an annual banquet that he could execute in the first year as he learned the network of people.

Tim succeeded at maintaining and supporting the changing needs of those ongoing projects and went on to grow the chapter's capability. He brought on our chair for the Women's Initiative, the chair for our Youth Initiative, strengthened partnerships with other TU chapters in the Midwest and nation, and so much more. Tim was a regular attendee at state and regional TU meetings and always represented our chapter's interests.

Tim was adventurous. He never lost that in all the time I knew him. He knew his limitations and would push right up to them. He would sometimes express doubt or worry about a new adventure, but he had a diverse group of friends for support. He gave freely of what he had experience with and listened to others who had experience in areas he did not. If he had doubts or questions, he always had friends who would help. It provided the support he used to grow. He did not hesitate to return a favor, either.

I could tell you about the time he punched a bear through his tent wall, saved a man from quicksand in the middle of a river, climbed a 20-



TIM FRALEY: A GREAT TU LEADER AND AN ADVENTUROUS SOUL

He punched a bear through his tent wall, saved a man from quicksand in the middle of a river, climbed a 20-foot rock to get to the next fishing run after losing a toe, faced close encounters with bull moose, got lost in the north woods in a snowstorm coming off the river after dark and helped a deputy clear a mountain road of trees and boulders for a fire crew after a storm in the Bitterroots, just to name a few of his many adventures.

foot rock to get to the next fishing run after losing a toe, many opening day blizzards, close encounters with a bull moose, got lost in the north woods in a snowstorm coming off the river after dark, helped a deputy clear a mountain road of trees and boulders for a fire crew after a storm in the Bitterroots, gave me solid advice when I was in a tough spot on more than one occasion and would drive through the night dodging deer to arrive at fish camp at first light.

On October 9 Tim sent a text saying he had tested positive for Covid-19, so we cancelled our board meeting for the October 12. On October 15 Tim's daughter informed me that he had passed away at home.

Tim will be sorely missed, he touched so many and gave so much. TU has lost a great leader. His friends and family miss him badly. I hope he is on to the next great adventure.

"The meaning of life is to find your gift.
The purpose of life is to give it away."

William Shakespeare

Remember TU as Part of Your Legacy

Have you considered making Trout Unlimited part of your legacy? For loyal TU members, making a bequest to TU in your will or trust is a wonderful way to continue supporting clean water and healthy trout populations. Help assure that TU is able to continue its good work now and into the future.

Should you decide that TU is worthy of a legacy bequest, be sure to specify in your will or trust if the bequest is intended to benefit National TU, the State Council or your local chapter.

Thank you for considering Trout Unlimited in your estate planning.

Support Wisconsin TU and get your Wisconsin TU license plate now. Go to www.dot.state.wi.us/ drivers/vehicles/personal/ special/trout.htm



Get to know Jamie Vaughan, TU's Great Lakes Engagement Coordinator

Interview by Mike Kuhr

Hi Jamie, we're glad to hear TU has hired you to be the Great Lakes Engagement Coordinator. It looks like you've done some great work in Michigan and we're excited to have the opportunity to work with you in Wisconsin.

Let's start with this, why did you want to work for TU?

I was lucky to get an internship with TU right out of college after studying environmental science. Fly fishing was something foreign to me at the time, but my passion aligned with TU's mission, and I couldn't be happier that I ended up in an organization with a great culture, effective leadership and an incredible thirst to find the best and most creative ways to protect coldwater resources.

Could you tell us a little bit about your involvement in the Rogue River Home Rivers Initiative?

In 2014, I began working with Nichol Demol, who launched and led the Rogue River Home Rivers Initiative since 2010. Under Nichol's leadership, I honed my skills in watershed management, working on both urban and rural projects from small rain gardens to large wetland restorations. Working in the greater Grand Rapids area presented lots of opportunities for engaging the community, and over time we grew an informed and impassioned community around coldwater conservation in the Rogue River. I eventually took over as project manager in 2019 and helped bring the initiative into its 10th year.

Are there any specific accomplishments from the Rogue River Initiative that you're most proud of?

We started an initiative called the Rogue River Tree Army to increase shade along coldwater streams and combat the effects of the emerald ash borer, climate change and more. In just three years, we've planted more than 37,000 trees and shrubs along coldwater rivers and streams in west Michigan.

Wow, that's impressive. Let's back up a little. Can you share some of your early upbringing with us?

I grew up in a residential neighborhood on the southwest side of Chicago. Growing up, my access to and experiences in natural areas was pretty minimal. Despite that, I had an innate care for the environment starting at a young age. I loved going

to Lake Michigan, walking along the Chicago River, and knew early on that I wanted to study and pursue a career in the environmental field. My upbringing has certainly informed my interests in the relationship of urban areas and the environment and my passion for bringing all people into coldwater conservation.

Do you recall a moment in your childhood when you made a special connection with fishing or the outdoors?

When I was younger, every summer I would go with my aunt and uncle to spend a day on a small lake outside of the city. I got to fish off a dock with my Snoopy fishing pole, take rides in a paddle boat, and soak up the outdoors in ways that were totally new and exciting to me. Though the days were few, I look back now and see how influential they were in shaping who I am and how I arrived at a career with TU.

Ah, the Snoopy pole, I can relate. We've all been stuck closer to home since the pandemic first hit. Secret fishing spots aside, do you have a favorite local area to recreate outdoors?

I really enjoy small, icy, ground-water-fed Michigan streams. Whether I am getting some line wet, foraging for ramps, or just hiking, these streams inhabit some of my favorite forests and I much prefer them to more exposed, larger river systems.

Alright, back to business. We know the position you're in now used to be called "Advocacy Coordinator." Can you tell us a little bit about how that role is expanding with the change to "Engagement Coordinator"?

In the Great Lakes and nationally, we have a strong base of staff and supporters who are keeping their fingers on the pulse of legislative issues at the state and federal level, from national government affairs staff to our state councils and other policy experts in the community. While I don't have a policy background, in this new role I will harness the knowledge of our vast network of experts to help educate TU members about various issues and empower them to play a role in legislative issues, from calling their representatives to writing letters and much more.

I will also be advancing engagement more broadly beyond policy issues. Through social media and

Why no donation envelope this issue?

It was probably inevitable that with supply chain issues impacting virtually everything these days, it would only be a matter of time until Trout Unlimited was somehow impacted.

Those of you who have become accustomed to finding a donation envelope for our Friends of Wisconsin TU and Watershed Access Fund grant programs in the Winter/January issue Wisconsin Trout will not be finding that envelope in this edition. The company that provides the envelopes has informed us that they cannot get that particular size envelope at this time.

Our hope is that the lack of the envelope will not result in a decrease in donations for those very important programs. Donations can be easily made by cutting out the donation form that accompanies the donor lists and sending that form along with your check to Kim McCarthy, whose address is on the form. Donations can also be made online on the Wisconsin State Council website.

We are hopeful that a batch of envelopes will get out of their shipping containers and into the April/Spring edition of the *Wisconsin Trout*.

other outreach, I will work to keep members aware of TU staff's Great Lakes activities and create volunteer opportunities for people to get involved in projects in a hands-on way, ultimately creating a stronger and more collaborative TU community. You can find us on Facebook at Trout Unlimited's Great Lakes Program and on Instagram at Instagram.com/troutunlimitedgreatlakes

We realize you're based in Michigan, and there is a Great Lake in between us, but we'd be happy to have you at one of our upcoming State Council meetings. Aside from that, what's the most efficient way for our chapters to connect with you?

I welcome chapters to reach out to me with questions, ideas or just to say hello. I am most quickly responsive to emails, so I'd recommend sending me an email to get the conversation going. Chapters can expect that I will be reaching out to keep them updated as policy issues arise, when there are opportunities to partner with national staff on projects in Priority Waters, and I am always happy to share information on chapter events or stories to our growing social media audiences. I reached be mie.vaughan@tu.org.

In a typical year, our TU volunteers in Wisconsin put in more than 50,000 hours working on conservation, education, advocacy and public outreach. While that's an impressive number, I think we can do more. Do you see opportunities for expanding the volunteer involvement within our TU chapters?

Absolutely. The work that TU does has so many positive auxiliary



benefits that it's very easy to make the case to non-anglers why the work we do is so important for local communities. I see potential in bringing in the wider community that is concerned about environmental issues and recognizes the importance of clean, cold water. Additionally, it can be intimidating for new and existing anglers to come out for a variety of reasons, so the more welcoming and inclusive we can demonstrate our organization to be, and reaching out to new or overlooked audiences, the more people will feel confident to step up and get active in the TU community.

Perfect, I think we're going to get along well. Thank you for spending some time with us, Jamie. We're really looking forward to working with you to help strengthen Wisconsin's TU chapters.

Searching for invasives

Volunteers search for aquatic invasive species to protect Wisconsin's waters.

By Ellen Voss, AIS Program Director, River Alliance of Wisconsin

As the temperatures drop and summer beings to feel like a distant memory, I wanted to travel back in time to the hot days of August and celebrate the success of an annual tradition that's become key to identifying new populations of aquatic invasive species early in our state: Snapshot Day.

Initially focused on rivers and streams, this one-day statewide AIS scavenger hunt has expanded to include lakes and wetlands. The premise and training remain the same, though. Volunteers learn how to identify aquatic invasive species that harm Wisconsin's water bodies and then search for them in the field at pre-selected locations. The state-"community-based-science" wide approach helps maximize the number of sites being checked, and this free event allows volunteers to learn about their local waters and how to help keep them healthy.

Asking folks to give up their time on an August Saturday is a big ask, but once again, dedicated water lovers showed up across the state to help find AIS. More than 100 volunteers put on their waders and water shoes, rolled up their sleeves and explored 128 different monitoring sites in 22 locations across Wisconsin. In total, 54 lakes, 37 streams/riv-

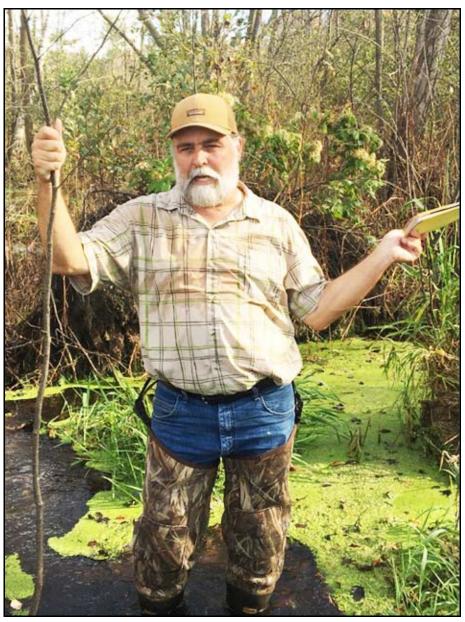
ers, and four wetlands were monitored, and 17 different species were found, including everything from snails to mussels to aquatic plants

Every year, Snapshot Day supplies a vast amount of AIS data to the DNR. Those reports are then compiled and verified by AIS experts and added to a statewide database so that appropriate measures can be taken if new species are detected. Early identification is a key factor in stopping the spread of these pesky plant, algae and animal species from spreading throughout the beautiful waters of Wisconsin.

How can you help? Mark your calendar and plan to take part in the 9th annual Snapshot Day next summer on Saturday, August 20, 2022. With hundreds of miles of rivers and streams and growing concerns about New Zealand mudsnails, our goal is to add more monitoring sites in the Driftless Area in 2022 and create a comprehensive network of volunteers, anglers and paddlers to help combat AIS.

In addition, help is still needed to monitor river sites statewide. If your local chapter would be interested in hosting or joining a Snapshot Day event, please contact me at evoss@wisconsinrivers.org. Thank you for your continued efforts to protect Wisconsin's rivers and streams.

Project will enhance Little Plover River



WISCONSIN WETLANDS ASSOCIATION'S TRACY HAMES

By Doug Erdmann, Frank Hornberg Chapter

Wisconsin Wetlands Association Executive Director Tracy Hames led a tour of the Little Plover River (LPR) in early October to update the public about the Little Plover River Watershed Project. Participants included members from the Frank Hornberg Chapter of TU, Wisconsin Wildlife Federation, River Alliance of Wisconsin, Ducks Unlimited, a local landowner and other interested citizens.

The Little Plover River is one of the most studied rivers in the nation and at one time was listed as one of the most endangered rivers in the country. In 2005 it ran dry.

In 2016 a project team was assembled that included the Village of Plover, Wisconsin Potato and Vegetable Growers Association, Wisconsin Wetlands Association, Portage County Land Conservation Department, DNR and the Wisconsin Wildlife Federation. This group sought to restore health to the watershed and find a balanced approach that would meet the needs of the stakeholders.

The study group looked at what had changed with the Little Plover River Watershed. In 1853, a survey showed that the stream was 5.5 feet wide at the current Kennedy Avenue. In 2016, several sections of the river at Kennedy Avenue were 30-40 feet wide and shallow. The river was not functioning properly with respect to its floodplain. Drainage ditches feeding the river would provide a sudden rise of the river after major rain events. The upper river went from a wetland habitat to a forested area.

Because 80 percent of the water

in Little Plover River comes from groundwater, the group looked for ways to make sure there were consistent, stable flows in the river. Most of the groundwater also came from northeast of Kennedy Avenue. To help remedy the situation, land was purchased which contained ditches and those ditches were filled in. The water in this area could now soak into the groundwater and recharge the system.

Another goal was to reduce pumping. Some land in close proximity to the river was no longer irrigated and pumping from three high-capacity wells in the area was reduced by 50 percent. The Village of Plover shifted to pumping the majority of its water in the summer to a well further away from the river.

Improving the stream channel would return the stream to having a properly functioning floodplain. The stream was narrowed by installing brush bundles, it became deeper, and sedges now hide the brush bundles.

The project team continues to work with local farmers to use the best practices in water conservation.

To date, between \$4-5 million has been spent on this project. Hames said "We are just beginning." The Frank Hornberg Chapter will continue to support this project. It is important that in order to be heard, we keep our seat at the table. By working together, we can find enough water for drinking, agriculture, industry and trout.

For more information, check out the Little Plover River Watershed project at https://wi-plover.civicplus.com/328/Little-Plover-River-Watershed-Enhancemen

Reviews: Three books from Wisconsin authors

By Duke Welter

Three books from Wisconsin authors top our list this issue. All three should be familiar to Wisconsin Trout readers.

The last comes first. Jay Ford Thurston has published what he describes as his last book, entitled "Trout Science, For Everyone," after four previous books on trout fishing. All have focused on Wisconsin trout streams, especially in the heart of the Driftless Area. Jay lives in and fishes around Viroqua.

Jay has spent most of his 88 years fishing for trout, and most of it in Wisconsin. He taught in schools in southwestern towns and since he retired lived for a time in Bayfield County but mostly in Viroqua. He is primarily an accomplished spin fisher, but many of the tips in his 58 chapters are applicable to either spin or fly fishing.

One of his tried-and-true fishing indicators is stream temperature and its effects on trout and catching them. He has kept detailed records for decades, measuring lengths of fish and water temperatures when it was caught.

From that experience he's developed some rules of thumb for temperatures at which trout become more active, or what changes in temperature will do to trout activity. I've kept track of temperatures for many seasons, several times a day, and agree that paying attention to them can make or break your fishing day.

You'll learn about temperatures from this book, as well as tips about stalking trout, stream etiquette, fishing during summertime and responding when trout start to gear up for the fall spawning period. That's a lot of nuts and bolts. Just don't expect to get very much information about fly-fishing techniques or flies.

Trout Science, For Everyone, www.ten16press.com, Waukesha Wis., 250 pages, \$19.95

Our other two books are both suspense novels set in trout-ish country, both from familiar authors.

Bad Moon Rising

John Galligan teaches writing at Madison College. His Bad Axe County series, set in a fictional Driftless Area county whose name was the historic predecessor of today's Vernon County, delves into the seamy side of our home turf.

His heroine is County Sheriff Heidi Kick, a former Wisconsin Dairy Queen, and as in the previous novels in the series (Bad Axe County and Dead Man Dancing), she's struggling to be a good cop and balance the demands of law enforcement, a bumptious family and reelection against baddies and misogynists. Somehow it works out, but the strain is constant.

I enjoy these books because while Viroqua, my home and its area are bucolic and offer some minor fishing opportunities, we don't often see the seamier side of the area. Often, we'll head way up in a coulee and someone in the car will think they are hearing banjos. That's bread-and-butter country for Galligan. This is by no means a book with a trout-fishing presence, unlike his four previous "Knot" mysteries featuring a trout bum who keeps finding bodies in the streams he fishes.

Here, Galligan has settled into writing a series featuring a complex heroine facing challenging mysteries to be unraveled. The series makes enjoyable reading.

reading.

Bad Moon
Rising, Atria
Paperbacks
(Simon &
Schuster imprint), New
York, 324 pages, \$17



Wolf Hollow: A Lew Ferris Mystery

Victoria Houston has written 20 mystery novels in the Loon Lake Series, all with the word "Dead" in the title and a straight-up appreciation of fly-fishing (though with a nod to tourist fish species like walleyes and muskies).

She's a long-time member of Northwoods TU and sprinkles descriptions of streams suspiciously resembling the Prairie River in her books.

Her stable of characters includes Sheriff Lew Ferris and her romantic interest, retired dentist Dr. Paul Osborne, but she's developed a colorful supporting cast.

In the latest, "Wolf Hollow: A Lew Ferris Mystery," she's gradually killing off some of the Northwoods' ultra-rich and variously sleazy inhabitants. The apt descriptions of how many among the "1 percent" live and their enclaves are not rarities across our northern counties, but I enjoy having an author write a police procedural story focusing on the necessity for the locals to poke into those enclaves.

The author had Sheriff Ferris, who often teaches newbies about trout fishing, describe her standard fly box selection: Five different flies, no more. Royal Wulffs, #22 and #24 Blue Winged Olives, a Pale Morning Dun, and an outrageously big Salmon Stone Fly. That way one won't get confused by too many choices. While I'll likely never be able to tie on those tiny BWOs, I suppose it might be worthwhile to reduce the flies I carry from six boxes, with 250 flies apiece, to something less. Good lesson, Victoria.

Wolf Hollow: A Lew Ferris Mys-

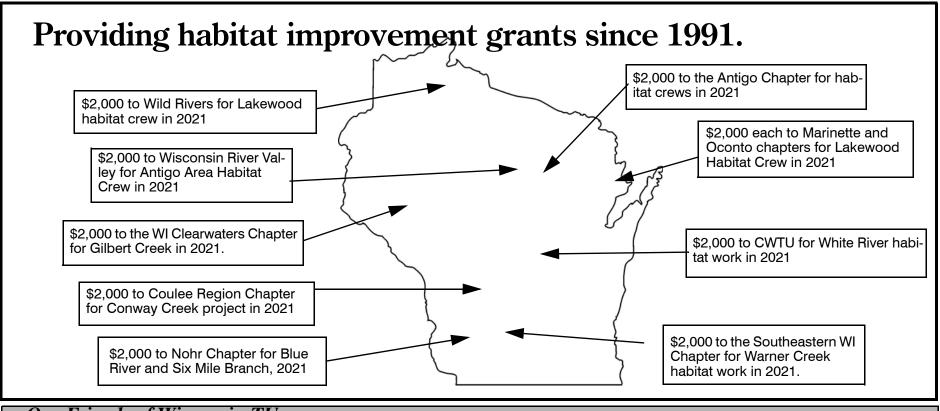
tery

Crooked Lane Books, New York, 276 pages, \$26.99

Please support Friends of Wisconsin TU in 2022

Please consider becoming a Friend of Wisconsin Trout Unlimited and support our Chapters' trout stream restoration projects.

We will recognize our donors by publishing their names here in *Wisconsin Trout* for one year following their generous donations.



Our Friends of Wisconsin TU Jeff Johnson St. Croix Falls, WI James School Kaukauna, WI Wausaukee, WI Cross Plains, WI Paul Julius Paul Schroeder James Kellner Saukville, WI Stephen Scott Belmont, WI George Albright Grace & John Kenealy Waukesha, WI Independence, KY Robert Selk Madison, WI Jason Anderson Ralph Klassy North Fond Du Lac, WI Frederick Sevbold Madison, WI Gary Anoszko Dousman, WI Dr. A.A. Koeller Ashland, WI Lou Arata Whitefish Bay WI **Brent Sittlow** Hudson, WI Stewart Smith, in Memory of James Cliff Kremmer Sparta, WI Rod Bahr Menomonie, WI Wisconsin Rapids, WI Larry Krueger Smith Charles Barnhill Madison, WI David Lange LaCrosse, WI Bill Sonzogni Verona, WI Jim Bayorgeon Appleton, WI Rockford, IL Hudson WI Jack Lenox David Sonstegard Mark Beilfuss New London, WI Michael Staggs Fitchburg, WI John Lindberg Wautoma, WI Poynette, WI Blaine Bierdermann Richard Lindroth Madison, WI Carl Stumpf Middleton, WI Madison, WI Stephen Born **David Swanson** Platteville, WI Monona, WI Herb Lundberg Stillwater, MN Stuart Brandes Thomas and Larissa Lyon **Rick Szymialis** Waupaca, WI Janesville Rick Christopherson Norwalk, WI Ned Cochrane Florence, WI Jim and Billie March LaCrosse, WI Sarah Tenby-Owens Hawthorne, WI Paul and Nichelle Martin Baraboo, WI Ky Terrill Chippewa Falls, WI David and Jill Coenen **Bob Martini** Rhinelander, WI Donald Thompson Cumberland, WI Combined Locks, WI Kim McCarthy Green Bay, WI Dennis Vanden Bloomen Eau Claire Terry Cummings Rhinelander, WI Milwaukee, WI Robert Moser Carol Vendt Oconto, WI Dale Dahlke Knapp, WI Herb Oechler Greg Vodak Wauwatosa, WI Stoughton, WI Bruce Davidson Marinette, WI Depere, WI Cheryl and Winston Ostrow Viroqua, Dave Vogt Presque Isle, WI Anna Jane Diedrich Eau Claire, WI Wausau, WI William Pearson III Ken Voight Chippewa Falls, WI Mark Dolenshek Raymond Weiss, in memory of Todd **Donald Persons** Janesville, WI Big Bend, WI Walter Dowty Middleton, WI Harry Peterson Durian Grafton, WI Katherine Duplessie Eau Claire, WI Wautoma, WI Paul Williams Madison, WI Lindsay Eichenlaub Ray Piehl Deephaven, MN Richard Ela Randall Rake Helena, MT Norbert Wozniak Stevens Point, WI Madison, WI Ronald Rellatz Robert Wyman Merton, WI Beaver Dam, WI Doug Erdmann Wisconsin Rapids, WI Bob Retko Cedarburg, WI Madison, WI Zarnowiecki, Stan LaGrange, IL Lawrence Euler John & Kathleeen Ewen Neenah, WI New Berlin, WI Gloria Roark Superior, WI Alan & Cindy Finesilver Madison, WI Bill & Lynn Rogers **BUSINESSES** William Flader Madison, WI Frank Roznik Maribel, WI **CHAPTERS** Freemont, WI Mike Ryan Rosholt, WI Eric Forsgren Jack Saltes Aldo Leopold Jerome Fox Two Rivers, WI Mount Horeb, WI Watertown, WI **Charles Sanders** Middleton, WI Antigo, WI Joen Francoeur, in Honor of Richard Antigo Jack Sanders Edgerton, WI Marinette County Marinette, WI Waukesha, WI Schumann Milwaukee, WI **David Sands** Fitchburg, WI Dan Geddes Christopher Gorzek David Schiebel Abrams, WI Eau Claire, WI Ron Grasshoff Prairie du Sac, WI Gordon Grieshaber Mineral Point, WI Yes, I want to join the "Friends" of Wisconsin TU. Sun Prairie, WI Henry Haugley Enclosed is my check for \$100 or more, payable to Wisconsin Trout Unlimited. Ashton Hawk Madison, WI MAIL TO: Kim McCarthy Madison, WI Stephen Hawk 736 Meadowbrook Court Bill Heart Ashland, WI Green Bay, WI 54313 Mark Heifner Appleton, WI Kurt Helker Monona WI Robery Hellyer Boulder Junction, WI Name John & Judith Hutchinson Sun Prairie, WI Address JR. Patrick Irvin Mt. Pleasant, WI Oconto Falls, WI Jeff Jackson City, State Zip Phone # Appleton, WI Thomas Janssen

Comment period now open on Enbridge pipeline

Now's the time to share with the DNR your opinions of the Line 5 Wisconsin Segment Relocation Project.

By Melis Arik, Vice President, Wild Rivers Chapter

The "Line 5 Wisconsin Segment Relocation Project" (aka the "Reroute") would install 42 miles of new pipeline with a 120-foot right-of-way, crossing farmlands, forests, wetlands, rivers and streams in several towns of Ashland and Iron counties.

The pathway of the new line would pass through the subwatersheds of Fish Creek, Lower Bad River, White River, Marengo River, Upper Bad River, Tyler Forks, Potato River and Montreal River. The new location is higher in the Bad River watershed, intersecting the upstream reaches of many of these watersheds – places with complex networks of headwater wetlands where groundwater recharge of

streams is sufficient to sustain trout populations, including brook trout.

These are sensitive areas, with 18 of the streams crossed by this project designated Areas of Special Natural Resources Interest (ASNRI). These waters are within the ancestral homelands of the Lake Superior Chippewa tribes and within the ceded territories in which tribal

members retain treaty-reserved rights to harvest, hunt, fish and gather.

The continued operation of Line 5 poses an existential threat to downstream waters at any location in the watershed. Additional impacts from new pipeline construction and ongoing maintenance in headwater areas also pose a threat. For these reasons, in January 2021, the Wild Rivers Chapter passed a resolution to "express OPPOSI-TION to the Enbridge Line 5 Wisconsin Segment Relocation Project, and to express SUPPORT for all efforts to halt expansion or relocation of the pipeline, such that Line 5 is removed from the Bad River watershed and decommissioned entirely.'

Status of Line 5 permitting process now?

The company submitted applications to the DNR in 2020 for Wetland Fill and Waterway Crossing and Stormwater Construction Site permits. The DNR can issue no permits or approvals until completion of full review and public comment on the Environmental Impact Statement (EIS), which was opened for public review and comments in December. See the adjacent article for details on the EIS and how to provide your comments to the DNR.

The first public hearing on the re-route was held in Ashland on July 1, 2020. The hearing focused on developing the scope of the EIS and the initial response to the Wetland and Waterway permit submitted by the company. The hearing lasted four hours and was both in-person and virtual. About 80 citizens gave forceful in-person testimony, mostly opposing the project. The DNR also received more than 2,100 written comments expressing opposition. A recording and written testimony may be accessed from the DNR Enbridge Projects web page.

Since that time, formal and informal coalitions have been organizing to not only defeat this proposal, but to shift the conversation to the larger questions of climate resilience, regional energy independence, and infrastructure for a fossil fuel-free world. TU National is engaging in that discussion, and the Wisconsin State Council, local chapters and we as individuals need to engage as well.

We all know that even voluminous public comments don't prevail often enough in permitting decisions. In Minnesota, 68,244 of 70,000 comments submitted to the Minnesota DNR opposed the completion of the 377-mile Enbridge Line 3 Pipeline Replacement Project. Yet the Line 3 replacement is now operational. Did climate activists lose? Did Enbridge win? What

These are

sensitive areas,

with 18 of the

streams crossed

by this project

designated Areas

of Special Natural

Resources

Interest

does that mean for us? Or for the movement to shut down Line 5 at the Straits of Mackinac of Lake Michigan?

Stand with the Seventh Generation

For companies like Enbridge, multibillion-dollar projects and the years of regulatory battles to get them approved represent the cost of

doing business. Though these projects are framed in terms of meeting human needs, this is a business and the bottom line is profit.

At the same time, we are witnessing – and living through – climate calamities which we know are fueled by continued dependence on fossil fuels and resulting carbon emissions. In whose interest is it, really, to keep tar sands oil flowing? In whose interest is it, really, to continue this willingness to sacrifice the land and water that sustain us all?

These are not philosophical questions. Communities like Mellen directly benefit when Enbridge hands them a \$1.5 million check for five acres of land in the proposed right of way adjacent to Copper Falls State Park, as happened in March of 2020 (with a promise of an additional \$3.25 million upon construction of the line). But who benefits if, or when, the pipeline that would cross the Bad River at Mellen fails? It is comforting to build a future on the basis of best-case scenarios, but would this project pass the Seven Generations Test? In the meantime, while we debate, we are losing species, habitats, biodiversity and time.

Where can you learn more?

Sign up for updates from the Wisconsin DNR and find links to Enbridge project documents on the Enbridge Pipeline Projects in Wisconsin web page at dnr.wisconsin.gov/topic/eia/enbridge.html

The League of Women Voters of Ashland and Bayfield Counties situate the issue within the context of the operation of Line 5 as a whole. See dnr.wisconsin.gov/topic/eia/Enbridge.html. The league signed on to a November 18, 2021 letter to the Council on Environmental Quality (a division of the Executive Office of the President) urging them to not issue a Special Use Permit for this

project. Other signatories included Wisconsin's GreenFire, Midwest Environmental Advocates, Honor the Earth, Sierra Club and many others. Read the letter on the league's website.

Honor the Earth has been leading this movement for decades, not only fighting pipelines but building regional energy and food systems that handily pass the Seven Generations test.

Interested in learning more about the ecological evaluation that goes into permitting pipeline projects? You can find videos on the website of the Association of State Wetland Managers.

And finally, don't neglect to explore Enbridge's website, specifically the presentation of the Line 5 WI Segment Relocation Project. It includes maps, infographics and video stories highlighting community support for the company.

Related issues to watch

Momentum for shutting down Line 5 in Michigan is growing. The deteriorating condition of the pipeline where it crosses Lake Michigan at the Mackinac Straits poses a clear and present threat to the Great Lakes. Read more at forloveofwater.org/line5/

The Bad River Band's legal actions related to Enbridge's continued on-reservation operations are far from over. Resolutions passed by the tribal council in 2017 and 2019 affirmed the band's decision to not renew expired easements, calling for removal of the pipeline from the entire watershed. Read more on at badriver-nsn.gov.

A document filed by Enbridge with the Federal Energy Regulatory Commission last spring and reported by the Minneapolis Star Tribune on December 5, 2021, reflected the company's awareness that the love affair with fossil fuels may be coming to an end.

DNR seeks public review and comments on draft environmental impact statement

The Wisconsin Department of Natural Resources (DNR) is seeking public review and comment on a draft environmental impact statement for a proposed pipeline relocation project in Ashland, Bayfield and Iron counties.

Enbridge has applied for waterway and wetland crossing permits and a construction site erosion control permit from the DNR to relocate its Line 5 pipeline. The purpose of the environmental impact statement is to inform decision makers and the public about the proposed project, alternatives and the associated environmental and socio-economic impacts.

The DNR will host a virtual public hearing regarding the environmental impact statement on Feb. 2, 2022. Details for the public hearing will be made available following the New Year.

Members of the public also have the opportunity to submit written comments on the draft environmental impact statement through March 4, 2022.

Enbridge proposes constructing approximately 41 miles of a new 30-inch-diameter crude oil pipeline to relocate its existing Line 5 pipeline outside of tribal lands of the Bad River Band of Lake Superior Chippewa. The company would also abandon approximately 20 miles of the existing 30-inch-diameter Line 5 Pipeline, including the section that currently crosses the Bad River Reservation.

In compliance with the Wisconsin Environmental Policy Act, the DNR and its consultants have completed a detailed analysis of the proposed project, various alternatives and the associated impacts. Construction of the proposed relocation would affect approximately 135 acres of wetland, including the conversion of approximately 34 acres of wooded wetland to non-wooded wetland, and permanent fill of less than 0.03 acres of wetland.

The proposed route would cross approximately 185 waterways, including the Bad River, Brunsweiler River, Marengo River, Tyler Forks, and the White River, as well as a number of unnamed ditches, streams and tributaries.

Some waterways would be temporarily bridged for vehicle access and some would have the new pipeline installed via open-cut trenching or dredging. Additional impacts associated with the project are detailed in the draft environmental impact statement available on the DNR website.

The public is encouraged to submit comments regarding the draft environmental impact statement for the proposed Enbridge pipeline relocation project. All electronic and hardcopy comments must be submitted or postmarked no later than Friday, March 4, 2022. Please submit comments to:

Wisconsin Department of Natural Resources

Line 5 EIS Comments (EA/7)

101 South Webster Street

Madison, WI 53707

Email: DNROEEACOMMENTS@WI.GOV

The DNR will consider all public comments received and will prepare a final environmental impact statement prior to making any permit decisions.

More information on the proposed project, permit application and draft environmental impact statement are available at https://dnr.wisconsin.gov/topic/EIA/Enbridge.html

Source: Wisconsin DNR Press Release from December 16, 2021

Convert trout flies for winter ice fishing

By Bob Haase

Many of us who fly fish for trout also enjoy fly fishing for panfish during the summer months. Some of those same people also fish for bluegills through the ice in the winter, but they generally use live bait such as wax worms, mousies, spikes or other grubs.

I stopped using live bait years ago, and started fishing with what they call "plastics." They are small triangular shaped pieces of plastic about an inch long that you attach to ice fishing jig hooks. I found



IceFlies All Season Scud

that I could catch more fish on these than I could on live bait, once I learned how to use them. It required a more finesse style of fishing than I was using, and being more alert to the subtle takes. Learning this presentation style will also help you catch more fish when using live bait. Similar to summer trout fishing, using the right fly and presenting it correctly, will result in more fish.

A few years later I wondered if panfish would take some of the same flies that I was using for trout in the summer. Aquatic insects are present in our lakes and streams all year long, and fish should still be feeding on them.

I started using a variety of weighted nymph patterns such as the hare's ear nymph, pheasant tail nymph and scuds, and started catching fish on them. I didn't have to change anything, just tied them on and started fishing. I was catching fish on them, but not as good as the plastics.

Then I started experimenting with new patterns, making slight modifications to the patterns, and the way I presented them.

I modified the weighting of the flies so that they would drop more naturally, such as a scud falling off of a weed. There has to be enough weight to get them down to where the fish are in a natural way, but not take forever to get there. By changing the weighting of the flies and the way I presented them, I started

catching more fish, and it seemed like I was catching bigger fish.

When UV resin first became available for fly tying, I designed a scud pattern using the resin for the

scud back. It worked great for trout that summer, and I decided to try it for panfish in the winter. I went from the .020 lead wire that I used for trout to a .025 to get them to drop a just a little faster. It worked just as good for panfish in the winter as it did for trout in the summer, so I renamed it my "All Season Scud." I shared it with some friends and it was working so well that they didn't want me to tell others about it. I

don't often share fishing spots, but I do share the fly patterns that work for me. I had a difficult time keeping up with the orders on these during the winter.

The other **Ic** modification that

I made was to use jig-style fly hooks with the slotted beads for most of the patterns. This allowed the ice flies to hang at an angle down with the barb up, resulting in more hookups.

Every year I experiment with new patterns and am amazed at

some of the patterns that seem to work. You don't see ants in the winter time, but some of the bigger gills that I caught through the ice last year were on a weighted ant pattern. I put two tungsten beads on a hook and put UV resin over them to make them look like an ant. I then tied on one or two wraps of hackle between the humps. I caught more fish on the other patterns, but the bigger gills came on the ant.

Mop flies became very popular a few years ago for trout, and bluegills in the summer. When micro mops

became available for detailing cars, I purchased them in every color that was available, and had good luck with them on trout. I found that they also worked great for winter bluegills. The micro mop nuggets are about 1/8 inch in

diameter and about ³/₄ to 1 inch long. They are so easy to tie that some good fly tiers kind of look down on them, but they catch fish.

Another good winter pattern

when the fish are fussy is any chironomid or midge pattern. They are usually tied on #16 to #22 hooks for trout, but I tie them in a size #14 and #12 for winter bluegills. I usually use a multi-hued tungsten bead and

Ice Fishing Chronomid

a black body with chartreuse wire. Sometimes I modify these by making one wrap of Krystal Flash Chenille just behind the bead.

Most of the time you do not need to use any live bait with these, but when the fishing slows down and nothing seems to be working, I add one goldenrod grub to the tip of the fly. You can get these by cutting open the pods on the stem of a goldenrod flower. If you can't find these, the best substitute are mousies. I am not sure if it is the use of live bait, or the white color of the goldenrod grubs that makes the difference.

Presentation is important, and once you master fishing these you will catch a lot more fish. I can't tell you the number of times that I came off the ice in the winter with a limit of nice gills, when most people weren't catching much. I think it is a combination of the ice flies and my presentation.

Scuds attach themselves to weeds

and often fall off. As they are dropping, gills come up and grab them. Getting the right weight on a scud will allow it to drop more naturally when the fish are fussy. Use more weight to get them down faster when the

fish are not as fussy.

Raise the fly slowly to the top of the hole and let it drop slowly to the bottom. Sometimes you need to jiggle the fly during the rise or drop, and other times you need to imitate a slow fall, then stop and hold that position for a few seconds. Always pay attention to where the fly is when they take the fly and adjust accordingly.

Another advantage of using ice flies, is that you don't have to purchase live bait, and the fly will not die and become unusable like live bait. Flies will keep forever and you can always have them with you whenever the urge to go ice fishing strikes.

The patterns that I described are some that work best for me, but don't be afraid to try any weighted nymph you might have in your trout fly boxes. Ice fly fishing for panfish in the winter is one time where dry fly fishermen might have to resort to using nymphs.



other IceFlies Micro Mop Ice Fly



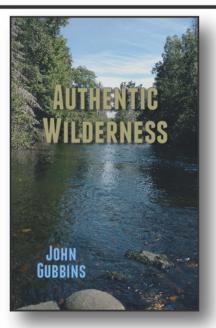
Trout stamp features Pittman brook trout image

Bill Pittman's love of the outdoors and art has continued throughout his life. As a teacher for 33 years, the Merrill artist had the privilege and pleasure of passing that interest and knowledge to his students.

His artwork has been shown locally and throughout Wisconsin. He has been a finalist in the state duck stamp competition and Wisconsin Artist of the Year competition.

Over the years, he has donated thousands of dollars through his artwork to conservation and other charitable organizations.

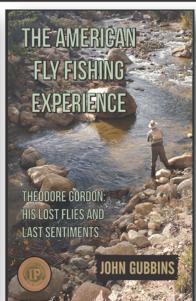
He is pleased to submit the brook trout image "Ambush" to Trout Unlimited and its chapters for 2022 fundraisers, with support of the Wisconsin Department of Natural Resources. A custom framed print and stamp will be awarded to the recipient of the Council's prestigious Resource Award of Merit at our annual banquet in February.



In John Gubbins's beautiful new book, what begins as a story of adventure in the wilderness of Alaska, rife with both camaraderie and loneliness, soon becomes much more, as memory and destiny intrude, carrying with them the sort of heartache and soul-sickness that in Gubbins's careful hands, burst with an electric and affirming humanity.

Matthew Gavin Frank

Professor, MFA Program in Creative Writing, N. Michigan University, Marquette, MI



Winner: 2020 IPPY Bronze Award 2020 Finalist Indie Award

John Gubbins has given us a great insight into Gordon's life, as an angler, a fly tier, a writer, a person of many secrets, and most importantly to me, a conservationist. I found it hard to put this book down once I started to read it.

Bert Darrow, Author, Guide & President of Theodore Gordon Flyfishers

For Books and Inquiries: Amazon - Kindle & Paperback
John Gubbins, 665 Tony's Lane, Ishpeming MI 49849
PH: 906-869-6679 · profoundriver@gmail.com (paperback with endorsement gratis)

Wisconsin salmonids: past, present and future

Coho and Chinook Salmon

By John Lyons

This past summer, I visited Port Washington, which is on Lake Michigan about 30 miles north of Milwaukee. I was struck by how busy, vibrant and prosperous the harbor was. It was a beautiful Saturday, and there were sailboats and sportfishing boats everywhere. Families strolled on the breakwaters past numerous anglers. Expensive-looking condos lined the shore.

I tried to imagine what the scene would have been 60 years earlier. Then, Port Washington was a very different place. Commercial fisheries for lake trout, chubs and lake herring had largely collapsed and sport fisheries were negligible. The lake was overrun with alewife, an invader from the East Coast. Periodically, the alewife would die unexplainedly in vast millions, and the carcasses would wash ashore, covering the beaches in piles of stinking rotting fish. The smell was awful. No one wanted to visit the shoreline, and Port Washington and other Lake Michigan communities turned their back on the lake.

But now it was so different, and Port Washington clearly had once again embraced the lake. I swung by the fish-cleaning station near the marina. A crowd had gathered to watch the mate from a charter fishing boat fillet an impressive pile of bright silvery fish up to 20 pounds.

These were Chinook salmon. The Chinook salmon and its smaller cousin the coho salmon, species native to the Pacific Northwest, had fundamentally changed Lake Michigan since their introduction in the late 1960's. They helped bring alewife under control, allowing the recovery of native species, and they created a fishery that had become worth millions of dollars a year.

It's no exaggeration to say that

Port Washington owed much of its current prosperity to these two fishes. Let's explore how the Chinook and coho salmon transformed Lake Michigan as well as their roles in Lake Superior and inland waters.

What are Chinook salmon and coho salmon? Distribution and life history

The Chinook salmon and the coho salmon are both native to the Pacific Northwest, found in rivers from central California north to Alaska and across to far eastern Russian rivers and throughout the North Pacific Ocean. Each species has many local names, but the Chinook is most commonly also known as the king salmon and the coho as the silver salmon. Both species are anadromous, spending the early part of their lives in freshwater rivers and then migrating to the ocean for an extended time to grow before returning to freshwater, usually the same river reach where they were born, to spawn and then die.

For both species, there's a lot of variety within that life history summary. Although reproduction is in the fall, actual spawning dates range from September to December depending on the location and strain of fish. Fish that reproduce in river areas not far from the ocean may enter just a few days or weeks before spawning, whereas those reproducing hundreds of miles inland may begin their migration months in advance. Other strains may enter their rivers while still immature and hold in deep pools for long periods before maturing and completing their journey to the spawning grounds much later. Larger river systems may have multiple strains, each arriving in the river, moving through it, and spawning at different times and places.



NICE LAKE MICHIGAN CHINOOK OFF DOOR COUNTY

Kyle Piller, formerly of UW-Madison, with a nice Chinook salmon from Lake Michigan off of Door County.



JUVENILE SALMON AND RAINBOW TROUT

Naturally produced juvenile coho salmon (top), Chinook salmon (middle), and rainbow trout (bottom) from a small unnamed tributary to the Sheboygan River, Sheboygan County.

This variability continues with the next generation. Upon hatching, juvenile Chinook and coho salmon may stay in the river of their birth for six to 18 months and grow to a size of four to nine inches, depending on the strain. They then begin a physiological transformation called smoltification that turns their bodies bright silver and allows them to survive in saltwater. Soon thereafter the smolts move downstream to the ocean.

Again, depending on the strain, they may remain in the ocean for one to eight years, feeding and growing, before undergoing another physiological change that eventually turns their bodies from lightly spotted and silver to heavily spotted and dark brown or reddish and allows them to return to freshwater.

As they enter rivers to complete their reproductive cycle, the salmon are at their largest, with some strains of Chinook salmon potentially over 100 pounds and some coho potentially over 30 pounds. Salmon lose weight as they move upriver, both from the rigors of migration and because they largely cease feeding.

Reproduction

Chinook and coho salmon reproduce in areas of gravel bottoms with moderate current. Chinook salmon, being generally larger, tend to spawn in somewhat bigger rivers and deeper water and stronger current than coho, which may spawn in surprisingly small streams.

The process of spawning is complicated and dynamic for both species. Males compete for access to court the female, who chooses which male she will spawn with. Usually, she prefers the largest male, the "alpha," which, once chosen, tries to keep the smaller "satellite" males at bay. However, while the alpha is chasing away some of the satellites, other satellites may move in and try to court the female.

As spawning begins, the female digs a depression in the gravel known as a redd, where her eggs will be deposited. The alpha male and female line up over the redd and release the eggs and milt (sperm) simultaneously, maximizing the chance of successful fertilization.

During spawning, smaller satellite males sometimes dart in and try to "sneak" fertilization of a few eggs before being driven away. When the female has released all of her eggs, she covers them with gravel and guards the redd for a time from other females that may attempt to spawn in the same place, an issue if the spawning run is particularly large or suitable habitat is limited.

After spawning, the male and female salmon die. Their carcasses nourish the stream, providing food for a host of microorganisms, aquatic insects, other fish and a variety of birds and mammals, most famously bears. The microorganisms and insects end up being food for the young salmon, which hatch and emerge from the gravel the following spring.

In that way, the death of the parents benefits the survival and growth of their offspring. Nutrients from salmon work their way through the food chain and are incorporated into and improve the growth and survival of many of the plants and animals living along the river. If the salmon run is reduced by pollution or overfishing or completely eliminated by an impassable dam, the entire ecosystem suffers.

The origins and early days of Chinook and coho salmon in Wisconsin: The earliest days

Although we think of salmon as a relatively recent addition to the Wisconsin fish fauna, Chinook salmon were among the first fish non-native species stocked in the state.

The federal fish hatchery established on the Shasta River in northern California in the 1880's that was so important in the spread of rainbow trout also produced Chinook salmon eggs. These were shipped around the country and first arrived in Wisconsin about 1890.

They were stocked in Lake Michigan and many deeper inland lakes such as Mendota and Geneva with great fanfare and promises of valuable new fisheries. But as far as anyone could tell, no salmon were ever captured from any of these introductions.

Egg and newly hatched fry stockings continued sporadically until the early 1900's without success.



SPAWNING-RUN COHO FROM THE SIOUX RIVER IN BAYFIELD COUNTY



FRESH 21-INCH COHO FROM THE SISKIWIT RIVER IN BAYFIELD COUNTY

Coho fever

The origin of the current salmon populations in the Great Lakes started in 1964. At that point, fisheries managers were in despair over the state of Lake Michigan's sport fisheries. Howard Tanner, at the time the chief of Fisheries for the Michigan Department of Conservation (today's DNR), hoped to find a gamefish that might take advantage of the abundant alewife and decided to try stocking salmon again in the lake, this time coho salmon.

In 1964, he and Wayne Tody, who replaced Tanner as Chief of Fisheries in 1966 when Tanner moved to Michigan State University to become a professor, obtained more than 1 million eggs of an unspecified coho strain from Oregon. However, instead of stocking the eggs immediately, as had been done in the past, they had the eggs hatched and reared to a smolt size of 5-7 inches. Then the surviving fish, about 860,000, were stocked in 1966, 650,000 in Lake Michigan at the mouths of the Platte and Manistee rivers along the northwestern shore of the Lower Peninsula, and 210,000 in Lake Superior at the mouth of the Huron River along the north shore of the Upper Peninsula.

In 1967 more than 2 million additional coho smolts and 836,000 Chinook smolts, raised from eggs of uncertain strains obtained from Washington and Alaska, were stocked in the same areas of Lake Michigan and Lake Superior. Fingers crossed, Tanner and Tody waited to see if their stockings would work.

To say that the stockings were a success in Lake Michigan would be damning with faint praise. The results were stunning. With no predators to speak of and an almost unlimited prey base of alewife, the coho prospered beyond anyone's wildest expectations. In a mere 16 months many had reached 10-20 pounds, incredible growth, almost unheard of in their natural range. By late summer 1967, schools of large coho salmon cruised the shoreline.

The public quickly took notice, and "coho fever" began. Anglers streamed into Michigan from all over the country, choking the few boat launches available at the time. Fist fights broke out at crowded landings as novice anglers struggled to launch and pilot their crafts. Every motel room in northwestern Michigan was full, restaurants and bars were constantly busy, and tackle and boat stores throughout the region ran out of stock.

Despite usually having the wrong sorts of gear and minimal experi-

ence salmon fishing, most people caught fish. A gold-rush mentality quickly developed, and anglers frantic to catch coho took to the lake in all manner of boats, many completely inappropriate for big water, such as canoes and small rowboats and sailboats. This led to tragedy on September 23, 1967, when a sudden storm sank dozens of sportfishing vessels and drowned seven anglers.

Coho fever in Lake Michigan continued well into the 1970's. The chaos of 1967 diminished steadily as better launch and harbor facilities were built and anglers and manufacturers learned which boats and techniques were most appropriate. Chinook salmon also survived and grew well in Lake Michigan and eventually supplanted coho in popularity because of their larger size. Chinook over 20 pounds were common, and the largest fish reached more than 40 pounds.

In Lake Superior, stocking results were less dramatic. Here, alewives were scarce, overall lake productivity was lower, and some potential smolt predators, most notably lake trout and burbot, still remained. Coho and Chinook survival, growth and maximum size were noticeably lower. But, unlike in Lake Michigan, the coho and Chinook that did survive spread widely and began to reproduce successfully in many different Upper Peninsula streams.

Coho fever rapidly spread to surrounding states. The coho and Chinook salmon stocked in Michigan moved widely, and some showed up in Wisconsin waters. Once Wisconsin anglers started catching these fish, they clamored for more, and Wisconsin began its own coho and Chinook hatchery stocking program in Lake Michigan in late 1960's.

Lake Superior was stocked with both species soon thereafter. Successful salmon reproduction was minimal in Wisconsin's Lake Michigan tributaries, but in Lake Superior self-sustaining runs of coho and Chinook salmon became established in the Bois Brule River in Douglas County, and coho runs also developed in the streams of the Bayfield County, beginning in the early 1970's.

Because of the excitement generated by the Lake Michigan fishery, an effort was made to bring coho salmon into inland lakes. An experimental stocking program for coho salmon began in 10 small northern Wisconsin lakes in 1969. Two of these lakes, Pallette and Stormy in Vilas County, had detailed evaluations. The Pallette Lake stockings were unsuccessful, with poor survival and growth and almost no fish



SPAWNING CHINOOK ON THE BOIS BRULE

Wisconsin DNR biologist Justin Haglund holding a spawning-run Chinook salmon from the Bois Brule River, Douglas County.

caught by anglers. Anecdotal angler reports also suggested that very few fish survived in the eight unevaluated lakes.

However, Stormy Lake had better results, with fish up to a pound produced after two growing seasons in the lake (compared to 10-20 pounds in Lake Michigan). Anglers caught and harvested many fish and liked the program. However, after three years of stocking, the Wisconsin DNR decided that the coho would be more valuable if stocked in Lake Michigan, and the inland lake coho program was ended.

The mature sport fishery

By the early 1980's, coho and Chinook salmon had become the cornerstone of the Lake Michigan sport fishery and associated shoreline economy, generating tens of millions of dollars in direct and indirect expenditures in Wisconsin and other Great Lakes states. The Wisconsin DNR made major investments in hatcheries and personnel to support salmon stocking and management.

Guiding and charter boat fishing became important occupations. Infrastructure associated with fishing and tourism such as docks and marinas, boat launches and fish cleaning stations, fishing tackle and boat shops, restaurants and bars, motels and resorts, grew to match a heavy demand.

The changes in the Lake Superior economy were not nearly as dramatic, but the new salmon fisheries were popular and benefited shoreline communities. However, the sailing was not all smooth, and several major challenges arose.

First, as delicious as they were, it became apparent that eating too many salmon might not be healthy. Testing revealed that salmon had elevated levels of microcontaminants, particularly polychlorinated biphenyls (PCBs). PCBs are a class of manufactured industrial chemicals long discharged into the Great Lakes. They can cause birth defects

and neurological and developmental problems in young children and also are suspected of increasing the risk of cancer in adults. As the PCB problem became apparent, governmental agencies scrambled to develop safe fish consumption guidelines. A silver lining was that in response the public began to clamor for a stoppage and clean-up of many years of improper industrial dumping. Over time, PCB levels gradually dropped, and salmon slowly became safer to eat.

Second, as stocking ramped up and additional predatory sportfish species were added to the mix (lake trout, brown trout, and steelhead), alewife numbers began to drop in Lake Michigan, and salmon survival and growth declined. To bring salmon numbers more in line with the carrying capacity of the lake, the Wisconsin DNR and other state and federal resource management agencies around the lake proposed capping and even reducing stocking, which was not a popular idea. The fishing was still good and the fish still large, but it was not quite as spectacular as it had been, and some anglers began to grumble.

In the late 1990's, bacterial kidney disease (BKD) significantly impacted coho and especially Chinook populations. It took several years for improvements in hatchery practices to bring the disease under control and restore salmon numbers, further frustrating anglers.

Third and finally, the Lake Michigan ecosystem began to change dramatically as new invasive species disrupted the food web. In the 1980's, the zebra mussel entered the Great Lakes and carpeted the bottom of many nearshore areas. By the 2000's the zebra mussel had been replaced by quagga mussels, which further expanded onto the bottom in deeper areas. In the late 1990's, the round goby arrived and took over the bottom-dwelling fish community, displacing and reducing several native species.

See SALMON, page 24



TROUT, SALMON COUNTNG WIER ON THE BOIS BRULE The wier also serves as a lamprey barrier.

John Lyons

Women's Clinic leaders available for chapters

The Wisconsin Women Fly Fishing Clinics (WWFFC) now has a corps' of women across the Midwest able to design and offer women's fly fishing clinics for your chapter. These courageous women have completed the Southern Wisconsin Chapter Women's Leadership Institute. The Wisconsin Women's Fly Fishing Clinics have always valued sustainability and quality programming. After 13 years of teaching more than 800 women and five years of mentoring 45 women anglers, the next logically steps for the WWFFC seemed to be to develop and offer leadership skills training. Held last June 2021 in Avalanche WI, it was the first leadership Institute Training in the nation, according to TU National.

These women courageously stepped forward for training and can lead some of the instruction for the June 2022 Women's Fly Fishing Clinics in Avalanche. This team from across the Midwest can offer satellite WWFF clinics throughout the year and have access to the resources built by WWFFC such as rods, reels, training kits and the networking/teamwork of other women to call upon to create capable teams. These women are the Wisconsin Women Fly Fishing Group. If you would like to create an event that is women friendly, feel free to contact them directly or email wisconsinwomenflyfishing@gmail.com.

These women are amazing organizers, so Midwest chapters that want to offer women's programming have a resource to turn to. WWFFC would like to offer continued future trainings, retreats and planning for women willing to step up to leadership. If any TU chapter would like support to help the WWFFC continue these trainings/opportunities, please contact Tina Murray at swtu.women.diversity@gmail.com. Donations will allow us to grow more women in leadership within TU.

If your chapter would like to hold Leadership Institute Training, it's a two-day curriculum. This curriculum is available to any group ready to progress to next-level teamwork. It emphasizes developing leadership, planning, communication, problem solving and, most importantly, teamwork skills. To set up a workshop contact Tina at shenanigansff@gmail.com

The SWTU Wisconsin Women Fly Fishing Clinics have become an institution in the Midwest with many other states looking at our model to see how we are so successful. The WWFFC leadership values sustainability and investing in others' growth. For more than a decade SWTU and WWFFC have invested in quality programming and building a corps of women fly fishers who are enthusiastic and ready to share with others. These individuals have invested their own personal time and energy into participating in WWFFC events and trainings to be able to offer extended knowledge across the Midwest and increase our abilities as an organization to bring others into the

They have also all invested in their own learning journeys to advance their skills. By their investments they have shown they will honor the WWFFC goals to offer quality programming that gives participants something positive for their lives. They will have the support of the organizers of the WWFFC.

There are more women in the wings, so be sure to ask at your chapter meetings who is involved in the Wisconsin Women's Fly Fishing Clinics.

Fishing Buddies / Guides needed to take women out to work on their skills while fishing on the water for the Women's Fly Fishing Clinics, Avalanche, WI.



June 15, 4 pm to and June 16th 10:30 - 12:30, Lunch at 1 again 3 pm to Contact Tom Thrall tpthrall@gmail.com / (608) 219-4249

Here are the first wave of women in the Midwest who either offered or took the training and are available to contact. When contacting them it is helpful for the chapter to have an idea of number of participants, resources they already have available and a date in mind for the event. It takes time to put an event together, so contacting them sooner is better.

These women have enough support that they can now offer By Women, For Women Clinics, along with co-ed, youth and diverse populations programming. They have invested in learning teamwork so let's get some chapter teamwork across the Midwest creating opportunities for populations with less access to the sport. These women can work across chapters or in any geographical area. For more information feel free to reach out to the Wisconsinwomenflyfishing@gmail.com

- Tina Murray, swtu.women.diversity@gmail.com, entire Midwest
- Pam Van Erem, wisconsinwomenflyfishing@gmail.com, entire Midwest
 - Donna Smith, dsmithflygirl@gmail.com, entire Midwest
- Carol Murphy, clmurph17@gmail.com, Dodgeville/Harry & Laura Nohr Jody Millar, jmillar@mchsi.com, Iowa/Quad Cities/Hawkeye Chapter
- Melis Arik, melis.arik@gmail.com, Washburn, Wisconsin/Wild Rivers
- Chapter
- Lisa Gilmore, gilmorelj00@yahoo.com, Illinois/Oak Brook Chapter Judy Rowe, jmyersrowe@gmail.com, Sheboygan/Lakeshore Chapter
- Jane Lehman, jedeprey64@gmail.com, Green Bay/Green Bay Chapter
- Colleen Kinsey, kinseycoco@gmail.com, Viroqua/Coulee Chapter
- Sheila McGuirk, Sheila.mcguirk@wisc.edu, Dodgeville/Harry & Laura Nohr Chapter
- Hillary Pinnella, hpennella@gmail.com, southeast Minnesota/Hiawatha
- Lisa Wilson, lawfinnee@gmail.com, Baraboo/Aldo Leopold Chapter
- Susan Jester, sjester@wi.rr.com, Milwaukee/Southeast and Coulee chap-
- Amy Koltz, akoltz@hotmail.com, Milwaukee/Southeast Chapter
- Celia Groff, celiagroff@gmail.com, Madison/Southern Wisconsin Chap-
- Lisa Powell, lisa@ironcountryroads.com, Rhinelander/Marquette, Michi-

Women's Fishing Clinics June 15-19

Wisconsin Women's Fly Fishing Clinics 2022 will be:

- June 15-16: Women's on the Water Skills Intermediate
- June 17-19: Women's Basic Fly Fishing Clinics
- June 17: Riverbuddy Leadership Prep Workshop

For those who have flies, gear or donations for raffle please email us at wisconsinwomenflyfishing@gmail.com. Your support is what makes the clin-

For those who would like to guide a woman who is working on improving her skills while on the water fishing, please contact Tom Thrall at tpthrall@gmail.com.

We are looking for guides to help on June 15 at 4 p.m. and June 16 from 11 a.m. to 12:30 p.m. Lunch will be at 1 p.m., and then you'll go out again at 4 p.m. There will be a group fire at the Portage Shelter that evening. Bring your preferred beverages.

Also, please see the Wisconsin Women Leadership Institute Article showing courageous women across the midwest willing to help organize more women's clinics near you. If you'd like to make a contribution to help build these new leaders and training opportunities for them on June 17 (they will be teaching on June 18) please contact Tina Murray at swtu.women.diversity@gmail.com.



THE WISCONSIN WOMENS FLYFISHING CLINICS ARE PLANNED FOR JUNE AT THE WEST FORK SPORTS CLUB





TU can help us turn page on pandemic

By Henry Koltz

When the pandemic started I was still required to drive for work, to inspect buildings which were falling apart, being torn apart and being rebuilt. That's the nature of what I do. And in early 2020, I more or less had the roads to myself. It was actually sort of freeing. I'd just had a heart attack, I needed no stress, and the lack of other drivers on the road helped make that a reality. I'd never seen so few cars as I drove through Milwaukee and to points all across southeast Wisconsin. For those wondering, our inspections were always outside, and we were always fully decked out in

After a while vaccines were created and more and more people have been returning to the road – although not nearly as many as before the pandemic struck. Despite the number of drivers being down, the number of traffic fatalities in 2020 was the highest it has been since 2007. That staggering fact caused experts to question what had changed.

The answer, depressingly, is that the pandemic has made people more reckless. They just don't care. If we're all going to die anyhow, then who cares about wearing a seatbelt, or driving sober, or driving at safe speeds?

Even more depressingly alcohol sales have soared, so too has drug use, and so too has the homicide rate. It seems like some of the light in this world has gone dark.

I feel that myself. I lost my dad in September. He was a TU member, he worked at our workdays back when he was healthier and younger and he loved the Northwoods Chapter where he was most active some years ago. He was a good man, and I don't intend to eulogize him here again. I've done that in a church once already, and having said my peace about the fine type of man he was, I'm content to stand on my past words. I do believe that even though he did not die of Covid, that Covid trapped him inside, took away his ability to do the things he needed to remain healthy, and that eventually he paid a toll as a result.

I don't know anyone who doesn't have some story about how Covid has negatively impacted them, and I don't know anyone who doesn't have some reason to be a little more pessimistic today after all that we've collectively been through.

I think that our TU chapters here in Wisconsin offer a chance to break out of our funk, however. TU is about coldwater, to be sure, but anyone who's been to a Wisconsin chapter event knows that it's more than that. We're a family.

We don't do the Washington, D.C. thing, where it's all about power by any means necessary and through backroom deals. We're friends. We accomplish what we accomplish because we do things the right way. We treat each other with respect. We handle things above board. We do good for the pure sake of doing good, not because it

might gain us an advantage somewhere else.

If you're looking for a bright star this holiday season, then Wisconsin TU offers a sky full of them. If you want to work with kids, we run Trout In the Classroom programs across the state. We work with youth and scouting groups, getting boys and girls outside and into rivers. We have a youth camp that is inspiring generations of future leaders, and we have family exploration days and fishing outings all season long.

If you'd like to help military veterans, we have that too. We work with vets, tying flies at VA facilities across the state. We take vets out fishing. It's amazing, and it's a core function of our DNA.

If you want to work with diversity initiates, Wisconsin TU has women's programs and opportunities to work with diverse groups. And we need more of this. It's good, and we need your help.

If you want to get in a river and leave a legacy that will outlast yourself, we certainly do that. Our chapters work each and every year restoring mile after mile of Wisconsin trout streams so that future generations will have as good or better fishing opportunities than we have today. We are literally building legacies and resiliency in the face of ever more frequent climate events, one bank structure at a time. Our volunteers do this for nothing. They wake up early, drive all across the state, and work doing good simply for good's sake. And then, occasionally, they go fishing.

And when they go fishing, it's more than just casting a fly or a Rapala. Friendships are forged, bonds are made, and parents and children spend time together, often outdoors, doing something good together.

It scares me that road deaths are up because people are so filled with rage and so devoid of care for the future. If there is one thing that TU can do it is to act as a bulwark against depression and to be a magnet for people looking to come back to good.

Wisconsin TU isn't the organization to hit you with made-up challenges to try to solicit your money. It's not going to give you the marketing treatment and try to get its hand in your wallet. What Wisconsin TU is going to do is what it's always done. Its members are going to set their backs to work, set themselves to providing service and get back to leading by example. If you are looking for a place to put your energy or be acatalyst for good, Wisconsin TU is that place.

This year, keep it local. Let's start right here at home. Let's get to work in our communities, in our rivers, in our classrooms and in our streams. Let's help turn the page on this pandemic, and let's be an example going forward.

Former State Council Chair and Southeastern Wisconsin Chapter President Henry Koltz is a TU National trustee.

West Fork Sports Club update

We had a work day October 16 and about 50 volunteers helped take down, clean up, saw and stack eight trees that were ready to come down in the park. Prior to that, we planted nearly 90 new trees. We had a remembrance for Bob and Roger Widner, with many family and club members attending. Many stories were told, and there were plenty of tears, laughs and good food.

We tallied up all the youth work from 2021 and are proud to say we impacted more than 200 youth.

We are busily working on a new cabin for members to rent in 2022. It will be similar to the "blue cabin" and will sleep four. The old blue cabin was the largest source of income for the club and losing it in 2018 was substantial. Replacing it should reassure sustainability for the club.

We will be releasing approximately 2,200 brook trout into the watershed in April, a collaboration between Living Waters Bible Camp, the DNR and the club. Anyone interested, particularly with children, in helping with disbursement of these trout, please email us at westfork-sportsclub@gmail.com.

We now have an events calendar on the website for those groups having events at the club and for others to both see what is available and the details of the event, https://westforksportsclub.org/events/month/.

The WFSC annual member meeting is June 11 at 7 p.m. Terms will be coming up for Tina Murray (president) and Colleen Kinsey (treasurer), along with a couple of executive member positions. Neither Tina nor Colleen will be running again. The board positions are for two years and half the board is elected every other year to ensure projects move forward. If you are interested, please let us know.

Volunteers are the backbone of this club. If anyone would like to donate time or funds, let us know. We'd also like to thank everyone who donated funds for ongoing improvements, including those who donated through their workplace giving programs and legacy programs.

through their workplace giving programs and legacy programs.

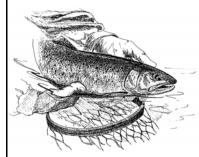
We made great strides in 2021, despite challenging times. We improved the landscape and continue to work to make smart landscaping decisions to protect the property. We reached out to multiple organizations and the club grounds are now reserved nearly a year ahead for events. For example, the music in the park series we started Saturdays in July will again be held in 2022. It was a fun and engaging series, bringing in local bands and people from near and far, as well as promoting small businesses such as Restoration Cider, Alt Brew and Driftless Provisions meats.

The 4H kids practiced for their fair presentations at the club, the Scouts (boys and girls) completed water education series, the Bamboo Rod Builders and the Women's Clinics held functions, we had weddings, baptisms, church luncheons, VSN water monitoring trainings and so much more. Check out the our website to see all the groups that used the club in 2021. For 2022 we have VSN completing water monitoring training again. TU's 5 Rivers Costa Program will be here in April, and so much more.

From each of us on the board we wish you a happy holiday season and a wonderful beginning to the new trout season in 2022.

Consider Proper Release

It's working...so let's keep up the good work!



- Don't play fish to exhaustion. Instead, use a landing net to bring fish under control before they're played out.
 Handle fish in the net. Grasp them across the back and head for firm but gentle control. Use the net fabric as your "glove."
- 3. Turn fish belly up while removing hooks. This disorients fish momentarily for easier, quicker handling.

 4. Don't remove swallowed hooks. Just cut the line...
- doing so saves two-thirds of deeply hooked trout.

 5. Don't keep fish out of the water more than 10-15 seconds. Fragile gills are damaged after that...especially





Antigo Chapter

We hope you all had a great fall season and we wish you a Merry Christmas. Our chapter had one more work day early this fall, brushing the fishing dock on the East Branch Eau Claire, and on River Road.

In September we were part of Kretz Lumber days for their customer and land forest people. We had a table there to promote coldwater resource work to landowners, explaining bank cover and other projects they could use to help the resource. Our area DNR personnel were there to talk about coldwater projects, and also shocked trout in Spring Brook as part of their demonstration.

We participated in the Council's northeast regional meeting in early December. It was a great meeting and we again came through with donations to help fund stream work in our region.

We started planning our banquet, which is Saturday, March 26 the Northstar Banquet Hall. We're looking forward to it, as it will be our first banquet in two years. Happy New Year to you all. -Scott Henricks

Central Wisconsin Chapter

Central Wisconsin Trout Unlimited (CWTU) rounded out a season of stream restoration with the last work day in September on the West Branch of the White River in the Younglove project area. The beautiful weather, guidance from the DNR, and 27 eager volunteers representing the Central Wisconsin and Fox Valley TU chapters contributed to another very successful morning.

Activities included streamside brushing to increase angler access and fishability/floatability; creation of brush bundles; placement of log sills; and the removal of the invasive buckthorn species. A special thank you to Laura Tucker for obtaining and serving (with assistance from Dan Harmon III) the delicious pizzas, salad and homemade brownies.

The Younglove project is an ambitious grant-funded endeavor which will take several years to accomplish. CWTU is quite certain more work will be done there again next year. CWTU's first habitat restoration work day for next year will be May 21, 2022. An additional note, Dennis Drazkowski, after many years as CWTU work day coordinator, has decided to resign from the position. Many thanks to Dennis and his dedication over the years to these CWTU habitat projects.

In November, Chad Tucker accepted the volunteer position as the new work day coordinator. He will be joined by a great work day support team comprised of Ira Giese, Tom Meyer, Chris Northway, Dan Harmon III and Laura Tucker. Many thanks to this great team.

We hosted two different fly-tying classes in Winneconne, led by David Pable. For the beginner, there was "Fly Tying – A New Experience" and for the tyer taking the next step, there was "Beyond the Woolly Bugger." The classes were held one evening a week for four weeks in September and October. It was one of the rare times this year we got to see a few new faces in person. "Fly Tying - A New Experience" had 10 students and a lot was learned and shared.

"Beyond the Woolly Bugger" had a good mix of tying techniques and interesting patterns taught. A big thank you goes to Dave Pable for doing a great job heading this up for five years. Thanks also go out to Dave's team, including Grace Pable, Tom Meyer, Dave Johnson, Wayne Parmley, Mike San Dretto and John Tucker, who all taught and assisted the students. Also, thank you to Bob Haase and Ira Giese for their considerate donations of materials to keep the cost down for the classes. Feedback from students was all positive and CWTU hopes to keep these classes going in the future.

In November, River Keepers canceled their in-person end-ofyear wrap-up and held it online instead. We recognized UW-Extension Coordinator for Water Action Volunteers Peggy Compton as River Keeper of the Year for all her years of service. River Keepers caps will be given as a thank you to the volunteers. Big thanks go to Bob Jozwowski, River Keeper coordinator, as well as the 90 volunteers organized into 28 teams that monitor 35 sites in the greater Central Sands

John Tucker, our CWTU watchdog, has been very involved in keeping our chapter abreast of the future Wautoma Solar Farm being planned by Alliant Energy. John has reported the Waushara County Zoning Commission approved a conditional land use permit for the farm. Condition 11 states that Alliant Energy must work with CWTU to protect the trout streams in the area. Construction is not expected to start before late spring or early summer of 2022.

CWTU has locked in a new date for our annual chapter conservation banquet, Saturday, April 30, 2022. Watch for more information to come and if you are interested in knowing more, please email Laura Tucker at lbtucker1953@gmail.

As I write this, the state reports that new Covid cases are at the highest for the year. This is not encouraging news and now, creeping up on almost two years deep into this pandemic, it is hard to be optimistic. But with that said, I am still finding ways to be positive.

As we move forward into 2022, some programs and activities will be a go and others might be postponed or canceled yet again. For example, the Master's fly-tying class is a go for January, but will be a bit smaller group understandably. As for one of our bigger annual events, TroutFest22 in February, that is still being debated. Like we have been doing, we will take it a month at a time and weigh each situation.

In spite of all this, our chapter has grown in membership during the past two years, exceeding 450, which is great news. But it is also frustrating since we are not having many opportunities to see and meet some of these new members.

So, as a way to engage and maybe learn a bit more about our members, old and new, I have designed and mailed out a questionnaire to all CWTU members. I am encouraging every one of our members to take a few minutes to fill it out and mail it back. This is part of us pressing forward and being optimistic as well as learning more about what members are looking for from our chapter. As an example, we did test an activity idea this fall called Fish-

ing with CWTU. We had a very small turnout, but we are not giving up on it yet and will do it again this

I look forward to hearing from our members and hope they give us some good feedback and suggestions. This information will help make our chapter better.

—Wayne Parmley

Coulee Region Chapter

We are busy preparing for our annual banquet, which is planned as an in-person event at The Golf Club at Cedar Creek in Onalaska on March 25. An item of interest to many is a 7-foot, 4-weigt bamboo fly rod, complete with two tips, built by

Bill Lamberson of Missouri. This fine piece of American craftsmanship will be available in a separate raffle. Check the CRTU Facebook page for further details as the event draws nearer.

-Brad Bryan

Fox Valley Chapter

The Fox Valley Chapter invites you to experience the fun and excitement of Cabin Fever Day, our annual and only fundraiser, on Saturday, January 15 at the Grand Meridian hall in Appleton. You can find details in our ad in this issue of Wisconsin Trout, and on our website at foxvalleytu.org. We are working hard to expand our fundraising activities beyond this event so we can devote more than half our budget to habitat work. Please visit us on the web or join us on Facebook.

TU national is asking chapters to prioritize and focus their conservation efforts because so much needs to be done. FVTU is working with other Central Region chapters to develop a joint plan that prioritizes our efforts in a quest to achieve the greatest long-term impact. This plan will enable us to focus our work and funds for the best regional result. FVTU leadership and board is working on our strategic conservation vision, which should be completed by April.

For the foreseeable future, we will hold board and chapter meetings virtually. We hope this changes soon, as Zoom meetings are not optimum. Our Chapter Meeting Coordinator Nate Ratliff has planned and scheduled 2022 chapter meetings from January through April.

January's meeting will feature

expert local fishing guide Nate Sipple, who will discuss strategies and tactics for success in catching warmwater game fish. Nate loves fishing for "smallies" in June, so I am sure we will hear about that.

February's meeting will feature Tom Lager, our chapter's own ecologist. Tom continues to author his always anticipated "Let's talk Bugs' column in our newsletter, Trout Talk. Tom will discuss "Giant Mayflies of Wisconsin - hatches, habitats and happy trout."

Our March chapter meeting will feature DNR Trout Specialist Shawn Sullivan, our DNR Fisheries Operations team manager based at the Wild Rose Hatchery. Shawn will bring us up to date on trout stream projects he manages in the Central Sands Hills ecosystem.

Our April meeting will feature guide Kyle Zemple of Black Earth Angling, who will discuss trout fishing the Driftless Area.

We're planning our April Angling Adventure, the annual early spring group outing which was suspended last year. Our annual May Fishing Day for people with Disabilities outing is also in the planning stages. Jerome Herro is leading our effort to organize this, the 42nd annual fishing event for people with special needs.

—Don Clouthier

Frank Hornberg Chapter

We held our second stream workday in September on the Little Wolf River at the end of Wigwam Road. Seventeen people helped brush the stream for fishability and remove trees that were blocking the

streamflow. Members from the UW-Stevens Point Flyfishing Club helped us with the project, which was greatly appreciated.

We are planning our first Trout In the Classroom



GARY GILLIS RECEIVED GBTU'S DISTINGUISHED SERVICE AWARD



school in Portage County in the spring of 2022. Follow us on Facebook for updates at facebook.com/ HornbergTU.

Looking for something to do this winter? Stop by Fall Line Outfitters on Saturdays from 9 a.m. to noon and tie some flies for the coming season.

The Wisconsin River Valley Chapter will hold a Flyfishing Film Tour on February 2 at UW-Stevens Point in Wausau. Watch our Facebook page for more details.

We are looking for people to tie flies to be donated to the Wisconsin Trout Unlimited banquet Saturday, February 5. A fly box will be filled with 50-100 flies from our chapter and auctioned at the state banquet. If you have questions contact Doug Erdmann at 715-712-3134.

If you order from Amazon for the holidays, make sure you use Amazon Smile. Select Frank Hornberg TU and a portion of the sale will be donated by Amazon to our chapter.

Remember to update your email address at TU.org so that you can be notified of our activities.

—Doug Erdmann

Green Bay Chapter

Green Bay Trout Unlimited (GBTU) held two monthly meetings since our last report. At our October meeting we presented our budget for membership approval. The budget passed and is available on our website.

We were also joined by guest speaker Chris Collier, TU Great Lakes Stream Restoration Manager in northeast Wisconsin. His presentation centered around northern Wisconsin trout stream projects and the new priority waters effort they released. It was a fantastic program and great to see Chris again.

Our November meeting featured guest speaker and Lakeshore TU President Myk Hranicka talking about night fishing for big trout. Myk shared some wonderful insights to this increasingly popular method of trout angling. We even got to see some of his personally tied, and proven, mouse patterns.

In our fall quarterly report we mentioned that our board approved \$1,500 for a Trout In the Classroom program at Lombardi Middle School. This project is being led by one of our board members and Lombardi Middle School agri-science teacher Carla Zimmerman. After a great effort by Carla to secure the tank setup, and GBTU's Kim McCarthy's help with the appropriate paperwork, Lombardi now has a new trout tank.

We wondered if this would lead to interest from other schools. After

to interest from other schools. After

PETER TILLEMAN RECEIVES GBTU PRESIDENT'S CLUB AWARD



GBTU PRESENTS POSTER AND CHECK TO BAY VIEW MIDDLE SCHOOL

Bay View Middle School receives the Council-provided brook trout poster and GBTU check. Shown here are GBTU President Adrian Meseberg and Bay View Middle School teacher Kelly Kohler.

Lombardi brought in their tank, we found out Bayview Middle School was adding one. Kelly Kohler, Bay View's Technology Integration Specialist, had already begun the process. After reaching out to us for answers regarding a few questions and support, we pitched in \$200 for the tank and helped put on the finishing touches for their new TIC program.

Afterward, a Two Rivers High School teacher was referred to us for another TIC setup. We shared this with Lakeshore TU as it's in their region. Given the fact TIC provides an amazing avenue for TU to spread our message and mission, GBTU has been very proud to see an uptick in the desire of our area schools to add this program.

We also gave each of our participating schools a large brook trout poster we received via the State Council. It is a great way for these schools to show they don't just have a "cool aquarium," but that TU is behind it. We also gave GBTU decals and stickers to our supporting schools.

In early December we held our Annual Awards Dinner/Holiday Party. Approximately 40 members and their family came out for the celebration. This is one of our chapter's ways to give back to our members who give so much for the resource. The evening started with a social hour, followed by a buffet of broasted chicken, BBQ ribs and all the fixings. Amy Megna played holiday favorites and other classic songs, and we gave out our annual awards.

First up was the invitation to the President's Club, a fantastic tradition at GBTU. This award goes to a "newer" member who has demonstrated a high level of activity within the chapter. In the past this has been associated with work project attendance, but we can look beyond that. This year Peter Tilleman and Chad Neta were recognized for their contributions to our coldwater resources. Both attended the DNRsponsored, GBTU-funded chainsaw safety program in 2019. Also, both have been regular attendees at our habitat restoration workdays for several years.

Next up was the prestigious Distinguished Service Award. This is a "biggie" because it is given for "undying contributions giving freely of time, money and talent for many years." Gary Gillis was honored this year. Gary became a GBTU mem-

ber in 1998 and helped us start and run our extremely popular Veteran's Service Program. He is a regular at events and work days and has donated several hand-crafted bamboo fly-rods to help fund our mission.

The next award was for the Member of the Year, for someone who has demonstrated outstanding efforts over the past year. We recognized Jose Diaz, who is a board member, life member and our membership chair. He has been instrumental in our chapter's use of Constant Contact, an email software program, which allows us to maximize different elements of chapter engagement. Most importantly, during the most challenging times of the Covid pandemic, Jose was a key player in GBTU's fundraising. He is a member of our fourperson alternative fundraising committee. Jose was extremely important in our "Direct Ask Campaign." He created the mailer, the email and the follow-up thank-you letters. This work led to us raising more than \$10,000 during a time when our annual fundraising banquet was cancelled. The funds helped GB-TU continue our mission.

Following the awards, we had a special gift. In June of 2020, while the pandemic had us all in a tight grip, GBTU lost an important member. Pete Harris was a former chapter president who had influenced several of our members. His good friend, Dan Ferron, put together a fly box filled with flies that he and Pete had tied and favored. The box was carved with an image of a stonefly on the inside and a picture of a "cut-bow" Pete had caught on the outside. We held a drawing with the names of 10 members Pete knew, and who veteran members thought Pete would like to have the box. Lee Meyers' name was drawn. The evening ended with a raffle for a dozen Christmas presents chosen by GBTU President Adrian Meseberg's wife, Christina.

GBTU is heavy into our preparation for our 46th Annual February Conservation Banquet on February 17. We hope to see you there.

For more GBTU Chapter information, please visit our website at greenbaytu.org or check our social media on Twitter, Instagram and Facebook.

—Adrian Meseberg



NOHR CHAPTER SPENT SEVERAL WORKDAYS INSTALLING STILES
From left are the DNR's Ted Swenson, Justin Haglund, Lloyd Meng and Adam
Ashand. On the right is the late Tim Fraley.



Harry & Laura Nohr Chapter

Our 2021 banquet, which was postponed from May to October due to the pandemic, was canceled. We will resume our regular schedule next year, the first Friday in May, 2022.

We had several work days putting in stiles on the Blue River this fall.

Our Trout In the Classroom program in Fennimore received 250 trout eggs in November. They are currently all hatched and in the alevin stage. Only about 25 were lost. They'll soon be swimming up for their first food.

We plan to send a student to the WITU Youth Camp and will send more if we find others who are interested.

Work on the second half of the Blue River project on the Zadrazil property will continue as soon the contractor can get in and deposit dirt spoil on nearby fields. We are working on funding for the last eased section of Big Spring Creek just above confluence with the Six Mile Branch. Work should be done

next year.

Nohr's new team of Water Monitoring Volunteers (WAV) have put their equipment away for now after completing a successful first season on their streams. We are looking forward to starting up again in May. The Lowery Creek Watershed monitoring team shared their end-of-year analysis and summaries with us. We hope to use their process and spreadsheets as a guide for us to compare results after next year's season.

A big thank-you for their guidance and generosity in sharing information. If anyone is interested in joining our WAV team, please contact Carol Murphy at Nohrgirl@gmail.com. Training sessions will be in March or April of 2022.

In October we unexpectedly lost our chapter president, Timothy Fraley, due to medical complications with Covid, despite vaccination. It is a great loss to us, as a member, a leader and a friend.

—Brian Larson

Marty Engel led the kids on an educational nature hike. The kids were like an army of ants dragging the brush and adding it to a bonfire which was set up near the parking lot on River Drive. This will be the second time around for this operation. Two years ago, pre-Covid, the same 4th-grade class turned out some 80 students along with three teachers and about 20 parent chaperones to hold our first buckthorn burn just downstream of where this year's event will be held.

In October the DNR provided us with another opportunity to have workday volunteers certified for chainsaw safety. Twelve individuals representing the Kiap TU Wish, Wisconsin Clear Waters and Twin Cities chapters participated in the training. The DNR requires that all volunteers operating a chainsaw at our workdays go through this training. In a related safety measure, we are just in the final throes of setting up a re-certification training session for first aid/CPR, also a requirement to be assured that we always

have a trained individual at work-days.

After a hiatus from brushing operations during Wisconsin's firearm deer season, we returned to the woods in early December to continue tackling the miles of stream corridor in our chapter area on easements which have become overgrown with box elder and buckthorn. We anticipate working almost every weekend through the end of March, barring bitterly cold temperatures or dangerous road conditions. Last winter we were limited to having no more than 10 individuals at a worksite at any one time due to the DNR's Covid protocols. As a result, many workdays were split into two shifts with one starting at 8 a.m. and the replacement crew coming at noon. With those restrictions removed this year, we are anxious to get back to more normal workdays when any volunteers who wish to participate are free to do so.

-Gary Horvath

Kiap-TU-Wish Chapter

We were happy to kick off our season of meetings in September with an open house at Rush River Brewing in River Falls. We had a great turnout with activities sponsored by Lund's Fly Shop. For October, November and December we experimented with having hybrid meetings consisting of an in-person gathering while streaming on Zoom. While we are still learning, this has worked well so far.

In October we heard a presentation by Tom Lager of Fox Valley TU on "The Grannom, aka Black Caddisflies, of Wisconsin." This was followed by our own Greg Olson presenting "No Time to Tie, Minimalistic Fly Box Essentials for the Northern Driftless and Assorted Musings on Fly Design."

Musings on Fly Design."

Finally in December, Matt Mi-

tro, a DNR scientist, talked about "Global Warming Effects on Trout in Wisconsin Streams." We didn't hold our annual holiday banquet again this year, but we are planning a Winter Fundraiser tentatively set for February, including another 4 x 100 raffle. Details on the raffle can be found on our website and Facebook pages or by contacting Tom Schnadt at thschnad@hotmail.com or 651-245-5163.

We have four classes participating in Trout In the Classroom this year. This is down from 10 (6 backed out due to Covid). All are up

and running and the eggs are hatching. A few of our classes made a field trip to the hatchery, got a tour, and brought their eggs back with them. The kids had a great time and learned a lot. Depending on the Covid situation, we hope to do "Bugs in the Classroom" this year and help with the fry release at the end of the school year.

Regarding our trout habitat efforts, two outings were held in late September/early October where Randy Arnold, Jim Tatzel and Mark Peerenboom visited easement sites where buckthorn and box elder had been targeted over the past two winters. They followed up with herbicide foliar spraying of newly sprouted plants and performed cutstump treatment using herbicide on plants which were still viable.

In preparation for a Greenwood Elementary School 4th Grade service-learning project, three workdays have been held at a site on River Drive on the upper Kinnickinnic River. Volunteers have cut and piled buckthorn and box elder followed by herbicide application of the cut stumps.

In early December, 58 students, their teachers, a dozen or so parent chaperones and seven Kiap TU Wish volunteers showed up to burn piles of buckthorn and box elder slash which was cut several weeks back. Retired DNR Fish Manager



LAKESHORE CHAPTER CLEARS DOWNFALL ON WILLOW CREEK



BEFORE AND AFTER LAKESHORE'S CLEANUP ON WILLOW CREEEK

Lakeshore Chapter

Lakeshore has many things in the works for the upcoming year.

Our plans are to hold in-person meetings on a continual basis. We have a new meeting place at Camp Y Koda. This is a great centralized meeting place, so we're very excited for this. We have our brushing season in the works for the winter, so

staying busy won't be a problem.

Come May, we will have our elections. With lots of new things coming up, change has to happen. We are excited for those changes.

In October the DNR finalized the stream work on the Onion River south of Hwy U. We are working on acquiring an easement to con-



KIAP TU WISH TIC STUDENTS LEARN ABOUT THE HATCHERY



tinue our work downstream in the near future.

We partnered up with the Glacial Lakes Conservancy again in December to clean and clear Willow Creek. We had about 25 people in attendance and cleared about a mile of stream. GLC has some big plans for Willow Creek in the future. It's the only stream in Wisconsin to knowingly reproduce salmonoids. With

the release of brook trout into the Great Lakes, we're excited about the potential of this stream.

Like with all chapters, Covid has made it difficult to organize as we normally do. But we have continued to be resilient and persevere to be as active as we can.

Stay safe and healthy.

—Myk Hranicka

Oconto River Chapter

Although the pandemic put a damper on some of our chapter meetings, we still managed to complete our annual banquet at Romy's Holiday Inn at Kelley Lake in September. What we lacked in numbers, we made up for in enthusiasm, great food and lots of fun. Thanks to all of our donors, supporters and volunteers who made the banquet successful.

We partnered with the Green Bay and Antigo chapters to plant more than 1,000 trees on the Prairie River, as well as anchoring donated used Christmas trees to narrow and deepen Evergreen Creek, a spring creek tributary of the Wolf River watershed. The final project included brushing and securing root balls on the north fork of the Thunder River on the Oconto-Marinette County border to increase fishability and habitat improvement.

Trout In the Classroom projects are going strong in more than 10 schools in Oconto and Langlade counties, which have been enthusiastically received by teachers and students alike.

Dale and Linda Halla and Helen and Gary Lisowe and the Wockings set up a Youth Fishing Day on Lyman Wocking's beautiful spring-fed pond in October. We introduced 20 students from Gillett High School to fly and spin fishing, and they caught 58 fish in about an hour. Hunter and Noah were the big winners with largest bluegill and largemouth bass. Also, thanks to TU members Wayne Czypinski, Dan Sumnicht, Tom Klatt, Dale Halla, Lyman

Wocking and Joe Femling for helping with the fishing stations.

A fly-tying seminar is in the planning stages this winter.

The chapter's spring trout stocking program included more than 1,000 12- to 14-inch trout released at the Suring, Hintz, Underhill and Pulcifer boat landings a week before opening day. Hopefully this put smiles on the faces of numerous trout anglers trying their luck on the Oconto River in May.

Dave Kalous, Oconto River chapter treasurer and a member of the Northern Oconto Country Trout Alliance (NOCTA) has been involved in the Lakewood Trout Hatchery operation, working with the DNR to raise 6-inch to 7-inch brown and brook trout for stocking streams in Oconto, Langlade and Marinette counties. More than 26,000 trout were raised and released this past October for the 2022 season. Funding for the \$4,000 cost of fish food each year is supported from donations from various organizations and individuals. The labor of feeding the fish twice a day and weekly cleaning of the seventeen rearing tanks for five months is accomplished by volunteers of NOCTA. If you would like to volunteer or donate to the operation, contact NOCTA at P.O. Box 87, Lakewood, Wisconsin 54138.

We're looking forward to a safe and prosperous new year, and our chapter extends best wishes for the holiday season.

—Wayne Czypinski



OCONTO CHAPTER INTRODUCES FISHING TO HIGH SCHOOLERSThe chapter introduced 20 students from Gillett High School to fly and spin fishing, and they caught 58 fish in about an hour.

Southeastern Wisconsin Chapter

The momentum of the summertime Southeastern Wisconsin TU Chapter (SEWTU) workdays carried into the fall of 2021. In September we assisted the Lakeshore Chapter on a workday on the Onion River. With a combined force of 30 volunteers, we focused on the stretch of public water south of Highway U. We installed bank covers and stabilizing fiber mats and removed debris from the stream, creating newly improved trout water

downstream from past workday efforts. This area is part of an ongoing restoration effort of the Onion River. More work will be needed going forward. The area will offer improved habitat and, in turn, better fishing not that far from Milwaukee.

Rosenow Creek in Waukesha County is only 30 miles west of Milwaukee and receives a lot of fishing pressure. Despite this, the DNR's fish surveys show a good number of



SEWTU'S ROSENOW CREEK WORKDAY CREW IN OCTOBER



SEWTU'S SCUPPERNONG WORKDAY CREW IN DECEMBER



SEWTU VOLUNTEERS AT SHOREWOOD FISH AND FEATHER FESTIVAL

naturally reproducing brook trout in the creek. SEWTU has been involved with the habitat restoration and maintenance of this creek since 1980s. Nineteen late volunteers participated at the October Rosenow Creek work day. We saw the largest number of volfor an workday. They cleared debris and removed large limbs and branches that had fallen into and partially dammed the creek. We accomplished all of our planned work, although there is still debris to be cleared on the lower portion of the public-access area of the creek.

On a very nice December Saturday, 18 volunteers participated at the Scuppernong River workday. Volunteers repaired a previously worked section of the river by installing 20 biologs and back-filling the area with brush upstream of the river-gauge bridge. We completed all of the planned work, but there is still more work needed on the improved section of the river. This little river has great potential and long-range restoration plans were discussed afterwards as the volunteers stayed for SEWTU's traditional brat fry.

Five SEWTU volunteers ran a tent at the Shorewood Fish and Feather Festival in October. Volunteers answered questions about our mission and fishing, and demonstrated fly casting to kids and adults. The water on the Milwaukee River was low, so the migratory fish were few and far between, but that didn't damper the fun we had as we continue to partner with other organizations in our community.

In October we returned to New Berlin Hills Golf Club for our fundraising banquet. More than 50 members and non-members attended the event and many took home some really nice prizes such as fishing equipment, art work and wine. Herb Oechler was the honoree, and we presented him with an award for his years of outstanding volunteer leadership and generosity. SEWTU is truly grateful for all Herb has done for TU and specifically, the chapter.

The SEWTU Service Partnership began building a community outreach program with Wisconsin Hero Outdoors in November. Now that water has begun to harden, and fly-tying season is upon us, We began organizing local events with





SEWTU FALL FUNDRAISER AWARD WINNER HERB OECHLER

Herb was the honoree for SEWTU's Fall Fundraiser event, and was presented with an award for his years of outstanding volunteer leadership and generosity. SEWTU is truly grateful for all Herb has done for TU and specifically, the chapter.



FLY TYING WITH VETERANS

Matt Cade tying a fly with one of our veterans at Wisconsin Hero Outdoors HQ in Delafield in November.

other organizations in the southeast Wisconsin region to host fly tying and other informational events for their local heroes. The November event saw several folks come out to tie a marabou leach pattern with several beginners and even saw them sharing their new learned skills with each other as they added new variations.

We hope to lead more events in the greater Milwaukee area shortly after the holidays, including an event at the recently founded Wisconsin Veterans Network, located near the Milwaukee VA Hospital.

Our chapter will continue to have membership meetings on the fourth Tuesday of the month from January through May. As has been customary, we will take the months of June-August off from our membership meetings and will pick them back up in the fall. We plan on having some great raffle prizes for each event and are looking to secure some awesome speakers as an extra incentive to attend. Please look for our email blasts on the specifics of each upcoming event, as well as our Facebook, Instagram and website.

Currently our meetings are held at the Bavarian Bierhaus in Glendale with an official start time of 7 p.m. Arrive as early as 5:30 p.m. if you want extra time to socialize and have some dinner.

Longtime member Greg Schick will again be hosting fly-tying sessions on the first and third Thursdays from January through June at the Oak Creek Community Center at 8580 S. Howell Ave from 5:30 p.m. to 8 p.m. Please bring your own vise and tying supplies. The workshops are intended for advanced novice fly tyers. For more information or questions, please contact Greg at g.a.schick@wi.rr.com. If you are in need of basic fly-tying lessons, contact Andy at andyavgoulas@yahoo.com.

Not getting our emails? Have a suggestion or question? Need some fishing tips? Want to help out? Please reach out to Andy at andyavgoulas@yahoo.com or 262-893-4965.

For general inquiries, please send an email to southeasternwisconsintu@gmail.com. Please note we inadvertently provided an incor-

rect email address in our last Wisconsin Trout chapter report.

Take care and I hope to see you

soon at one of our upcoming events.

—Andy Avgoulas

Southern Wisconsin Chapter

The SWTU Board made the difficult decision to pause on in-person meetings until Spring, and that's (unfortunately) looking like it was the right call. We will reassess the state of the pandemic then and truly hope to resume our monthly get-togethers.

Due to a lack of venue and COV-ID concerns, we are also again having to skip our usual Icebreaker fundraising event. We appreciate the great support that the statewide trout community has provided to that event and will try again next year. In the meantime, we're in the planning stages of a spring event to be held outside. A volunteer group led by Ben Lubchansky is chasing down the logistics of putting on such a fundraiser, and we'll let you know more about it once we get to the other side of winter.

We did join together this fall in the great outdoors for a series of highly productive workdays. Thank all who attended. In some locations, invasive woodies and box elders were cut and treated with the wood stacked for burning or turned into brush bundles installed in the stream. On other days, native trees were planted and prairie grass was sown. Throughout them all, we worked safely and in great camaraderie. It made a big difference on some very special waters, and we look forward to starting them back up again in the spring.

We ended the work season with a bang on an early December Saturday. More than two dozen SWTU members joined with volunteers from The Prairie Enthusiasts (TPE) and the Nohr Chapter to combat non-native willows and honeysuckle and the ever-present, ever-pesky box elders, to maintain the streambanks on a small, healthy trout stream that TPE and the DNR restored several years ago. The stream flows through TPE's Mounds View Grasslands between Barneveld and Hollandale. The grasslands are open to the public for many forms of outdoor recreation, including

One last wintery note to share is that we are again holding free fly-tying classes for beginners and more experienced tyers. Last year, our dedicated tying instructors held classes virtually and 16 students gave it high marks. As of this writing, the plan is to be back in person, but with last year's successful experience we can adjust that plan if it becomes necessary.

Thank you for reading and remember that you can always catch up with us and our activities on sw-tu.org.

—Drew Kasel



SWTU CLEARING A STREAM IN MOUNDS VIEW GRASSLAND

SWTU's President and Workday Chair Jim Hess (in water) and Bob Harrison chunking up a boxelder to be hauled to a burn pile that The Prairie Enthusiasts will torch this winter.

Wild Rivers Chapter

The Wild Rivers Chapter has been relatively quiet this last fall, although we have had a few member activities that I really enjoyed. Notably, in October we had a highway cleanup in Delta and a tour of TU's collaborative stream restoration work on the Marengo River. We also had a guest presentation by Ian Harding, a fisheries biologist with the Red Cliff Treaty Natural Resource Division on the history, research and reintroduction of the coaster brook trout in Lake Superi-

or.

I will take this opportunity to shout out to all the TU members in Iron, Ashland, Bayfield, Douglas, Sawyer, Washburn and Burnett counties. We are planning to have an in-person membership meeting on January 12 at 6 p.m. It's time for board member elections and to plan for the 2022 calendar. Come join us and give us your input.

Until then, stay warm.

—Kevin Seefeldt

Wisconsin River Valley Chapter

After a long delay due to Covid, I'm happy to report that Trout In the Classroom is up and running for the fourth graders at Marathon Elementary School.

We also have the first year of WAV under our belts. I loved taking part in visiting the river each month

TICILLY INCILLS LOWC





WISCONSIN RIVER VALLEY CHAPTER'S TIC PROGRAM UP AND RUNNING After a long delay due to Covid, the Trout In the Classroom program is up and running for the fourth graders at Marathon Elementary School.

to watch how the surroundings change, as well as temps and oxygen saturation. I'm looking forward to doing it again next summer.

Please keep an eye on our Facebook page for these upcoming events.

The Fly Fishing Film tour is coming back in February. We are seeking sponsors for the event.

More work has been completed on the Prairie River and we will be doing more tree planting in the spring.

Future presentations at our meetings at Sconni's are as follows:

- January 13: Craig Cook on the fly shop industry and technology in the industry.
- March 10: Taylor Curran from

the DNR will give an update on the Prairie River project.

- April 14: Carmin Hardin on tips for solo trips, entitled "Where to find beer, bathrooms and fish"
- May 12: Heidi Oberstadt on diversity with Trout Unlimited.

We also have a YouTube channel that you can subscribe to. Check out WRV Trout Unlimited.

Thank you to Tom Lager for his October presentation on the black caddis and to Tim Parks from the DNR for his virtual presentation in November, and to all who attended.

Enjoy the snowflakes. Green leaves will be sprouting before you know it. Stay healthy.

—Linda Lehman

er

In other news, this year we will continue our maintenance work on Ninemile Creek, a coldwater tributary and brook trout spawning habitat. Also, we have identified work that needs to be done at the Hunting River/Wolf River confluence. If

you get the chance, read the article in the current Wolf River Hatch, "The Old RR Pilings at Pearson" by John Carbonari. It explains the work that needs to be done there to bring more cold water into the Wolf River.

—Laurie Zen Netzow

Oak Brook Chapter

OBTU contributed \$1,000 to the Monroe County Land Conservation Department, directed by Bob Micheel, who hired interns to work on the stream-crossing-inventory project. The interns were trained in the Great Lakes Stream Crossing Inventory Protocol and their data was inputted into the Wisconsin DNR Great Lakes database. The interns surveyed at least six crossings per day and completed about 200 crossings, which accounts for about 25 percent of all crossings in Monroe County.

In October we conducted our semi-annual Du Page River cleanup day with 24 participants, including some members of Scout troop 75, who also attended our last youth fly fishing skills day in September.

OBTU held our semi-annual invertebrate study on the Coldwater River near Grand Rapids, Michigan in October. We invited members of the Coldwater River Watershed Council and Schrems West Michigan TU to help with insect collection and identification. We sent 14 participants to five different locations throughout the watershed to collect insects and identify and count them. The data is recorded to be used as historical inventory, in case streams are polluted and populations are lost. We also read five temperature loggers and checked on our Mayfly monitoring unit, making sure it is functioning properly.

Our holiday party was December 8 at the Arrowhead Golf Club in Wheaton, Illinois. About 45 people attended, raised a glass of holiday cheer, bid on silent auction items and won a variety of bucket raffle items. Proceeds from the event will be used for operating costs of the chapter.

—Stan Zarnowiecki

Wolf River Chapter

Winter season greetings from the Wolf River Chapter. It is officially winter here on the Wolf River, with plenty of snow on the ground and ice in and on the river as of the beginning of December. The bald eagles that hang out on the dead maple on the island across from me are busy grabbing fish from the remaining open water for a very cold meal.

The autumn issue of The Wolf River Hatch was emailed to subscribers just before Thanksgiving. I would like to thank those who wrote articles for this issue, and past issues, for making it a great newsletter. Please keep writing those interesting articles. If you are interested in learning more about the Wolf River, please email me at Iznetzow@me.com and I will send you the latest issue of The Wolf River Hatch. Then, fish the Wolf River next spring and see if you can catch

a "butter ball."

The Fly Tying Rendezvous is January 22 from 10 a.m. to 2 p.m. at the Bear Paw Outdoor Adventure Resort in White Lake. Come tie your favorite patterns for the Wolf River and learn to tie Wolf River Chapter members' favorite patterns. Please bring your own vise and materials or just come with a notebook and join in the fish-story telling. A big thank you to Tom Kreif and Eric Scharenbrock for opening up the Bear Paw for this fun event.

The Wolf River Meet and Greet is scheduled for May 21. Watch for more information on this event. It's a great way to learn more about fishing the Wolf River, when the hatches happen, access points and to fish with some of the experienced Wolf River Chapter members. As always, lunch will be at the Livingstons' on the banks of the Wolf Riv-



OAK BROOK CHAPTER SUPPORTS STREAM CROSSING SURVEYING
OBTU contributed \$1,000 to the Monroe County Land Conservation
Department in support of two interns. The interns surveyed at least six stream crossings per day and completed about 200 crossings, which accounts for about 25 percent of all crossings in Monroe County.

Got your TU plate yet?



Support Wisconsin TU and get your Wisconsin TU license plate now. Go to www.dot.state.wi.us/drivers/vehicles/personal/special/trout.htm



RAILROAD PILINGS STILL IMPEDING FLOW INTO WOLF RIVER
The old Wolf River railroad pilings left over from logging days at Pearson, which often catch flotsam and debris.

SALMON, from page 15

The mussels filtered plankton from the water and the gobies ate bottom dwelling invertebrates, reducing food for young alewives and decreasing their growth and abundance.

Because coho and Chinook salmon fed mostly on alewives in Lake Michigan, any decline in alewives had a strong impact on salmon survival and growth. This was illustrated in Lake Huron. When the alewife population there collapsed there in 2003, never to fully recover, the salmon fishery soon foundered. Alarm grew that the same scenario could play out in Lake Michigan. Zebra and quagga mussels and round gobies also entered Lake Superior but never achieved the same wide distribution and high densities and had much less of an impact on the ecosystem.

Coho and Chinook salmon today: Lake Superior

At present, coho salmon remain an important component of the Lake Superior fishery. Anglers catch coho through the ice during the winter, trolling offshore during the summer, trolling or shore fishing river mouths in late summer, and by wading and casting during the spawning runs up tributaries in the fall. Runs are completely selfsustaining, and no coho salmon have been stocked in many years. Mature coho usually begin entering their spawning streams in early September (Photo 5). The run peaks in late September and early October and gradually tapers off until ending in mid-November, although in some years fresh fish may enter into December. Most spawning takes place far upstream in small tributaries and headwaters. The largest run is in the Bois Brule, where a counting weir tracks the total number entering the river each fall. Since 1990, the annual run has averaged about 2,200 fish, but has varied substantially, ranging from 1,001 to 5,674 per year. Spawning coho usually average 21-22 inches and 3-4 pounds, with an occasional fish up to 27-29 inches and 8-9 pounds.

The early life history of coho salmon has been studied in the Onion River and Whittlesey Creek in Bayfield County as well as in several tributaries in Michigan. Eggs hatch in early April and the juveniles remain in the stream for one or sometwo growing seasons. Fingerlings inhabit pools and runs and feed on aquatic insects. Small coho are aggressive and will displace brook trout and brown trout of similar size. Once they reach about 4-5 inches later in their first summer of life, iuvenile coho are commonly caught by anglers fishing for trout.

During the winter, Lake Superior juvenile coho remain relatively active and spread-out in pools, which contrasts with their behavior in their native streams on the West Coast, where they aggregate in backwaters, sloughs, or log jams and become notably less active and aggressive. The following spring, most juvenile coho drop down to Lake Superior at a size of 5-7 inches.

However, a few remain in the stream until the fall or the following spring when they leave for the lake at a size of 7-10 inches. They remain in the lake for one or usually two years before returning to their home tributary to spawn and die.

The Chinook salmon population in Lake Superior is much smaller than the coho population but also self-sustaining. No stocking has taken place since 2007. Because of

their scarcity, the fishery is small, and the few fish that are caught are usually taken by anglers trying for something else. Chinooks typically enter their spawning streams a little earlier than coho, with their peak in mid-September. The Bois Brule River has the largest spawning run, but it only averages about 200 fish per year. Much smaller numbers enter Pikes Creek and the Sioux River in Bayfield County.

Spawning Chinook do not run as far upstream and spawn in bigger water than coho. The typical size of spawning Chinook is 25-32 inches and 6-12 pounds. The eggs hatch in early April, and the fry spend a relatively short time in the stream, usually moving down to the lake by early summer at size of 2-4 inches, although a few fish may remain in the stream until the following spring and leave at a size of 5-6 inches. Once in the lake they feed and grow for 3-5 summers, typically 4, before returning to the river of their birth to spawn and die.

Lake Michigan

Coho and Chinook salmon continue to be the mainstays of the Lake Michigan sport fishery today. Coho generally have a three-year life cycle in the lake, spending their first summer in the stream where they were born or, much more commonly, in a hatchery. They then usually spend two summers in the lake before returning during late September through early December to the stream of their birth or to tributaries near their release point from the hatchery to spawn and then die.

Limited natural reproduction occurs in a few small Lake Michigan tributaries in Wisconsin, but it is not nearly enough to maintain the fishery, and the vast majority of Wisconsin cohos are stocked.

More natural reproduction occurs on the Michigan side of the lake, but even there, most coho are of hatchery origin. Wisconsin collects eggs for its hatcheries from spawning coho entering the Kewaunee River in Kewaunee County and the Root River in Racine County. Fish raised from these eggs are stocked the following year at a size of 5-7 inches in tributaries and harbors from Kenosha to Kewaunee. About 400,000 to 500,000 coho are released into Wisconsin waters each year.

Once in Lake Michigan, cohos have a characteristic migration, aggregating in far southern Lake Michigan during the winter and then gradually moving north over the summer, before either returning south for the following winter or entering streams to spawn and then die. The fishery follows this migration, with cohos first being caught by anglers off Kenosha in May, gradually appearing further north over the summer and reaching Door County by mid-August, and then finally being encountered in tributaries in the fall.

Fish in their third year of life are typically 18-21 inches and 2-3 pounds when they first arrive off Kenosha but have grown to 24-27 inches and 5-7 pounds by the time they enter streams to spawn. The Wisconsin state record is 38 inches and 26 pounds 1.9 ounces and was caught off Milwaukee in 1999.

Chinook salmon generally have a longer life cycle than coho, usually 3-4 years, but sometimes 5. They also have a shorter residence time in the streams of their birth or the hatchery, moving to the lake or being stocked early in the summer of their first year of life at 3-5 inches. Natural reproduction in Wisconsin tributaries has a negligible contribu-

tion to the fishery in Lake Michigan but is observed occasionally.

However, natural reproduction has become major in several Michigan streams, and those Chinook migrate to Wisconsin waters each summer. Now half or more of the Chinook caught by anglers in Wisconsin during the summer are of natural origin from Michigan. These fish return to Michigan in late summer to spawn in the streams of their birth in September and October, so Wisconsin stocks about 800,000 to 1,200,000 Chinook each year in tributaries and harbors to enhance the summer offshore fishery and to insure a large spawning run into Wisconsin streams in the fall. Eggs for Wisconsin hatcheries are collected from spawning fish in Strawberry Creek near Sturgeon Bay in Door County. The typical size of adults in late summer as they prepare to enter tributaries to spawn is 30-35 inches and 10-20 pounds. The state record for Wisconsin is 47.5 inches and 44 pounds 15 ounces from off of Door County in 1994.

Management of the salmon fishery in Lake Michigan has become increasingly complex for fisheries managers. Chinook salmon are the most desirable sport fish in Lake Michigan because of their large size, superb fight and excellent taste. This has led to near constant pressure from anglers and shoreline communities to maintain and, if possible, increase the Chinook population in the lake, which is already the most numerous of Lake Michigan's trout and salmon.

Because of their high abundance and large size, Chinook are also by far the largest consumer of alewife, which is the primary food of all the trout and salmon in the lake. As alewife numbers have dropped in Lake Michigan, concern has grown among fisheries managers that predation from trout and salmon, particularly Chinook, might overwhelm and collapse the alewife population, as happened in Lake Huron. If that were to occur, the consequences could be dire for the trout and salmon fisheries and for the people and communities who rely on them for their livelihoods. But convincing anglers and shoreline communities to curtail Chinook stocking has been difficult and contentious.

The increasing natural reproduction of Chinook salmon in Michigan tributaries and of lake trout in the lake proper has made managing the total population of alewife predators even more complicated, as densities of these two gamefish are now driven to a large extent by uncontrollable and unpredictable natural forces rather than relatively controllable and predictable hatchery production and stocking quotas.

Alewife are still common in Lake Michigan, although their abundance is only a tiny fraction of what it was in the 1960's and their numbers fluctuate dramatically from year to year in response to natural variation in spawning success. Managers worry that if Chinook numbers surge too high due to an especially good year of natural reproduction while alewife simultaneously drop low due to particularly poor reproductive success, elevated Chinook consumption could crash the depressed alewife population and doom the Lake Michigan fishery.

The future of coho and Chinook salmon

For the moment, coho and Chinook salmon are doing well in Wisconsin's Great Lakes, but the future is uncertain. Sharp declines in the coming years are certainly plausible. Both non-native species and climate

change could have major negative impacts. In Lake Superior, warming lake temperatures could make the lake more hospitable for some of the non-native species that have so modified the food web of Lake Michigan, particularly quagga mussels and round gobies.

The main foods for coho and Chinook in Lake Superior are nonnative rainbow smelt and native ciscoes. If quagga mussels and round gobies become more common, both smelt and ciscoes are likely to decline, making for less available food and resulting in slower growth and poorer survival for salmon. Warming will also reduce suitable spawning habitat in the tributaries, although projections suggest that some will remain at least through the middle of this century. But if climate warming continues unabated, this remaining habitat will eventually disappear, and with it the salmon.

In Lake Michigan the big question is whether trout and salmon prey consumption, particularly by Chinook, can be balanced against large annual variations in alewife abundance. So far, consumption has not exceeded alewife production, but it may only take one bad year for alewife for the situation to get dicey. And as weather conditions become more variable with climate change, alewife reproduction and population fluctuations are likely to be more extreme.

The specter of new non-native species, such as Asian carp, entering Lake Michigan and further disrupting the food web makes the situation even more fraught with risk. Ideally, management agencies would be allowed to take a precautionary approach and substantially reduce salmon and trout stocking to leave a bit of a cushion for the alewife, but this has been a hard sell with fishing groups, shoreline communities and the Wisconsin state legislature. Whether agencies can continue to walk the tightrope between public pressures and ecological realities to maintain a vibrant salmon fishery remains to be seen.

Conclusions

Coho and Chinook salmon, introduced into Wisconsin in the 1960's, have become the key game fishes in Lake Michigan and an important component of the sport fishery in Lake Superior.

At present, both lakes support fine salmon fishing, which in turn provides important social and economic benefits for both local communities and the state as a whole. But management of these two species is complicated by major recent and anticipated future changes in the Great Lakes ecosystem driven by non-native species invasions and climate change, and the future of the salmon fishery is by no means assured.

John Lyons is curator of fishes at the University of Wisconsin Zoological Museum and a member of the Southern Wisconsin Chapter of Trout Unlimited.



Scott W. Grady
Rodmaker

Split Bamboo Rods

New, repairs, restoration, appraisals Rodmaking Tools and Advice

Call or email Scott for details at 920/687-0987 or oossg@vbe.com

Trout movement research shows importance of stream connectivity

By Matthew Mitro and Emma Lundberg, Wisconsin DNR, Office of Applied Science—Fisheries Research

A fisheries researcher once presented an analogy to a group of foresters to illustrate the challenges of studying fish: It is like studying trees in a forest where you cannot see the trees and the trees are moving around.

Fish move. Trout move. We all know it. If you peered over the banks of a Driftless Area stream on a clear day, you might see hundreds of trout darting in all directions, making short moves through the stream in front of you. But what about long distances? Just how far do some trout travel? How trout move through stream systems fascinates us for many reasons, but toward the top of the list (at least for us fish researchers) is the challenge in documenting such movement.

We have tagged many trout across many Wisconsin streams over many years. This extensive tagging is done with the intention of recapturing as many of these trout as possible over time. We tend to recapture a lot of trout in the general stream vicinity where they were tagged and released, sometimes repeatedly.

Driftless Area research

In one such project on Elk Creek (Vernon Co.), we tagged brown trout using three different colored tags in six separated sections of the stream. We routinely recaptured tagged trout, but they always had the color tag used in that stream section. We did not find any evidence they moved among stream sections. There are many more places these trout could have moved to than we could physically survey. (For the record, we tagged trout for estimating survival, not just movement.)

We similarly tagged brown trout in Spring Coulee Creek in Vernon County, but in stream sections adjacent to one another, where we were manipulating trout density to observe effects, if any, on growth. We lowered the density in one section of stream and wanted to make sure trout were not quickly moving back

As you would expect with stream sections bordering one another, some trout did move from one section to another. However, from the tag-recapture data we estimated an annual movement rate of four percent. These fish were largely staying where they were, or if they were moving, they were moving beyond where we were surveying.

The movement rate of four percent that we observed could have been low because shortly after we lowered trout density in one section of the stream, Mother Nature lowered trout density everywhere, due to the exceptionally harsh winter of 2013-14.

Trout can be territorial, so if density is low and the availability of space to establish territory is high, movement rates may be low. Conversely, if density is high, territory availability can be low leading to movement rates that are high.

We did have an interesting longdistance trout movement observation on Spring Coulee Creek a few years ago. We recaptured a brown trout with a tag we only used in Timber Coulee Creek, in a stream section across the hill in the next valley. This fish moved about 2.5 miles downstream in Timber Coulee to Coon Creek, 2.4 miles to the confluence of Spring Coulee Creek, and 2.2 miles up Spring Coulee Creek to where we recaptured it: about 7.1 miles.

This past year, with the help of the Fisheries Management crew from La Crosse, a trout we tagged in Elk Creek in October 2019 was recaptured in Warner Creek in June 2021. This fish moved downstream from Elk Creek to the Kickapoo River and then upstream to Warner Creek, traveling a little over 30 miles.

These types of long-distance trout movement observations typically only come after investing many years in tagging trout and surveying streams. And while such observations may be few, they are important in showing the connectivity of distant streams and the ability of trout to navigate among them.

More recently we have been working on a brook trout movement study as part of a larger, statewide beaver-trout study. One major concern about beaver on trout streams is that their dams fragment streams and obstruct movement of trout. Beaver dams may not be perfect barriers to fish movement, but if they preclude a significant number of trout from moving to access spawning areas or overwintering areas, for example, the effects on life history processes could be negative for the overall population.

In earlier work on brook trout age and growth in northeastern Wisconsin streams, we would encounter fewer trout in early spring versus summer, and the trout we tagged in one summer were not there the following summer but were replaced by other trout. These observations suggested the occurrence of significant seasonal movement and redistribution of trout. This movement may have been driven by harsh winter conditions where stream temperatures were near freezing, common from November through March. These observations contrast with what we see in typical Driftless Area streams like Elk Creek, where winter conditions can be more benign and tagged brook trout and brown trout are frequently recaptured year to year.

Northern Wisconsin study

We chose to study brook trout movement in Upper Middle Inlet, a 14.4-mile stream in Marinette County that connects to Middle Inlet and Lake Noquebay. Upper Middle Inlet (UMI) comprises seven miles of Class 1 and 7.4 miles of Class 2 trout water and supports a robust population of wild brook trout and a small number of wild brown trout (<10%).

The headwaters originate from Spies Lake, flowing through woodland interspersed with meadow. The steam picks up volume and gradient, allowing for some gravel-cobble-boulder substrate as it enters a predominantly cedar swamp landscape. Here the stream gradient becomes lower and the substrate sandy, with lots of woody debris from the riparian forest. The lower reaches of UMI flow through a mix of woodlands and shrubs, silt and detritus make up more of the substrate, and deeper

pools and narrower channels become more prevalent, particularly in reaches where stream habitat development occurred.

Beginning in May 2019 and continuing about monthly through November 2021 (excluding the winter months and excluding spring of 2020 because of DNR COVID-19 restrictions on field work), we surveyed multiple sections of UMI by electrofishing and tagged trout with passive integrated transponder (PIT) tags. Each PIT tag has a unique alphanumeric code, allowing us to differentiate between tagged individuals and record information that provides insight into survival, growth and movement.

In June 2020 we installed two PIT-tag detection arrays to continuously scan the water for tagged trout that may be moving past the arrays. Each PIT-tag array includes two parallel wire loop antennas across the stream, which any moving fish will swim through. Including two sequentially numbered antennas allows us to detect which direction the PIT-tagged trout swimming through the arrays is moving. The antennas are powered by a series of 12-volt batteries and a 130-watt solar panel to continuously scan the water. If a trout with a PIT-tag swims through the paired loops, the tag is activated and sends a signal back through the system where the individual tag number, date-time and direction of movement are recorded.

Over the course of the study we tagged 1,491 trout. We recaptured or detected 28 percent of them from one to four times and some up to 30 times. Many tagged trout exhibited localized movement around each PIT-tag array. These fish presented as multiple detections at a single location throughout much of the year. Others were only detected occasionally and sometimes at far distances from where they were first tagged.

The capture and the recapture (or PIT array detection) of tagged trout in UMI presents a temporally and spatially complex picture of movement dynamics. A plot of these observations in total, connected by lines to show movement of individuals, would present as an undecipherable web stretched across the study period, linking clusters of trout caught at discrete times at discrete study sites or detected quasi-continuously at the two PIT arrays.

Three examples of individual movements of trout are shown in the accompanying maps. These are some of the notable longer-distance movers in the study, which may have been seeking places to spawn or overwinter. Each fish is identified by the last 4 characters of its PIT tag code.

Trout 1FB4 (8.3 inches, unknown sex) was first captured on November 11, 2020 in an upper reach of UMI. It was next detected moving upstream past our upper PIT array on March 21, 2021. This trout likely moved downstream from its capture location and past our PIT array(s) during winter when our PIT arrays were not operable. We then recaptured this trout on April 8, 2021, back where we originally captured and tagged it. This trout moved at least 9.1 miles but could have moved further because we do not know how far downstream it went last winter.

Trout 1C4A (6.5 inches, un-

known sex) was first captured on September 22, 2020 in the midreaches of UMI, just upstream from our lower PIT array. On November 23, 2020 the fish was detected moving upstream past our upper PIT array. We later recaptured this fish on December 9, 2020, back where we originally tagged it. This trout moved at least 6.3 miles up and back down UMI during the fall spawning season.

Trout 1C70 (6.6 inches, unknown sex) was first captured on September 21, 2020 in the midreaches of UMI, upstream of our upper PIT array. After release, this fish moved downstream and was detected at our lower PIT array four days later, on September 25 (we did not detect it passing our upper PIT array, showing that detection is not perfect). We then recaptured this trout on December 8, 2020 at our furthest downstream electrofishing location; it was caught with a group of about 30 brook trout that appeared to be moving through the area, likely heading towards an overwintering location. This trout moved about seven miles down-

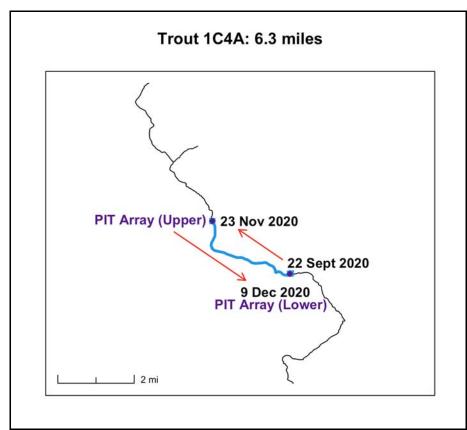
While we did not determine the sex of these three trout, often we can when they are caught during fall surveys. Of note were some large male (see photo) and female brook trout (13 to 15 inches) we caught through a mid-reach section of UMI in October 2020. We rarely saw such large males with depth of body and bold colors, and we have not seen those that we tagged since, but there are presumably other brook trout like these out there moving through UMI during spawning season.

One other movement observation of note occurred this past fall. During our final electrofishing surveys on UMI for the season, on the last two days of November, we experimented with using fyke nets to see if we could capture any moving trout. Winter had arrived, with ice forming along the banks in some lower sections of UMI and water temperature dropping to near freezing, but the mid and upper reaches were still open and wadeable. We set two nets, one upstream and one downstream of our lower PIT array. Each fyke net had a long lead net that funneled any moving fish into a trap-like net.

A muskrat apparently got caught in one and chewed its way out, allowing for the escape of any fish that might have been in there. In the other fyke net, we did not catch any large trout but we caught 11 young-of-year brook trout and a number of other species we may see during summer electrofishing but do not see during late fall or winter electrofishing: mottled sculpin, central mudminnow, brook stickleback, redbelly dace, blacknose shiner, brassy minnow, American brook lamprey, and green sunfish.

Again, we electrofished UMI during the day and did not see any of these non-trout fish species. But the stream fyke net survey indicated there was active, and likely nocturnal, movement of these fishes.

Nighttime drift of larval fishes is a well-known phenomenon, especially for fish like walleye and white suckers that run up rivers to spawn. It was interesting to see such activity for fishes that we simply do not see during daytime in late fall/early win-



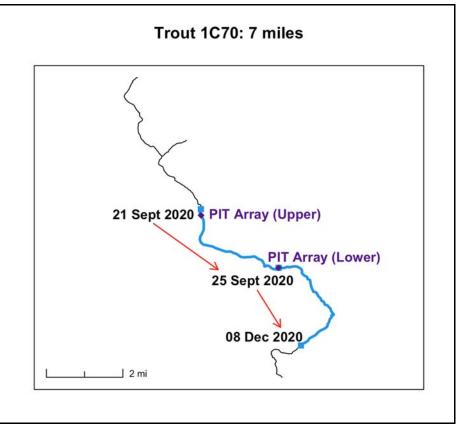
MOVEMENT OF ABOUT 6.3 MILES RECORDED

This trout moved at least 6.3 miles up and back down Marinette County's Upper Middle Inset during the fall spawning season.

ter. Next year we plan to experiment with more nighttime, and daytime, sets of fyke nets in streams, as this type of movement may explain how beaver ponds can quickly become populated with non-trout fish species that are generally absent or in low numbers when beaver dams are not present.

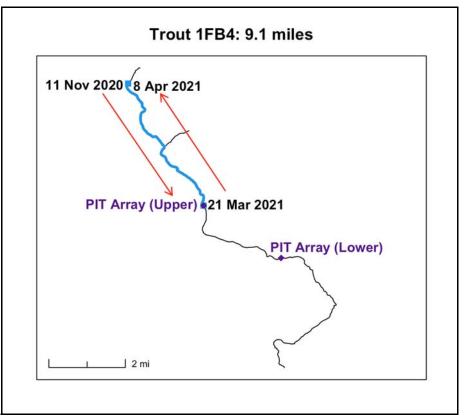
We are done tagging trout with PIT tags in UMI, but we plan to continue operating the PIT arrays into 2022 and surveying for trout to complete estimates of movement, growth and survival rates. We also hope to obtain creel observations from anglers fishing Lake Noquebay to confirm whether brook trout or brown trout from UMI are seasonally using Lake Noquebay. And finally, we hope that the data from UMI help inform beaver management on trout streams by providing a more complete picture of trout population dynamics across the whole-stream scale in northeastern Wisconsin





MOVEMENT OF ABOUT SEVEN MILES RECORDED

This trout was caught with a group of about 30 brook trout that appeared to be moving through the area, likely heading towards an overwintering location. This trout moved about seven miles downstream.



THIS TROUT MOVED AT LEAST NINE MILES, AND MAYBE MORE

This trout moved at least 9.1 miles but could have moved further because we do not know how far downstream it went last winter.



Great Lakes Stream Restoration Program update

By Chris Collier, Great Lakes Stream Restoration Manager

While winter is finally moving across the state, there's been some hot news for coldwater conservation in Wisconsin. This includes the recently passed infrastructure bill.

Rock Creek is a coldwater tributary to the Peshtigo River that contains more than nine miles of class 1 and 2 habitat, meaning the creek provides important spawning and coldwater refuge habitat.

Late this summer a barrier that cut nearly all the stream off from the Peshtigo was replaced with a fish-friendly design. With the new crossing in place there's a chance trout were able to access the stream for spawning this year. Thank you to the U.S. Forest Service, U.S. Fish and Wildlife Service Great Lakes Fish Habitat Partnership, National Fish and Wildlife Foundation, Sustain Our Great Lakes program, Wisconsin DNR and TU chapters and the state council for funding for this project.

Now let's talk infrastructure. When we think about trout, we often daydream of free-flowing rivers with ample supplies of cold water. However, infrastructure plays a large part in determining if those streams exist. Take northern Wisconsin's Great Lakes watersheds, which are is rich in protected habitat and high-quality frout water, but these environments are threatened by a vast road network. Undersized road culverts can fragment rivers and degrade habitat. This is one of many examples why infrastructure matters so much to us as conservationists and trout enthusiasts, and why we should be excited about the recently passed bi-partisan infrastructure bill.

How can TU use this money?

Funding for hazard mitigation and infrastructure repair programs is heading to state and federal agencies like FEMA and various departments of transportation. These infrastructure programs have a focus on making sure roads, bridges and communities are resilient to events like flooding, which are only going to get worse, due to climate change. Using design methods like TU already uses for our stream crossing work will result in fishfriendly infrastructure that also hits these flood-resiliency goals. Investing in resilient infrastructure is an investment in trout.

There is also significant funding heading to natural resource agencies like the U.S. Fish and Wildlife Service and U.S. Forest Service. This funding will bolster existing programs, such as the National Fish Passage Program and the Great Lakes Restoration Initiative, and revitalize programs such as the Legacy Road and Trail Remediation Program. This means that agencies which focus on improving aquatic ecosystems will be able to direct funding towards infrastructure projects that will result in the greatest benefits to rivers, streams and wetlands. Once again, an investment in infrastructure is a direct investment in aquatic ecosystems.

It's been an exciting end to construction season, and the increased funding for infrastructure has us all looking forward to even more projects. If you would like to learn more about our projects, or how the infrastructure bill will benefit our communities and coldwater resources, contact me at chris.collier@tu.org.



ROCK CREEK BEFORE NEW CROSSING

Rock Creek is a coldwater tributary to Peshtigo River that contains more than nine miles of class 1 and 2 habitat, meaning the creek provides important spawning and coldwater refuge habitat.



ROCK CREEK WITH NEW FISH-FRIENDLY DESIGN

Late this summer a barrier that cut nearly all the stream off from the Peshtigo was replaced with a fish-friendly design.

Erik Helm's Classical Angler Fly fisbing service



Guíðeð Tríps Trout Master Classes Schools

Serving the Driftless area of Southwest Wisconsin

Classicalangler.com: 414-331-9102

Come explore the spring creeks and fly
angling at its best with Classical Angler

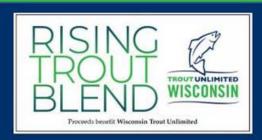
SHOW YOUR SUPPORT FOR WISCONSIN TROUT UNLIMITED

Start everyday with "Rising Trout"



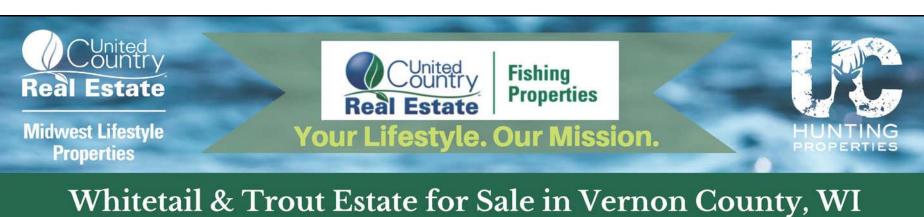


We're proud to partner with
Luna Coffee Roasters in De Pere
to bring you this special breakfast blend of coffee.
Whole Bean or Ground.
Shipping available nationwide!



lunacafe.com/shop/fundraising

42% of sales will directly support
Wisconsin Trout Unlimited's work
to ensure future generations access to
cold, clean, fishable water.

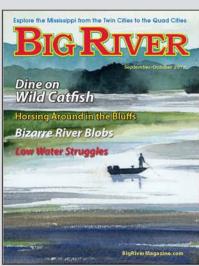


1.5+/- miles worth of Reads Creek frontage a Class A Trout Stream 213.75 Ac US Hwy 14 Kickapoo, WI 54652



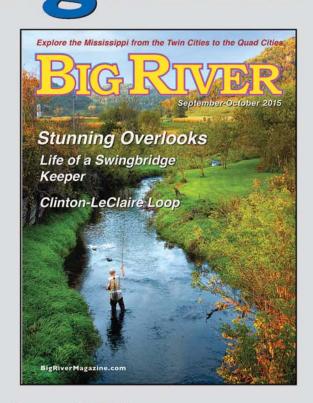
BIGRIER IN THE Missispi from the Twin Cities to the Quad Cities BIGRIER IN THE STATE OF THE Missispi from the Twin Cities to the Quad Cities BIGRIER IN THE STATE IN THE STA





Subscribe Today!

www.BigRivermagazine.com or 800-303-8201



And bring the Mississippi River to your door all year.