

TROUT UNLIMITED MINNESOTA

The Official Publication of Minnesota Trout Unlimited - June 2017



Fishing East Indian Creek
Book Review - The Habit of Rivers
Becoming an Outdoor Mentor
Saving MN's North Shore Steelhead
Soft Hackle Fly Tying
Meet the Gustavus Fly Fishing Club!

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P.O. Box 845
Chanhasen, MN 55317-0845

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ON THE COVER

Tim Hemstad's daughter Verona tests the waters of Trout Brook in Dakota County on a recent father-daughter fishing trip. The photo is the overall winner of our annual photo contest. Check out other photo contest results on page 8. Read about their fishing trip and learn about mentoring opportunities on page 5. Tim Hemstad photo.

IN THIS ISSUE

- Steelhead Genetic Issues
- Tying Soft Hackle Flies
- Fishing East Indian Creek
- Mapping to New Trout Streams
- And much more!

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MINNESOTA COUNCIL UPDATE

Taking on a New Role

By Steve Carlton, Minnesota Council Chair

Hey, trout fanatics. I'd love to say I'm the "new guy" but you have probably seen my name before. I've been on the State Council for about 14 years. I was the Twin Cities Chapter President from 2006 to 2009 and the National Leadership Council Representative for 6 years. More recently, I have been the State Council Vice-Chair for the past 6 years. So, I guess I'm a Trout Unlimited "Lifer." Thank you to our former Board Chair, JP Little, for leaving me a motivated State Council.

We are just coming off another very successful Great Waters Fly Fishing Expo. Friday I volunteered at the Twin Cities Chapter booth and ran around seeing old

friends. I spent two out of the three days there and on Saturday snuck away into the office to watch my Badger basketball team knock off #1 Villanova. I also got to see a few presentations and picked up a switch rod for my trip to Ireland.

Looking forward, it's an exciting time for Trout Unlimited in Minnesota. Most of this newsletter will be highlights of our successes, but there will be battles ahead. I am concerned about state and federal politicians that still don't believe in climate change, protecting our watersheds and saving our environment. So, I encourage you to stay involved, stay active and support our efforts.



There is always room for you on the State Council Board if you are interested.

Now get out there and catch some fish!

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SOME OF THE OVER 700 STUDENTS AND MEMBERS OF THE PUBLIC WHO PARTICIPATED IN MINNESOTA TROUT UNLIMITED'S ICE FISHING EDUCATION PROGRAMS THIS WINTER. LEARN MORE ABOUT OUR EDUCATION PROGRAMS ON PAGE 14!

FROM THE EXECUTIVE DIRECTOR

Learn to Fly Fish This Summer With MNTU

By John Lenczewski, MNTU Executive Director

June marks the end of the school year and the beginning of the season of long summer evenings. These long days are a perfect time to introduce people to the fun of fishing, especially trout fishing. This month our chapters are making a concerted effort to introduce more kids and adults to fishing. Trout Unlimited is a conservation organization, but one energized by the joys of angling and spending time along picturesque trout streams.

Most people need to appreciate and understand our watersheds in order to be motivated to protect and restore them. I believe there is no better way to truly appreciate trout waters than to make spend time along a stream with a fishing rod in hand. As all of you readers can surely attest, the trout angler is typically hooked far more deeply than the first trout on the end of the line. The tangible connections we experience with trout and all the aquatic critters in the food webs along our streams and lakes typi-

cally have lasting effects. The passion and dedication of trout anglers when it comes to actually speaking up to protect public waters is second to none. After more than 30 years attending public meetings around the state I am struck by the fact that often the vast majority of citizens who care deeply enough to show up are trout anglers. People tend to speak up for something they love, and come to love something only after they know and understand it. Trout angling creates lovers of coldwater fisheries and advocates for healthy watersheds. By introducing more people to fishing we are likely fostering more voices for conservation.

Please check out the Chapter News section of this newsletter for opportunities to help with one of the June casting clinics. Share your enthusiasm and help recruit the next wave of passionate anglers and future conservationists.

Enjoy the summer!



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A WILD SOUTHEAST MINNESOTA BROOK TROUT RESTING IN CLEAR WATER AFTER BEING CAUGHT THIS SPRING
BRIAN SCHUMACHER PHOTO

EDITOR'S ANGLE

Fishing the Last Light

By Carl Haensel, Editor

As we glide along in June toward the longest day of the year, I relish the opportunity to fish longer hours. Fishing in Minnesota after 9PM while casting to rising trout is a summertime delight to be savored. Too often I see anglers dejectedly heading home after a long, hot day fishing in the sunshine at 7PM, not realizing that the best three hours of fishing are ahead of them. While I'm not looking for more competition on my favorite trout streams, I have some firm recommendations. First, take a break. While there are anglers, my brother included, that will happily fish from 6AM to 10PM without a break, most of you will not. An afternoon siesta is well worth taking, and can make a family trip much more enjoyable. If the fish are biting, by all means, keep on fishing, but consider your options. Sec-

ond, plan your evening. I'm not advocating hiking out of a canyon in the dark over miles of ragged trails. Instead look for options that allow you to fish closer to your car when the light dims. Third, bring some good dry flies. Big fish that have seen plenty of flies will often slink out from underneath logs and overhangs as the dusk falls. Even if you're fishing nymphs, streamers, spinners or bait all day, a fly rod with large dry flies can be magic at dusk. Tie some up or stop at your local fly shop and make sure you've got the right patterns along. Last, don't give up. While sometimes the fishing is hot, some evenings just fade to dusk. Regardless, the magic of the summer twilight on the water as the bats dance across the sky should not be missed.

Good Luck Fishing!



TROUT FISHING IN THE INFORMATION AGE

Online Mapping With The New Trout Spotr App

By Roo Way

The alarm on my phone goes off at 4:30am. I turn it off, a little groggy and confused about why it's still dark outside. I am almost at the top of the stairs before my brain grinds into gear and I remember: I'm going fly fishing! And just like that, my attitude changes from some sort of grumpy shuffling morning-hating zombie to Julie Andrews dancing through an alpine meadow. As the coffee brews I gather my gear and load the truck in the morning half-light. The ritual brings back memories of getting ready to go fishing with my dad as a kid. It was my dad who first introduced me to fly fishing and the calming steady pull of the river. I loved everything about it: the quiet and Zen of the cast, the exploration of a new environment, the challenge and excitement of a catch, and the tight-knit yet individualistic community of anglers. However, over time fishing was slowly, and unintentionally, replaced in my life with a chain of other outdoor interests, work, and a family of my own. It wasn't until years later that my dad reintroduced me to fly fishing with a trip to the AuSable River in northern Michigan. The calm and connection reminded me just how much I loved it. So when we recently relocated to Minnesota, I was determined to use the opportunity to get back into fly fishing while getting lost in the Driftless area I had heard so much about.

But lost is exactly how I felt. I had done my research, asked around, and been given good directions to a handful of streams, but upon arriving at each one it seemed pretty obvious that I would be trespassing on someone's property (which is a pretty good way to get shot at in the NC mountains where I spent much of my youth). At each spot I thought, "do I knock? Is this their property and am I trespassing? Do I just try to hide the car and sneak

what's just around the bend - not all the rest of this. Apparently I'm not alone.

In 2014, web developer Stuart Anderson decided to step up and solve this exact problem. He realized that with all the massive amounts of free public data available he could create an app that would help people discover not only how to access publicly fishable trout streams, but also to know the active regulations and open dates for every known stream. And it all started with the idea that if you simply overlay trout streams, public land, and public roads you get a map that shows exactly how and where to access a stream. It's a little embarrassing, having actually grown up in a time before cell phones and google maps (a time when you used a road atlas when planning a trip or a topo map for a backcountry excursion), but when Stu pointed out the simple fact that whenever a river and a public road meet you'll find a bridge, a lightbulb turned on in a long unused part of my brain. I think I actually said "oh, sh*t!" under my breath. Taking that one step further he noted that if you then added public land into this Venn diagram of awesomeness, where the three intersect you find a legal and safe access to a trout stream! Take these three things, put them together, and you're done. Simple, right? Well it's one thing to synthesize data for people to access, but quite another to do it well. When I first moved to Minnesota and decided I needed to get back into fly fishing, I found myself (not unpleasantly) wasting hours online at places like the DNR, TU, local shop's websites, Google Maps, and even Instagram trying to piece together the whats and wheres of fly fishing in my new home state. I discovered pretty quickly that for new anglers the internet can be a cluttered place filled with a jumble of beautiful fly fishing photos, habitat info, and fly shop websites - all with bits of helpful data spread around everywhere like the proverbial needles in haystacks.

I received the first email about the app. I thought, "Here we go again, another bit of technology we don't really need... it's probably like Waze for fishing spots or a fly fishing Facebook or something." Holy cow was I wrong. Working with help and data from MN DNR and others, what Stu built (after three years of obsessing, designing, learning, assembling, tweaking, managing, and more obsessing) is quite possibly the best and most

you have full access to a wealth of information on trout fishing locations in Minnesota and Wisconsin, just pick your region and wade in! You're immediately greeted with list of trout streams, creeks, and rivers in alphabetical order and organized by county. Right away you can see in the abstract for each stream the open/closed dates, limit information and more via the DNR as well as how many bridges



A DESKTOP SCREEN VIEW FROM THE MAPPING SECTION OF THE TROUT SPOTR WEB SITE. THE SITE IS OPTIMIZED FOR MOBILE DEVICE USE.

complete planning tool that Minnesota (and now Wisconsin) anglers have! And it's so damn simple.

But let's back up.

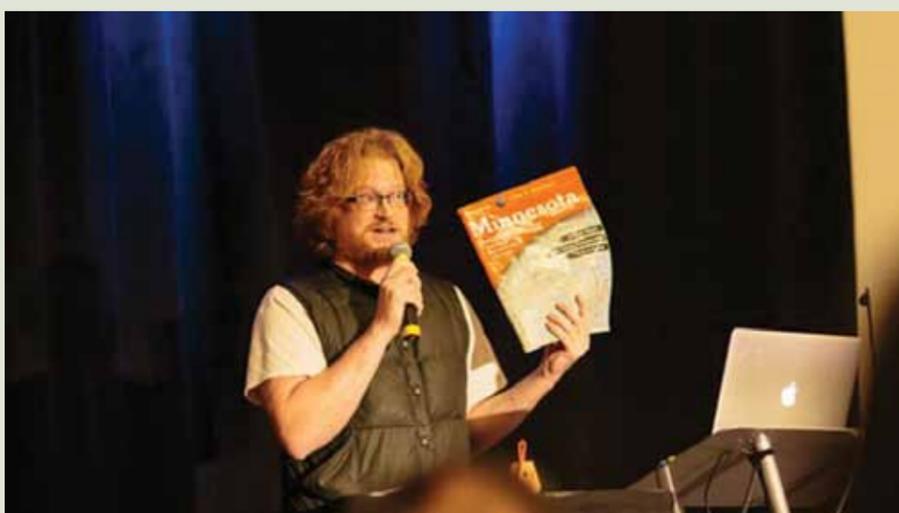
Somewhere around 2013, Stu's dad was starting to have knee issues. They had been fishing together since Stu was a boy, and now it was getting harder and harder for him to get to the trout. Needless to say, they were both starting to obsess a bit over finding trout fishing areas with easy public access. Now for years, Stu's friends had been coming to him for advice on how to get into trout fishing, and he had generally noticed how difficult it was to find all the info you needed, especially for someone new to trout fishing. It started small at first in 2014, just a few awkward iterations that were all intended to help his dad find easy access points. And as these personal projects often go, before he knew it he was neck deep in data and open source GIS programs. That's when he knew he was onto something. It was becoming something that filled the need he had been talking about for years, not some sort of vehicle for stealing someone's favorite fishing spots, but a resource for all anglers that compiled all the facts you might need, presented in a logical way. In 2016 he made a 'last' big push, taking 3 months off to focus on Trout Spotr and nothing else. The results, I think, were well worth it.

From the start, Trout Spotr is well designed and straightforward with an intuitive user experience. You're greeted with some ground rules and the basic premise that trout streams + public land + public roads = safe and legal fishing. Once you get through all the legal info (which you should always read and Stu has laid out in easily digestible chunks)

over publicly fishable land there are. You also have the option to search via a map view. Either will lead you to selecting a stream, which gives you further information for the stream including the areas of publicly fishable land, the areas with known trout habitat, regulations specific to the stream, as well as all legal access points (viewable in detail or map view) including Google Maps and GPS interface for directions! In both the detail and map views the stream is color coded so you can easily see the sections that are trout habitat on private land and the sections that are trout habitat on public land. Zoom in close and Google Maps' satellite view gets layered beneath these color coded sections, and that isn't even the best part. Any area or detail that you view while online is saved for offline viewing! Stuart Anderson is my hero. Epic ballads about his brave conquest of the internet and prowess in the mystic arts of QGIS will be sung around campfires for generations. If I have a son, I will of course name him Stuart.

Maybe.

I will, however, feel so much more confident and informed whenever I go fly fishing because of Trout Spotr. And this morning is proof of that. I finish packing up my gear, grab my coffee, and give my sleepy dog a scratch behind the ear as I head out the door. The cool damp air of dawn gives way to the morning sun which is just peeking through the trees as I pull into the turnout. I've never been here before, but I know everything I need to about the location. I'm comfortable here, alone and eager to explore a new creek. Before I leave the truck, I make a mental note to buy Stu a beer if and when we ever meet.



STEWART ANDERSON PRESENTING TROUT SPOTR AT MINNEDEMO WHILE DISCUSSING OLDER WAYFINDING AND MAPPING METHODS

in somewhere? Is the stream I'm looking for even back there somewhere?" Never a good way to start a fly fishing trip. The anxiety I felt became this grey storm cloud that followed me around. I didn't want to be that guy that ruined it for everyone else. I wasn't keen on getting yelled at for trespassing, and I really really didn't want to get shot at. I wanted to be thinking about where to cast, what fly to use, and

Pieces of the puzzle, but not the whole picture. Maybe some people enjoy the discovery of it, like trying to piece a puzzle together. Not me. I'd rather spend my time exploring the bends and banks of a new stream.

Little did I know that Stu was busy answering each and every one of my prayers with Trout Spotr (2017.troutspotr.com). In fact, I was still skeptical after I'd re-

FOSTER THE OUTDOORS: GET INTO MENTORSHIP!

By Tim Hemstad

Fellow outdoorsy fly fishermen and women:

You alone can spark a passion for the outdoors in a child, just by simply showing up. My mentor, Bill Hinton recently reminded me that since the dawn of time humans have been inspiring each other through story telling. Here's my story that just might bring a tear to your eye for a few conflicting reasons.

Recently, my daughter Verona asked, "Can we go fishing today?" All of a sudden, my Sunday to-do list consisted of only one thing that mattered. She had turned away from the iPad and willingly requested I take her outside. As I frantically checked the forecast and threw gear in the car for an epic outdoor adventure, her enthusiasm waned. I had delayed our departure, making sure not to forget all of the little things to safeguard the success of our excursion.

As we finally strapped into the car and headed for the stream, I knew the conditions were in our favor. A late afternoon on an early spring day, overcast skies, no wind, and I was taking her to my go-to spot minutes away from home. We did a few practice casts in the parking lot as a refresher on rod-line control, just as we had practiced at a local pond weeks before. I confidently chose to bring only one rod, as this day was going to be her day, and the focus was on her having the time of her life. Walking in, the anticipation grew as she froze in her tracks and said, "Daddy, I can hear the water!"

"OK, we have to be very sneaky and tip toe so we don't scare the fish away," I said. I let her take the lead on approaching the stream as she yelled at the top of her lungs, "Daddy, Daddy, the fish are jumping out of the water!" At that moment, I knew this would be the day she was going to catch her very first trout on the fly! There was a midge hatch popping off with 6-8" trout carelessly breaching the water every 30-60 seconds.

So with one hand on her hip and one hand on the fly rod, we got into position and began false casting a single midge emerger pattern. A few casts in, we placed the fly just left of the bubble

line and inevitably snagged the bank-side.

She gave me a puzzled look. "No problem," I said as I gave my favorite small creek 3 wt. rod a quick jerk and proceeded to snap it clean in half. As tears started welling up in my eyes and my lips quivering at the pressure of four-letter words, I looked up from the pile of fly line and rod parts and she said, "That's OK, we can just go on a hike." I wanted to snap that rod into five more pieces, but I suppressed the urge and said, "You know what? You're right. Let's go on a hike."

I disassembled what was left of my now five piece 3 wt. rod, put the reel in my pack and we started off. Along the way we saw a bald eagle, a beaver dam, and many more trout jumping freely out of the water. I'll admit it was very hard to ignore the itch to run back to the car to grab a second rod. She climbed trees, found snail shells, collected agates, threw rocks in the stream and I even found a set of matching shed deer antlers. It turned out to be quite the adventure, and even though a fish didn't turn out to be the highlight of the trip, it was indeed a successful outing after all.

What is a Mentor Anyway?

The role of a mentor is not necessarily to be an expert passing down well-defined informational instructions. I would classify a mentor as a partner in exploration, much more so than a teacher. This is because a deep-rooted reciprocating passion for the outdoors cannot be taught, it must be experienced, no different than the way children are not taught to love their mothers. Please take a moment to ponder this analogy.

I think it's fair to say that mentors attempt to facilitate experiences which may or may not change a person's life. Sure, it's easy to get fired up about conservation and the idea of volunteering time to help foster a new generation of anglers. However, the reality is that we live in an overwhelmingly fast-paced, technology-driven world. I tend to go off on a long tangent on that topic, so I'll spare you.

Who Has Time for All of This?

Recently when discussing the topic of volunteer work with a friend of mine



JOIN US IN HELPING YOUTH EXPLORE THE WORLD AROUND THEM. YOU CAN PLAY A ROLD AND ENGAGE, EDUCATE AND MENTOR THE NEXT GENERATION!

he said, "Free programs are perceived as not having value. No one has time to volunteer and without tangible incentives, no one will make time." I disagree! My argument is that volunteering may be the only method we have of finding purpose in such a fast-paced world, and that if we don't react now, our kids and certainly our grandchildren will be paying the price for our unwillingness to work for free.

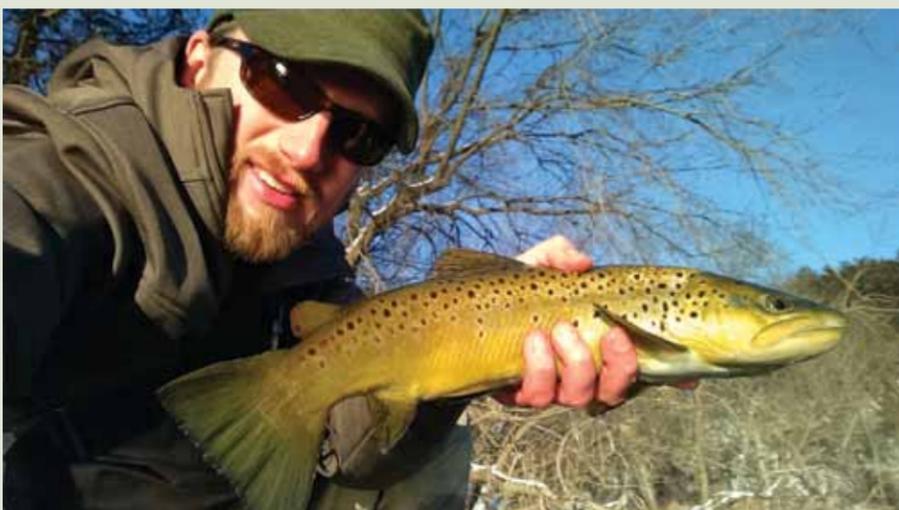
Depending on your budget, chances are you are willing to spend hundreds, if not thousands, of dollars on epic adventures to reach corners of the earth to experience a once-in-a-lifetime excursion. Upon arrival, undoubtedly the weather won't be ideal or the water will be too clear, or too stained, which turns into the reason you didn't just set the new world record for X fish on a fly in X region of the world. This scenario plays out for me every year during an annual trip I am fortunate enough to take with my two best friends. Now approaching our 20-year high school reunion, I attribute fly fishing for keeping our bond as strong as it is.

Ultimately, we all have the time of our lives and take pride in spending time with a close friend or family member, experiencing the outdoors, possibly trophy fish and/or broken rods. We return home relaxed and rejuvenated and with a debt to "pay it back" by fostering a love of the outdoors in generations to come.

Thank you to the many that are already actively working as stewards for the outdoors completely under the radar. For those of you that are ready to start chipping away at your debt, please add your name to the list of mentors around the state that have jumped at the chance to start fostering the outdoors.

Get involved by contacting:

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AUTHOR, FATHER, MENTOR AND ANGLER TIM HEMSTAD WITH A FINE BROWN

FISHING OUR HABITAT WORK: EAST INDIAN CREEK

Exploring a Brook Trout Gem in Minnesota's Driftless

By Paul Krolak



BANKS HAVE BEEN SLOPED, SEEDED AND COVERED IN EROSION CONTROL FABRIC AFTER GRADING AND CHANNEL WORK (LEFT). AFTER WINTER, SPRING VEGETATION THRIVES IN MAY OF 2017 IN COMPLETED RESTORATION WORK ON EAST INDIAN CREEK (RIGHT).

Tucked in a valley northeast of Plainview and the next valley over from the Whitewater, East Indian Creek is a little gem of a trout stream. A small stream in a beautiful valley, the creek drains into the Mississippi backwaters just upstream from Weaver.

Hiawatha TU and Minnesota TU have completed two Lessard-Sams funded stream restoration projects on East Indian. The latest, completed in 2016, is on the upper end of the creek.

To find East Indian Creek and the 2016 project, take MN 42 north out of Plainview and turn right on Wabasha Cty 14 East towards the Mississippi River. A few miles later, you'll see an 8% grade sign and begin your descent towards the valley floor. Just shy of the bottom of the hill on the right or south side is 173rd Avenue which curves back along the valley wall. Follow that about a mile past the big barn and you'll come to a place where the road widens out with a cluster of buildings, including two small cabins on the downhill side of the road.

Without blocking the driveway that con-

tinues on from that point, park along the downhill side. There's a sign, leaning against a tree last I was there, indicating "East Indian Creek Access" and "Walk up the road from this point."

Gear up and follow the road to a horse pasture and you'll see signs indicating a trail to the stream easement. The easement goes downstream quite a ways, well beyond the barn you passed earlier and upstream almost to the headwaters.

At the easement access, the stream is in a relatively rough state. The stream corridor is mostly wooded with high banks typical of unrestored stream reaches. There are fish to be found but you'll contend with overhanging trees and brush.

The 2016 project starts about one hundred yards downstream of the easement trail. You'll know you're there when the stream corridor opens up and the banks are sloped back. The project continues downstream about a mile to the end of the angling easement. Again, you'll know you're there because the trees close back in and the banks get tall. There's also the small beige easement stop sign, but

the change in condition is obvious. The project area had a fair amount of tilled acreage but as of 2016, the land adjacent to the project went into the Conservation Reserve Program (CRP, and only a few wildlife food plots are being tilled.

When the restoration design for the project was discussed, it was noted by the MNDNR Lake Cities Fisheries Staff that the brook trout living in East Indian are a genetically special strain. While they can't claim they're true natives, they don't seem to show much influence from the eastern brook trout seen in other brook trout populations.

Restoration objectives included lowering the high dirt banks, narrowing the stream where it had over-widened, and adding rock and wood habitat features. Larry Gates, the former Lake Cities

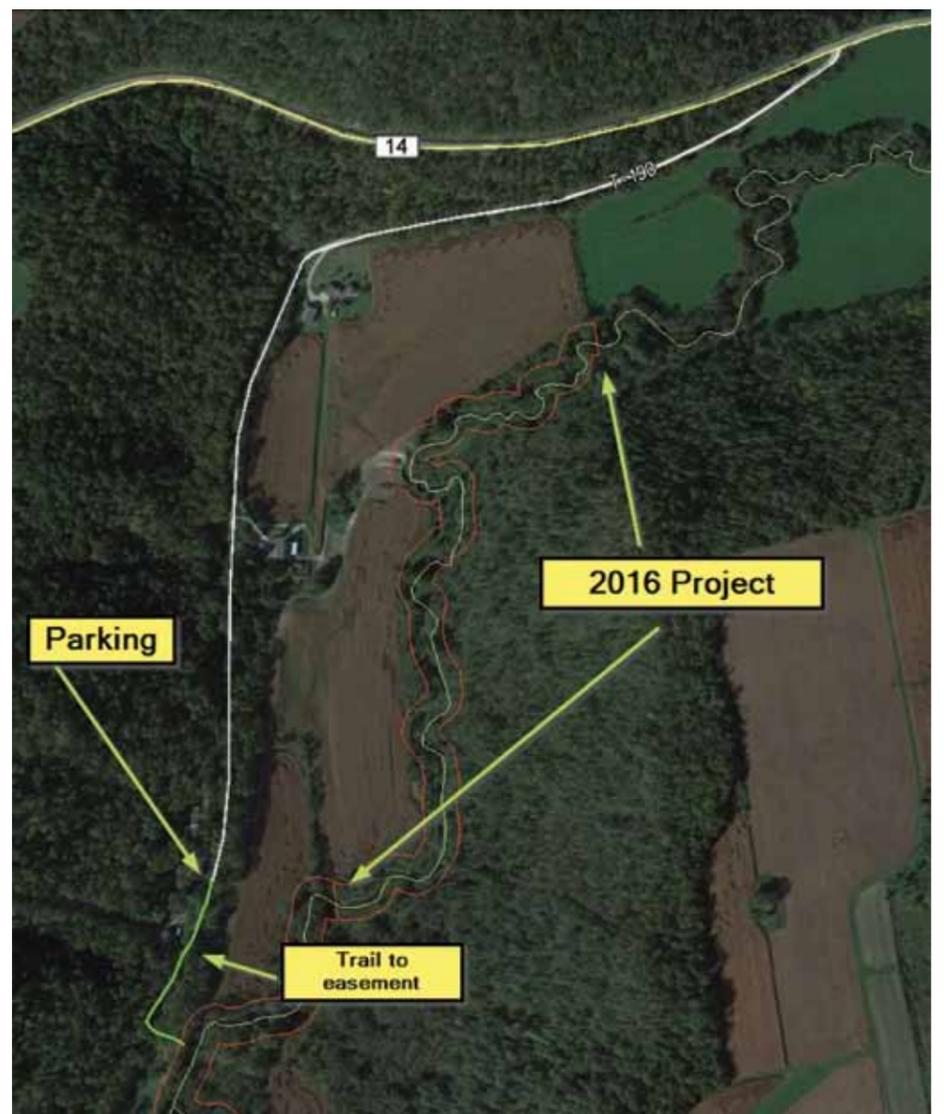
Fisheries Supervisor, valley landowner and watershed champion accompanied the TU and Fisheries personnel on the conceptual review. He emphasized 'tactile' cover: deeply placed wood and rock that the trout can nestle up against or under to avoid predators.

The preliminary restoration plan was drawn up by Melissa Konsti of the MNDNR Fisheries. Final plans, permitting and construction oversight was done by Emmons and Olivier Resources, and construction was done by Bennett and Sons of Plainview.

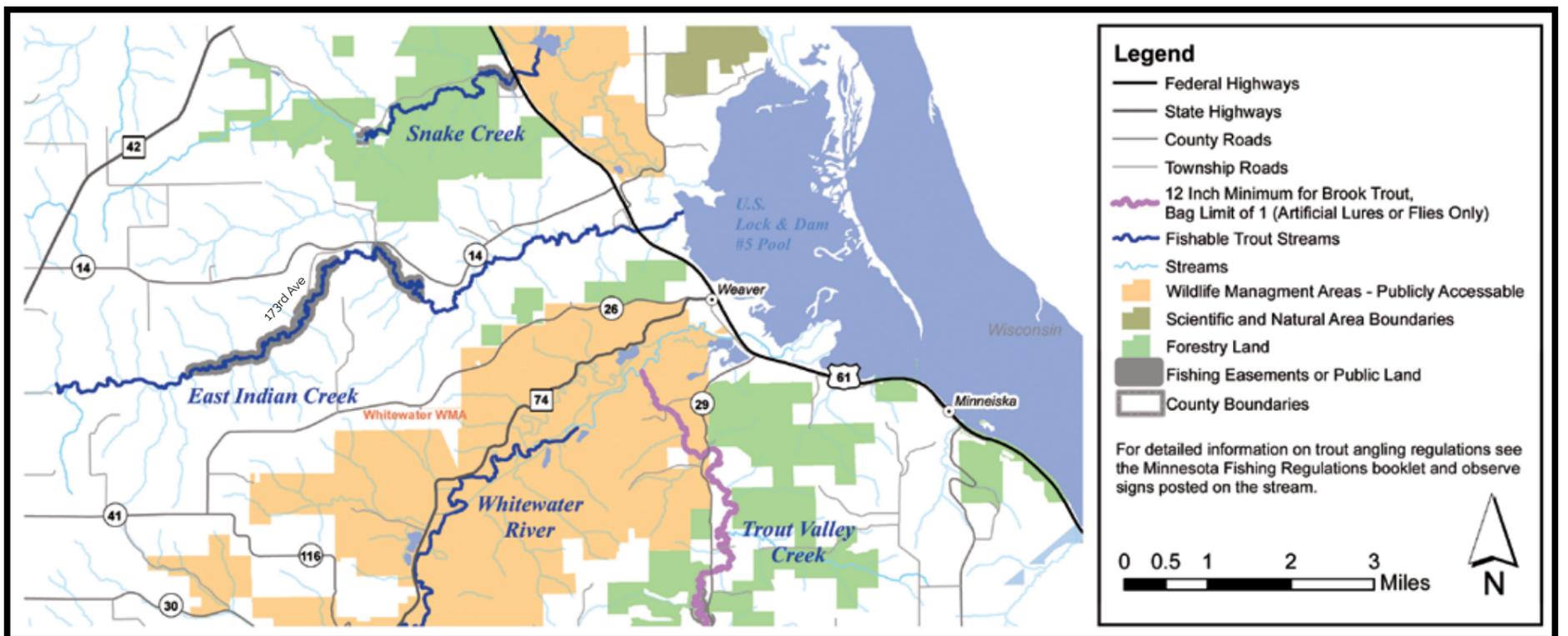
The trees that were removed from the stream corridor during construction were used as habitat and bank stabilization features. There are toe-wood structures, cover logs, log vanes projecting deep into pools, and root wads. The



ANOTHER NEWLY IMPROVED REACH ON EAST INDIAN CREEK



FIND THE ACCESS TO THE IMPROVED AREA OF THE STREAM OFF 173RD AVE.



EAST INDIAN CREEK IS ONE OF MANY HIGH QUALITY STREAMS NEAR WEAVER, MN. ACCESS IS FOUND SOUTH OF HIGHWAY 14. MAP COURTESY OF THE MN DNR.

complex cover that was created provides habitat for insects and small fish, and hiding places for fish large and small. Trout can be quite territorial and cover that prevents visual contact allows more fish to use the cover. If they can see each other, the dominant fish will chase others out.

There are also a number of cover rocks and a few enhanced chutes or weirs. There is a good amount of riffles and runs, which are necessary for a complete and healthy stream. Where possible, existing habitat and stream features were retained, along the bluff side there are some great spots under mature tree roots.

The banks were sloped back both to reduce erosion and to reconnect the stream to a floodplain to allow the energy from high water flows to dissipate and drop sediment. The soil is protected with a jute fabric that is staked into place and seeded with a mixture of grasses and forbs. Eventually the jute will degrade but only after the perennial vegetation is well established.

Does the fabric work? During construction an 8 inch rain event occurred and the newly staked fabric held and protected the newly shaped banks and habitat with minimal damage. Further downstream, where construction hadn't yet begun, the same event scoured out a whole new pool.

The water quality in East Indian is outstanding. While it will get off-color after heavy rains, for the most part its clear and cold. East Indian supports a healthy population of brook trout and quite a few brown trout, some quite large.

When the sun is high and the water is clear, stealth and a quiet approach are required, but you'll still spook fish in a stream as small as East Indian. If you can fish to them without spooking them, the brookies will take flies aggressively but you may find they get particular if a specific hatch is in swing. If nothing is hatching, a generic black wet fly seems to be a favorite.

With the stream running thru a sunny valley, the grasshoppers are numerous



A WILD MALE BROOK TROUT FROM EAST INDIAN CREEK IN FALL COLORS

in late summer and early fall. Popping down a high floating grasshopper fly can result in some explosive takes. In low-light or in off-color water conditions, and especially in the fall, streamer fishing can be fantastic. I've seen brown trout shoot a dozen feet across a pool to take a stripped streamer. Dead-drifting weighted streamers into the base of tree

roots and stumps can be a great way to find the larger fish.

Quality brook trout streams are pretty rare, and this one deserves to be protected and visited, it's worth the trip. When they're in season, take home a few brown trout. The brookies will appreciate it.

TROLLING THE WEB

By Dan Callahan

Each issue of the newsletter, I pass along my findings about fishing websites or YouTube channels worth watching. I've ignored Facebook, until now.

Facebook is now where you will find the latest fly hatch reports, river levels, and big fish pictures. Need to see what was biting the night before? You might just find it on Facebook. Most people update Facebook long before they will put information on their website. The easiest way to find Facebook pages is to login at facebook.com and search by name.

So, search for Minnesota Trout Unlimited, our local chapters around the state and every fly shop, guide and outfitter you know of in the corner of the region where you want to fish.

Once you find a site, click "like." Then do something a lot of people forget to do: click on "following," and choose if

you want to see this page's updates first, the next time you check Facebook. Need the latest trout updates from around MN? It's a great way to follow MNTU, TCTU and others online.

MNTU and some chapters also provide event information that you can get easily online for events like the Great Waters Fly Fishing Expo.

One fun Facebook page belongs to the Minnesota Department of Natural Resources (MNDNR). If you like "big fish" pictures, this is where you'll find them.

Of course, your Facebook page might be a destination for some as well. Let me know all about it and what you find (or any sites you think are a worthy catch) by sending me an email: dan@TwinCitiesTU.org.



FIND PHOTOS LIKE THIS ONE OF VOLUNTEERS WORKING ON HABITAT PROJECTS IN SE, BIG FISH, AND MUCH MORE ON THE MNTU FACEBOOK PAGE.

2018 PHOTO CONTEST WINNERS

Congratulations to the Winners!

This season was the fourth year for the MNTU Newsletter photo contest. We continue to get many entries, and with the advent of better and better smart phones and mobile devices, lots of you are shooting. Keep it up! Thanks to the large number of contestants that sent a wide variety of photos from around the state. A selection of winning photos are presented on this page. If your photo was not used here, keep an eye for it in future newsletters, on the web site, our Facebook page or at the Expo in 2018.

The Rules of the 2017 Contest Were:

- Photos must be shot in Minnesota
- Photos should fall into a category: Minnesota Waters Trout, Salmon & Steelhead Family Fishing
- Photos must include a trout, salmon or steelhead, **OR** a water body that they inhabit.
- Photos must be submitted by May 15th, 2017. Top entries in each category will be published in the June issue of the MNTU Newsletter.
- All photos submitted must be sent in *.jpg format at their original resolution to the Editor at: mntueditor@gmail.com
- There is a entry limit of three photos per individual. Please include the name of the photographer and the location the photo was taken in the submission.

- Submission of photos gives MNTU the right to publish photos in the MNTU newsletter and in online media.

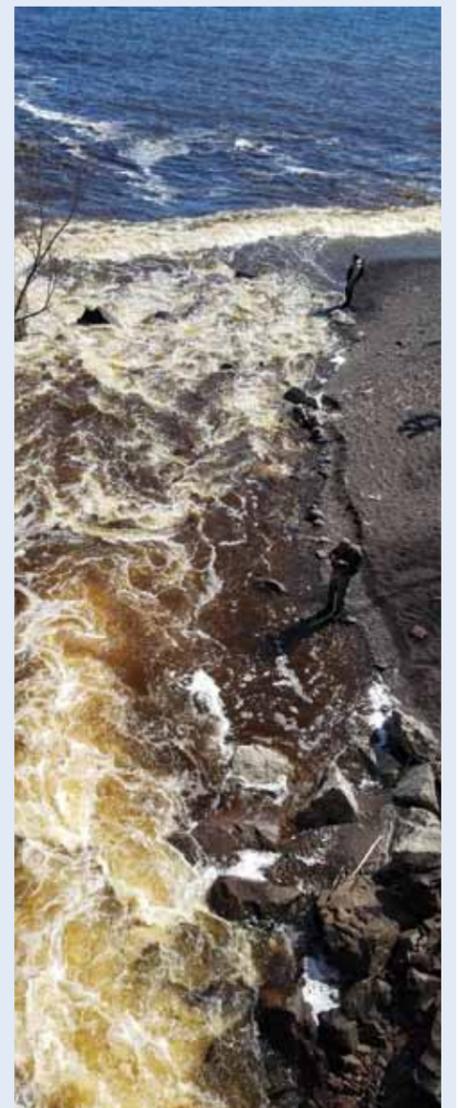
2017 Prizes

The winner in each category will receive a box of a dozen flies ready to catch trout this season. The overall winner will receive an official Great Waters Fly Fishing Expo T-shirt with the 2017 design by Jake Keeler, and an official Expo hat in either brown or gray.



FIRST PLACE - TROUT, SALMON & STEELHEAD
 NORTH SHORE STEELHEAD
 LAKE COUNTY, MN
 PHOTO BY CHERI HENDERSON

OVERALL WINNER
FAMILY FISHING
 TESTING THE WATER
 TROUT BROOK - DAKOTA COUNTY
 PHOTO BY TIM HEMSTAD
 SEE PAGE 2 & COVER FOR INFO



FIRST PLACE - MN WATERS
 RETYING
 ONION RIVER - COOK COUNTY
 PHOTO BY ROBERT JOHNSON



SECOND PLACE - TROUT, SALMON & STEELHEAD
 HUSTON COUNTY, MN
 PHOTO BY JANET VEIT



THIRD PLACE - FAMILY FISHING
 SOUTH BRANCH OF THE ROOT RIVER, FILLMORE COUNTY, MN
 PHOTO BY MONTA HAYNER



THIRD PLACE - TROUT, SALMON & STEELHEAD
 FALL COLORS
 WHITEWATER RIVER, WHITEWATER STATE PARK - WINONA COUNTY, MN
 PHOTO BY MONTA HAYNER



SECOND PLACE - MN WATERS
 LITTLE CANNON RIVER
 LITTLE CANNON RIVER, GOODHUE COUNTY, MN
 PHOTO BY ISAAC WINEMILLER



SECOND PLACE - FAMILY FISHING
 GOOD THINGS COME TO THOSE WHO WADE
 HOUSTON COUNTY, MN
 PHOTO BY BRIAN SCHUMACHER

SAVING NORTH SHORE STEELHEAD

Genetic Tests Confirm its Time to Stop Gambling Our Natural Heritage

By John Lenczewski

The swing of my fly came to a hard stop. I made a quick sideways hook set and the river exploded in silver. My reel screamed as the steelhead raced around the pool, putting on a show punctuated with high cartwheels which threw spray in the spring sunshine. A run to the pool's head was followed by single long sprint all the way to the pool's tail out. I palmed the reel harder and strained the 8 pound tippet to its breaking point. The fresh steelhead was too big to turn, but luckily for me it decided to return to the deep gut of the pool. Several minutes of struggle ensued and I pressed my tackle hard to tire the fish quickly. I thought surely the fish was exhausted and ready to be netted in the calm inside sweep of the pool. Then the steelhead decided it was time to leave. In one unstoppable run the big male was out the tail of the pool and running down the rapids below. I stumbled after it, alongside the rooster tail waves, clinging to tree branches and trying hard to concentrate on my footwork and avoiding a dunking. Forty yards downstream he stopped in a run and our tussle resumed. I was eventually able to steer him into my net. I was exhausted. The fish seemed exhausted. I twisted my fly from the corner of its mouth and reached for my pocket knife to collect scales for the DNR's steelhead genetics study. But as I reached to grab its tail the steelhead surged over the rim of my net and bolted up into the rapids.

Scenes like this are played out thousands of times each spring along Minnesota's rugged North Shore, as anglers from around the state and beyond its border flock there to tangle with these amazing fish and scenic rivers. Fishing is good for now. But new research reveals we are at a crossroads. The steelhead fishery can either become great or decline and disappear, depending upon whether or not the DNR chooses to heed the new genetic data and follow the science.

A Uniquely Adapted Wild Fishery

North Shore rivers below their barrier falls are rugged, harsh environments where only the fittest wild fish can manage to survive and reproduce. These bedrock confined reaches nearly freeze solid during some winters and become extremely low and warm each July and August. Despite these extremes, Minnesota's wild steelhead populations have survived, and at times thrived, adapting to these harsh conditions over more than 20 generations. From modest initial stockings on the Canadian shore in the late 1800s, naturally reproducing steelhead spread throughout the Lake Superior basin and quickly established self-sustaining populations. The steelhead population which has evolved in this crucible we call the North Shore is now a uniquely adapted, wild fishery unlike any on the West Coast. It became legendary by the 1950s.

Decline and Rebound

The storied North Shore steelhead fishery of the 50s, 60s and early 70s

began to decline in the late 1970s. The decline accelerated in the 1980s through mid-1990s. This was due to many factors, including overharvest ("limit" of 3 per day until 1992), changes in Lake Superior's forage base and altered hydrology and stream habitat. Recent research suggests that a misguided put-grow-and-take hatchery program begun in the late 1970s also has been undermining steelhead reproduction and abundance. Since the 1980s the DNR, Trout Unlimited and other groups have worked hard to stop the decline of the wild steelhead fishery and slowly rebuild it. MNTU has stepped up work restoring juvenile steelhead habitat on the Sucker, Stewart, Kadunce and Blackhoof, with more work planned. We are also working on restoring riparian forests and hydrology. We have been making good progress, and steelhead fishing is good. Nevertheless we have a considerable ways to go to fully recover this amazing fishery.

Counterproductive Hatchery Program

The DNR's stated goal in the 1996 and 2006 Lake Superior Management Plans was to rehabilitate naturalized (wild) steelhead stocks to achieve a level that would allow limited angler harvest supported by naturally reproducing populations. This is a good goal, and one that MNTU has consistently supported and worked with DNR and other partners to help achieve. Unfortunately, the DNR has also chosen to continue stocking a domesticated hatchery strain of rainbow trout known as "Kamloops" to appease a segment of harvest anglers unwilling to wait for steelhead recovery. Rather than breaking the news to anglers that killing three 4 to 8 pound fish per day was not sustainable, DNR kept the three fish limit and kept pumping Kamloops into the Lake. MNTU has been warning DNR for 20 years that this is a dangerous and counterproductive gamble which should be stopped. Results of new genetic tests unveiled in March 2017, confirm our worst fears – domesticated Kamloops are spawning with steelhead in rivers up and down the North Shore, producing hybrids which weaken the wild steelhead population (genetic introgression) and will gradually destroy it.

Advantages of a Wild Fishery

MNTU has been working for rehabilitation of the North Shore's wild, naturally reproducing steelhead fishery not for romantic notations of "wildness," but for the simple pragmatic reason that healthy wild fisheries produce the most fish year after year. Countless studies of fisheries reach the same conclusions: wild, self-sustaining fisheries are best able to maximize the productivity of an ecosystem and are the most resilient in the face of disease, hatchery failures, budget cuts, etc. Stocking can create a temporary bump in numbers if the problem is lack of natural reproduction, but stocked fish typically just displace an equal or larger number of wild fish. In short, wild fisheries produce more fish.



A HEALTHY WILD NORTH SHORE MALE STEELHEAD CAUGHT THIS SPRING, SHOWING AN INTACT ADIPOSE FIN JUST TO THE LEFT OF THE ANGLER'S THUMB ON THE TOP OF THE BACK OF THE FISH. THIS IS THE CLEAR DIFFERENCE BETWEEN A STOCKED KAMLOOPS RAINBOW TROUT AND WILD STEELHEAD.

What are Kamloops? Can we have both?

In the mid 1970s the Minnesota DNR introduced a domesticated hatchery strain of rainbow trout known as "Kamloops" (named for a region of inland lakes in western Canada from which eggs are believed to have originated) in the belief that they would provide more fish to harvest. Back then managers and anglers failed to realize that aquatic ecosystems, even large ones, have finite productivity and that stocked fish displace wild ones. This hatchery strain has now been domesticated over seven to nine generations of artificial selection in the controlled hatchery environment. Managers for years gave little thought to this since the program is intended as a dead end, put-grow-and-take harvest program. When started, little thought was given to the adverse impacts stocked fish might have on the wild, naturally reproducing steelhead population well adapted to our local waters.

Can We Have Our Cake And Eat it Too?

Perhaps we can have a catch and kill Kamloops program and fully recover our steelhead fishery? This what anglers have hoped for and what DNR has gambled is possible. The fact is that the 90,000+ juvenile Kamloops stocked annually in locations between the Lester River and French River compete with wild steelhead for forage in near shore waters of the relatively infertile Lake Superior. Fisheries biologists acknowledge that stocked Kamloops effectively displace wild steelhead in the lake, eating up the productive capacity of the lake which would otherwise support and produce a similar number of wild steelhead. This trading away 1,000 wild, self-sustaining steelhead for a dead-end put-grow-and-take harvest program might be acceptable if this was the extent of Kamloops' impacts. Certainly this is a tradeoff that

DNR managers have been willing to make to keep harvest minded anglers happy.

Opposition to Stocking Kamloops Has Nothing to do With Harvest

We believe that the steelhead fishery has not yet recovered enough to withstand harvest at this time, and the catch and release restriction should stay in place for the time being. Some Kamloops fans have suggested that since Kamloops can be harvested, our opposition to Kamloops stocking stems from an "elitist catch and release" mentality. This is false. We embrace catch and release angling as an important management tool. But where harvest is sustainable, it is a personal preference for each angler. MNTU supports biologically sound angling and harvest regulations for all species which ensure the long term health and stability of the resource, in this case the Lake Superior fishery. We believe in maximizing angling opportunities and providing the option to harvest truly "surplus" fish, to the extent that the quality, stability and self-sustainability of the resource are not jeopardized. I and many members choose to harvest and eat surplus fish when and where we believe a given fishery can sustain such harvest without loss of quality.

MNTU thus is not opposed to harvesting fish. Indeed, we encourage anglers to harvest any Kamloops they catch in North Shore streams. We strongly support providing recreational opportunities, including through stocking waters incapable of sustained natural reproduction such as in inland stream trout lakes and degraded urban fisheries. We also envision a very limited steelhead harvest option in the future, once our steelhead fishery is fully recovered. We might be fine with trading away 1,000 wild, self-sustaining steelhead in a geographically limited area for a put-grow-and-take

harvest of 1,000 Kamloops if this were the extent of Kamloops' impacts on steelhead. However, we now have proof that Kamloops have been undermining steelhead recovery and continued stocking will eventually destroy our steelhead fishery completely. No angler or fisheries manager should accept such a trade-off.

Steelhead Fitness and the Dangers of Hybridization

After more than twenty generations of very successful reproduction in the wild, Minnesota's unique steelhead populations have demonstrated that they are now well adapted to the very harsh and highly variable conditions found along the North Shore. Historic logging practices and altered hydrology in their watersheds have left the lower ends of North Shore rivers flashy, and with little groundwater flows. As a result steelhead nursery areas get extremely low and warm in summer and nearly freeze to the bedrock in many winters. It is amazing these fish make it at all. In stark contrast, the domesticated Kamloops strain is very poorly suited to successful reproduction and stream survival outside the artificial hatchery environment.

By the mid-1990s observant anglers began expressing concern that Kamloops were spawning with wild steelhead in numerous rivers along the North Shore, including ones in which they had not been stocked as juveniles. A large number of studies conducted on West Coast steelhead from the 1970s through 1990s were being published which made it increasingly clear that hatcheries inevitably have domesticating effects upon steelhead/rainbow trout (due to artificial selection for hatchery conditions) and that stocked fish by interbreeding with the wild population would weaken the gene pool of the wild population and make it less able to survive in natural (versus artificial hatchery) conditions. Some of these anglers, including several MNTU members, began publicly raising concern that Kamloops were at a minimum interfering with steelhead reproduction and possibly hybridizing with them. By 1997 MNTU began calling upon the DNR to reduce the numbers and locations stocked, and then to eliminate this dangerous hatchery program in order to preserve and recover the wild steelhead fishery.

Myths and Wishful Thinking

Many harvest minded anglers took to the artificial put and take Kamloops program immediately. Kamloops were easier to catch, easier to land due to a much less spirited fight (sometimes likened to "fighting" a snagged stick) and you could kill three a day, even as the steelhead limit was dropped to one per day. When a DNR biologist agreed that Kamloops might be interfering with steelhead reproduction, Kamloops boosters denied it was possible. A series of unsubstantiated claims were thrown out and they insisted the DNR disprove each with MN specific research (they rejected the application of a mountain of research on West Coast steelhead and basic principles of fish biology and fish genetics). Claims included that kamloops did not stray to other rivers, that they ran rivers earlier than steelhead and didn't stay around long enough to interact, and that

they only swam a little way up from river mouths and were not capable of reaching steelhead spawning grounds. When these were disproven, several alternative claims were added, including that Kamloops will not actually spawn with steelhead when together on spawning gravels, that hybrid eggs cannot hatch, and even if the eggs hatch the hybrids might somehow improve steelhead survival. All these silly claims were disproven by controlled DNR research by 2005.

Hybridization Cuts Steelhead Survival in Half

Importantly, DNR research demonstrates that wild steelhead have far greater survival rates at all life stages than Kamloops and Kamloops-steelhead hybrids. The studies taken together show that for every 100 juveniles produced by two steelhead, Kamloops-steelhead crosses produce an average of just 50 juveniles and two Kamloops produce only 14 juveniles to age 1. In other words, hybridization by Kamloops on steelhead would cut steelhead production in half! These results warrant discontinuation of Kamloops stocking and MNTU has been pressing for this for more than a decade.

More Wishful Thinking

Because DNR studies began with eggs fertilized in the hatchery, DNR and Kamloops boosters clung to two additional, unsubstantiated reasons why the hatchery program was not dangerous and could be continued: (1) Even if Kamloops spawn in the wild with steelhead, either those eggs won't hatch or the hybrids will be too unfit to survive to adulthood and spawn with steelhead, and (2) Even if a few actually do survive to adulthood, it will be so extremely rare it cannot impact the steelhead population. MNTU believed this was unsubstantiated wishful thinking and argued that it was irresponsible to risk our wild steelhead fishery given the well documented impacts hybridization would cause. We repeatedly pointed out that even if the "best" case scenario were true (i.e., no hybrid eggs hatched or hybrid juveniles survived) there were still substantial impacts on steelhead reproduction since each time a male Kamloops spawned with a female steelhead the steelhead gametes were being wasted just as surely as if an angler had harvested the steelhead before spawning. In the past few years DNR publications have at last begun acknowledging this waste of steelhead gametes. Until 2015 DNR lacked genetic testing methods sophisticated enough to identify a genetic marker unique to Kamloops. Absent genetic tests confirming MNTU's warnings, the DNR still planned to continue stocking Kamloops as late as February 2017.

2016 Steelhead Genetics Project Confirms Fears

In 2015 several MNTU members renewed efforts to get the DNR to conduct genetic testing on North Shore steelhead. DNR had informed us that genetic testing methods had advanced and that Dr. Loren Miller had identified a unique genetic marker for Kamloops. We suggested that steelhead anglers could help collect tissue samples from the adult steelhead. The DNR agreed and the Steelhead Genetics Project was launched beginning with the spring 2016

steelhead run. The program used volunteer anglers to collect tissue (scale) samples from adult steelhead they caught in North Shore rivers. DNR also collected tissue samples from wild juveniles via electrofishing surveys. Results from genetic analysis were unveiled at the Great Waters Expo in March 2017 and sent tremors through the steelheading and conservation communities. Genetic test results revealed that:

- Domesticated hatchery strain "Kamloops" are spawning with steelhead in the wild.
- Despite being far less fit, some hybrids survive to adulthood and return to spawn with wild steelhead.
- Hybridization by Kamloops is occurring in most steelhead rivers from Duluth to the Canadian border, and is heaviest in rivers nearer Duluth.
- Shore-wide, nearly 15% of adult steelhead have some Kamloops genes indicating recent hybridization of at least one "great grandparent."
- Naturally reproduced "pure" Kamloops were even found in several rivers (3% of unclipped fish, which until now were assumed to all be pure steelhead).

Implications

For two decades the DNR has been playing a dangerous game of roulette with our uniquely adapted North Shore steel-

steelheaders.

A Silver Lining and Call to Action

The good news is that it is not too late to save our unique North Shore steelhead. Fish geneticist, Dr. Loren Miller, confirmed that it is not too late to stop and reverse the impacts of hybridization by domesticated Kamloops and to fully recover the wild steelhead fishery, provided that the dangerous, counterproductive Kamloops stocking program ceases. The Minnesota DNR's goal is, and for more than 20 years has been, to rehabilitate naturalized (wild) steelhead stocks to achieve a level that will allow limited angler harvest supported by naturally reproducing populations. The DNR now has hard data showing that long term survival of the steelhead fishery is not possible if Kamloops stocking continues. The only responsible course of action is for the DNR to immediately cease stocking Kamloops in Lake Superior and its tributaries. Another year of data will not change these facts.

Sadly, the DNR has yet to declare an intention to cease this counterproductive hatchery program. They did collect more than 100,000 Kamloops eggs this spring, but these can be used for stocking inland trout lakes. The final decision will surely get made in St. Paul,



A KAMLOOPS RAINBOW TROUT CAUGHT IN THE SUCKER RIVER ON THE MINNESOTA NORTH SHORE. NOTE THE LACK OF AN ADIPOSE FIN TO THE LEFT OF THE ANGLER'S THUMB ON THE TOP ON THE BACK OF THE FISH.

head fishery. This was possible because until last year the DNR lacked genetic testing tools which could prove whether the Kamloops which anglers frequently observed spawning in steelhead rivers were in fact interfering with steelhead reproduction and producing viable hybrids. We now have hard data showing that Kamloops are hybridizing with wild steelhead in nearly every river to the Canadian border. Earlier research determined that Frankenloops (Kamloops-steelhead) hybrids produce only one-half as many juveniles as pure steelhead. Consider for a minute the downward population spiral this will lead to. While the results are alarming, they are not altogether surprising to observant

so anglers should consider encouraging DNR Fisheries Chief Don Pereira to do the right thing and save our wild steelhead fishery before it is too late. You can reach him at: don.pereira@state.mn.us or (651) 259-5231.

Discussions can be had at a much later date about whether to initiate a harvestable hatchery steelhead program or consider a very limited harvest on wild steelhead. Kamloops already stocked into Lake Superior will continue returning to rivers for five more years. Please help protect our wild steelhead fishery by keeping any Kamloops you catch.

MAUER BROS. TAVERN TROUT CONTEST

A Historic Trout Fishing Competition and the Tales It Has to Tell

By Mark Reisetter



THREE GENERATIONS OF MAUERS IN FRONT OF THE MAUER'S BIG BROWN TROUT CONTEST BOARD: IN THE CENTER IS BOB MAUER, AT LEFT IS BOB'S SON MIKE MAUER, AND ON THE RIGHT IS MIKE'S SON ROBERT MAUER.

Mauer Bros. Tavern and Grill in Elba, Minnesota, in the heart of the Whitewater River system, has been operated by the Mauer family since 1890 and is perhaps the longest continually operated tavern by the same family in the state, if not the nation.

I became familiar with the place in the early 1970s when I became friends with Francis "Ben" Benedett, the Winona County Highway Superintendent, who lived in Elba. I would meet Ben after work at his house and together we'd walk down to Mauer's where either Bob or John would be manning the bar. Ben would ask to borrow their Jeep to go trouting, the keys to the Jeep would be handed to him and away we'd go, exploring the remote recesses of the big valley and its fabled trout waters.

The bar has always been an iconic place to visit with the fish, deer, and other animal mounts, the sporting clientele present, and the annual leader board where you could keep track of who was catching the biggest trout each week.

Recently, Mike Mauer agreed to share with us 52 years of records of their "Big Brown Trout Contest" beginning with the year 1963. I'm not a scientist, but I have an inquiring mind that became enthralled with over 1,300 weeks of data. Each week of each season would have a winner: the person who brought in the heaviest trout caught somewhere in the Whitewater System during that week. This winner would be listed on the board and given a 12-pack. In most years, the leader board would list the person's name, the weight of the trout, which branch of the Whitewater the fish was caught in, and the lure/bait used.

Of all those years, one year stands out for large trout, and the banner year was definitely 1974. In the 52-year span, five trout have made the board weighing ten pounds or more, and three of those fish were caught in 1974. Ed "Blitz" Krieger of Elba is the all-time winner of the Mauer Bros. contest with the largest brown trout, which tipped the scales at 13 pounds, 14 ounces in July of that year. Frank Murphy, a former colleague of mine, happened to be in the bar the day when Ed came in, stepped up to the bar and said, "I have something to show you, but first I need a shot!"

The week before Ed caught his monster on a night crawler from the South Branch of the Whitewater River (SBWW), Mike Hanson of Preston, MN, brought in a 12 pound, 14 ounce brown he also caught in the SBWW, his with a spinner. The third ten-pounder caught that year was taken using a Mepps during the second week of the season in May by Dave Benike of Rochester, also from the SBWW. My question would be, how many other large trout might have been brought in and weighed during those weeks, and since they didn't measure up to these behemoths, we have no record of their existence?

Adding up the total weights of all the weekly winners in 1974 and dividing by the 25-week season revealed that the average weight of those 25 weekly winners was almost five pounds (4 lb. 14 oz.). Compare that 4 lb. 14 oz. average weight on the high end in the peak year of 1974 with the average weekly winner's weight on the low end in 2013, 2014, and 2015 (which was 2 lb. 2 oz. in each of those years), and a considerable and steady decline in the average size of trout caught in this contest can clearly be seen.

Another measure of this decline in the size of trout is documented with the Mauer contest data by dividing the 52 years in half. In the first 26 years of the contest, 39 of the 61 trout over six pounds were caught. In the last 26 years of the contest, 22 of the 61 trout over six pounds were caught. That's a 64% to 36% difference.

What in the world is going on? What factors have caused such a decline? Has the catch and release movement contributed to this decline in the number of big fish being turned in to be weighed? The elder Bob Mauer thinks C & R is a factor. That would be a desirable explanation, meaning there might be as many large trout as ever out in the Whitewater system, they're just not kept and turned in to be weighed.

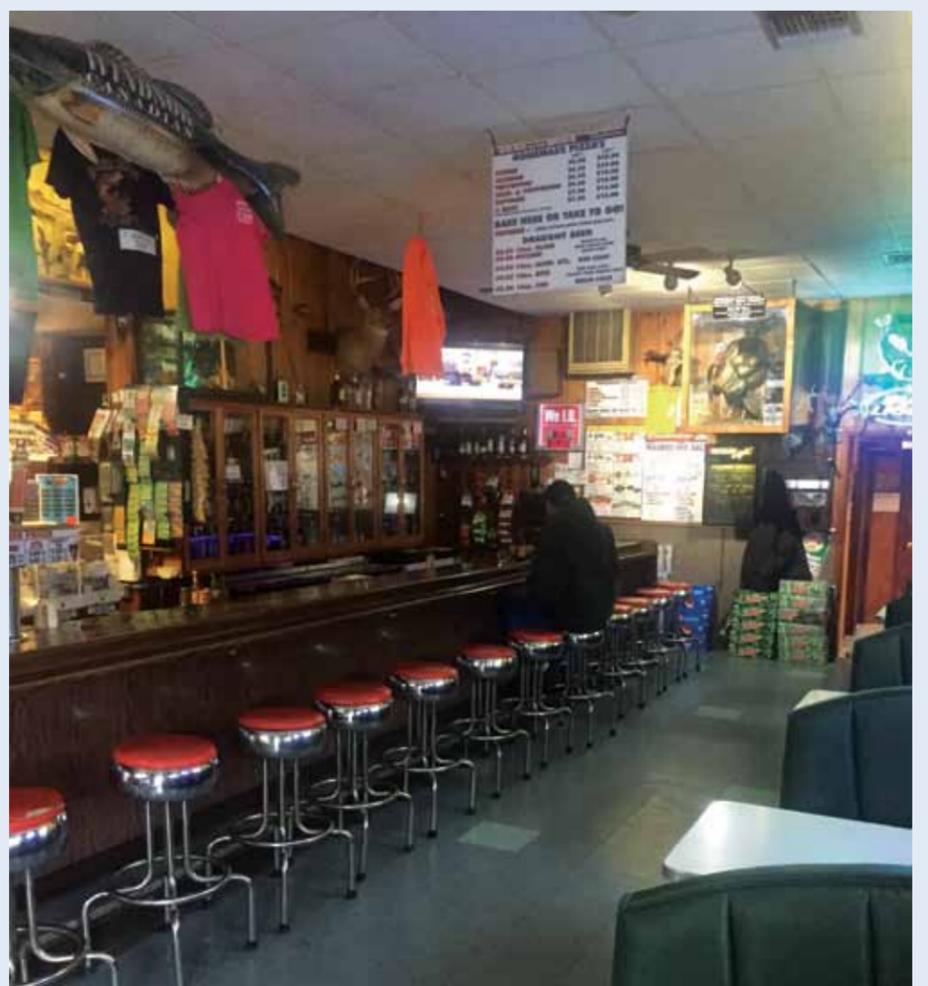
Vaughn Snook, MN DNR Lanesboro, cites the 2005 and 2013 creel surveys that indicate that today most trout anglers in Minnesota are practicing catch and release. When did C & R become prevalent in Minnesota? My largest Minnesota stream trout came on a fly, also in 1974, but that brown was mounted (the taxidermist Mike Lyga, then of Independence, WI, did return the frozen meat to be eaten) and is on my wall. In my defense, I like to say that in 1974 the only guy practicing catch and release was probably Lee Wulff, himself.

I think I started leaving my creel at home about 25 years ago, in the early 1990s. John Gierach's statement, "There's an old black cast iron skillet hidden somewhere in about every fly fisherman's closet," has me pegged to a tee. MN TU Executive Director John Lenczewski and I must have similar backgrounds, as I spotted his name in the Mauer records

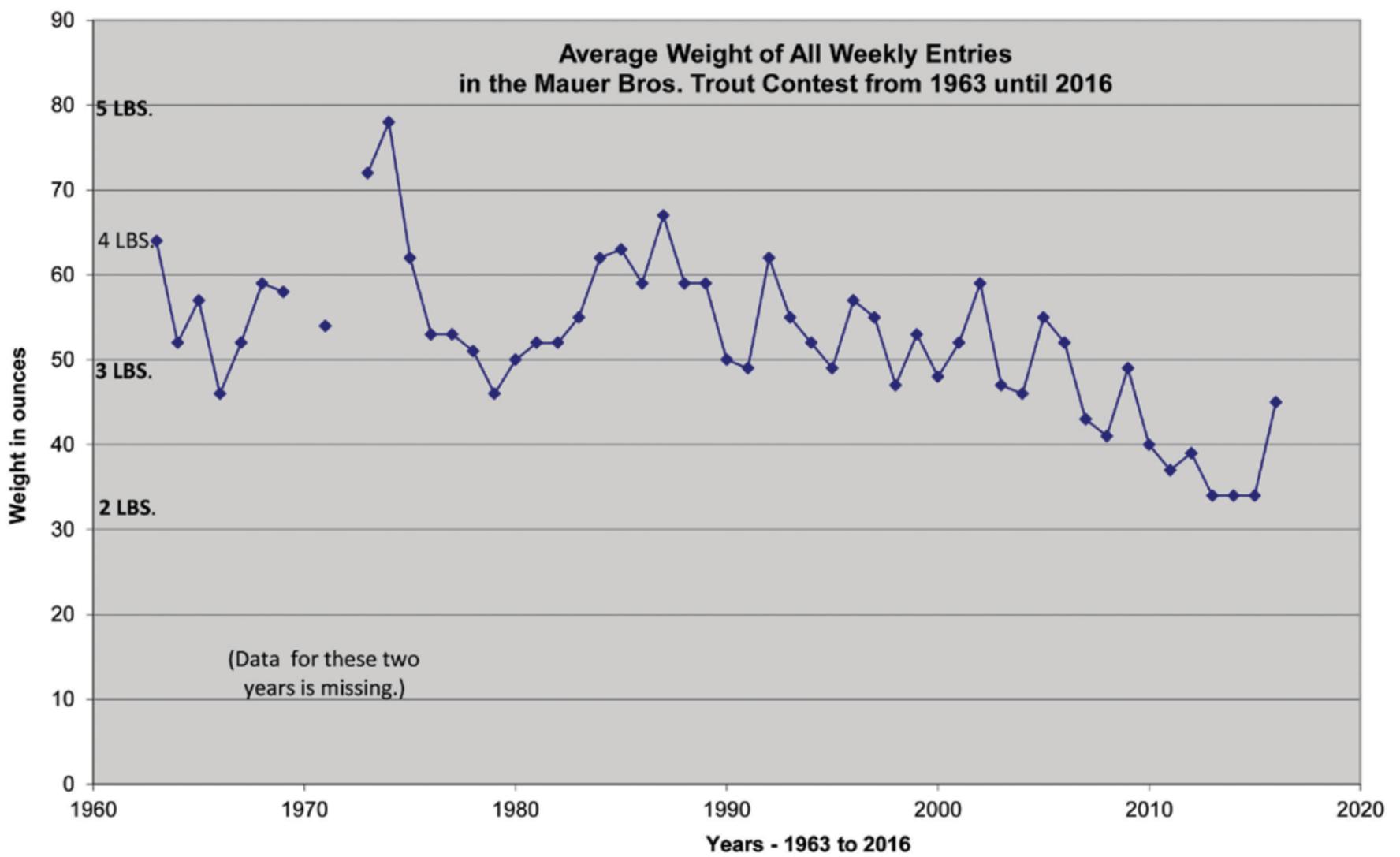
as a weekly winner with a 4 lb., 9 oz. brown trout from the Main Branch in 1981.

If you examine the graph "Average Weight of All Weekly Entries in the Mauer Bros. Trout Contest from 1963 until 2016" you will see that the decline in the size of trout has already begun before the 1990s when my "conversion" to C & R took place. Perhaps my experience is not so typical, but I think it might be close to the actual keeping or releasing practices common to this region. With that in mind, perhaps C & R is not the main factor in this decline. But C & R might be more of a contributing factor in a secondary fashion. Numerous fishermen won the Mauer contest frequently. The angler who won the contest a dozen times more than anyone else was the local Floyd Ball. Ball made the Mauer board 39 times! He must have been driven! Floyd, according to reports when he was in his 70s, would use an 8' graphite fly rod equipped with 14-pound test monofilament on a spinning reel and his predominant, successful bait was a crawler on a size 6 hook, often fished at night. When Floyd died in 1991, a recurring connection to large trout in the Whitewater Valley was lost. How many younger folks today are on the stream with Floyd's passion? And if they are out there today, the chances that they are practicing catch and release are quite favorable!

When shown the results of this study, and asked what are some factors that might be contributing to a decline in the size of trout, some anglers thought right away that some of the biggest holes have disappeared, and the biggest trout with them. Others would say



PART OF THE INTERIOR OF MAUER BROTHERS TAVERN AND GRILL. THE BAR IS FULL OF MOUNTS OF DEER, TURKEY, TROUT AND MORE. IT IS WELL WORTH A STOP WHEN YOU'RE IN THE WHITEWATER VALLEY. LOOK FOR IT IN DOWNTOWN ELBA.



that when one large hole is filled in or deteriorated, it seems like the stream compensates nearby as another stretch gets deeper and improved.

Perhaps the strongest influencing factor in the decline of larger trout is a result of increased spring flows. That seems somewhat counterintuitive at first, but is probably more influential than other factors. I remember Melvin Haugstad, the former Fisheries Supervisor in the Lanesboro office from yesteryear, saying that the spring flows seemed to be on a fluctuating 15-year cycle from high to low. I don't know if his observation is still the pattern today, but our water table certainly seems higher this year than before. The streams this spring seem to have more water flowing in them. A former student of mine, who farms south of Utica, below the Interstate, told me a couple weeks ago that he had gotten some of his equipment stuck in the middle of one of his

fields. A spring has developed in a place where this 40-something-year-old man had never seen one before.

Our fisheries people have concurred. Jeff Green, the DNR's groundwater hydrologist, notes that the discharge from our springs has increased; shifting upward in the early 1990s, a trend that continues today. The increased discharge from our springs has increased, making our streams colder as the 48-degree spring water mixes at a higher percentage with warmer surface waters. Trout do grow faster in slightly warmer water, as long as the temps stay within their suitable range. Also, as a result of having colder streams, we have fewer chubs, shiners, and young white suckers in our streams, all great sources for growing trout larger. Is this why some troutiers I know are now catching some beautiful, large trout in warmer, non-designated trout water?

A second observation that becomes obvi-



A MASSIVE BROWN TROUT PHOTO ON THE WALL AT MAUER BROS. TAVERN.

ous as one goes through these records is the increase in recent years in the weeks with "No Entry." In the first 26 years of these records, there were only 14 weeks with "No Entry."

In the last 26 years, there were 113 weeks with "No Entry."

In 2016, there were 12 weeks of the 23-week catch-and-keep season with "No Entry."

When you see that in 2010 one weekly winner won the prize with a six-ounce trout, and each year usually has at least one weekly winner with a one pound fish, we can't say that folks aren't entering unless they feel they have a verifiable trophy in hand.

Is this the catch and release movement that is kicked into high gear and responsible for this downturn of participation? Or is it something else?

In August of 2007 when I emptied over 17 inches of rain from my gauge in Lewiston in about 25 hours, the Mauer Bros. Big Brown Trout Contest had "No Entry" for four straight weeks. Rainfall and flooding certainly are responsible for that empty stretch of data. Streams

had been so blown out that we didn't even fish for a while after that deluge. How many other weeks without an entry into the Mauer Bros. Trout Contest were a result of rain and surging water? Is this sharp spike in the number of weeks with no fish entered a reflection of more flooding from increasingly violent rainstorms?

Questions abound. Will the trends we see at this time extend into the future on the same downward slope? Or will we see a rebound and return to past glory? Either way, the extensive data that the Mauer family has collected and maintained all these years certainly documents a vibrant and productive cold-water fishery that has produced some marvelous trophy trout.

History swells in the Whitewater Valley and the friendly confines of the Mauer Brother's Tavern and Grill will continue to house this rich record of trout angling in the heart of Minnesota's Driftless region!



A SCENIC SECTION OF THE SOUTH BRANCH OF THE WHITEWATER RIVER, ONE OF THE LOCATIONS WHERE MANY OF THE WINNING TROUT HAVE BEEN CAUGHT OVER THE YEARS.

MNTU EDUCATION UPDATE

2017 Bringing More Programming for Trout Unlimited Education in Minnesota

By Benji Kohn

MNTU's education program has had a busy and successful start to the 2017 season. Lots of smiles and learning about cold water habitats and what it takes to keep our trout and other aquatic wildlife healthy. With dozens of events around the region, hundreds of youth and the public have been able to experience a variety of

events. Check out these photos to get a taste of what we've been up to.

We are looking forward to a busy and fun summer season ahead, so check out our Facebook page for some upcoming fun summer events!

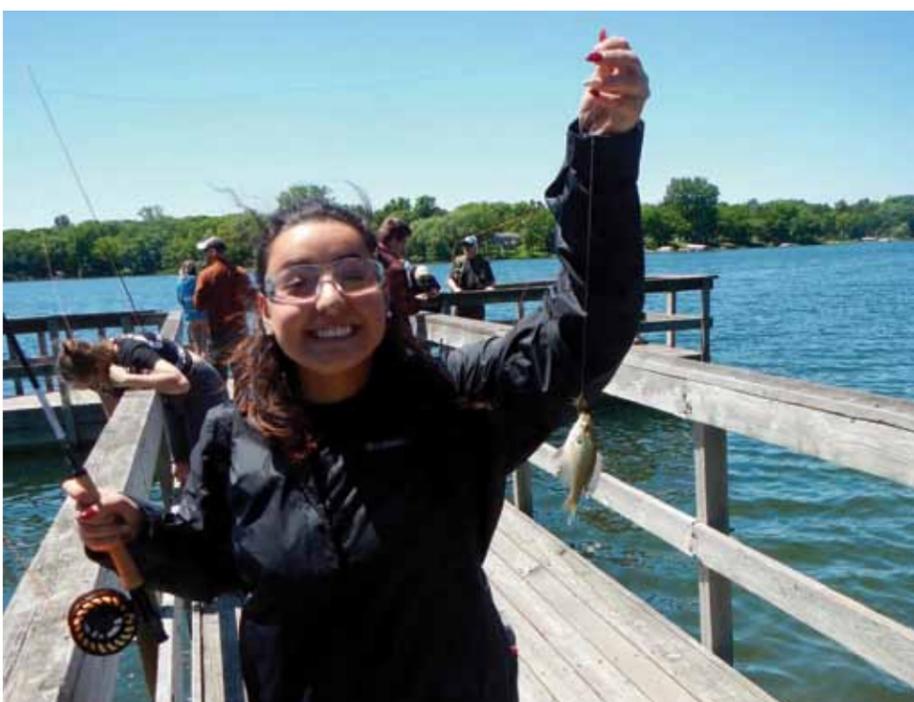
See you on the water...



2017 STARTED OUT WITH SOME FUN ON THE ICE! SECURING FUNDING FROM THE MN DNR, WE WERE ABLE TO PURCHASE FISHING EQUIPMENT TO EXPAND PROGRAMMING DURING MINNESOTA'S FAVORITE SEASON: WINTER! EVENTS ON LAKE HARRIET IN MINNEAPOLIS AND CAVER LAKE IN WOODBURY BROUGHT ROUGHLY 700 YOUTH AND THEIR FAMILIES OUT ON THE ICE TO LEARN HOW FISH SURVIVE WINTER, WINTER LAKE ECOLOGY, FISHING ELECTRONICS AND WHERE TO FIND FISH.



CHECKING OUT SOME COOL MACROINVERTEBRATES AT AN EVENT THIS SPRING.



THIS SPRING, TIC PARTICIPATED IN SEVERAL WATER FESTIVALS THROUGHOUT THE METRO AND SURROUNDING AREAS INCLUDING THE GOVERNOR'S FISHING OPENER AND THE MDEMAKASKA WATER FEST.



BEFORE THE WEATHER WARMED UP, A GREAT DEAL OF TIME WAS SPENT IN CLASSROOMS TEACHING ABOUT GROUNDWATER AND WATERSHEDS. STUDENTS LEARNED ABOUT WHERE THEIR DRINKING WATER COMES FROM, WHAT A WATERSHED IS AND WHAT THEY CAN DO TO HELP PROTECT THEIR WATER.



LATE SPRING FOUND THE STUDENTS PARTICIPATING IN SPRING RELEASE-DAY ACTIVITIES. THE HIGHLIGHT FOR THE STUDENTS IS RELEASING THEIR SMALL FINGERLINGS THEY'VE BEEN LEARNING ABOUT AND WORKING SO HARD TO CARE FOR ALL YEAR. IN ADDITION, THE TROUT IN THE CLASSROOM STUDENTS ENGAGE IN FLY TYING, CASTING GAMES, MACRO INVERTEBRATE STUDIES, POLLINATOR SCIENCES AND A GPS PRAIRIE TRACKING ID GAME



A GROUP FROM THE 2017 GOVERNOR'S FISHING OPENER IN ST. CLOUD, MN



FLY TYING

With Laughing Trout Fly Fishing

By Paul Johnson



Laughing Trout meets every Wednesday night at the American Legion Post in Wayzata. We describe ourselves as an informal gathering of fly fishing and fly tying enthusiasts. At most of our meetings we have somewhere around 30 people in attendance. We typically have a Fly of the Week pattern that a lot of our members will be working on. Some tie what they need for their fly boxes and others show up, get all their tying stuff out and don't tie any flies. It is all good.

At some point in the evening, I like to walk around and see how everyone is doing and if they have questions. We have one member, Joe Kluver that I always make time to visit with and check out what he is tying. Joe is a very talented fly tyer. He is very precise and consistent in his tying. Several months ago when I was making my rounds, Joe was tying a cool little

soft hackle. It was so good, I just might have kept one of his flies for myself. I tied some up and had a chance to do some field testing this spring and it turns out that the fly works as good as it looks. Thanks Joe for letting me "borrow" one of your patterns.

If you ever find yourself in Wayzata on a Wednesday night, feel free to stop by and see what our Laughing Trout club is up to.

Paul Johnson

952-334-4688

Paulwaconia@gmail.com

The Kluver Soft Hackle



Materials List

- Hook Size 16 Dai-Riki #125 Emerger Hook
- Thread Black 14/0 Sheer
- Abdomen Olive Ultra Wire Size Small
- Thorax Peacock Green Krystal Dub
- Wing Wood Duck
- Collar Starling



Step 1. Insert the hook in your vise and start your tying thread a small distance behind the eye.



Step 2. Tie in a length of wire and tie it down to the bend of the hook. Take care to keep the wire in line with the shank. Return your thread to just behind the hook eye.



Step 3. Wrap the wire forward in touching turns to just behind the hook eye. Secure with your tying thread and clip the excess.



Step 4. Form a very small dubbing noodle on your tying thread.



Step 5. Form a small ball with the dubbing, leaving a hook eye gap behind the hook eye itself.



Step 6. Tie in 4 wood duck barbs on top of the hook shank. They should extend to the back of the abdomen.



Step 7. Prepare a feather by pulling off the fuzzies on the base. Hold the tip and gently pull the fibers away from the tip. Clip the tip of the feather to form a small wedge where it will be tied in.



Step 8. Tie in the starling feather just behind the hook eye.



Step 9. Palmer the starling feather around the hook with 2 or 3 turns. Secure with your tying thread and clip the excess. Whip finish. Go fish!

SAVE THE DATES!



GREAT WATERS FLY FISHING EXPO

Presented By Minnesota Trout Unlimited

March 16th-18th, 2018 • Hamline University • St Paul, MN

EAGLE CREEK THEN AND NOW

Commentary on the History Surrounding a Metro Trout Stream

By Dan Callahan

About 70 volunteers joined the DNR and crews from the Twin Cities Trout Unlimited (TCTU) chapter on April 8th to start cutting invasive buckthorn and non-native honeysuckle on the east branch of Eagle Creek, a trout stream in Savage.

The work was done in the Eagle Creek Aquatic Management Area (AMA), managed by the DNR and the first AMA established in the state. AMAs now are used throughout the state to preserve land around high quality water resources. The Vermillion River has several, which allow public access for fishing and preserve restored prairie and other wildlife habitat.

Trout Unlimited helped save the creek—the last trout stream in Scott County—after getting money from the state legislature in 1995 to buy a 400-foot-wide conservation corridor along both the east and west branches of the creek. Big, naturally-reproducing brown trout still swim there. The stream hasn't been stocked since 1978. Catch and release regulations are in place to protect the small population.

We had done a lot of historical research back in 1993, when we convinced the state that the proposed development on Eagle Creek required an environmental review. We learned about Hattenberger's Boiling Springs, which was a tourist attraction in the early half of the 20th century. We also learned that the springs are a Native American sacred site.

The springs are a cool 49 degrees year-round, erupting through a sandy clay layer in a spring pond and making it look like they boil. It's quicksand. Another, smaller spring, Johnston's Boil-



A REMNANT OF THE HISTORIC MILL RUINS ALONG EAGLE CREEK, POTENTIALLY BECOMING A STATE ARCHEOLOGICAL SITE.

ing Spring, is upstream of the Town and County Campground.

But until April, I had never found the mill that late 19th century maps showed was on the main stem of Eagle Creek. I stumbled on the ruins Easter Sunday while fishing and snapped a couple of photos. After contacting the Scott County Historical Society in Shakopee, I learned that the mill was built in 1855 and was the first grist mill in Scott County.

One of the first roads between Savage

and Shakopee crossed Eagle Creek at the mill. The dam had two outlets: one that ran over the water wheel, which provided the power to rotate flat mill stones which ground grain into flour or meal, and the other outlet for when water power wasn't needed.

The only thing left of the dam are the two steep banks on either side of the creek where the dam was built. The only obvious signs of the mill are a column of cut stone still on the northeast corner, and the cut stone foundation.

Lenord Isenhour lived on the east side of the creek, and helped Eli Pettijohn build the mill. The Isenhours are related to President Eisenhower. Eli Pettijohn went on to build a famous mill on Minnehaha Creek. He also became famous for inventing the first nationally-marketed breakfast cereal, Pettijohn's Breakfast Food. Minnesota is now considering designating the mill ruins as a state archaeological site.

TU - A GREAT PLACE FOR VOLUNTEERS

By Bob Wagner

Reading through the chapter reports of years past, I realize a lot of great work in restoration, conservation and education is being accomplished by volunteers statewide. As a chapter board member, we need to keep records for our annual report and evaluate our own programs effectiveness. In tabulating our past year's data, I was amazed and really proud of our volunteers as I'm sure every chapter president is.

Adding up just our educational activities, we held 18 events serving 395 youth and adults. This record year for Headwaters Chapter got me questioning how we can keep this going? I think there are several reasons for our volunteers' success. My volunteer history goes back to when I had a real job, meaning I got paid. In my past life, the Bemidji School Board asked me to implement a district-wide volunteer program and in my igno-

rance, I said "sure." I quickly learned to have a successful volunteer program you need an organizational structure that has a mission or purpose that will attract volunteers. TU has that in aces. You also need leadership with goals and a vision. TU has that. Also, an environment that encourages the BIG 3: comradery, friends and fun. TU is all about the BIG 3. It's called fishing!

Assessment surveys at our spring membership meeting asked what our membership wanted and, no surprise, they wanted the BIG 3: fun group activities. From this assessment the annual Pike Hunt, winter fly tying nights and the women's fly fishing weekend were created. Membership assessments are critical to retention and success for program development.

TU fishing and volunteers are a match made in heaven. Volunteers want and need purpose or meaningful work. TU

restoration, conservation and education programs offer members real purpose. TU has "Life Long Learning" written all over it as well as cradle to grave learning and teaching opportunities. This past spring, we had nine volunteers work our first chapter's booth at Great Waters. Several important lessons were learned. Learning the new skills of fly tying, casting and fishing tactics can be acquired rather quickly, especially if the student is encouraged to pass on this fun new rewarding activity. There's more to the old saying "if you want to really learn something, teach it" than meets the eye. Promoting and creating a place and time for new members (students) to share what they have learned is a win-win for TU recruitment and retention. Six of the nine volunteers running the booth (who taught over 70 youth and adults fly tying) were in fact first time tyers this past winter. Giving credit to John Lueth, booth committee chair, and main instructors Chris Williams and Jeff Korbel, the

six newbies loved it and want to come back. The youngest student was a girl who had just turned four and the oldest was June, 91 years young and they each tied their first fly, now that's life-long learning.

The concept that we are all learners and teachers is critical to reinforce and promote. Brian O'Keefe, a highly respected multitiered fly fishing pro, introduced a casting clinic with "the hope that all of us students would in turn pass on the knowledge and skill as teachers to others." What a great attitude to actually view and instruct your students as potential teachers. It has been several years but I have not forgotten Brian's introduction. This very attitude builds "purpose," connects us with a mission and reinforces how important each and every volunteer and student is to the success of TU's vision for the future. Volunteers, they make it happen.

MEET THE GUSTAVUS FLY FISHING CLUB

Minnesota's First Costa 5 Rivers College Club

By Jacob Larson



Meet the Gustavus Fly Fishing Club! This is a Trout Unlimited Costa 5 Rivers college club newly formed at Gustavus Adolphus College in St. Peter, MN. As the only Costa 5 Rivers member in the state, they are looking forward to laying the groundwork for other colleges to join the program. The club is mostly focused on fly fishing, but conservation is very important to its members. They hope to raise awareness of the issues facing coldwater fisheries through campus and community events and spread the enjoyment of the outdoors through fly angling.

The Gustavus Fly Fishing Club spawned from a January-Term class called Minnesota Aquatic Stewardship taught by their club Faculty Advisor, Eric Elias. Students learned about what it means to be a good aquatic steward in the Land of 10,000 Lakes and how to conserve and protect valuable aquatic resources. As part of this course that covers topics including fish and aquatic insect biology, stream ecology, water quality assessment, and environmental regulations, students learned introductory fly casting and fly tying. Students in the course then had an opportunity to test their newly acquired fly angling skills during a day trip fishing adventure to Whitewater State Park near Elba. Shortly thereafter, sophomores Jacob Larson and Noah Carlson wanted to take their knowledge and passion for fly angling one step further and decided to form the Gustavus Fly Fishing Club. They partnered with Trout Unlimited's Costa 5 Rivers Program and were officially recognized as a student organization by Gustavus in early March, 2017. With the addition of

sophomore Jake Noel, junior Jake Westfield and senior Adam Peters, the club has a great foundation of officers. They gathered friends from the January-Term class, and others who share the same passion for the outdoors as themselves, to bring their current member base to 15 men and women, and they hope to grow that number going into next fall semester. Their mission statement reads:

"The purpose of the Gustavus Fly Fishing Club is to promote fly fishing as a form of outdoor recreation by bringing together Gustavus students and faculty, providing an environment conducive to learning about the arts of fly fishing and developing a conservation ethic when following Trout Unlimited's mission to protect, reconnect, and restore North America's coldwater fisheries and their watersheds."

The club has been very active in the few short months that they have been in existence. A few members were able to take time away from their studies and attend the Great Waters Fly Fishing Expo at Hamline University in March where they got to experience the wide breadth of fly angling interest in Minnesota. Donning their newly inked club t-shirts they made connections with several people representing TU, Fly Fishing Women of Minnesota, Lew Jewett Fly Fishers, guest presenters, and various vendors. Their eagerness and excitement to get involved couldn't have been more evident. Club members harnessed this energy and motivation and have been putting it to good use.

The club's first official activity was attending an event held on April 8th at Eagle Creek in Savage, MN, with their Twin-Cities TU parent affiliate chapter and the Minnesota DNR. A total of six members and their advisor helped remove buckhorn around the creek. They believed that participating in this event was a great way to get out and meet members of MN TU and others who share their interest in fly angling, to send a message that they are a group of dedicated, action-driven students willing to get involved in conservation projects, and to bring attention to local conservation efforts. Many meaningful connec-



JED BINGHAM ROLL CASTING AT THE SAINT PETER TROUT PONDS



CLUB MEMBERS AND GUESTS ON A LOCAL FLY FISHING OUTING

tions were made, and they look forward to future involvement with their parent chapter of TU. They even had the opportunity to connect with a parent of a current Gustavus student who was also participating in the event! While most of the members came back with multiple scratches on their arms, it did not stop them from having a great time meeting others and having a huge impact on the buckhorn.

The club had its first fly fishing outing at locally stocked trout ponds near St. Peter on April 23rd. Four members participated in the adventure and for most of them, it was their first time reeling in fish. They caught and released a total of five rainbow trout. They also spent time around the ponds removing trash. The club is hoping to go there again for another outing before the semester is over, and they are planning a fishing trip in southeastern Minnesota to experience the fly angling opportunities that the Driftless Area has to offer. Many members are excited to get out and fish now that the weather is finally nice.

The club already has plans to host events next fall for the Gustavus and surrounding community that include learning how to fly cast and tie flies, getting kids

involved in stewardship while being active in the outdoors, and making sure the rivers and streams are staying clean for all to enjoy. Stay tuned for more news from this group!

The Gustavus Fly Fishing Club has many people to thank for their encouragement and support. From Dean Campbell (President of TCTU) helping the club nail down the details of running a chapter, to Andrew Loffredo (Costa 5 Rivers Program Coordinator) helping the club run the Costa 5 Rivers program to its full mission and intent, the support that has been received has been awesome. The number of people that have helped the club has been incredible, but maybe this should have been predicted with the strong love all of us share for conservation and fishing. This has allowed the Gustavus Fly Fishing Club to start off on the right track and continue into summer with momentum as a growing, thriving student organization.

You can follow the Gustavus Fly Fishing Club on Facebook. Any questions about the Gustavus Fly Fishing Club can be directed to their faculty advisor at eelias@gustavus.edu.



CLUB AT EAGLE CREEK REMOVING BUCKTHORN (L TO R: JAKE WESTFIELD, JED BINGHAM, NOAH CARLSON, LEXI PETITE, JACOB LARSON, ADVISOR ERIC ELIAS)

TYING STANEK'S SOW BUG

By Mark Reisetter

Earl Stanek (1929-2016), through his family, left an extensive and fine collection of fly rods and reels to MNTU to be used for fundraising. In a very limited release at fundraisers in 2016, Minnesota TU Chapters have already raised nearly \$1000.00 from this donation.

During his life he also befriended the International Federation of Fly Fishers by donating small dioramas which displayed his fly tying creations in natural scenes, bringing in thousands of dollars for that organization. Earl was known as an innovator in tying flies, often using hardware store or craft store supplies, or simple packaging materials. As an engineer for 3M where he designed the Scientific Anglers System 2 Fly Reel, Earl also was able to use products his company made in unorthodox ways.

One of his innovative flies that typifies the use of these unique materials is the Stanek's Sow Bug/Watercress Bug. The description and photos that follow are excerpted from Earl Stanek's own compilations and instructions, given to me by Earl's niece Barb Daily and her husband Jim of Chatfield, MN.

Stanek felt that many fly fishers confuse sow bugs with scuds. While both are crustaceans, "The sow bug has two tails, seven sets of distinct legs, two curved antennae, and is flat as a pan-



A SELECTION OF ORIGINAL EARL STANEK SOW BUGS. NOTE THAT SOW BUGS ARE SIMILAR BUT DISTINCT FROM SCUDS.

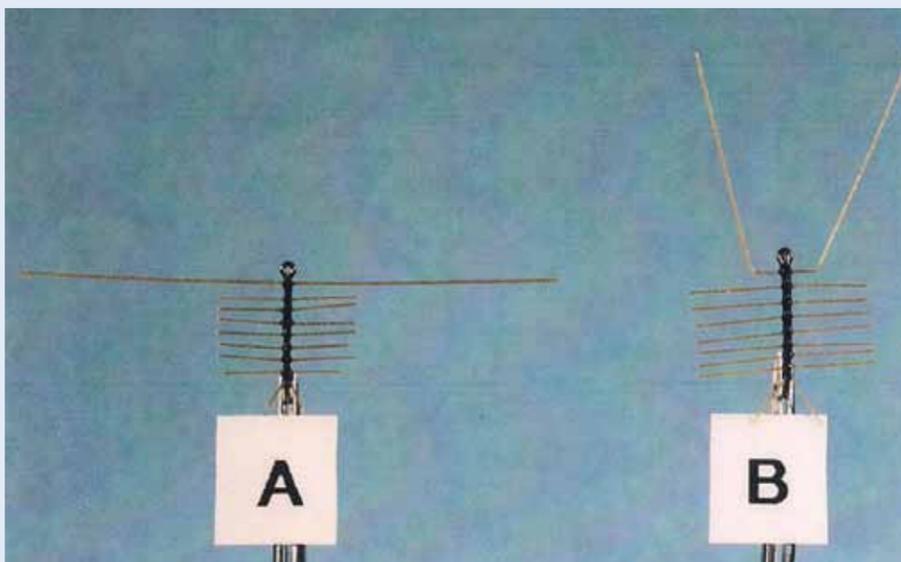
cake. The sow bug can range from 5 to 20 mm in length, not counting the antennae or tails. While sow bugs have the chameleon ability to be colored to blend with the color of the stream bottom, the sow bugs of Arkansas and Minnesota tend to be colored grayish/black. Sow bugs of the high mountain country of Montana and Idaho are colored yellow/

orange." Earl further goes on to state: "Sow bugs can't swim, but hang on to foliage with their many legs. When startled, they will roll up into a small black ball."

Besides fishing his Sow Bug pattern in Arkansas, Stanek first fished it in Southeast Minnesota in the 1950s in creeks

that had large watercress beds. He also fished this fly in the spring creeks of the Rocky Mountain states, and as far away as the famous spring creek Arroyo Pescada, which is south of Esquel, Argentina.

Check out his fascinating instructions below.



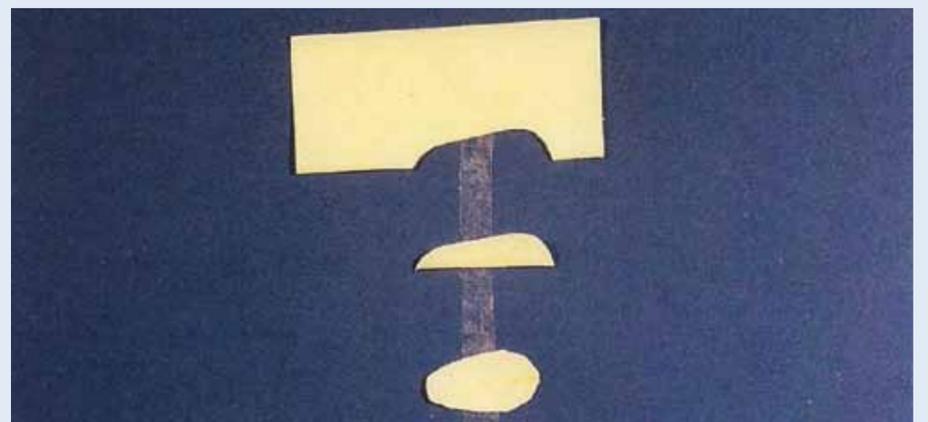
Step 1

Mount the hook in the vise and wrap a solid double thread base from the hook eye to the point above the barb.

This fly can be tied with the hook point up or hook point down. Earl preferred that it be tied hook point up as it produced a fluttering natural retrieve. Tie in a 7/8" long .008" diameter paint brush bristle on top of the hook with two "X" wraps at the point above the barb. Sweep the two tails back 45 degrees over the bend of the hook.

Mentally divide the hook shank into eight equal spaces – this represents the seven legs and antenna tie-in spots. On a "TMC" 200R size 16 hook the spaces will be approximately .050". Double "X" wrap the seven legs and the antenna on top of the hook shank as shown on Photo #2 – A. The legs will be trimmed to length at a later step. The antenna is a .011" diameter paint brush bristle cut to two inches in length. It is very important that the legs and antenna are tied in parallel to each other and perpendicular to the hook shank. Coat all the legs and antenna "X" wraps with CA40H Super Glue to lock them in place. Tie off the thread and remove the hook from the vise.

Place the hook on its back on a piece of 1/10" graph paper. With a pointed tweezer grab the antenna exactly 1/10" from the hook shank and bend the antenna 90 degrees to the front of the eye as shown in Photo #2 – B. Coat the bend of the antenna with CA40H Super Glue to stiffen.



Step 2

Prepare the template to make a symmetrical carapace pattern by using a "3M POST-IT" notepad. Fold the adhesive part of the "3M POST-IT" note pad in half and cut a half silhouette shape of the carapace. Check the template for length from the eye of the hook to the point where the two tails are tied in. Open the template and check overall shape – do not make it too wide.



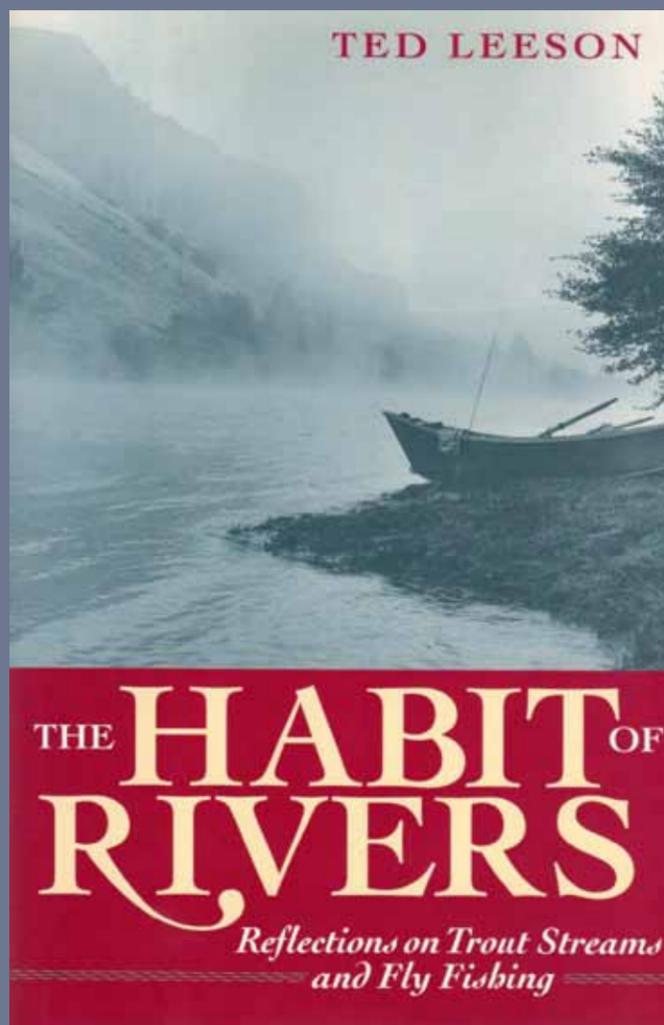
Step 3

Earl used a thin sheet of electronic foam, textured on one side, that was perfect for the material to make the carapace. Color the carapace on both sides with permanent color markers. Use "CHARTPAK" warm gray #5 for Midwestern sow bugs. Use "PRISMACOLOR" markers of mineral orange and terra-cotta for sow bugs in the spring creeks of the Rocky Mountains. As shown left to right – clear foam sheet, high country orange, and warm gray for sow bugs of the Midwest. Stick the template to the back side of the colored thin foam sheet and cut the carapace to shape. Remove the template from the foam sheet as shown far right. Glue the carapace to the hook using the thick "HARD as NAILS" head cement making sure the carapace is symmetrical about the hook shank. Let the adhesive dry.

THE HABIT OF RIVERS

Book Review

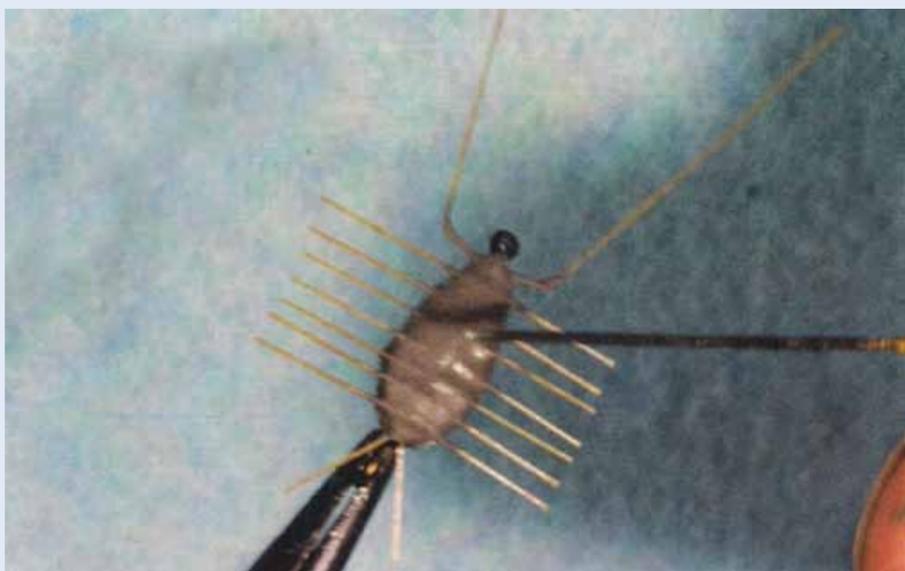
By John Hunt



Step 4

The underside of the body and leg joints are coated with a microsphere-color body filler to produce the abdomen. This also gives the fly a neutral density which allows it to flutter just above the water's surface.

In a small mixing bowl; mix a small amount of medium gray #5 craft acrylic paint with 200% by volume of "3M SCOTCHLITE K-1" microsphere glass bubbles. Add two to three drops of "LOON" water based head cement and mix to a smooth slurry. Control the viscosity of the mix by adding micro-drops of water.



Step 5

Using a pin bodkin, pick up small amounts of microsphere mix and coat the underside of the carapace. Coat the legs and abdomen to the edge of the carapace – allow the microsphere mix to cure. To produce a fat abdomen, add a second coat. Also coat the bend of the antenna to strengthen the joint. Allow the body to cure.



Step 6

The rear legs of a sow bug are longer than the front legs. Cut the legs, tapering the length back to front, the back legs are approximately 1/8" and front legs 1/16" long.

Using a sharp pointed tweezer, bend each leg down at the edge of the carapace. Train all of the legs to the rear about 45 degrees. Tip each leg with black craft paint to represent the leg claws. Using the tweezer make short incremental bends of the antenna to sweep them to the rear. To preserve the coloration of the fly, coat it all over with the thin "3M Pronto CA40H" super glue.

Book titles are often the only means by which a reader's curiosity can be captured for more than a passing glance, whether on a bookshelf or a webpage. Like a dry fly drifting drag-free on the current, a good title imparts the potential consumer with just enough interest to induce a closer look and maybe, just maybe, hook our attention. So it was in the case of Ted Leeson's 2006 book "The Habit of Rivers."

I was first introduced to Leeson through his earlier book, "Jerusalem Creek." In that volume, he shares observations made while fishing across a portion of the Driftless Area. In "The Habit of Rivers," the author has been transplanted across the country to the state of Oregon. While the landscape there is vastly different from the author's native Midwest, Leeson uses the same carefully crafted language and writing style that reflects his vocation as a college English professor.

"The Habit of Rivers" is organized into about a dozen chapters, each of which builds on the author's thoughts regarding one of the themes of life as experienced through fishing. Leeson's prose is excellent, often able to capture a moment in time so visually as to transport the reader to the stream. One example I enjoyed is his admission that he "will watch the last few rises to the last few caddis, down to zero, on a summer-solstice evening, at the best part of the best part of the year."

Leeson acknowledges that while each of us can learn the actual skills of fly fishing, it is his opinion that we are either born with a temperament for fish-

ing or not. My own sense is that is likely true. There are some who relish the hours spent on a stream regardless of success, while others need a particular outcome to consider the day well spent.

In one chapter, he compares his sense of Midwestern fishing, in which heading north once generally meant better fishing, to his three-dimensional experiences in Oregon and other Western locales, in which the pursuit of better fishing has often meant heading up in elevation, regardless of the direction on the compass. Leeson concedes that the size of the fish are often in proportion to the size of the headwater streams he fishes in these high places, but suggests that today's obsession with catching big fish should be secondary when surrounded by the scenery of some of the nation's most wild places.

I appreciated Leeson's admission of finding enjoyment in pursuit of sea-run cutthroat in the fall, a fish that he calls the "subtlest and best expression of the place." He notes while salmon and steelhead have been studied extensively and get most of the attention, they have also fallen victim to extensive "management" (his quotations, not mine). We can all hope that the future of trout fishing will still retain some places where the fish do not require "management".

I have stated in prior reviews that I enjoy authors that can blend good writing with topics that capture my attention. Ted Leeson is one of those authors.

2017 GREAT WATERS EXPO WRAPUP

Another Successful Expo & Dates For 2018

By Jade Thomason

Last March Minnesota Trout Unlimited presented another successful Great Waters Fly Fishing Expo. Now that I have finally stopped having 2017 expo organization dreams, it is time to begin planning for the 2018 event! It will be held March 16-18th, 2018 at Hamline University in St. Paul. We were very pleased with Hamline as a venue and it offers both room to grow, as well as unique amenities. In particular, we enjoyed having access to the swimming pool for spey and roll casting demos, as well as streamer tactics in the water.

This year we met our growth goals of 30% with both attendees and exhibitors and we hope to continue this growth trajectory in the years to come. The fly fishing community in the Midwest is continually thriving and we believe that this industry has plenty of potential for expansion, especially within the warmwater sector. We plan to continue our emphasis on education and host programs about new tactics, conservation issues and local as well as exotic waters. We are always looking for new ideas on how to best organize the event for the community so don't hesitate to send an email or give us a call with any suggestions.



LEARNING THE ART OF FLY TYING AND PICKING UP FINER POINTS IN THE TYING AREA AT THE 2017 EXPO IN MARCH.

I would like to extend a special thank you to all of the exhibitors, presenters, volunteers and attendees who helped make this year's expo possible. The expo continues to be the most important fund-raising event for MNTU and everyone involved is helping to protect and conserve our local fisheries. If you are interested in volunteering for next year's expo feel free to send an email to us and you will be added to the contact list for next spring.

Next year we will again be hosting the Fly Fishing Film and Video Showcase for its third year. Our purpose in creating this event was to celebrate the incredible local fishing resources that we have in the Midwest and to support the local film and video community. Other films highlight far-off bucket list locations but it's always inspiring to recognize people and waters that you know. This season the event had even more impressive film submissions than our first year and the

folks from Blue Forest Films took home the Sage X rod first prize with their film "South is Local." The film event will again be held on the Saturday of the expo weekend, March 17th, and we can promise top prizes yet again for film winners. Now is the time to bring along a camera on your fishing adventures this season!

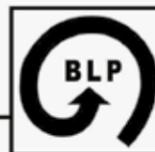
Expo Questions?

Email us at gwflyfishing@gmail.com or call the Expo at 612-562-9242.



ARTIST AND AUTHOR DAVE WHITLOCK HARD AT WORK AT THE 2017 EXPO

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A BUSY SCENE FROM THE 2017 EXPO FLOOR AT HAMLIN UNIVERSITY

THE MINNESOTA TROUT UNLIMITED 2018 FLY FISHING FILM AND VIDEO SHOWCASE

SATURDAY, MARCH 17TH, 2018
HAMLINE UNIVERSITY - ST PAUL, MN
IT'S TIME TO START SHOOTING VIDEO!

INFORMATION AT: WWW.GREATWATERSFLYEXPO.COM

INCLUDING MNTU IN YOUR ESTATE PLANNING

Any loss in a family is challenging. It's much easier to delay answering uncomfortable questions such as "What happens to my assets and my loved ones when I or my partner dies?" So it's no surprise that roughly half of Americans don't have a will, and even fewer have an estate plan. While it is a hard subject to discuss, an estate plan goes much further than a will. Not only does it deal with the distribution of assets and legacy wishes, but it may help you and your heirs pay substantially less in taxes, fees, and court costs, as well as benefit the people and causes that you care about.

Including MNTU in your estate plans not only helps to provide for future programmatic and organizational security, it can take many different forms to balance your financial and philanthropic goals. Drafting these documents may seem like a daunting task at first, until you realize all the good that comes from having them. A gift in your will or living trust lets you make a meaningful gift to MNTU with ease and be flexible in your commitment. You can give cash, specific property

or a percentage of your estate, with restrictions or without. Because your gift doesn't come to MNTU until after your lifetime, you can change your mind at any time. To make sure your will accomplishes your goals according to your wishes, we recommend that you obtain the professional counsel of an attorney who specializes in estate planning. We've included specific bequest language below for usage with individual or estate planning.

Bequest Language

The official bequest language for Minnesota Trout Unlimited is:

Unrestricted General Legacy:

"I give Minnesota Trout Unlimited, a Minnesota non-profit corporation, presently at 7201 West 78th Street, Suite 207 Bloomington, MN 55439, the sum of (dollar amount)/ or percentage of (___%)/ residue of my estate to be used at the discretion of its governing board."

Specific:

"I give Minnesota Trout Unlimited, a Minnesota non-profit corporation, pres-

ently at 7201 West 78th Street, Suite 207 Bloomington, MN 55439, my (specific personal property item(s) and/or real property located at _____) to be used at the discretion of its governing board."

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The information above is not intended as legal or tax advice. For such advice, please consult an attorney or tax advisor. Contact our executive director John Lenczewski with any questions or for assistance with estate planning, using this language or this process: jlenczewski@comcast.net or at 612-670-1629



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MNTU CHAPTER NEWS

Gitche Gumee Chapter

Steelhead season has been great, and we're looking forward to a busy summer of fishing northern Minnesota. We've got a couple of opportunities to get involved with the chapter coming up:

Beginning Fly Fishing

Thursday, June 29th - 6PM
Great Lakes Fly Shop, Duluth
Learn the basics of fly fishing from TU chapter members, and learn how to cast a fly rod! We'll start off at the shop and then transition to casting at nearby Lester Park. Look for more information on the chapter facebook page or call the fly shop for details at 218-740-3040. Call Carl Haensel to sign up at 218-525-2381

Habitat Improvement Tour and Tree Maintenance

Sunday, July 16th, 10AM
Sucker River Parking Lot on Scenic 61
We'll be out on different sections of the Sucker River and a tributary to work on tree cages and other maintenance of our MNTU habitat work. Come along, lend a hand and help us continue our habitat



STUDENTS RELEASE TROUT INTO THE WHITEWATER RIVER ALONG WITH THE WIN-CRES CHAPTER AS PART OF THE TROUT IN THE CLASSROOM PROGRAM

work. You'll also learn some of the spots where you can go to catch steelhead, brook trout and brown trout on local waters. Contact Carl Haensel at 218-525-2381 to sign up.

Later on this summer, check out the following local fishing event benefitting our friends at the Minnesota Land Trust.

Paddle the Pads Bass Fly Fishing Tournament

Saturday August 26th: Tournament 8:00 am - 6:00pm
Where: St Louis River, Chambers Grove
Who: Fly Fishing Anglers; Canoes, Kayaks, Non- motorized drift boats ONLY
Cost: \$20.00 (per person) registration fee: all proceeds will be donated to The Minnesota Land Trust to support clean

and sustainable water on the St. Louis River.

Please call the Great Lakes Fly Shop at (218) 740- 3040 or email lesterriver@aim.com to register, registration deadline: August 25th @ 5 pm

Top of the Line Prizes Awarded

We hope to see you this summer!

Brent Notbohm

Hiawatha Chapter

This month work begins on two more of our habitat projects in the Root River watershed – Lynch Creek just east of Chatfield, MN and the South Branch of the Root River in the City of Preston, MN. The Lynch Creek project will improve habitat along a 4,600' segment which is currently used as pasture. Banks will be resloped to reconnect more of the flood plain and cover habitat installed to create more adult trout habitat. The So Branch Root River project will run upstream from the mouth of Camp Creek approximately 1.5 miles to the St. Paul Street bridge. The project is designed to create

more complex habitat for larger brown trout while also reducing sedimentation which covers spawning and food production areas. After the habitat work is completed, plans are for the MNDNR to construct a drift boat launch at the downstream end of the project, likely in 2018! Design work will also be done a number of southeast streams this summer, including West Indian Creek, Money Creek (with Win-Cres) and Wisel Creek. Get on Hiawatha TU's e mail list for stream maintenance work days later this summer. Please consider sharing your knowledge of fly fishing at our casting clinic on June 26. To help out please contact Phil Pankow at (507) 273-0934.

Phil Pankow



RAINBOW TROUT RAISED WITH THE TROUT IN THE CLASSROOM PROGRAM, READY FOR RELEASE IN THE WHITEWATER RIVER IN SE MINNESOTA.

Headwaters Chapter

Restoration Update: Summer 2017 work is just getting off the ground. The 5th tree drop on the Straight River will be finishing up in late May/early June. This will be the first time we will be dropping trees in two areas of the river that require two helicopter landing sites and trees cut and skidded from two sites. The work is a cooperation of the DNR fisheries, Straight River Trust Committee, Trout Unlimited and DNR Forestry. Tree skidding was done by a local landowner and the trees were donated by the R.D. Offutt company. The objective is to narrow and deepen the stream, hopefully cooling the water and improving habitat at the same time. Other work planned for 2017 will be alder removal from impacted stretches of Kabekona creek, a carryover from work done in 2016. We are also hoping to install Christmas trees in a portion of Necktie Creek, a continuation of work done over many years in cooperation with DNR and TU. Additional habitat improvement projects will be done this summer.

Women's Fly Fishing Workshop 2nd Session: June 23-24 in Bemidji and is cosponsored with Riverwood Design. Workshop runs Friday 5:30-9:30pm and Saturday 9am-6:30pm. This includes 10.5 hours of instruction, three meals, on the water fishing and lots of camaraderie. Cost \$95 call Bob and Val Wagner at 218-766-7757

Pike Hunt: June 9-10. This is our 3rd annual Pike Hunt, also known as the Great Slime Event. Bigger and better this year with everyone who registers receiving the Esox custom designed hat and all materials and instruction Friday evening to tie the articulated Pike Dancer fly. We start Friday at 5:30pm at the Garden Grill and Pub in Bemidji. Call Bob Wagner for directions and to register 218-766-7757. The Pike Hunt will be on Saturday with a great fish fry evening meal, including two special Pike Hunt micro brews. Registration is \$45. Please register by June 7. All profits go to our educational projects.

Annual Fall Membership Meeting September 26, CK Dudley's Bemidji. First thank you to all the members that attended our spring meeting "A Night of Trout Fishing." 51 people (new record) attended to hear a panel give tips and tactics on having more successful trout fishing. We received several requests to do a similar panel for the fall program and we will. Three regional guides will present their area's special fly fishing opportunities: Johnny Petrowski – Upper Red Lake guide, Doug Harthan- Perham area smallmouth, Darwin Sumner – Red Lake area small lakes guide. Write the date down!

Bob Wagner

Mid-Minnesota Chapter

The next meeting of the Little Rock Creek Sustainable Groundwater Use Planning project will be held on June 13, 2017 from 1:00 pm to 4:00 pm in the Old Village Hall, Rice, MN. Groundwater use around this trout stream has been increasing at a faster rate than the statewide average. There is an increased



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MNTU CHAPTER NEWS



risk of overuse and contamination of the shallow aquifer. This DNR led efforts looks to develop a plan to ensure groundwater use remains sustainable. Public is welcome. Visit DNR website to find updates.

The next major habitat project on Little Rock Creek will be designed this summer for 2018 work. To get involved protecting and improving Little Rock Creek's trout population please e mail MNTU's executive director at jlenczewski@comcast.net

Micah Barrett

Twin Cities Chapter

The chapter's habitat project on Trout Brook near Meisville, MN gets underway this month. This cold brook trout stream is rather flashy do to current land use practices upstream of the county park. The severe floods which occurred a few years ago ripped apart the channel and left it overly wide and shallow, with little deep pool habitat. The stream has very good natural reproduction, but very limited depth and cover for age 1 and older trout. The result is heavy predation upon young of year trout and limited survival to age two or three. Our project will narrow the low flow channel to increase depth and install overhead cover to create deep pool habitat for adult brook trout. Stream banks will be stabilized and native grasses and forbes

planted. The project is located in Dakota County's Meisville Ravine Park and done in partnership with the County. We plan to hold several volunteer work days here in the fall to early spring to remove invasive buckthorn from the stream corridor as well as the larger forest.

We are offering one or more fly casting clinics in the second half of June, and assisting with the recreational component of MNTU's outdoor education program. Dates, locations and times are being finalized so please check out or website for details www.twincitiestu.org While we are not a fly fishing club, but a conservation organization, we are passionate anglers and know firsthand that fishing and fly fishing are great ways to connect people with our streams and make them advocates for clean water and trout stream watersheds. If you want to learn to fly cast or improve your casting please join us. Fly fishing outfits will be available for instruction, or you can bring your own.

Fly anglers, please consider lending a hand at one of our clinics. You do not need to be an expert, just know the fundamentals and be able to help novices. This is fun and rewarding, and we need your assistance. Our outdoor education program will also offer basic spin casting instruction. To help with either our outdoor education ("TIC") clinics or our fly casting clinics please contact Rob Noirjean at (651) 408-5635. Thank you!

Dean Campbell



A 4-YEAR OLD LEARNS TO TIE HER FIRST FLY ALONG WITH HER MOTHER AT THE HEADWATERS CHAPTER BOOTH AT THE 2017 GREAT WATERS FLY FISHING EXPO

JUNE FLY CASTING CLINICS

Want to Learn to Fly Cast? Now is Your Opportunity!

Want to Help Out? We Need Volunteers - You Can Play a Role!

Headwaters (Bemidji)

June 10 to 25 (several)

Contact: Bob Wagner (218) 766-7757

Win-Cres (Winona)

June 21 - 7:00 p.m.

Lake Winona bandshell

Contact: Joe Lepley (608) 323-2339

Hiawatha (Rochester)

June 26 - 6:00 p.m.

River Park West (Jct of W. River Parkway NW & Zumbro Dr. NW)

Contact: Phil Pankow (507) 273-0934

TCTU (Twin Cities)

Several events; including TIC students

Visit: www.twincitiestu.org

Contact: Rob Noirjean (651) 408-5635

Gitche Gume (Duluth)

June 29 - 6:00 PM

Great Lakes Fly Shop

Contact: Carl Haensel (218) 525-2381

Win-Cres Chapter

The Win-Cres Chapter will have a busy summer with work on Garvin Brook, using the new DR brush hog on area streams, and working with kids and adults to help them become trout anglers.

Work on Garvin Brook is proceeding nicely in spite of the heavy rains our area has experienced. When the work is completed in a few weeks, we plan to host "An Evening With Trout." The public and elected officials will be invited so they can see some of Minnesota's tax dollars at work. We also want to show the benefits of habitat improvement projects to the stream and its surrounding land that will be beneficial far into the future.

We plan to use the brush hog to mow access paths along streams and to create return paths to parking areas after anglers have spent a few hours fishing. The brush hog got its initiation along Hemingway Creek on May 27. Ten members of the chapter used their Saturday morning to mow a path on state forest land. The hog worked great. The machine will prove to be a good investment for the chapter. A few of the streams we will work on with the brush hog this summer are Rush, Diamond, and Garvin.

Volunteers are committing to work with Whitewater State Park on the park's annual "Take a Kid Fishing Day" in early June. Win-Cres members will also work with the Lewiston Sportsmen's Club in their summer program "Kids in the Outdoors" that is designed to foster interest in outdoor sporting activities.

A few chapter members joined Winona Senior High School science teacher Pete Weess and his students at Whitewater State Park to release over 250 rainbow trout. Before the end of the school year Pete wants to have his students try their hand at fly fishing on Lake Winona. Rods provided to Win-Cres by MNTU will be used in the fishing experience.

Joe Lepley

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A 23-INCH VERMILLION RIVER BROWN TROUT. CHRIS O'BRIEN PHOTO

REELING IT IN

Climate Change and Minnesota Trout

By Sam Troutt

From streams on the edge of the prairie to those near the Twin Cities metro area, trout in Minnesota live on the edge. While some may think their range is defined by clean water, it is almost universally the case that the range of trout is defined by temperature. The fine line that brook, brown and rainbow trout live in does not cross 78 degrees. A trout in 75 degree water is thoroughly stressed. A trout in 81 degree water is dead. The potential places that trout can live is in flux, and our Minnesota trout range is shrinking on the map.

Suburban sprawl has stolen the brown trout holes of Nine Mile Creek in Bloomington, the brookies of Purgatory Creek in Eden Prairie and others. Just over two generations ago, these were viable, fishable streams. Now the temperature increases brought by urban and suburban runoff have rendered them unfit for trout to live in.

The temperature creep of climate change is less dramatic, but will have impacts in many more locations. Few places have as much to lose as the Minnesota North Shore and Duluth, MN. Sixteen designated trout streams currently flow

through the city of Duluth. Anglers pursue steelhead in the spring, trout in the summer and some even find salmon in the fall within the city limits. Projections decades down the road show the amount of trout streams in the city shrinking to zero over the course of the next decades. Already, the MN DNR has made changes in management and stocking that reflect the shrinking opportunities available within the city.

While it often seems like there is little that we can do personally, these streams are our "canary in the coal mine" in Minnesota. Already we've worked to plant more trees along them, protect their watersheds and do more habitat improvement, but we can do more, both broadly as advocates and by making changes to our lives and habits at home.

It's time as anglers to be concerned about our resources and to step up and play a role relative to climate change. MNTU has begun to lead the way with temperature studies, but these are only a step to quantify and qualify the issues at hand. Lend your voice, your efforts and your talents when you can and help us make a difference!

Donate to MNTU!

Minnesota TU is the leading voice, your voice, advocating for coldwater fisheries and watersheds in Minnesota and the region. Our effective advocacy work and successful habitat grant writing efforts **cannot continue without your direct financial support of Minnesota TU**. We receive none of the donations raised from TU's direct mail and other fundraising efforts, and the small portion of your membership dues we receive is less than the cost to print and mail this newsletter. We need direct support from you - members and non-members alike - to keep us working effectively for you, your family and your friends. Every dollar of your donation will be used here in Minnesota.

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