

Susquehanna Ripples

Newsletter of the Susquehanna Chapter of Trout Unlimited #044

July 2020

Free TU Membership for Essential Workers

We wish to extend our heartfelt thanks to all those workers on the front lines keeping us safe, treating the sick, delivering necessities, and feeding our nation. If you are an essential worker who loves to fish (or wants to learn) and cares about conservation, we invite you to enjoy a free one-year Trout Unlimited Membership.

Time on the water can provide refuge, joy, healing ... and hope, which is so important during difficult times. We offer camaraderie and good times along with the pleasure of being part of a community that is dedicated to a brighter future for America's rivers, streams and fish. Our 300,000 members and supporters are joining the conversation online right now while our local chapters plan for when we are all able to be together again.

If you are new to Trout Unlimited, we hope you will accept this free invitation. Join us today. Together, we can look to the future with hope

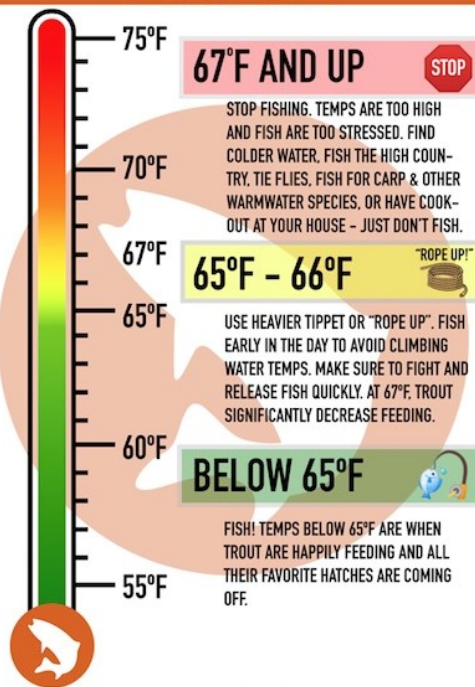
If you would like to become a member of Trout Unlimited, please go to the link below and it will take you to the join page.

https://gifts.tu.org/essentialworkers_join#:~:text=If%20you%20are%20an%20essential,so%20important%20during%20difficult%20times.

Or if you prefer, you can send your contact information to us at susquehannatu@gmail.com and we will submit the information for you.

WATER TEMPERATURE & TROUT

WHEN TO FISH & WHEN NOT TO



WWW.TROUTSFLYFISHING.COM

When out fishing over the next few weeks, please pay particular attention to the water temperature. The higher the water temperature is, the more stress is placed on trout. If you want to fish for trout, please seek out mountain streams and areas that are shaded and have lower water temperatures. Even better yet, try your luck fishing for bass, sunfish, perch, pike, or any of the other great species that thrive in warm water.

Officer and Directors

President

Charles Knowlden
cjknow@comcast.net
(570)971-1296

Vice President

Walt Nicholson
walt.nicholson10@gmail.com

Secretary

Kevin McJunkin
kevinmcjunkin@comcast.net

Treasurer

Bob Baker
boblbaker@comcast.net

Director Emeritus and Advisor

Bill O'Connor

Board of Directors

Bob Spencer (2020)
Bill Worobec (2020)
Isaac Bragunier (2021)
Dave Craig (2021)
Dave Wonderlich (2022)
Joe Radley (2022)

Media Liaison

Kevin McJunkin

Program Director

Joe Radley

Veteran's Service Partnership

Coordinator

Charles Knowlden
(570)971-1296

Youth and Women's Coordinator
Trout in the Classroom Coordinator

Newsletter Editor/Webmaster

Bob Baker
boblbaker@comcast.net

susquehannatu.com
susquehannatu@gmail.com



President's Message

**From Charles Knowlden
President, Susquehanna
Chapter of
Trout Unlimited**

July 2020



I hope this message finds you all well. This has been a different Spring for all of us. The Board of Directors would like you to know that we have not sat idly by and left everything go that we have been working on. It is unfortunate that our fly tying classes were cancelled in the middle of the program and our rod building class never got started. We have one veteran who wants to build a rod and I will work with him in August. National TU offices and chapters were able to resume activities as of June 1 in accordance with local and state regulations. For us it meant that outside activities with social distancing were acceptable but meeting with large groups in confined areas were not.

We have received a donation of two sets of shelves to be used for our library that will be set up in the basement of Covenant Central Presbyterian Church. As soon as the books are inventoried, we will let you know when they are available for sign out. These are the books formerly housed in the Angler's Alcove at the James V. Brown Library.

Several of us toured the mine drainage treatment areas in the Upper Loyalsock Creek Watershed near Lopez. We saw where one of the mine flows has eroded and much of the water bypasses the treatment area and flows directly into the Loyalsock. We are coordinating with the U.S. Geological Survey, the PA Fish and Boat Commission, the TU Regional office, and Lycoming College's Clean Water Institute to remedy the problem.

Due to the COVID outbreak, TU's National Meeting that was to be held in Bangor, Maine in August has been postponed until August 2021. Several of the programs that were to be offered have been presented on ZOOM. Walt Nicholson and I have participated in several of them.

Because the schools were closed, the Trout in the Classroom program had to be curtailed before the fingerlings were of size to stock. They were released into streams anyway probably providing fish food for the adults already in the streams. In that sense, they didn't go to waste.

We have been gifted with a number of new and really good used fly fishing equipment that we hope to raffle as a fundraiser. There have been new regulations for the small games of chance licenses that I was not aware since we renewed our last license. We had to start from scratch with the application process due to our meeting place changing. Hopefully we will be able to go with the raffle by August.

Finally, the Veterans Service Program has evolved into the Veterans Service Partnership. The start date for this new program is appropriately July 4, 2020. This new program will serve first responders, active military as well as the veterans and their families. It will be a source of comradery, conversation, and recognition for those men and women of every race who have served or are serving on the front lines. We hope that it will strengthen the bonds within the group and with the community as we work together to provide fishing recreation activities and continuing our conservation efforts.

Keep safe and keep fishing.

The brook trout at the top of page 1 was caught on Boulder Mountain in Southern Utah. The picture was taken by Jason Morrison and was featured in the 2014 Trout Unlimited Calendar for the month of April. The picture is used with his permission and we thank Jason for allowing us to use it.

What You Need to Know About Fish and Why We Need to Protect Them

Facts About Fish

- It is estimated that there are *more than 32,000 species of fish worldwide*
- A cyprinid fish is the world smallest fish; only 0.3 inches long
- The Ocean sunfish can grow to 10 feet long
- In 2016, global fish production reached 171 million tons, with 88% of this amount directed for human consumption
- 33% of fish species are being fished at biologically unsustainable levels
- Fishing is big business, with nearly 40 million people working in fishing industries
- Overfishing is destabilizing marine ecosystems, especially illegal and unreported unregulated fishing.

We Need to Protect Fish

- Role in the ecosystem: Fish play an integral role in ecosystem nutrient cycles. Fish recycle nutrients that are vital in the productivity and survival of organisms at the base of the aquatic food web. The importance of this function suggests that overfishing can be highly detrimental to the proper functioning of the whole ecosystem
- Fisheries play an integral role in both recreational and cultural services around the world
- Food from fish alone generated \$231.6 billion in 2016. Approximately 120 million people are dependent on fish for their incomes, with 97% of these workers living in developing countries
- From deep in the ocean to shallow streams, fish have evolved and adapted to their respective habitats in fascinating ways. For instance, some species of fish navigate and hunt through electroreception, a process in which they detect and respond to electrical stimuli, like the speed of the surrounding water current

Threats to Fish

- Climate Change: rising ocean temperatures threaten to disrupt the migration and distribution of numerous fish species. Many species of fish are also decreasing in size
- Habitat loss: since the 1960's, the water held by dams has quadrupled, impacting populations of freshwater fish. Agricultural development, land clearance, industrial and urban development are all threats to fish populations and habitats.
- Overfishing: Worldwide, fish stocks have significantly declined from overfishing
- Pollution: pollution comes in many forms and from different sources - chemicals from production plants, plastic from waste facilities, fertilizers from agriculture, oil and fuel spills - all can be extremely harmful and cause significant population declines in fish

What can you do to help protect fish

- Make safe and sustainable seafood choices. Buy sustainable seafood and fish from fisheries and fish farms that support coastal communities and healthy ecosystems
- Keep our water clean and prevent water pollution. Properly dispose of garbage and waste including recyclable materials, and reduce or eliminate lawn and garden fertilizers from your yard; avoid flushing or dumping chemicals or products containing toxic ingredients down the toilet or sink; clean up your pet's waste using eco friendly disposable methods; choose recyclable products and packaging when shopping.

The above was taken from Earthday.org

MEngel

What is blue line fishing

When I first started fly fishing I felt that I had to have a good deal of money, time to plan big trips to exotic destinations, and have a desire to chase the biggest fish ever.

I found out for me that that just didn't fit the bill. I was going after fish, in the rivers that everyone else fished. Because hey they caught big fish.

After trying this for a little while, I realized that it just wasn't my speed. There were other things that were on my list for experiencing.

One of the biggest reasons that I got into fly fishing, is my love of the outdoors. And since, I was fishing the rivers that everyone else went to, I wasn't able to experience the outdoors like I really wanted to. I was surrounded by other fisherman, people floating on tubes, and a bunch of

That is when I first started my love of blue line fly fishing. I pulled up Google maps and started looking for all of the squiggly blue lines.

I had some criteria when I started looking for these places to fish. Part of that criteria was that it needed to be out where I wouldn't easily rub shoulders with every other fly fisherman. And I really preferred to see some beautiful country. That way, even if I was skunked by the fish, I would have experienced something amazing.

I've had a blast finding a few favorite spots, exploring the outdoors, learning to cook with my solo stove, and even catching fish.

Unique challenges

All types of fishing have their own challenges. Blue line fly fishing can present some challenges, especially if you're coming from other a more traditional style of fly fishing.

Knowledge

Probably the biggest challenge that you'll soon realize, is that the mantras and beliefs of traditional fly fishing are all that you can find, but have very little in common with

being out in the backwoods of a blue line.

Number one rule

The #1 rule of blue line fly fishing is: you're going to get your fly stuck, in branches, a lot. Practically all of the time! At first this bothered me, but now I just roll with it.

This happens all of the time, because the streams are generally smaller, at times extremely small. Also the branches and undergrowth gets a little wild on those small streams.

Fitness

You've got to be in shape, or you'll hate it until you get in shape. I spend a lot of time on my feet when I'm blue line fly fishing. Sometimes I hike for hours to fish one hole and find that the fish had migrated out of that spot already.

Safety Concerns

You've got to keep an eye out for big wildlife. Last year I was out on one of my favorite blue lines and found a moose shed. It was an awesome find, but I quickly realized I had to be careful as moose were close by.

Also, you're going to be out in the back country. You're going to need an understanding of first aide. And keep your head, you're going to need to make a lot of smart decisions while your out there. Don't do anything too stupid.

I realized that I made a lot better decisions once I had my first child. There was a lot more riding on me getting home safely. Keep that in mind, for whomever you might have at home waiting for you to get back.

Unique opportunities

The fish are hungry. I had the itch to get out fishing one year, quite early in the season. In fact the snow was still on the ground. Most folks will tell you that you need to match the hatch. There are a few hatches in the cold months, but not this day.

I put on my bead head pheasant tail nymph and a yarn strike indicator. I was casting around a few holes for only a couple of minutes, when a nice wild cutthroat exploded on my yarn indicator on the surface.

A lot of the time these fish on blue line streams don't see a lot of food. So you can generally show them what you have and you'll get a strike. In fact my favorite patterns for these places are attractor patterns.

Other Wildlife

Just like the safety concerns from above, you'll be in prime territory to see some amazing wild life, not just the fish that you're out after. I've seen deer, grouse, plenty of moose and elk sign, and I've even been scared near to death by giant beaver.

As long as you enjoy them from a distance you can have a fantastic time.

Solitude, just you and your buddies I picked up blue line fly fishing because I love being outdoors by myself. I have no agenda when I'm out there and there is no one else there to have an agenda either.

If I feel like I'd like to stop and think, I do it. If I feel like hiking as fast as possible to my next hole, I do it.

I can only remember one time in 5 years, where I ran into another fisherman interested in fishing in the same area that I was in. That sure beats some of the blue ribbon fisheries where there are anglers as far as the eye can see!

Above article was taken from <https://blueineflyfishing.com/blog/what-is-blue-line-fly-fishing>.

For more information on blue line fishing, go to the link above or search blue line fishing on the internet.

Have You Tried Micro Fishing?

Catching the biggest fish usually comes with the biggest bragging rights, but now a new breed of anglers working to hook those at the other end of the spectrum. The catch might not be as big, the bragging rights are.

As the owner of Tombstone Tackle bait shop in Columbia, Mo., Adam Wolf has a lot of ways to catch fish.

"Night crawlers, minnows, shiners, goldfish, and the frozen bait like chicken liver, turkey liver, shad guts, shad sides, skipjack herring, vacuum seal whole shad," says Wolf as his list of lures goes on.

Wolf likes catching big fish. Really big fish.

"I caught two 96-pound blue cats, biggest bass are probably around 10 pounds, biggest crappie I caught two three pound crappie," Wolf says.

As Wolf's list shows, fishers looking for bait that the big fish will bite have lots of options. But when anglers look to land fish closer to the size of the bait in Wolf's shop, a new sport rises. It's called micro-fishing, and it's growing in popularity.

Micro-fishers target not just the smallest fish, but the largest number of species — a process known as life-listing. It's like what birders do, but for fish caught with a rod and a reel.

Across town from Wolf's bait shop, Michael Moore — no, not the documentary film director — is wading in a shallow creek turning over rocks and looking for tiny bugs to use as bait. It looks like he's found a few.

"Oh gosh, I think they're eating each other — um, I have not taken aquatic entomology, but most of them are different kinds of mayflies," he says.

Moore, a doctoral student in fisheries conservation at the University of Missouri, is on one of his first micro-fishing expeditions. As schools of sand shiners flit about in a rocky pool, Moore explains the type of gear this hobby demands.

"Micro-fishing, you're using the smallest-size hook you can find at your local tackle stores, so your fly fishing hooks and things like that," Moore says. "And instead of casting, like you would with regular fishing, it feels really weird, but you're usually just dangling the bait in front of fish that you can see."

Moore puts one of his mayflies on a hook, and dangles it in the water. Only a minute passes before he gets a bite.

"So this is a little bluegill. You can catch a lot of these on regular lures too, but ones this small are usually hard to catch," Moore says.

To get hooks small enough to catch a lot of micro-fish species, micro-fishers sometimes have to order from Japan, where the hobby is more popular. In the U.S. the fish species with the biggest variety are minnows and darters. With that many options, you want to have the right hooks.

"Some people have like 400 species on their list and they're adding to it all the time," Moore says.

Those people include Ben Cantrell, a micro-fishing

enthusiast in Peoria, Ill., who runs the website microfishing.com and its associated Facebook page.

"Well I just passed 400 on a trip earlier this summer," Cantrell says. "I'm nowhere near the top. There's a guy out in California, Steve Wozniak — not the co-founder of Apple — he's got 1,600 or so."

In seeking out new species to add to their list, micro-fishers sometimes resort to extreme measures, like driving across several states to catch just one specific species, or camping out on frozen lakes, using sonar to target fish.

The sport certainly isn't for everyone, and Cantrell is used to people thinking his hobby is a little weird.

"A lot of people will ask us what we're doing when they see us fishing," says Cantrell. "Some people are puzzled, some people are interested and sometimes we convert someone into trying."

Cantrell says the hobby is growing, convert by convert, which will likely translate to a lot of pictures of little fish, and a lot of little fish stories.

<https://www.npr.org/2016/10/27/498406364/little-fish-tales-micro-fishers-focus-on-the-species-not-size>

Donations Received

Loyalsock Creek Watershed Association
\$250.00

Anonymous
2 sets of bookshelves

HJ Wilkinson
Fly rod and reel with case
3 spinning rods and reels
Spare fly spool
Fly line
Landing net

Double D Construction \$5000.00

In November 2017, Double D Construction was the contractor at a well pad off Yeagle Road in Eldred Township, Lycoming County. During that time, Double D construction was responsible for monitoring the transfer of treated brine water from a million gallon tank to a smaller one so that it could be removed from the site. A worker for Double D Construction failed to turn off the pump thus allowing approximately 63,000 gallons of the treated brine water to escape onto the ground and some going into a tributary of Loyalsock Creek. In April 2020, the owner of Double D Construction plead guilty to charges of pollution of waterways and a clean streams act violation. As part of their sentencing, Lycoming County Judge Marc Lovecchio ordered Double D construction to make the \$5000 donation to our Chapter.

Getting Started in Microfishing

Outfitting for micro fishing requires creativity since most fishing stores do not offer tackle specific to micro fishing. You will need to modify tackle used for other purposes. The best places to begin searching for equipment is in the ice fishing and fly fishing department.

Hooks for Micro Fishing

The most important reason you should use small hooks for micro fishing is so you can successfully release micro fish back into the water with the least amount of damage. Barbless hooks lessen damage to the fish, however; this can be frustrating because of the difficulty in landing hooked fish. Some people use micro fishing for catching bait fish. This should not be done unless you are familiar with the fish you are catching and only keep the common species. Fly fishing tackle is a good place to look for small hooks and line. Find the smallest hook available. Anything below size 14 is a good. Ideally, the hook will be in the 20 and 30 range. Choosing pre tied, or snelled, hooks can save time and frustration. Also, look for hooks with a longer shank as these are easier to remove from the mouth of the fish. Japanese hooks, such as those used for catching tanago, a species of bitterling, are an ideal choice.

Line, Bobbers and Floats

Line should be extremely light since most small fish have great eyesight and will not bite if they are spooked. Again, start by looking for line in the fly fishing tackle section. Find a high quality small diameter tippet. An alternative is ice fishing line. However, this is usually weaker and has a larger diameter for the same pound test. These small lines can be attached as a leader on to a spinning rod. A very small weight pinched at about three to five inches above the hook will help control bait and keep the line steady in wind. Japanese equipment that is specialized for tanago can also be used, such as the bitterling kit listed below, and is best in murky conditions

Rods for Micro Fishing

Most micro fishing is by sight so use a longer rod that will allow you to sneak up on the fish without scaring them. Several good options are crappie rods and heavier weight fly rods. Both of these options may have disadvantages to be aware of and avoid. Crappie rods (panfish rods) will be your most dependable, available, and affordable option. Some of the lighter weight fly rods have very sensitive tips that will cause the bait to bounce around undesirably in front of the fish. Although far from ideal, a conventional fishing rod and reel can be used by attaching micro fishing gear at the end of the line. Most micro fishing will require a 9-12 foot rod. Longer rods are available and will be excellent options so long as the bait can still be held steady. When using a fly or crappie pole you will tie the

line to the furthest ring of the rod leaving between one and five feet of fixed line. Japanese tenkara rods designed for tanago can be excellent micro fishing rods but the best models tend to be expensive and other are short and difficult to use unless on a dock or structure immediately adjacent the water.

Bait and Techniques

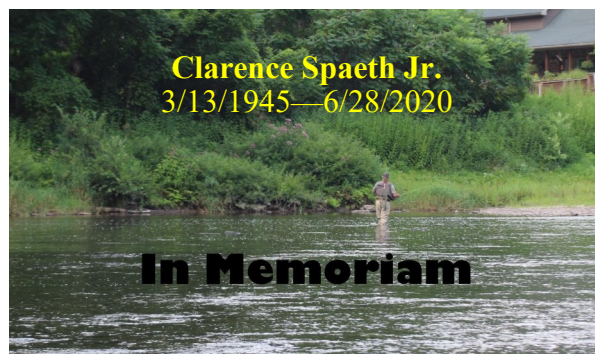
Worms work great for micro fishing. Many micro fish have very small mouths so the smallest piece of worm you can get on the hook is ideal. Using your finger nail, or clippers, will be your best options for preparing the bait. Maggots, blood worms, and gluten also work for micro fishing. When necessity dictates, a wide variety of other food sources can also work as bait for catching minnows. Some good baits you can purchase are bread, cheese, and imitation crab, and Berkley Gulp Maggots

The depth of the bait in the water is important and will determine what species of fish you will catch. If the bait is teased on the surface of the water you will attract aggressive topminnows and other species that primarily feed at this level. Letting the bait fall to the bed of the pool or stream will entice benthic feeders such as darters and madtom. Time of day, swiftness of current, structures, and substrate are also factors to consider when targeting micro fish. Researching habitats and feeding traits of fish will increase your chances of landing the right species.

Taken from <https://microfishing.com/tackle/>

Canada - US Border to remain closed until at least July 21

During the summer months, many people (including some of our Chapter members) head to Canada for vacation and great fishing at one of the many beautiful locations. Because of the COVID 19 virus, the US - Canadian border is closed to all non essential travel until at least July 21. If you have a trip planned, or were planning to go into Canada, please check prior to leaving if the border is open and if Canada is allowing visitors. If you booked through a resort or lodge, they may be able to help you with this information as well as Canadian requirements for COVID.



DEP Draft 2020 Water Quality Report Found 25,468 Miles Of Streams Have Impaired Water Quality

The Department of Environmental Protection published notice in the June 27 PA Bulletin inviting comments on the draft 2020 Integrated Water Quality Monitoring and Assessment Report.

The report found 25,468 miles of streams in Pennsylvania-- about 30 percent-- have impaired water quality for one or more uses-- water supply (84 miles), aquatic life (17,547 miles), recreation (9,935 miles) or fish consumption (2,817 miles).

The 2016 Water Quality Assessment found 19,900 miles of streams did not meet water quality standards.

The top three major sources of water quality impairment identified in the 2020 report are-- Agricultural runoff 5,765 miles (5,741 miles in 2018 and 6,421 miles in 2016); abandoned mine runoff 5,559 miles (5,576 miles in 2018, 5,595 miles in 2016); and stormwater 3,206 miles (3,066 miles in 2018, 2,902 miles in 2016).

The report also highlights specific efforts in Pennsylvania to restore impaired watersheds. Abandoned mine drainage and sediment pollution from runoff from agricultural, urban, and suburban landscapes have all degraded water quality in many parts of Pennsylvania, and intensive efforts have been made in several key watersheds to restore these natural resources.

“In a state as rich in water resources as Pennsylvania it is important to be able to show people how their local streams, lakes, and rivers are doing,” said DEP Secretary Patrick McDonnell. “The online report lets people focus in on their local waterways to see how healthy they are or what is causing any impairments. Local input on impaired waters can help DEP restore those waterways.”

“In a world now shaped by the COVID-19 pandemic, it is even more important for DEP to make our informational resources available digitally,” said McDonnell. “The 2020 draft of the Integrated Water Report is another step towards making more DEP resources available and accessible.”

Every two years the federal Clean Water Act requires DEP to update its Water Quality Assessment report which evaluates whether waterbodies across Pennsylvania are achieving the water standards that protect clean water.

Streams, lakes, rivers, and other water resources are evaluated on how well each waterway is meeting its assessed use, such as drinking water supply, aquatic life, recreation, and fish consumption.

The report contains lists of streams that have impaired water quality and helps set priorities for restoration of impaired waterbodies.

The draft 2020 Integrated Report continues the new digital and fully interactive format with some enhancements such as a general overview of statistics, better search functionality, video tutorials and direct links to TMDL reports through the mapping interface.

Questions about the report should be directed to DEP’s Water Quality Division at 717-787-9637 or send email to: RA-epwater@pa.gov.

In addition to comments of a general nature on the Integrated Report, the Department is seeking comment on the waters listed as high priorities for TMDL development and the waters selected to be restored through alternatives to TMDLs (Category 5alt).

Comments on the report are due by August 11 and can be submitted via DEP’s eComment webpage or by other methods outlined in the PA Bulletin notice.

Taken from the PA Environment Digest June 29, 2020

<http://www.paenvironmentdigest.com/newsletter/default.asp?NewsletterArticleID=50300&SubjectID=>



Fly of the Month Dragonfly



Materials Needed:
Hook: TMC 100 #8
Thread: 6/0 UNI Blue
Abdomen: Loco Foam
Wings: White Super Hair
Thorax: Blue Antron dubbing
Eyes: Black Mono Eyes

Fly pattern taken from Charlies Fly Box at <https://charliesflyboxinc.com/portfolio-items/fly-box-template-119/>. This link will have step by step instructions as well

Kayak Fishing Quarterly Magazine

A brand new digital magazine is available to you and for those of you who fish from your kayak or have been thinking about doing so.

Kayak Fishing Quarterly, published by Payne Outdoors, brings the reader adventures in kayak fishing from freshwater to saltwater. From angler profiles to industry information and of course published reviews. KFQ is a magazine for kayak anglers by kayak angler volunteers who want to share their thoughts and adventures as well as their photos with the world in a magazine that costs the readers zero money ever. We hope to offer what we feel best represents kayak fishing in every type of water and celebrate those who do.

You can click the link, if reading on line, or go to <https://payneoutdoors.com/kayak-fishing-quarterly-magazine/> to get your copy today.

Internet Resources

Fishbrain—local fishing map and forecast app

Flylords Magazine

They are offering full length fly fishing films for you to watch for free. The films are over 20 minutes in length. go to <https://flylordsmag.com/fly-fishing-films-stream-free/>

Swift Fly Fishing

They have made two of their DVD's (Once in a Blue Moon and Casts that Catch Fish) and a 40 page fly rod building catalog available to you to download free.

Go to <https://swiftflyfishing.com/collections/fly-fishing-lockdown-loot> to download your copies.

TCO Fly Shop

They are offering Live fly tying on Friday nights at 7:30 pm on their Instagram page.

Welcome New Members

<p>Theodore Anderer Frank Gray Charles Harner Matthew Helf Chris Leshner Cheryl Loudenslager Jack McCarthy Patrick Nardi</p>	<p>Ryan Orgitano Chase Pearson Gary Rinker James Stuchell Robert Tule</p>
---	--

COVID and the Future

Over the last several months, we have all seen and experience changes in the way we live and work. Events have been cancelled and business's closed, travel limited and our everyday activities have been changed in ways in an attempt to make you, and others safer.

What does the future hold? No one knows for sure and some health experts are predicting another wave of COVID to affect us this fall / winter.

Trout Unlimited has been very involved in learning about this virus and doing what it can to minimize risk and make safer environments for us to have our events.

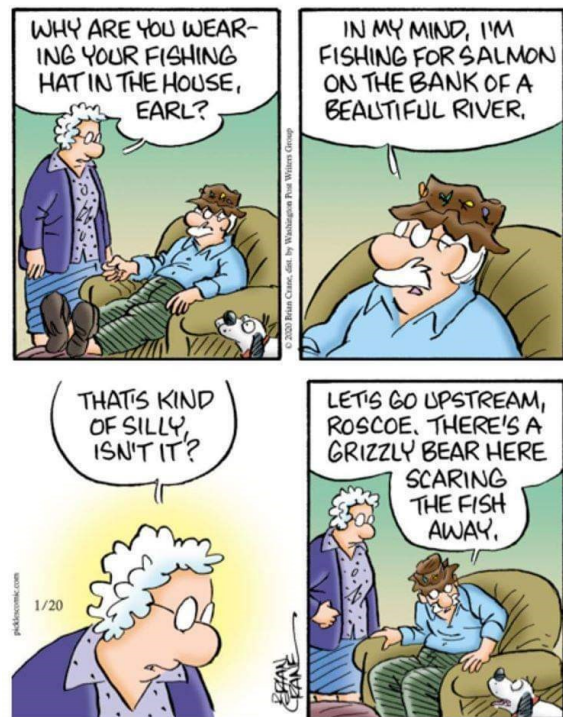
Earlier this year they ordered that all events and meetings be cancelled and have recently allowed Chapters to again conduct these events.

National TU has recently sent all Chapters an 8 page guideline for conducting business during the COVID crisis. Many of the same things that we hear daily, social distancing, wearing a mask etc are part of these guidelines.

As a Chapter, we will make every effort to comply with not only TIU guidelines, but those of Health Officials as well.

It is important to note that if you do not feel comfortable in attending an event, please do not. We do not want to make anyone uncomfortable in any way and will work to prevent that from happening. Additionally if you are sick, have been exposed to anyone who has COVID or been exposed themselves, to please stay home.

Our leadership is discussing our options for meetings and we will have more information in the September issue of the Susquehanna Ripples.



A Healthy Stream Has Stream Bank Cover - Penn State Extension

By Sarah K. Zenophon, Research Technologist, Kristen Koch, Penn State Agriculture & Environment Center, Jennifer R. Fetter, Extension Water Resources Educator

One of the many visual indicators you might use to assess the health of a stream is the amount of stream bank vegetation and other cover.

You might find yourself walking along a stream or river, either on your own property or when visiting a park or your local woods, and wish you had an easy way to understand the health of that stream.

One indicator of stream health is the condition of the stream bank cover.

When we talk about stream bank cover, or simply bank cover, we are talking about how much of the soil, immediately adjacent to the water, is covered by growing vegetation, stable debris, or bedrock material.

This helps determine the health of a stream because it can tell us a lot about the relative stability of that stream.

A stable stream is one that maintains the same shape and flow pattern over time. A healthy, stable stream will typically have more bank cover than an unhealthy stream.

Bank cover helps to reduce erosion by reducing the amount of soil that is exposed to passing water as it rushes into and down the stream.

The stability of a stream is important for any organisms that live in and around the stream as well as for protecting your property and nearby infrastructure (driveways, sewer lines, bridges, and more).

Bank erosion causes sediment to wash into the stream. That sediment has major impacts on stream life including a loss of wildlife habitat, higher levels of nutrients, and clouding the water.

As banks collapse or slough-off

into a stream the bushes, shrubs, and grasses drop off into the stream as well. These stream-side plants, now lost, were providing shade and cover for fish, perches for birds, and habitat for many other wildlife.

Stream dwelling insects are also impacted by bank erosion. As the soils and sediment settle out on the stream bottom, they fill the rock spaces where stream-dwelling insects live, smothering the insects and taking away their feeding and breeding areas. Stream dwelling insects are an important food source for fish, birds, and other wildlife.

Excessive amounts of erosion can also introduce excess levels of soil nutrients, such as Nitrogen and Phosphorus.

Nutrients are important for plant growth, and in the water, they lead to algal growth. Excess algae causes a decrease in dissolved oxygen in the water. Many fish, shellfish, bugs, and other aquatic animals depend on that dissolved oxygen for respiration.

Depleted oxygen levels is what has led to many “dead-zones” in America’s largest fisheries.

When stream banks erode, the soil dirties the stream water. Cloudy and muddy water blocks sunlight from reaching the stream bottom. Sunlight is important for plant growth and for fish to find their food. It can also make it harder for fish to obtain oxygen through their gills.

Since plants are key to helping prevent erosion and keep stream banks stable, observing the amount of vegetation growing on stream banks can help measure the health of a stream over time.

Questions to ask when considering your stream's health

What percentage of the soil next to the stream is covered in vegetation? Are the stream banks tall and steep or do they gently slope towards the stream? Has the stream maintained its shape over time or are the banks collapsing into the water?

The more vegetation, the healthier and more stable the stream is

likely to be. Adding more native plants, such as live stakes can help to increase your stream’s health, provide more habitat, and protect you from property loss.

You can learn more about assessing stream health using the First Investigation of Stream Health (FISH) protocol from Penn State Extension. The FISH protocol is based on procedures taken mostly from the PA DEP. In Stream Comprehensive Evaluation (ICE) Surveys Manual; 2013 version

(Reprinted from the June 22 Penn State Extension Watershed Winds newsletter.

Your Ideas are Needed

The next Chapter meeting will be held on September 9, 2020 and run through April 2021. A great deal of effort goes into planning each meeting and finding topics of interest not only to our membership, but to the angling community. At times our leadership struggles to find programs and there are often last minute cancellations or changes that have to be made. We have been very fortunate to have had great programs in the past. Here is where you can help. Is there a topic that interests you or something that you would like to learn about? Let us know what you would like to see and we will work on getting it set up. The majority of our meetings consist of 15 people or so but some have 30 or more. Please let us know your ideas for programs.

At the same time, we want to know you ideas for programs or events. We do an annual fly tying program that is very successful and run a Veterans Partnership program that is dually successful. If there is something you want to learn, casting, lure making, insect identification, reading the water, or fishing specific water, we can make these classes happen.

This is your Chapter and we want to provide you with the things that **YOU Want**.



Shining Falls Walleye Cheese Dip



Ingredients:

For dip:

2 Walleye Fillets
1 cup Cream Cheese
1/3 cup Sour Cream or Mayo
1 tsp Worcestershire Sauce
3 drops of Tabasco Sauce
1 Tbsp of Lemon Juice
1/4 tsp Salt
Parmesan to sprinkle on top

For preparing fish:

Original version

1 tbsp Salt
1 tbsp Sugar
1 tsp Dill
1 tsp Peppercorns

Spicy version

1 tbsp cooking oil
1/2 cup Frank's Red Hot Sauce



Preheat oven to 350 degrees F.

To prepare the fish cut the fillets into 1 inch pieces and cook it one of two ways:

Original: Boil the Walleye fillets in a pot of water with salt, sugar, dill and peppercorns until cooked through.

Spicy: Marinate the chunks of Walleye for 10 minutes in a bowl with Frank's Red Hot Sauce. Cook the fish and hot sauce in a frying pan with a bit of oil until cooked through.

Mix all the ingredients for the dip together except the Parmesan Cheese, adding the fish pieces last so they will not break up too much.

Spread the dip 1½ inches thick in a pie plate or other oven safe dish and sprinkle parmesan on top.

Bake the dip at 350 degrees F for 30 minutes or until it bubbles throughout, then broil until golden brown.

Serve hot with tortilla chips.

Taken from http://www.shiningfallslodge.com/docs/walleye_dip.pdf

Leaving No Trace: Rock Stacking

You've seen them in and around the Adirondacks, you've seen photos of them in wild places on Pinterest and Instagram, or maybe you've seen them decorating homes and businesses: rock cairns and rock stacks. Rock cairns are built by land managers on trails above the tree line to aide in overland navigation, whereas rock stacks are piles of rocks that are artfully or mindfully placed in a variety of locations.

One purpose of a rock cairn is for guiding people. They are used in mountain and desert regions around the world to help guide hikers along paths and trails. Another use of cairn building is for rituals, burials, and memorials. In places of the world where soils are too hard to dig graves, people use rock piles to bury their dead.

Recently, visitors to the Adirondacks have taken to stacking rocks along our Adirondack trails or waterways as creative art form or for meditation. Often, they build the rock stack, snap a few photos for Instagram, and leave. To some, these signs left upon the landscape are the same as graffiti carved into a tree. Stacking rocks for art and personal pleasure and then leaving them to mark the landscape does not meet with Leave No Trace ethics. Rock stacking in forests and on mountains could mislead hikers off trail and lead to dangerous results.

Rock stacking can be detrimental to the sensitive ecosystems of rivers and streams. Moving rocks from the river displaces important ecosystem structure for fish and aquatic invertebrates. Many of our Ausable River fish species lay eggs in crevices between rocks, and moving them can result in altered flows, which could wash away the eggs or expose the fry to predators.

Salamanders and crayfish also make their homes under rocks, and rock moving can destroy their homes, and even lead to direct mortality of these creatures.

Every single rock is potentially a home to the larval stages of aquatic insects, including dragonflies, damselflies, mayflies, stoneflies, and caddisflies, and many others. They cling to rocks and capture drifting food particles. By moving and stacking rocks, the insects that are attached to or living on the rocks can be desiccated and burned by the sun.

Most river rocks are coated in algae and moss, which provide food to insects and fish. This makes river rocks an important part of the river and stream life cycle, contributing to a streams' overall productivity. In addition to having ecological impacts, large-scale rock stacking can lead to increased erosion in riparian areas.

Rock stacking may be detrimental to the ecosystem, but it can also be unsightly to other visitors to the wild areas of the Adirondacks. Though it may represent a spiritual or connection to place for the builder, it may ruin the aesthetics of the area and destroy the sense of discovery for the next visitor. Picture yourself exploring a river by canoe and feeling solitude, and then around the next bend is a billboard reminding you that someone else was here first. To some, these rock stacks stick out just as much.

Consider finding another way to artfully connect with the river. Instead of making art, look for art within the natural world. Place a few leaves in an intricate pattern for the foreground of your photos. Try meditating on how the water moves across, around, over, and under the river stones. Pick up a rock and look at how many insects have made a home there, and then gently place it back in the same place with the same orientation. And if you decide to stack dry rocks from a river bank, take your photos, make your memories, and then put everything back the way it was.

The Leave No Trace Center for Outdoor Ethics has similar suggestions in this article on the subject:

☞ "By respecting the following recommendations we can keep

our wild spaces wild, while enjoying rock stacking, and the freedom of expression that comes along with it.

- ☞ Leave What You Find, officially designated cairns need to be left in place. Altering these cairns in any way poses a threat to visitor safety, and the ethic of the area visiting.
- ☞ When making your own rock stacks stick to durable surfaces. Many times along streams and rivers, one will be walking in riparian areas. Use designated trails and durable surfaces to minimize impacts.
- ☞ When collecting rocks only collect ones that are loose from soils, sands, and silts. This will minimize the impact of erosion.
- ☞ Build your stacks, take pictures, and then return all of the used rocks to their original locations.
- ☞ Leave the area how it was originally found to maintain the wildness of the area. Pack out all trash, including food scraps.
- ☞ Remember that other people may be visiting the area while you are there. If listening to music consider using headphones to let nature's sounds prevail".

We hope this has expanded your thinking on the subject, and hope you will leave the river landscape the same as how you found it, and take with you only memories when you leave.

Although this article address's rock stacking in the Adirondacks, it applies throughout our area and Country. Article taken from <https://www.ausableriver.org/blog/leaving-no-trace-rock-stacking>



Photo by Bob Baker



Susquehanna Ripples
Susquehanna Chapter of Trout Unlimited
PO Box 1132
Williamsport, PA 17703 - 1132

Since 1964, the Mission of the Susquehanna Chapter of Trout Unlimited is to work to conserve, protect and restore Central Pennsylvania's Coldwater fisheries and their watersheds

Upcoming Events

September 8, 2020

Extended Trout Season Begins

September 9, 2020

Chapter Meeting

September 12, 2020

Slate Run Sportsmen Fall Meeting at 1030 am at the Brown Township Fire Hall. slaterunsportsmen.com/calendar/

October 14, 2020

Chapter Meeting

November 11, 2020

Chapter Meeting

December 1, 2020

Fishing Licenses for 2020 on sale

January 13, 2021

Chapter Meeting

February 6 - 14, 2021

Great American Outdoor Show in Harrisburg

February 10, 2021

Chapter Meeting

March 10, 2021

Chapter Meeting

April 14, 2021

Chapter Meeting

Chapter meetings held on the 2nd Wednesday of each month and are open to the public and begin at 7:00 pm (unless otherwise noted). Meetings are held at the **Covenant Central Presbyterian Church, 807 W 4th St, Williamsport, PA 17701**, in the Fellowship Hall (unless otherwise noted). Parking is at the rear of the Church and enter off of Campbell Street.

No meetings are held in May, June, July, August or December

The ***Susquehanna Ripples*** is the official newsletter of the Susquehanna Chapter of Trout Unlimited. It is published 8 times a year: January, February, March, April, June/July, September, October, and November. Please consider submitting something of interest to our readers; a story, stream report, recipe, photograph, gear review, etc. Submissions received will be placed in the next available issue. All submissions can be sent to susquehannatu@gmail.com or boblaker@comcast.net.