



# Tennessee Chapter American Fisheries Society Newsletter



Winter 2019-2020

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## Dates to Remember

- Jan 31 Award Nominations due
- Feb 22 Lodging registration ends for special rate
- Mar 1 Early registration ends  
Abstracts due
- Mar 24 Continuing Ed. courses begin
- Mar 25 Technical Sessions begin

## Officers

President—Brandon Simcox  
President-Elect—Mark Rogers  
Treasurer/Secretary—Shawna Mitchell Fix  
Past President—Brenda Pracheil

<https://units.fisheries.org/tn/>

## PRESIDENTS MESSAGE

Greetings you fishy freaks!

I can't believe that 2019 is coming to a close. I hope each and every one of you has had a safe and productive year. As we move through the holidays and into 2020, I'd like to take a minute to provide you with a little recap of the past year.

The chapter started 2019 with a record setting meeting at the Tennessee Aquarium in Chattanooga that included talks, awards, and good times for almost 100 attendees. This meeting also marked the first professional symposium that hosted a collective of talks that emphasized how collaboration and partnerships play a vital role in helping us work more efficiently on important aquatic resource issues across the state. The meeting showcased 8 student and 12 professional talks, 7 student and 2 professional posters, and 7 symposium presentations. Kayla Key took best student presentation with her talk titled "Spatial Variation in Composition of Mussel Communities in Relation to Modeled Habitat Suitability in the Meramec Drainage of Missouri," and Thomas Flanagan took runner-up with a talk titled "Evaluating Asian Carp Movement in the Tennessee River with a Focus on Preventing Lock & Dam Passage." Aden Blackburn took best student poster and Spencer Womble took runner-up. This is the first year we gave out professional awards and Ted Alfermann took best symposium presentation with their talk titled "TWRA and TN B.A.S.S. Nation—Partnering to Improve Reservoir Fish Habitat", while Brandon Simcox took best professional poster.

We also recognized some that have dedicated entire careers and their free time for the pursuit of improving our understanding and relationships with the outdoors. Tim Churchill was honored with the Distinguished Service Award for his 30 years' worth of involvement in the American Fisheries Society. Tennessee B.A.S.S Nation was awarded the Friends of Fisheries Award for their efforts assisting TWRA with improving reservoir fish habitat and leading a cleanup effort that removed over 5,000 pounds of trash from the banks of Tennessee waterbodies. I would also like to thank the workshop instructors for volunteering their time and knowledge to help our membership learn and

continue to grow in the field of Fisheries. We are looking forward to seeing what the 2020 meeting in Gatlinburg, TN will have in store for us.

In 2019, we awarded \$1,150 to all 9 fishing derbies that applied for funding. These funds were used to help expand local outreach efforts across the state. Those fishing derbies hosted nearly 2,000 participants. The chapter looks forward to supporting these events in the future. This past year, the Tennessee Chapter also secured the opportunity to host the **Southern Division of the American Fisheries Society Annual Meeting in 2023**. This endeavor will undoubtedly need all hands on deck so as we move toward planning look for spots where you can help. This will be a great opportunity for us to replenish our funds so that we can continue to support our Chapter initiatives, as well as showcase the great state of Tennessee.

I hope you all enjoy the holiday season and spending time with friends and family. I look forward to seeing y'all at the Chapter meeting in Gatlinburg in March.

Brandon Simcox, [Brandon.simcox@tn.gov](mailto:Brandon.simcox@tn.gov)

## Annual Chapter Meeting: March 24-26, 2020 Gatlinburg, TN Edgewater at the Aquarium Hotel and Conference Center

The Tennessee Chapter of the American Fisheries Society will hold its 2020 annual meeting March 24th-26th 2020 at the Edgewater at the Aquarium Hotel and Conference Center in Gatlinburg, TN. More information about the lodging, workshops, and how to get registered will be posted on the Tennessee Chapter website <https://units.fisheries.org/tn/>.

### **\*\*CALL FOR ABSTRACTS\*\***

This year marks the second time the Tennessee Chapter of the American Fisheries Society will be hosting a special symposium session with select talks focusing on a central issue aquatic resource biologist's face on a regular basis. This year's symposium will focus on "Emerging Issues and Past Lessons Learned". The 2020 symposium talks will raise awareness of new threats to fisheries and conservation in Tennessee (or nearby states). Presentations highlighting past issues of high importance and solutions and lessons learned are also encouraged. We hope for a diversity of submissions from agency, NGO, and university members so we can raise awareness of resource challenges.

We strongly encourage submissions to be included in this symposium but the meeting will also feature presentations outside the scope of the topic.

Oral presentations should be no more than 15 minutes with 5 minutes for questions. Please see website or e-mail for more information and submission instructions. Those who wish to give an oral or poster presentation at the 2020 TN AFS meeting are required to submit abstracts by March 1, 2020. Questions about the meeting and abstract submissions should be sent to Mark Rogers [mwrogers@tntech.edu](mailto:mwrogers@tntech.edu). See e-mail or website for more information/instructions on submissions. Student presenters are invited to compete for the Best Student Paper and Poster Awards. Professional presenters are invited to compete for Best Symposium Paper and Poster Awards.

## **REGISTRATION**

Usual technical sessions will begin at 1 pm on March 25th at the Edgewater Hotel & Conference Center in Gatlinburg, TN. Please visit our Square Store to purchase your registration: The new store works best when you copy and paste the link into Google Chrome. <https://tnafs.square.site/> or send a check to:

Shawna Mitchell  
175 Baylor School Rd  
Chattanooga, TN 37405

### **Registration rates:**

Professional: \$60 through March 1, \$70 thereafter, \$85 **day of** meeting.

Student and Retiree: \$35 through March 1, \$40 thereafter.

Registration form now only needs to be sent if you are sending a check by mail.  
Issues registering or paying through the square store? E-mail [tennesseefs@gmail.com](mailto:tennesseefs@gmail.com)

## **LODGING**

A rate of \$94 per room (the per diem rate for Gatlinburg) has been negotiated with The Edgewater at the Aquarium Hotel and Conference Center. You must make a **phone reservation**, please call the following number:

Phone: 1-800-423-9582  
Reference: TN Chapter of the American Fisheries Society 2020  
Address: 402 River Road Gatlinburg, TN 37738

**RESERVATION CUTOFF is Saturday, February 22, 2020**

## **CONTINUING EDUCATION (CE)**

We are excited to again offer optional Continuing Education Workshops to attendees! Courses offered will be Tuesday, March 24th and Wednesday morning, March 25th at the Edgewater Hotel & Conference Center in Gatlinburg, TN. Continuing Education Courses will be determined after January 1<sup>st</sup>, 2020.

## **Award Nominations!**

We are seeking nominations for the Lifetime Achievement, Outstanding Fisheries Scientist, Distinguished Service, and Friends of Fisheries awards. Our membership is full of dedicated professionals, and it's time to recognize them for their efforts. Please review the award criteria below and send nominations to Will Collier ([Will.Collier@tn.gov](mailto:Will.Collier@tn.gov)) by **January 31<sup>st</sup>**. Applications should be limited to one page.

### **Lifetime Achievement Award**

Nominee should either be retired or within five years of retirement and have had a long history of significant contributions.

### **Outstanding Fisheries Scientist**

To be bestowed on the biologist in their early to mid-career for making significant contributions in the past year or over several years.

### **Distinguished Service Award**

To be bestowed on individuals that served as a Chapter officer for more than five years or served the chapter as chair of a long-standing Chapter committee for more than five years.

### **Friends of Fisheries Award**

This award shall be made to non-Chapter member(s) who have distinguished themselves by service or commitment to the Chapter or the fisheries resources of Tennessee.

Also, the Tennessee Chapter of the American Fisheries Society is soliciting nominations for the following Chapter officer positions:

President-elect.

# Student Section

## Tennessee Tech University Student Sub-Unit

By: Parker Hildreth

Tennessee Tech University's student chapter of Student Fisheries Association has had a very productive year in 2019. In January, two members of SFA, Tom Flannagan and Will Wood presented at the AFS Southern Division Meeting in Houston, Texas. Tom presented two different projects, Asian Carp movement dynamics and Florida Bass introgression in Chickamauga Lake.

In February, some of our chapter members made a strong showing at the annual TN AFS meeting in Chattanooga, TN. Tennessee Tech had over 15 students attend, with Kayla Key and Tom Flanagan taking home best student presentation awards and Sam Day and Aden Blackburn winning best poster awards. Past club President Lauren Kelley gave a great recap of club activities for the year, including the club's assistance to TWRA for fin clipping of trout to be stocked. All of the TTU students had a great time seeing the Tennessee Aquarium after hours and SFA looks forward to sharing more of our member's accomplishments at TN AFS next spring.

Also, this past February, SFA members braved a rainy day to volunteer with TWRA fin clipping brown trout. SFA members and TWRA associates worked hard to fin clip 23,050 brown trout in just five hours. We thank our members for their hard work and determination.

This past April, we were lucky enough to have a beautiful day for Tennessee Tech's annual fish fry. SFA members served over 100 meals of fried catfish, hushpuppies, baked beans, and coleslaw to students and faculty members on campus. Having SFA members volunteer their time to set up, cook, serve, and clean up has been a great opportunity. All proceeds of the annual fish fry go towards funding the annual Kids Fishing Derby at Cane Creek Park.

On June 8th, the 31st annual Kids Fishing Derby was held at Cane Creek Park Lake in Cookeville, TN. Members of SFA, in conjunction with TWRA, volunteered for this successful event. Despite the weather, we had just over 100 registered kids participate. Prizes were awarded in three age categories for most fish and biggest fish caught. In addition, and new this year, was the category for the family with most fish caught. We were delighted to have the Cookeville Fire Department join us with a fire truck for the kids and look forward to hosting next year's derby.

In October, TTU SFA chapter President Parker Hildreth attended the Southeastern Population Ecology and Evolutionary Genetics Conference at Clemson University in South Carolina. Parker was able to present his genetic research on cryptic variation and morphological diversity of *Faxonius placidus*, the big claw crayfish and he was awarded first place in the undergraduate poster division.

TTU SFA chapter member Mack White had the opportunity to present his research on the use of aerial imagery to estimate the abundance of spawning Buffalo in Citico Creek at the 2019 Southeastern Fishes Council (SFC) meeting in November. Mack is working with Dr. Kit Wheeler to quantify nutrient contributions from spawning buffalo and measure system responses to those delivered nutrients. Mack was awarded 2nd place at the SFC meeting for his research poster examining the efficacy of aerial imagery for abundance estimates of these, spawning catostomids.

As the semester comes to a close, we are looking forward to next year. Members are currently preparing for upcoming conferences, presentations, volunteer opportunities and fundraisers to help our club outreach.

# University of Tennessee-Knoxville Student Sub-Unit

By: Kyler Hecke, UTK AFS Student Subunit Grad. Student Representative

The University of Tennessee-Knoxville (UTK) AFS student subunit is part of a joint organization with the UTK student chapter of the Wildlife Society. Together, this organization is called the UTK Student Chapter of the Wildlife and Fisheries Society (UTKWFS), with around 100 members. We have had a busy, yet successful year since our last update for the newsletter.

In January, some of our members were able to attend the 2019 SDAFS annual meeting in Galveston, TX, where they presented their research, attended scientific talks, and accepted the 2018 SDAFS Outstanding Student Subunit Award. In the same month, we had a few members help Tennessee Wildlife Resources Agency with Rainbow Trout stockings and creel surveys at Fountain City Lake (Fountain City, TN). In February, members attended the 2019 Tennessee Chapter of the American Fisheries Society annual meeting in Chattanooga, TN, where they presented research, participated in workshops on fish age/growth and fish identification, and attended scientific presentations. Later that month, our members hosted the 2019 UTKWFS Wild Game Dinner, a public event where various types of wild game and fish are cooked multiple ways and served at a buffet-style dinner. At this event, we have a live and silent auction, and proceeds from the wild game dinner provide funding to send members to professional meetings and other events throughout the year. We had a successful wild game dinner this year with over 400 attendees.



Members accepting the 2018 SDAFS Outstanding Student Subunit Award from SDAFS past-president Craig Bonds during the 2019 SDAFS annual meeting in Galveston, TX.

The UTKWFS was able to participate in the 2019 Wildlife Conclave hosted by the Wildlife Society at Abraham Baldwin Agriculture College in Georgia during March. Members of the UTKWFS competed in many events throughout the conclave. In late March, members conducted an educational outreach event with students from William Blount High School in Maryville, TN, where they taught students about stream ecology and fish identification. During late April, some of our members participated in a joint float/camping trip on the New River in Virginia with members from the Virginia Tech and the Clemson AFS student subunits. We finished the semester by helping with Mountain Madtom and Bluebreast Darter translocations in early May. This was part of the Pigeon River Recovery Project's effort to help restore native fish species in the Pigeon River drainage. Also, in May, members were able to assist with Lake Sturgeon sampling as a part of the Southeastern Lake Sturgeon Working Group's effort to monitor Lake Sturgeon populations and stocking efforts in the Tennessee River. We ended the spring semester by electing new officers for the 2019-2020 school year.

We have meetings for our members every two weeks, to stay up to date on current events we have planned and for fellowship among our members. Each meeting includes a speaker or skill-based

workshop. At our last meeting this year in April, we hosted Sally Petre, a Streams and Rivers Biologist for the Tennessee Wildlife Resources Agency, who discussed her experiences in the fisheries field.

Over the summer, most of our members worked summer internships, jobs, or undergraduate research projects. Additionally, some of our members were able to work a registered student organization booth for our UTK Wildlife and Fisheries Society at freshmen orientation sessions all summer for recruitment purposes. We used this opportunity to recruit new members for the upcoming school year. During the summer, we also created a Facebook page to share all the events our members are doing, follow our student subunit page by searching “University of Tennessee Wildlife and Fisheries Society” on Facebook.

We kicked off the new school year by hosting a back-to-school social for our members and new students interested in wildlife and fisheries. In September, many of our members volunteered and worked a booth at SturgeonFest 2019. We used this opportunity for educational outreach to attendees, to both inform and answer questions on Lake Sturgeon. In October, members went to William Blount County High School and sampled fish on Pistol Branch to teach 9<sup>th</sup> grade students about stream



Our members that sampled fish, discussed stream ecology, and fish identification to 9<sup>th</sup> grade students at William Blount High School, in Maryville, TN.

ecology and fish identification. At one of our bi-weekly meetings in October, we hosted Meredith Harris, a Reintroduction Biologist for the Tennessee Aquarium Conservation Institute. Meredith gave an outstanding presentation on her work at the aquarium. We were also able to send members to the Southeastern Association of Fisheries and Wildlife Agencies conference in Hilton Head Island, SC at the



Some of our members who volunteered and worked a booth at SturgeonFest 2019.

end of October, where members attended scientific presentations. In early November, we had some members sample Capshaw Branch at Camp Wesley Woods to help their staff build a fish species list for outreach events. Also, in November, multiple members attend the 2019 Southeastern Fishes Council annual meeting in Knoxville, TN, to present on

their research and attend scientific presentations. As the semester winds down, our members are gearing up for Lake Sturgeon sampling once again, and preparing for a busy spring, full of conferences, volunteering, and outreach.

## Professional Updates

### Tennessee Aquarium Conservation Institute (TNACI)

By: Shawna Mitchell Fix; Science Coordinator TNACI

The Tennessee Aquarium Conservation Institute has been very busy this year monitoring, researching and propagating our state's protected fishes. They raised and released 1600 juvenile Lake Sturgeon into the French Broad River and Watts Bar Reservoir. With the help of Trout Unlimited, they also raised and released 382 Southern Appalachian Brook Trout into Little Stoney Creek last spring. The federally endangered Laurel Dace spawned in captivity at their facility and about 250 were hatched. Monitoring for the Laurel Dace continued up on Walden Ridge and they have discovered that are now only abundant in 2 streams in the whole state. Work continues to collaborate with other partners and landowners on the ridge to try and address water quality issues affecting the populations of this fish. Scientists at TNACI are also collecting Tennessee Dace to study their life history and use them as a surrogate for the life history of the Laurel Dace. They have also been assisting a graduate student at Tennessee Tech with Blotchside Logperch surveys to try and find the best source population to reintroduce them into the Great Smoky Mountains National Park.



Front: Meredith Harris and Avery Millard, Back:  
Ayi Ajavon, Anna Quintrell and Anna George



Fabiola Lopez holds Tennessee Dace (*Chrosomus tennesseensis*) collected for a life history study.

# The University of Tennessee-Knoxville; Pigeon River Recovery Project (PRRP)

By: Justin Wolbert; Pigeon River Recovery Biologist

The last couple of years have been successful with the Pigeon River Recovery Project (PRRP). Some of our successful translocation efforts were with Mountain Madtoms (MM) and Bluebreast Darters (BBD). There have been 462 MM and 146 BBD translocated to the Pigeon in 2018 and 2019 alone. In addition, we continue to collect and translocate Stripetail Darters, Northern Studfish, River Chubs, and Blueside Darters. Northern Studfish, River Chubs, and Stripetail Darters are occasionally documented during annual IBIs at Tannery Island and Denton sites. The fish sourced for re-introduction are collected from local sites within the French Broad River drainage and with strong populations.



**2019 Age-0 Mountain Madtom**



**Oct 2018 & 2019 – Muskie stocked @ 4 sites on Pigeon R.**

In 2018, the first evidence of Mountain Madtom reproduction was discovered, and in 2019 there was more evidence found when two more age-0 individuals were discovered at the site of re-introduction. In 2018, we documented two age-0 Tangerine Darters in the river. This was the first evidence of natural reproduction for both species, since they were both presumed extirpated after the Champion Papermill opened in 1908 in Canton, NC. Adult Tangerine Darters had been seen at Denton Bridge previously, but no reproduction was discovered before 2018. The Tangerine Darters were propagated by Conservation Fisheries, Inc in Knoxville and stocked in 2016 and 2017.

In 2018 and 2019, Muskellunge were stocked into the Pigeon River for the first time as part of a collaborative effort with TWRA. The Muskie were provided and transported by TWRA. Muskie are a historically native species to

the drainage, and they provide recreational opportunities for anglers hoping to catch what may be a once in a lifetime fish.

In July of this year, we placed 18 mussel silos in the river containing *Villosa iris* and *Alasmidonta viridis*. Some of the *V. iris* were from the Marion, NC hatchery and others were wild stock from the Little Tennessee River. All of the *A. viridis* were wild stock from the Mills River in North Carolina. The goal of this particular study is to determine if hatchery-reared mussels differ in growth and survival from translocated wild individuals. We will also be investigating differences in gut microbiome between wild and hatchery reared mussels. Preliminary results suggest that all mussels are healthy and growing well.

Annual PRRP committee meetings are held in April at the TDEC Knoxville Field Office and are attended by partners from TWRA, TDEC, TVA, CFI, and UTK. All of these organizations are involved in the planning and restoration operations and have been crucial to the success of this project.



**Mussel silo underwater**



***V. iris* in a mussel silo "canister"**

# Tennessee Wildlife Resources Agency

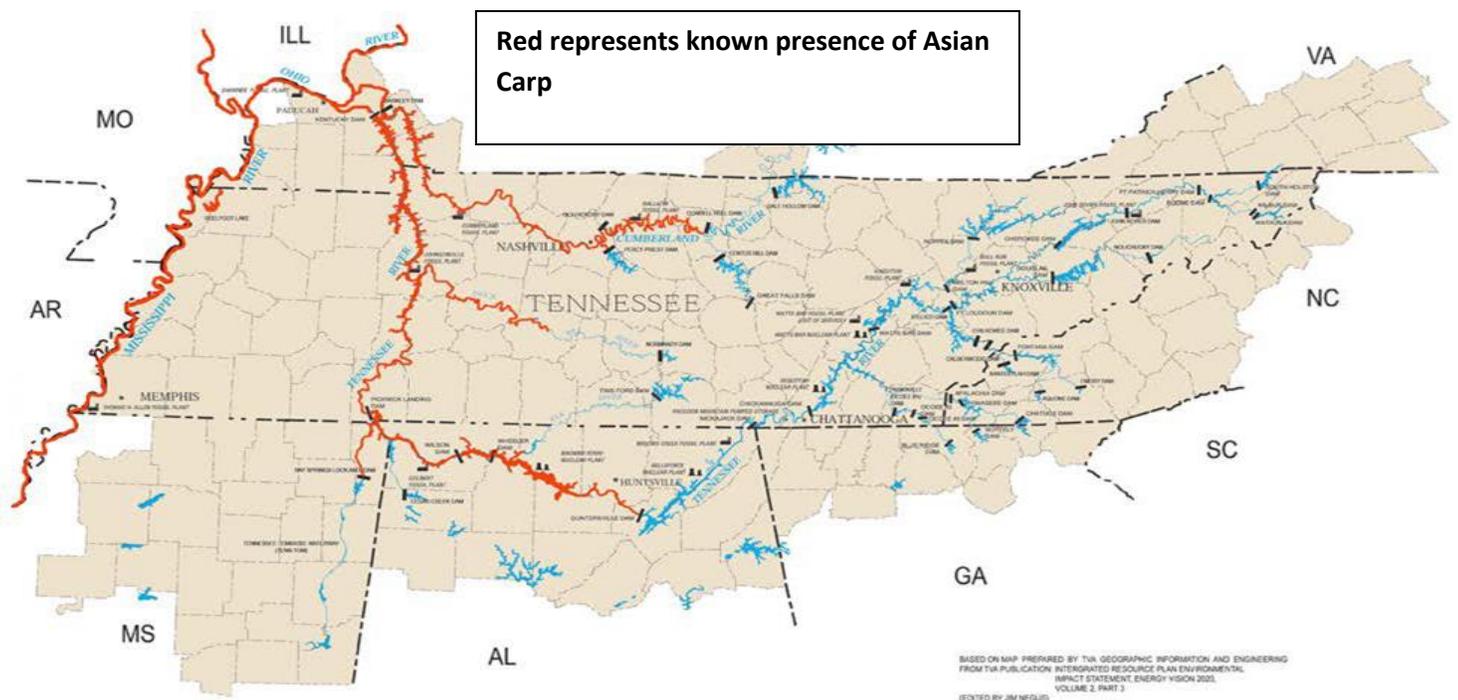
## TWRA Region I

By: Tim Broadbent; Regional Fisheries Manager

Region I continued maintenance of deep-water fish attractors established lakewide and established additional shallow-water fish attractors throughout the year. Those programs are very popular with anglers. Although we still work with wooden stakes, we are currently testing plastic structures in various designs. These plastic structures require less maintenance and allow the habitat crew to expand outside traditional sites and reservoirs.

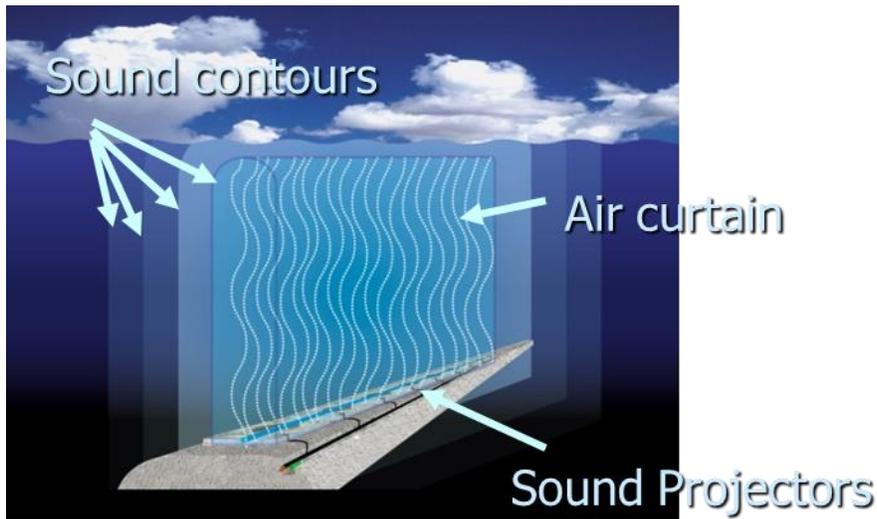
Region I just completed the fifth year of Florida largemouth bass stocking in Harmon Creek, Blue Creek, and Eagle Creek. Approximately 150,000 FLMB were stocked each year in 2015 - 2019. Future sampling efforts in these embayments will focus on growth rates and percent FLMB collected compared to baseline data. Regional fisheries personnel have collected additional LMB fin clips at other reservoirs in Region I.

The silver carp populations have continued to increase on the Mississippi River. As reported last year, silver carp have been collected in all Mississippi River tributaries, below the spillway at Reelfoot Lake and below Cheatham Dam. We have also collected silver carp below Pickwick Dam and commercial fishers have continued to collect bighead/silver carp in the Big Sandy area. The Agency has developed an ACHIP program that contributes to the price/pound of Asian carp harvested by commercial fishers. The Agency also provides webbing to qualifying fishers twice per year to help defer the costs of Asian carp sampling. The total harvest of Asian carp from Kentucky and Barkley reservoirs in the states of Tennessee and Kentucky has reached nearly 5 million pounds. Although the leading distribution edge has been documented to Pickwick Dam, densities have not increased in the area.



Region I obtained funding from the USFWS to hire two interns to conduct larval light trap surveys and larval egg tows on Kentucky and Barkley reservoirs in 2017-2019. These collections have been conducted since 2017 and Asian carp reproduction has not been documented. The Agency will be contacting universities in 2020 to hire two more interns to continue sampling efforts.

In addition to silver carp, bighead carp, grass carp, and black carp fingerlings have also been documented in the Mississippi River. Black carp pose a threat to the native mussel populations and have been collected from Kentucky and Barkley reservoirs, and Reelfoot Lake. Region I personnel have also attended Ohio River Basin and Lower Mississippi River meetings to discuss sampling strategies and funding possibilities to determine densities, effective sampling gear, and reproduction of Asian carp. Although adult populations have been documented in Region I waters, reproduction has not been recognized.



Finally, the Biological Acoustic Fish Fence (BAFF) has been installed and currently in operation at the Barkley Lock and Dam. The fence utilizes sound, light, and bubbles to hopefully restrict movement of Asian carp from below Barkley Dam into Barkley Reservoir. Over 300 fish have been tagged below the dam and receivers have

been installed in and above the lock to detect passage of fish thru the BAFF.

The stream crews completed assigned surveys (sampled 30 streams and small rivers) and have established the “leading edge” of silver carp distribution in the major rivers, creeks, and streams feeding Kentucky Reservoir. As previously mentioned, larval light traps were set in Kentucky Reservoir from 2017-2019 in an attempt to collect larval Asian carp, but young-of-year fish have not been collected. However, age 2 and 3+ fish were collected in both Kentucky and Barkley Reservoirs at significant



densities (length collected > 600 mm). Asian carp will be our biggest management issue for the future and we are working with private industry and commercial fishers to develop harvest plans.

Sauger were stocked in 2011 and that continued for five years. Due to low population numbers and low catch by anglers, walleye stocking will be initiated in 2020.

The state lakes and hatchery crews have worked to improve state lake facilities and visitation remains good. The Humboldt Hatchery is the largest in Tennessee and has been assigned the Florida Largemouth Bass program. The crew completed the FLMB rearing facility and has produced more than 500,000 fingerling fish each year. Sauger, catfish, blacknose crappie, sunfish, Florida LMB are the primary species raised at Humboldt and trout and alligator gar are also received and stocked from the hatchery. New stocking strategies may allow the hatchery to begin rearing striped bass and/or hybrid striped bass.

Region I state lakes and hatchery crews coordinated, organized, and stocked over 10,500 pounds of catfish for 30 youth fishing events across west Tennessee during 2019.

The winter trout program has also been a success in Region I and the Agency stocks approximately 12 small ponds throughout Region I with over 12,000 trout. This is also a popular program with the anglers. We are currently evaluating stocking strategies and have been utilizing trail cameras to evaluate usage.

We are also working on developing new small impoundment stocking strategies to determine if lower numbers can continue to provide good densities, especially with catfish. This project utilizes summer sampling to determine catfish densities.

A production pond has been set aside at Humboldt State Fish Hatchery to conduct research. The objective of the study is to determine the effects of predation and survivability of young of the year catfish in small impoundment settings.

## **TWRA Region III: TU Partners with TWRA to Monitor Water Quality**

**By: Will Collier; Regional Fisheries Biologist**

Trout Unlimited Chapters across Tennessee helped procure dozens of HOBO Pendant temperature loggers and several HOBO dissolved oxygen sensors this year.

The Hiwassee and Overmountain Chapters bought the Pendant temperature loggers to be placed in multiple wild trout streams in Region 3 and 4 including many native brook trout streams. TWRA biologists and interns, TU members, and USFS biologists deployed data loggers in the spring to record seasonal temperature fluctuations along elevation gradients. Loggers were set to record stream temperature every hour and have a battery life of 13 years. Aside from a couple that had been appropriated by looters unknown, most have been collected or downloaded and redeployed. Some surprising information was gleaned including impressive temperature tolerances of rainbow trout in lower elevation streams within the South Zone Cherokee National Forest.

The Music City Chapter of TU purchased six dissolved oxygen/temperature sensors for the Caney Fork River (Center Hill Tailwater). Sensors were positioned on both bank sides throughout the first five miles of the tailwater in early September. They recorded oxygen and temperature data every thirty minutes during a time of year when water quality is of greatest concern. Oxygen levels frequently drop below 3.0 mg/L during fall discharges and temperatures were thought to rise quickly during periods of no generation. While dissolved oxygen measurements were less than desirable at times, temperature only reached 21.0°C one time at one location briefly. Data gathered has provided valuable insights into the fishery that will help guide agency trout stockings and electrofishing surveys, and will be utilized in planning the new Corps of Engineers Center Hill Master Plan.



TWRA and USFS staff deploying temperature loggers

# TWRA Region IV

By: Sally Petre; Regional Streams and Rivers Biologist

TWRA Region IV staff partnered with the North Carolina Wildlife Resources Commission, the U.S. Forest Service, the U.S. Fish and Wildlife Service, Trout Unlimited, private land owners, the U.S. Geological Survey, and the Southeastern Cooperative Fish Parasite and Disease Lab to stock wild, native Brook Trout into Phillips Hollow on the Cherokee National Forest. Brook Trout were collected from Nolichucky River watershed streams in North Carolina (private land) and stocked in Phillips Hollow Creek



**Left: TWRA and NCWRC staff collecting Brook Trout on private land in NC to transfer to TN. Right: TWRA, USFS, USFWS, and Trout Unlimited members ready to stock the Brook Trout collected in NC.**

(US Forest Service land), a Nolichucky Watershed stream in TN. Brook Trout have been extirpated in the Tennessee portion of the Nolichucky River Watershed, so this is a great addition to our state's outstanding fisheries! This work could not have been done without all of our aforementioned partners' willingness to cross jurisdictional boundaries for restoration.

TWRA partnered with the City of Knoxville and the Lyons Club to bring fish into Fountain City Lake in downtown Fountain City during the 2018/2019 winter. This winter trout fishery was one of the most popular locations stocked by TWRA in winter trout stocking program, providing opportunity for many new and seasoned anglers. This program will continue here and be expanded into other community fishing waters in the region.



**Left: Anglers lined up on the banks of Fountain City Lake. Right: A new flyfisher catches a stocked Rainbow Trout with his daughter at Fountain City Lake.**

The causative agent, *Myxobolus cerebralis*, for Whirling Disease was found in four of twenty-one trout waters tested in TWRA Regions 3 and 4. These include Wilbur Tailwater, South Holston Tailwater, Doe River and North River. We have partnered with the Southeastern Cooperative Fish Parasite and Disease Lab at Auburn University to continue monitoring our trout waters. No population level effects have been found as of yet. We are emphasizing stopping the spread of *M. cerebralis* so it doesn't spread to other waters, particularly wild Brook Trout streams, where we may see population level effects.

## New Faces

TWRA would like to officially welcome Cole Hardy (back) to Tennessee. Cole will serve as Tennessee's Aquatic Nuisance Species Coordinator based out of Nashville, TN. Cole grew up in the small town of Clear Lake, Iowa, where he spent much of his youth developing a passion for hunting, fishing, and the outdoors. He completed his undergraduate work at Iowa State University in 2013 with a B.S. in Animal Ecology. In 2017, Cole earned his M.S. in Biology from Tennessee Tech University studying catfish population dynamics in the Tennessee River. Most recently, Cole spent three years as a regional fisheries biologist in southwest Florida developing stakeholder relationships and navigating contentious management issues. We are excited about his return to Tennessee and looks forward to working with him on Tennessee's incredible resources.

