

President's Message

By: Sally Petre

Happy New Year!

As 2024 closes and 2025 begins there are many accomplishments to look back on. The most notable accomplishment our Chapter rallied together for was hosting the Southern Division of the American Fisheries Society Meeting in Chattanooga, TN. This meeting was one of the largest Southern Division Meetings with 12 workshops, and 6 concurrent sessions of talks ranging 2 days with over 620 attendees. The most impressive thing to me was how our Chapter members worked together to make this meeting happen!

After the Southern Division meeting, we had a virtual business meeting. Here, we voted to amend our bylaws in three major ways: 1) the meeting planning responsibility to be shifted from the incoming President-Elect to the President, 2) for the President to form a meeting planning committee to help with the duties of planning our annual meeting and 3) to split the roles of the Secretary/Treasurer in two, having a Secretary and a Treasurer. The objective was to make the positions less time intensive, but this also means there are more positions to fill. I challenge our members to step up to the challenge this year by volunteering to take an active (but simple) role in our Chapter. Additionally at our meeting, we voted to support a Tennessee student to attend the Southern Division AFS each year.

This year we solicited designs for a new Chapter logo, you all voted, and the vote went to Amanda Rosenberger's drawing. Congratulations! Thank you all for submitting designs and voting!

We also donated over \$1000 to fishing derbies this year that encouraged family fishing. This puts emphasis on the entire family learning. This is something the chapter does each year to help give back to communities in Tennessee and support events hosted by our membership.

Looking ahead, this year's meeting is at the newly renovated Pickwick Landing State Park. We're very excited to host it there since we have not had a meeting in West Tennessee in a few years! We have 4 great workshops planned with topics including eDNA, macroinvertebrates, mussels, and fish. We are also featuring lightning talks to encourage the exchange of information and get people out of their comfort zone. If you want to propose an idea, or share a neat finding, but you're nervous about doing a 15-minute talk, the lightning talk is for you!

We look forward to seeing everyone at the meeting and working together in the future!



Tennessee Chapter of the American Fisheries Society (TNAFS)

2025 Annual Meeting

Feb 4-6, 2025

The Lodge at Pickwick State Park

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

Important Dates:

- Dec 6** Nominations for awards due to Aaron Burch - alburch123@gmail.com
Newsletter submissions due to Joelle Ciracy - [Newsletter Submission](#)
- Dec 20** Deadline for booking lodging with discounted rates - [Here](#)
- Jan 10** Early registration - <https://tnafs.square.site/>
Abstract submissions due - [Google Form](#)
Nominations for officers due to Aaron Burch - alburch123@gmail.com
- Feb 4-6** Conference!

Registration

Due by Jan 10th, 2025

Professional: \$130 through January 10, \$160 thereafter

Student and Retiree: \$55 through January 10, \$60 thereafter

Banquet only: \$60 each

Please remember to also pay your annual dues of \$10.

Visit <https://tnafs.square.site/> to register OR send a check with subject line indicating payment intention to:

Abbey Holsopple
175 Baylor School Rd
Chattanooga, TN 37405

If anyone has registration questions or financial concerns (especially students) OR issues registering OR paying with the square store please contact Abbey Holsopple at aholsopple@tnaqua.org.

Lodging

A rate of \$145 per standard double room has been negotiated with The Lodge at Pickwick Landing State Park. All those eligible for the government rate will receive it instead of our negotiated rate. .

You can either use the link provided below OR call the phone number below and reference **TN American Fisheries Society**.

[Book your lodging online here](#)

Phone: (731) 689-3135 ext.0 and reference TN Chapter American Fisheries Society
or 1-888-867-2757 and use code 45039

HOTEL RESERVATION CUTOFF is Friday, December 20th, 2024

Abstract Submission

Instead of a theme for this meeting, we are introducing “Lightning Talks”. For those of you who have some great ideas you want to connect with people on, are planning to do a project but don’t have any data yet, or if you just don’t have a full presentation, this is for you!

All abstracts can be submitted through this [Google Form](#). Abstracts are **due January 10th, 2025**.

Ways to present:

Oral Presentations* – Speakers will be given 15 minutes for talks (including time for questions and/or discussion).

Poster Presentations* – The poster session will be held after the business meeting on Wednesday, February 5th. Presenters will be provided with tacks or tape in which to hang their posters.

Lightning Talks- Speakers are given 5 minutes (strictly enforced) for an oral presentation with no time for questions. Students and professionals can submit. There is no competition for this type of presentation.

*Students giving Oral and Poster Presentations will be entered into the student competition where 1st and 2nd place receive monetary prizes!

Continuing Education Workshops

TNAFS is proud to offer four continuing education courses at our annual meeting this year! Courses can be signed up for at our Square Store <https://tnafs.square.site/>

Tuesday, February 4th

- Workshop I: Aquatic Macroinvertebrates All day - 8:00-12:00 & 1:00-4:30
- Workshop II: eDNA - Part 1 - Sample Collection - 8:00-12:00
- Workshop II: eDNA - Part 2 - Data Processing - 1:00-4:30

Wednesday, February 5th

- Workshop III: Mussel Identification - 8:00-12:00
- Workshop IV: Basic Fish ID - 8:00-12:00

Workshop I: Aquatic Macroinvertebrates (Tuesday – All day (8:00-4:30))

Instructor: Justin Wolbert, Jenny Isham

Max number of attendees: 20

Cost for attendance: \$35

Join us for an aquatic insect workshop at the TN AFS meeting. Aquatic insects play a significant role in the food web and are often used as biological indicators of stream conditions. We will discuss the basics of sampling and ecology then walk to a stream on State Park property to collect samples during the morning session. Then after lunch we will bring the samples back and identify them with microscopes in the afternoon session. Please bring your waders or muck boots for getting in the stream. Other supplies and gear will be provided.

Workshop II: eDNA - Part 1 (AM) & Part 2 (PM)

This two-part workshop offers a crash course on environmental DNA surveillance. Anyone with any level of experience is welcome, but the focus will be on those with little to no experience. Please email Robert Paine (rtpaine@tntech.edu) with any specific questions.

*You can register for Part 1 or Part 2, but in order to attend the full day workshop, you must register for both parts. *

eDNA Part 1 - Sample Collection (Tuesday AM - 8:00-12:00)

Instructor: Robert Paine

Max number of attendees: 20

Cost for attendance: \$15

Morning Session - This session of the course will provide an overview of collecting different kinds of eDNA samples in the field, including different collection methods, tools, and protocols to reduce contamination. Participants will not be required to enter the water, but protective gear (i.e., waders, waterproof gloves) is recommended for participants wanting the full immersive experience.

eDNA Part 2 - Data Processing (Tuesday PM - 1:00-4:30)

Instructor: Robert Paine

Max number of attendees: 20

Cost for attendance: \$15

Afternoon Session – This session will offer an overview of quantitative PCR (for single species detection) and a chance to practice metabarcoding bioinformatics (for multi-species detection). Participants will need to bring their own laptops for the afternoon session. Please plan to download the following program for the metabarcoding bioinformatics before you arrive to the workshop: (<https://github.com/mothur/mothur/releases/tag/v1.48.1>). Additionally, participants will need Notepad/Notepad++ or Excel.

Workshop III: Mussel Identification (Wed AM, 8:00 - 12:00)

Instructor: Amanda Rosenberger

Max number of attendees: 20

Cost for attendance: \$25

This course will focus on both the ecology and identification of Tennessee freshwater mussels. Please email Amanda Rosenberger at arosenberger@tntech.edu if you plan to attend and what region you expect to work in so that the workshop may highlight those species.

Workshop IV: Basic Fish ID and ecology of West Tennessee fishes (Wed AM, 8:00 - 12:00)

Instructor: Michael Clark, Tom Blanchard

Max number of attendees: 20

Cost for attendance: \$25

Students: Free

This course will focus on identification of freshwater fishes typically found in West Tennessee. The workshop will highlight species unique to the low-gradient streams and wetlands of West Tennessee and important invasive species of rivers and reservoirs of the region.

Officer Nominations

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

- President-elect*

Send nominations to Nominations and Awards Chair, Aaron Burch, alburch123@gmail.com by **January 10, 2025**.

Award Nominations

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 Aaron Burch, alburch123@gmail.com by Dec 6, 2024. 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.

2025 TNAFS Tentative Meeting Schedule

All times in Central Time Zone

Monday, February 3

There is a block of rooms set aside for members on February 3rd that are attending workshops on Tuesday morning.

Tuesday, February 4

7:30 – 5:30 Registration open

8:00 – 12:00 Workshop I : Aquatic Macroinvertebrates

Workshop II: eDNA Part 1

1:00 – 4:30 Workshop I: Aquatic Macroinvertebrates

Workshop II: eDNA Part 2

6:00 – TBD Informal Social (Tentative fish-fry in the park)

Wednesday, February 5

7:30 – 5:00 Registration open

8:00 – 12:00 Workshop III: Mussel Identification

Workshop IV: Basic Fish ID

1:00 – 6:30 Oral and Poster Presentations

Business Meeting

6:30 – 10:00 Banquet, Auction, Awards

Thursday, February 6

9:00 - 3:00 Oral Presentations Continued

3:00 Meeting Adjourned

Thank you!

Shawna, Sally, Abbey, Meredith

TWRA Region 3 Streams and Tellico Hatchery Crews

By: Will Collier

This year has been a challenging yet rewarding year for both the Tellico Hatchery and Region 3 Streams crews. We're fully staffed and hitting the water every day despite environmental and man-made hurdles. Elevated summer temperatures in Tellico River coupled with a prolonged drought this fall caused significant trout mortality and delayed fish deliveries to Tellico Hatchery. The closure and replacement of the Bald River Bridge along River Road, the main thoroughfare to and from the hatchery, has forced all traffic to use longer and rougher detour routes through the mountains. In light of this, the Tellico Hatchery staff has continued to raise and stock quality trout throughout the region. This could not have been possible without assistance from other state and federal hatcheries that brought surplus fish to replenish depleted raceways, picked up long haul deliveries, and provided valuable resources to help mitigate the unfortunate situation. Hatchery staff also held multiple outreach events this year including the annual Tellico Trout Fest in downtown Tellico Plains and a handful of school programs. We stocked the very first Palomino Rainbow Trout in the Hiwassee River, made significant structural and operational improvements, and cleared the hatchery grounds of more bears than the Country Bear Jamboree.

The Streams Crew has had a busy year working on a variety of projects in addition to their standard cold and warmwater sportfish surveys. A multi-year Southern Appalachian Brook Trout restoration on southern Cherokee National Forest streams was deemed a success after natural reproduction was documented; effectively reestablishing over three miles of native Brook Trout waters. This year brought much needed operational changes at Center Hill Dam made possible by a vital partnership forged between USACE and TWRA Fisheries during revisions to the Water Control Manual. Changes include mandated seasonal orifice gate releases to maintain consistent flows and decreased maximum time between turbine releases that otherwise degrade water quality in the tailrace. The crew responded to an unusual fish-stranding event caused by flooding on the Caney Fork River in May as dozens of state-endangered Lake Sturgeon were found trapped in isolated pools of a small tributary. With help from local landowners, TWRA Fisheries and Law Enforcement hand-collected and transported 31 very large sturgeon back to the mainstem of the Caney Fork. Access to regional fisheries continues to be a focal point of our program. Upgrades to many parking areas, ramps, and piers were completed with the highlight being improvements at the Moody access area on Dale Hollow Tailwater. Utilizing Tennessee's Moment of Freedom Campaign funds TWRA, USACE, Trout Unlimited, Friends of Dale Hollow Lake, and Clay County partnered to renovate sidewalks, trails, and two fishing piers including one ADA-compliant fishing pier on this Obey River access area.

Both crews assisted with and coordinated programs for the Southern Division AFS meeting in Chattanooga, the inaugural TWRA Fisheries Division Workshop at Fall Creek Falls State Park, and a well-attended public meeting at Lee University concerning management of the Hiwassee River trout fishery. These events and the aforementioned accomplishments could not have been successful without two key members of our crews, Jessica Matoy and Justin Spaulding who were awarded TWRA Fisheries Technician and Biologist of the Year, respectively. Their ingenuity and out-of-the-box thinking, continued professionalism, and unparalleled dedication to the mission of TWRA has greatly enhanced fisheries throughout the region and state for future generations Congratulations Jessica and Justin!



Student Fisheries Association at TTU

By: Eduardo Toala-Hidalgo

The Tennessee Technological University (TTU) Student Fisheries Association (SFA) has had a successful and exciting 2024. We have provided our membership with valuable volunteer opportunities, professional development, conference funding, and socialization with like minded individuals. Thanks to our members and collaborators, we held and assisted in various events on campus and in communities across Tennessee. Additionally, with the help of campus wide events and our amazing officers, we have doubled our membership, boosting student involvement within the association.

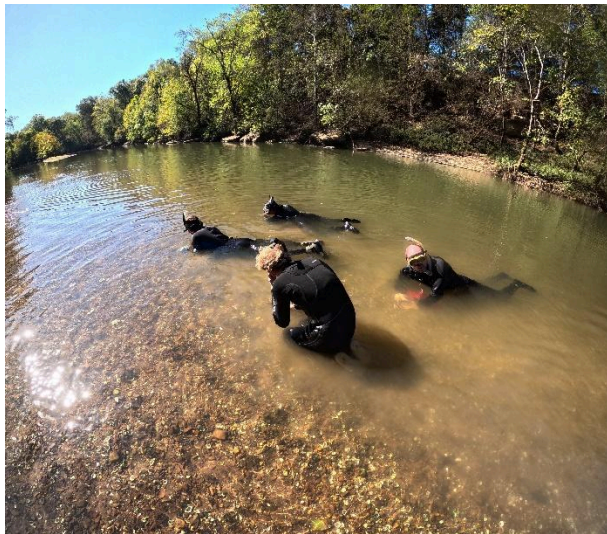
We began the year assisting TWRA Region 3 personnel with an artificial habitat dispersal project at Fall Creek Falls. Our members present were able to connect with TWRA biologists in the area as well as learn how to build and disperse artificial habitat in lake systems. Several graduate and undergraduate members also attended the Southern Division American Fisheries Society meeting from February 1st-4th. This conference offered opportunities to network, present research, and enjoy incredibly informative workshops and seminars. As the spring semester progressed, we held various monthly meetings, attended fisheries related seminars, and assisted The Evergreen Society in various trash cleanups at Cane Creek Park. We also elected a temporary Undergraduate Representative, Mason Pyburn, given the graduation of our previous officer.

March and April were busy months for our membership. We started off with a social event at East Blackburn Fork where we worked on our native fish identification and went over some basic sampling methods. Eight of our members were able to tour facilities at Conservation Fisheries Inc. in Knoxville, providing them the chance to learn about the wonderful work behind endangered and nongame species propagation. Five of our members attended the 2024 Nature Rally in Standing Stone State Park. Here, members were able to hold educational demonstrations related to aquatic invertebrates with the hope of instilling a lifelong appreciation of all stream inhabitants in the youth present. Members also assisted in The Wildlife Society's 2024 Beast Feast fundraiser. At the end of the spring semester, SFA held officer elections for the 2024-2025 school year and elected Eduardo Toala-Hidalgo (President), Tom Miles (Vice President), Tony Kumetis (Treasurer), and Riley Widdifield (Undergraduate Representative).



Over the summer, a great number of our undergraduate and graduate members remained busy with fisheries related research and work opportunities that would provide applicable field and lab experience. Graduate students continued field work and undergraduates, either as paid technicians or as volunteers, assisted on multiple research projects. We began the Fall semester in August, by participating in the University's Mix and Mingle campus wide event and displaying our association to incoming freshmen and transfers. This brought us an encouraging number of members leaving us at 40 active members for the semester.

In September, we assisted TWRA in three-pass electroshock surveys on the North River at Cherokee National Forest. SFA also held a social event at The Boils Wildlife Management Area and learned how to identify common nongame species of fish and aquatic invertebrates. Additionally, we also provided a workshop for some common sampling techniques like kick seining and snorkel surveying. Various members also attended a great seminar by Dr. Bernie Kuhajda (Aquatic Conservation Biologist; Tennessee Aquarium) on TTU campus during which Dr. Kuhajda presented a talk on the past, present, and future state of aquatic biodiversity in the southeastern United States.



We kicked off October with many members attending the Tennessee Cooperative Fisheries Research Unit Annual Meeting and displaying ongoing projects. Shortly after, SFA held a research panel with The Wildlife Society to expose incoming students to the research being done by their professors. We were able to assist

TWRA's malacologist in a mark-recapture survey targeting mussels on the Duck River. Members present had the opportunity to learn basic mussel ID, conduct snorkel surveys, and network with TWRA personnel. Within a week, a couple of our members assisted USFWS and SARP in a large-scale Barrier Assessment effort in Southern TN. At the end of October, SFA assisted TWRA with an outreach event called Feather to Fork at Sawbriar Preserve and exposed a large number of hunters and high school students to fisheries and biology career paths.

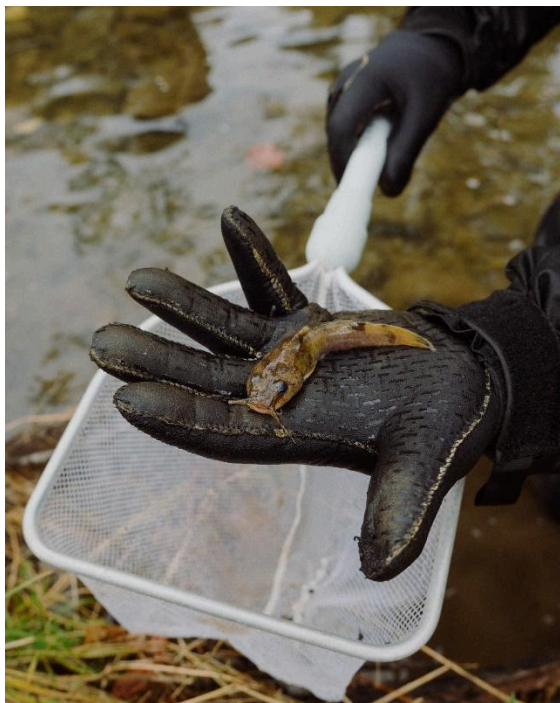
As the semester progressed, several of our members were able to assist one of our graduate members by conducting seining surveys for Barrens Topminnows, giving them a chance to see an endangered species in the wild as well as practice common sampling techniques. Soon after, more members assisted another graduate student with their research on Spottfin Chub by conducting snorkel surveys and collecting habitat data. To end the year, a record number of SFA graduate and undergraduate members attended and presented either orally or through posters at the 2024 Southern Fisheries Council meeting in Little Rock, Arkansas.

With our semester ending, we are beginning to plan for a Fish Fry fundraiser in the Spring, our Kid's Fishing Event in the Summer, and several other outreach events within our immediate surrounding counties. Given our growth this year, SFA hopes to become a reliable source of volunteers for our partners throughout Tennessee. Our membership is beyond excited to get out in the field and develop as professionals. We look forward to remaining an active subunit of the Tennessee Chapter of the American Fisheries Society.

Conservation Fisheries, Inc.

By: Shannon Murphy

In 2024, Conservation Fisheries, Inc. worked with 17 rare, non-game species representing 21 wild populations and released over 13,000 fish into the wild for restoration projects. Species that we have released this year include Barrens Topminnows (235) Boulder Darters (964), Buck Darters, (439), Carolina Madtoms (489), Duskytail Darters (292), Leopard Darters (331), Marbled Darters (344), Roanoke Logperch (190), Spotfin Chub (6,680), Tennessee Dace (2,300), and Yellowfin Madtoms (384). Some young-of-the-year (YOY) fish that were not released were either transferred to other facilities or are kept back at our facility for a variety of reasons. We are proud to be working on many long-standing projects, including work with some of our earliest species (such as Yellowfin Madtom and Spotfin Chub), but are glad to have the opportunity to take on new restoration projects as well! Late in 2024, after much anticipation and excitement, we collected our first Candy Darter broodstock to overwinter in our facility in preparation for next spring's spawning season. Next year we look forward to welcoming back two species to our hatchery: Blackside Dace and Cumberland Arrow Darters for Cumberland Gap National Park restoration.



While CFI's main focus is always on propagation and restoration of non-game, native freshwater fishes, we take pride in the success of our education and outreach programs. Our Volunteer Program has allowed us to work with 15 seasonal volunteers and several scholarship volunteers, totaling just over 1,000 volunteer hours. Our next volunteer season is from February-April 2025, and applications will be available on our website starting the first week of January 2025. CFI has also created several outreach opportunities outside of the hatchery! We have hosted several educational panels in our community featuring panelists not only from CFI but with partners at Tennessee Wildlife Resources Agency, Tennessee Valley Authority, Little River Watershed Association, and more! Our staff have also served on several other panels this year, visited and spoken with classrooms to teach kids of all ages about freshwater biodiversity, and participated in many river and field days to encourage folks from all walks of life to wade in the water or stick their face in a stream.



We have been overwhelmed with joy from not only working with these beautiful native species, but from sharing their stories with our community and beyond.

University of Tennessee Wildlife and Fisheries Society

By: Belle Jenkins, *Fisheries President*

The University of Tennessee AFS student subunit is part of a joint organization with the UTK Wildlife Society student chapter, collectively known as the UTK Wildlife and Fisheries Society (UTK WFS). We have had a busy and successful year, with members participating in various field opportunities.



In February, many of our members attended the 2024 Southern Division American Fisheries Conference in Chattanooga, Tennessee. This event provided students with numerous workshops and opportunities to connect with professionals, helping them secure post-graduate jobs and graduate positions.

In March, our members hosted the 2024 UTK Wild Game Dinner, a public event where various wild game species were cooked in multiple ways and served at a buffet-style dinner. The event also included a live and silent auction. Proceeds from the wild game dinner help fund attendance at professional meetings and other events throughout the year. The dinner was a great success.

Some members of the UTK WFS student chapter and AFS student subunit participated in the 2024 Southeastern Wildlife Conclave, hosted by Murray State University last spring. We earned first place in three competitions and second place in the trail camera division.

We kicked off the new school year by hosting a back-to-school meet-and-greet for members and new students interested in wildlife and fisheries. In September, members assisted with the Index of Biotic Integrity (IBI) sampling in the French Broad River with the Tennessee Valley Authority (TVA). Over the summer, most of our members worked internships or jobs, while others focused on research projects.

In October, many of our members volunteered at SturgeonFest 2024, where we conducted educational outreach, informing attendees about Lake Sturgeon and answering their questions.

In December, our students conducted sturgeon sampling with Dr. Engman, Dr. Izzo, and graduate student Adam Bajo-Walker. The sampling project had a successful year.



As the semester winds down, our members are preparing for a busy spring, full of conferences, volunteering, and outreach activities.

Tennessee Valley Authority (TVA)

By: Jon Michael Mollish, Matt Reed

Todd Amacker, Tyler Baker, Daniel Geren, Jessica Giddens, Clint Jones, John Justice, Adam Kennon, Kurt Lakin, Dave Matthews, Shannon O'Quinn, Kevin Parr, Justin Wolbert

TVA biologists had another busy year! Below are highlights from 2024.

Monitoring, Projects, and Partnerships

TVA's legacy monitoring programs focus on assessing ecological conditions throughout the Tennessee River and neighboring watersheds both in tributaries and reservoirs. These efforts drive a wide range of projects for stewardship, internal and external compliance, and support our many partners.

Over 150 aquatic community surveys were conducted in 2024 as part of our stream monitoring programs across the seven states of the Tennessee Power Service region. Of these surveys, nearly 100 were conducted across the state of Tennessee. More than 115,000 individual fish were collected (> 80,000 in Tennessee) constituting nearly 200 species (>170 in Tennessee).

A major highlight was the discovery of Snail darter, *percina tanasi* in the Duck River at two locations. These first known records for the Duck River were at Hite Ford, river mile 23.5 and near the mouth of Beaverdam Creek, river mile 46.5. Additionally, Snail darter was discovered at Indian Creek, Hardin, TN at river mile 4, another first known record.



“Snail darter, *Percina tanasi*, from the Duck River”

Another species of note was the discovery of Silverjaw minnow, *Notropis buccata*, in the Clarks River at river mile 9.2, a tributary to the lower Tennessee River in McCracken County, KY. This is the first TVA record for the Tennessee River system.

TVA and its partners completed mussel surveys in the Elk, Hiwassee, and Caney Fork River systems in 2024:

TVA conducts mussel surveys at five sites on the Elk River below Tims Ford Dam every three years. This year, mussel surveys included observations of the following nine federally listed or proposed listed species: *Epioblasma triquetra*, *Fusconaia cor*, *Fusconaia subrotunda*, *Hemistena lata*, *Lampsilis abrupta*, *Pleurobema oviforme*, *Pleuronaia barnesiana*, *Pleuronaia dolabelloides*, and *Theliderma cylindrica*.

A first of its kind, multi-year freshwater mussel survey was completed in the Apalachia cutoff reach of the Hiwassee River, a section of river rarely surveyed. TVA and partners conducted surveys at 16 sites within the cutoff reach, located between TVA's Apalachia Dam and Apalachia Powerhouse in Cherokee National Forest, Polk County, TN. Seven mussel species were documented, including the following federally listed or proposed listed species: *Pleurobema oviforme*, *Pleuronaia barnesiana*, and *Venustaconcha trabalis*. Environmental DNA water samples were collected to compare against traditional sampling means and are in the process of being analyzed.



“TVA’s Matt Reed and TWRA’s Brittany Bajo-Walker on the Hiwassee River”

Surveys for Cumberland pigtoe, *Pleuronaia gibber* and Bluemask darter, *Etheostoma akatulo* were completed in the Upper Caney Fork River drainage above Great Falls Dam, in the mainstem Caney Fork as well as the following tributaries: Collins River, Cane Creek, Rocky River, and Calfkiller River. Highlights included the documentation of 75 live *Pleuronaia gibber* at a shoal below Shellsford on the Collins River as well as documenting Bluemask darter at almost all previously known locations within the drainage.

TVA’s aquatic stewardship efforts provided one million dollars to support multiple on the ground projects. Together with our partners, we aimed to improve water quality and aquatic habitat by supporting:

- Monitoring programs (Index of Biotic Integrity, Climate Change Sentinel Stream Monitoring)
- Snail darter post-delisting monitoring, a five year agreement to further evaluate snail darter populations
- Barrier removal projects in Cherokee National Forest, working with the Tennessee Aquatic Connectivity Team to identify and remove barriers, and providing funding for the Harms Mill dam project
- Tennessee riparian incentive program, working with the Tennessee Department of Agriculture to establish riparian buffers in Tennessee – \$500k spent over the next eight years
- Conservation Fisheries Inc., work with Sickle darter, *Percina williamsi*, and Boulder Darter, *Nothonotus wapiti*

- Paint Rock River Watershed habitat and stream bank improvement projects
- Tennessee River Basin Network meeting 10 year anniversary – over 130 attendees and recognized the good work being done in the Valley.
- Stream Sweepers in the Clinch River
- Million Trees Program and Shade your Stream– Provided funding to support planting trees in urban environments and teach public how to plant riparian buffers
- Graduate project, water quality study in the Calfkiller River, TN
- Numerous scientific studies and research
- Outreach – over 50 educational events across the Valley reaching tens of thousands of students and members of the public
- National Geographic Photo Ark Expedition



“TVA and National Geographic’s Joel Sartore during the 2024 Photo Ark expedition”

Monitoring reservoirs, 42 fish community monitoring sites on 15 reservoirs were completed this Fall as part of the TVA Reservoir Vital Signs Monitoring program. This program, started in 1990, developed the Reservoir Fish Assemblage Index (RFAI) to describe the health of our reservoirs based upon resident fish communities in our reservoirs.

Spring Sportfish surveys, another reservoir fish monitoring project, are conducted on nine, main-stem reservoirs of the Tennessee River to primarily assess black bass and crappie populations. The 2024 surveys resulted in over 7,400 bass and over 1,300 crappie individuals collected of which Chickamauga Reservoir recorded the most Largemouth Bass (1,333), Pickwick Reservoir recorded the most Smallmouth Bass (93), and Chickamauga recorded the most Spotted Bass (126). Catch per unit effort (fish/hr) was highest on Chickamauga (74), Wilson (69.9), and Gunter'sville (60.9) reservoirs.

These projects and accomplishments could not be completed without the tremendous help from our partners. We work with amazing people in an amazing part of the world and are fortunate to have the opportunity to build and maintain these partnerships. Thank you all!