Under the Dock

May-June 2025



Newsletter of the Georgia Chapter of the American Fisheries Society

WHAT'S INSIDE

Click on title to go directly to page

- Mark Your Calendar (important dates to remember)
- Dockside Message from the Chapter President
- News and Updates
- Campus Corner
- Understanding Climate Change and Its Impact on Fish
- Georgia Resiliency Conference Jekyll Island
- 2025 Sponsor Highlight Edge's Aquatic Services
- Celebrating 75 Years of Conservation
- Georgia AFS Art and Photo Contest
- Plugged In
- Did You Know
- Fishy News Around the World
- Bubba's Place
- Bubba Bass Safety Tip
- Fin and Games
- Future AFS/SDAFS Meetings
- General Information



Mark Your Calendar

- June 7
 - Girls Who Rule the World Camp
 - We need volunteer anglers
- June 14
 - Steve Harvey Boy's Mentoring Camp
 - We need volunteer anglers
- August 10 14
 - AFS 155th Annual Meeting
 - San Antonio, TX
- October 20 21
 - Georgia Resiliency Conference 2025
 - Jekyll Island Convention Center
- October 26 29
 - SEAFWA (Biloxi, MS)
- February 3 5, 2026
 - Georgia AFS 2026 Annual Meeting
 - Villas by the Sea, Jekyll Island
- March 5 8, 2026
 - SDAFS New Orleans, LA

OUR MISSION

The mission of the American Fisheries Society and the Georgia Chapter is to improve the conservation and sustainability of fishery resources and aquatic ecosystems by advancing fisheries and aquatic science and promoting the development of fisheries professionals.

You can help support our mission by becoming a member of Georgia AFS, joining the American Fisheries Society, becoming a Georgia AFS Sponsor, donating to our annual fundraiser, or participating in our annual meeting. Visit our website for more info.

https://gaafs.org/

The newsletter is interactive - if the font is blue or underlined you can click on it for more information. Click on images with a play button for a video



We are looking for high-quality photos to use for the newsletter cover page. We are in need of pictures showing fisheries professionals and students working (lab, fieldwork, etc.).



Do you have an idea for an article?

We welcome a broad range of submissions that address research and ideas relevant to marine and freshwater finfish and shellfish and their respective fisheries and environments. Articles range from 250 to 1200 words.

Contact us at GeorigaAFS@gmail.com if you have questions. We also welcome suggestions for an aquatic species to highlight, safety tips, and ideas for the sections *Did You Know* and *The Bookshelf*.



Message from the President

Jackson Sibley

Greetings, Georgia AFS!

Spring is in full swing across our great state. From the Blue Ridge to the Coastal Plain, the reminders of seasonal changes surround us. For fisheries folks, spring often represents the busiest time of the year. Hatching houses are full, field schedules are packed, and academia is immersed in finals and thesis defenses as the annum concludes. This time of year, workloads can be stressful and often have the to overwhelm us. And tendency uncertainties across governmental strata have the capacity to exacerbate our professional stressors. In the spirit of spring, I want to offer a few words of optimism-a reminder of our purpose, resources, and the simple joys that sustain us in this profession:

What you do matters. With the repetition that comes with a workload that operates on an annual cycle, it is so easy to lose focus on the impact we have on ecosystems, the economy, and societal well-being. If our goal as fisheries workers is to inform, transform, and protect the integrity of our state's aquatic resources, remember that each of us represents a small,

but important contributor to that goal. Taking part in a mussel translocation may seem like a minor activity, but the seeds you're planting verv well ensure the resiliency. may redundancy, and representation of species that would otherwise be flirting with extinction just a couple decades into the future. Feed and fertilizer stacked in hatchery storerooms may symbolize tedium and sore arms, but their methodical application is the catalyst for growth and survival enabling one million resident anglers to make lifelong memories or feed their families. Viewed in isolation, our daily duties can feel menial, but I encourage you to consider the context of your routine. Collectively, we move mountains.



AFS offers a host of professional support resources. Most of us are familiar with the

print resources, conferences, professional certifications offered by the Parent Society. You may not be aware of the some of the other support the Society offers its members. Here are a few great resources you might be missing out on:

- Continuing education: These opportunities, such as webinars, take place several times a year on topics across the fisheries spectrum. With a variety of free and paid options, these can help you both broaden and hone your skillset.
- Policy: The Society takes action on federal and state policy that can impact fisheries resources nationwide. From redefining Waters of the United States to legislation concerning climate change, AFS engages policymakers through statements and policy letters to enhance legal protections of our aquatic ecosystems. Additionally, AFS is currently compiling statements to advocate on behalf of fisheries workers impacted by recent mass layoffs. If you've been affected, AFS wants to hear from you.
- Community Check-Ins: In the wake of recent federal workforce and budget cuts, current AFS Executive Director Jeff Kopaska initiated a web-based community check-in series. These are live, collaborative events held on Microsoft Teams and open to AFS members. The next check-in will take place Wednesday, May 7th at 3:00 PM. An excerpt from the May 2025 AFS Newsletter: With so many things happening at various levels of AFS, federal and local

(USA, Canada, governments states provinces, etc.), universities, and agencies, these concurrent chaotic events can result in feelings of confusion and apprehension. Every month, we'll be hosting a space for our community to talk, listen, and join in fellowship with other fisheries professionals. Executive Director Jeff Kopaska will provide news and updates from DC and beyond, as well as what AFS is doing in response (and why). We want to provide a space for people to share and be heard. Please tune in, grab a cup of coffee, and let's chat.

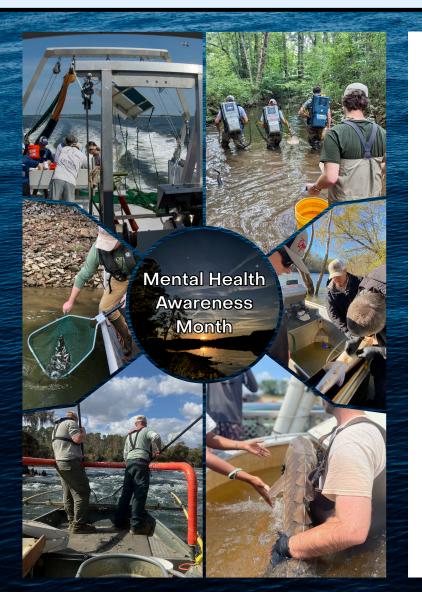


Fishing is the great stress reliever. Far be it from me to explain the benefits of fishing to a team of fisheries professionals; however, this may be an opportune moment for us to collectively reflect on its restorative value. The healing properties of the great outdoors have been well documented within the medical community. Likewise, fishing has been shown to provide supplements to the senses far beyond what we might expect. One recent study among recreational anglers demonstrated a 15% lower stress score of avid

anglers vs. their less devoted counterparts. Similarly, a survey of 1752 anglers found that those who fished more frequently reported significantly reduced incidences of depression and anxiety coupled with higher mental well-being. Reconnecting with "blue spaces" provides a reprieve from the frenzy of 21st century living—a proverbial push of the reset button. In short, fishing improves lives. Even if you don't fish, you can take pride in the simple fact that your work contributes to the overall welfare of society.

All that said, I ask you to take some time to dive into this newsletter and learn about some local fishy things to be excited about: recent Georgia AFS accomplishments, opportunities on the horizon, and how you can get involved. 2025 is shaping up to be a great year for the Chapter, and I am grateful to be a part of such a resilient community.

Respectfully, Jackson



May is Mental Health Awareness Month

Mental health awareness plays a crucial role in reducing stigma, encouraging early intervention and fostering empathy and understanding. By normalizing conversations around mental health, it nurtures a more compassionate society where individuals feel empowered to seek help, leading to improved mental wellbeing.

National Council of Mental Wellbeing

MHA Mental Health Month Action Guide

MHA Take Action for Yourself

NEWS & UPDATES

Georgia AFS 2026 Annual Meeting

Sound Science for Sustainable Fisheries: Bridging Management, Policy, and Conservation

The Georgia AFS EXCOM is excited to announce we are returning to Villas by the Sea for Georgia AFS 2026. The EXCOM and Planning Committee has already begun planning for the 2026 annual meeting. What to expect in 2026:

- Keynote Speaker
- Networking Activity
- Poster Social
- Student-Mentor Luncheon
- Annual Fundraiser
- Awards Banquet
- and more



Searching for Symposia Ideas

The Planning Committee is accepting symposia ideas for the 2026 annual meeting. You can email you ideas to Rebecca Brown at GeorgiaAFS@gmail.com.

Join a Committee

One way you can support Georgia AFS is by co-chairing or joining a Georgia AFS Committee. Each of the committee's have a responsibility that is essential to the success of Georgia AFS. No task is too small. Even seemingly mundane tasks are essential for the chapter to achieve its mission. Contact Chapter President Jackson Sibley (jasibley@edwards-pitman.com) if you are interested in co-chairing one of the committees listed below. Contact Rebecca Brown (GeorgiaAFS@gmail.com) if you would like to join a committee.

The following committees/sub-committees need a co-chair:

Financial Audit Grants Recognition Awards
Code of Conduct

Environmental Concerns
Past Officers

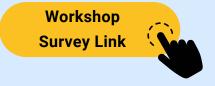
2025 and 2026 Georgia AFS Workshops

The Georgia AFS Continuing Education Committee has several 2-day workshops planned for 2025 and 2026.

- This summer, Dr. Brian Irwin will facilitate an R workshop.
- Early October or mid-December, Dr. Brett Albanese and a team of volunteers will lead a nongame fish identification workshop.
- Summer 2026, there will be a fish aging workshop.



We are currently in the process of finalizing the dates for the two scheduled Georgia AFS Workshops in 2025 and would greatly appreciate your valuable input to ensure these workshops best meet your learning requirements and availability. Your feedback on potential dates and specific topics of interest is crucial in shaping the content and scheduling of these important professional development opportunities.



Trout in the Classroom Manual/Curriculum Guide

The Georgia AFS Communications Committee is collaborating with the Georgia Trout Unlimited Education Committee Chair, Jay Shelton, to develop a Trout in the Classroom Manual/Curriculum Guide for Georgia teachers. While Trout in the Classroom (TIC) has been implemented nationally for over thirty years and several Georgia TU Chapters have local programs, a statewide TIC manual/curriculum guide does not yet exist.



Email Rebecca Brown (GeorgiaAFS@gmail.com) if you want to join the GA AFS Communications

Committee and help create a Georgia Trout in the Classroom Manual/Curriculum Guide.

Summary of 2025 Post-Annual Meeting Survey

The Georgia AFS leadership team is excited to be putting the thoughtful feedback and valuable insights from the 48 members who completed the 2025 post-meeting survey into action as we plan future chapter annual meetings. To promote transparency and collaboration, all comments, suggestions, and responses from the leadership team are available for members to explore on the 2025 Post-Meeting Survey Results webpage. Here are a few examples of what you will see on the webpage.

Suggestions/Comments

Awards Ceremony was too long

We should encourage more posters.

Response

This was one of the first things discussed by the Planning Committee after the meeting. The Planning Committee is working with the Awards and Recognition Committee to determine which awards are best presented during the Chapter Business Meeting (i.e. Certificate of Appreciation and Distinguished Service).

Georgia AFS uses email, newsletters, and social media to promote the annual meeting to professors and students across the state, encouraging them to both attend and present their research. Students can also apply for travel grants or awards to help defray the cost of attendance.

Visit the webpage for all posted suggestions and responses



We Need Volunteer Anglers

We're looking for enthusiastic volunteer anglers to help make a difference in young lives! Join us on Saturday, June 7th and/or Saturday, June 14th at Steve Harvey's Legacy Ranch in Upson County, GA (near Thomaston), where you'll have the opportunity to share your fishing expertise with high school students as part of a transformative outdoor mentoring experience.

Each year, the Steve & Marjorie Harvey Foundation hosts impactful mentoring camps at the Legacy Ranch, designed to empower young men and women with essential life skills, confidence, and inspiration. One of the most anticipated activities is fishing in the ranch's well-stocked ponds. It is an experience made even more special thanks to dedicated volunteers like you.

Camp participants will be divided into smaller groups and rotate through a series of thematic educational stations. The Georgia Department of Natural Resources has loaned us the use of one of their Reels on Wheels trailers to use at the "Intro to Fishing" station. As a volunteer angler, you'll help teach basic fishing skills such as tying lures, casting lines, and reeling in the catch.

Your time and passion can spark a lifelong love of the outdoors and make a lasting impact. Whether you're available for one day or both, we'd love to have you on board.

Interested? Please complete our Volunteer Form to sign up. (Volunteers must be 13 or older.)

June 7th Girl's Event (9:30 AM - 1:00 PM)



June 14th Boy's Event (10:00 AM - 3:00 PM)



Email Rebecca Brown (GeorgiaAFS@gmail.com) if you have questions.

National Fishing and Boating Week June 1 - 8

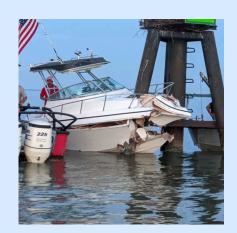
National Fishing and Boating Week is a nationwide celebration that typically takes place during the first full week of June each year. The event is designed to highlight the importance of recreational fishing and boating in the United States, promoting outdoor fun, conservation, and the protection of aquatic resources.

During this week, many states offer free fishing days, allowing people to fish on public waters without a license, making it an ideal time for beginners and families to try out the sport. Activities often include Kids Fishing Events (KFEs), fishing clinics, boat parades, educational programs, and community clean-ups to foster environmental stewardship and encourage safe, responsible recreation.

The 2025 FREE fishing days held in Georgia are May 31st, June 7th, and September 27th



Georgia DNR WRD provides a list places to go fishing with your family and a list of KFEs (event calendar)



Georgia DNR Law Enforcement
provides a list of approved boater
education classes

Review water safety before heading out on the water with family and friends



Supervise children around water - especially rivers and streams with strong currents



Life jackets work best when they are worn properly; kids should wear PFDs that fit



Anyone planning to operate a boat should know boating safety rules

Scientists and Social Media



Fisheries scientists should use social media to enhance the impact and visibility of their work. By sharing their research online, they can communicate complex scientific topics—such as sustainable fishing, marine conservation, and climate impacts—to a broader public audience in an accessible way. This helps combat misinformation, increase public awareness, and build trust in science-based management decisions. Social media also fosters collaboration with other researchers,

creates networking opportunities, and allows scientists to engage directly with stakeholders, policymakers, and students. In a rapidly changing environmental and digital landscape, social media is a powerful tool for fisheries scientists to educate, advocate, and inspire.

David Shiffman authored an insightful article on the use of social media in fisheries science and management titled "Social Media for Fisheries Science and Management Professionals: How to Use Bluesky and Instagram, and Why You Should." The article provides valuable guidance along with curated starter packs tailored for fisheries professionals. A Bluesky Starter Pack is a curated collection of recommended accounts and custom feeds designed to help new users quickly connect with communities and content that align with their interests.

Georgia AFS and Social Media



Georgia AFS uses social media to:

- Advertise upcoming meetings, webinars, workshops, and conferences
- Showcase fisheries work especially the work of our members, sponsors, and donors
- Celebrate awards, promotions, publications
- Educate the public and advocate for conservation
- Post job openings
- and more

A Successful Georgia Aquaculture Conference

The 2025 Georgia Aquaculture Conference, held on April 18, energized the state's aquaculture community by bringing together more than 100 industry leaders, researchers, and stakeholders to dive into the latest innovations and opportunities in sustainable aquaculture.

Hosted by UGA Marine Extension and Georgia Sea Grant, along with the College of Agricultural and Environmental Sciences and the Warnell School of Forestry & Natural Resources, the conference sparked collaboration, inspired fresh ideas, and strengthened the network driving Georgia's aquaculture growth.

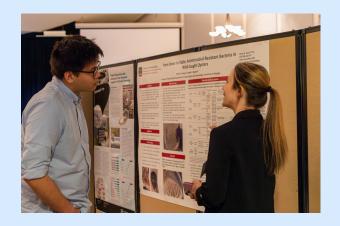
Packed with dynamic, concurrent sessions, the event tackled a wide range of hot topics, including:





Packed with dynamic, concurrent sessions, the event tackled a wide range of hot topics, including:

- · New and emerging opportunities in coastal and inland aquaculture
- Shifting market trends and strategies for industry expansion
- Navigating regulatory frameworks and the permitting process
- Smart investment approaches and financial planning
- Cutting-edge research, education initiatives, and workforce development





Who is Marine Extension and Georgia Sea Grant?

You have seen their logo. You have probably met some of our chapter members who work with Marine Extension and Georgia Sea Grant. But could you describe what Marine Extension and Georgia Sea Grant does for Georgia?

Marine Extension and Georgia Sea Grant serves Georgia's 11 coastal counties, providing research, education extension to improve the environmental, social and economic health of the coast. They work alongside communities, scientists, and coastal industries to find practical, sustainable solutions to local challenges. They inspire stewardship of our coastal resources and train the next of marine professionals generation through hands-on learning and workforce development.



Marine Extension and Georgia Sea Grant's mission is to improve the environmental, social and economic health of the Georgia coast through research, education and extension. Learn more about their work: gacoast.uga.edu

Their program exists through a federal-state partnership between the University of Georgia and the National Oceanic Atmospheric Administration's National Sea Grant College Program. There are a total of 34 Sea Grant programs located in coastal and Great Lakes states and territories.



Lowcountry Shrimp Collaborative

Researchers and fishermen from Georgia and South Carolina are working together to understand changes in shrimp populations in response to environmental shifts.

Read the new storymap that highlights some of the projects findings.









Are you looking for a job or an internship?

Georgia AFS maintains a Job Postings and Internships web page that includes current job postings and a list of websites that include job postings for fisheries/aquatic professionals.

Job Postings and Internships

The interviewing tips web page is the work of several fisheries professionals who interview potential candidates.

Interviewing Tips



Mock Interviews

Attention students - You do not want to miss out on this opportunity.

We have several of our Chapter members who have volunteered to host a mock interview session with students looking for an edge when interviewing for an internship or a job.

Email Rebecca Brown if you are interested or have questions.

GeorgiaAFS@gmail.com

The Georgia AFS Communications Committee created a mock interview packet for those who would rather have a friend conduct their mock interview.

Mock Interview Resources



Student Awards

AFS Marine Fisheries Section Student Travel Award (June 1)

Results of Membership Survey

A recent survey by the Georgia Chapter of the American Fisheries Society (Georgia AFS) aimed to understand the factors influencing membership decisions. The survey targeted newsletter recipients to provide the Georgia AFS Executive Committee (EXCOM) with data to enhance membership accessibility, appeal, and value.

Of the 20 respondents, 16 were current Georgia AFS members and 10 belonged to the Parent Society (AFS). All respondents showed an understanding of Georgia AFS membership benefits and how chapter dues support the organization's mission. Furthermore, 16 out of 20 understood AFS membership benefits, and 18 knew how their AFS dues contribute to the Society's mission. These findings will inform future strategies to strengthen engagement and membership within the chapter and the wider fisheries community.

Summary of Comments

Please briefly explain why you chose to be or not to be a member of Georgia AFS.

- Professional Development and Networking: Connection with industry professionals, networking, resume building, career connections, staying engaged in the fisheries network, professional development, and support of students and young professionals are key reasons for membership.
- Staying Informed and Support: Several mentioned wanting to stay informed about research and management practices in the state and connect with others in the field.
- Membership Benefits: Participation in workshops, low dues offering good value, and the overall benefits received from the organization.
- Practical and Personal Reasons: A few stated they joined due to employment reasons, important to maintain membership on CV, and a personal desire to support the chapter and its mission.
- Lack of Membership/Uncertainty: One individual stated they had not gotten around to joining and another was unsure if dues were current, while one cannot attend functions.

Please briefly explain why you chose to be or not to be a member of AFS.

- Professional Benefits: Access to journals and books, resume building, professional
 development, and staying connected. Membership is required to hold office in local chapters.
 Attending national meetings when possible is also a benefit for some members.
- **Financial Concerns:** Cost of dues is seen as expensive relative to benefits, and some only renew when planning to attend specific events.
- Organizational Issues: Concerns were raised about the national chapter removing climate change and diversity/inclusion language, and a perception of a shift towards political movements.
- Local Chapter Focus: Some members primarily engage with or are limited to events with the Georgia chapter due to job constraints or other factors.
- Lack of Engagement or Knowledge: Some individuals have not explored membership, are not deeply involved, or are unsure of its benefits for them.
- **Time Constraints:** Lack of time hinders some individuals from supporting or becoming involved in the organization.

Do you have anything else you would like to share concerning Georgia AFS membership or AFS membership?

- Local Chapter Value: There is a high level of satisfaction and professional benefit derived from the Georgia AFS chapter, specifically regarding its workshops, newsletters, and networking opportunities compared to the Parent Society.
- Leadership and Community: Georgia AFS has enthusiastic leaders and creates a strong sense of community, fostering involvement and inclusivity from members.
- National Chapter Concerns: Potential concerns exist about the AFS mirroring broader administrative trends, which may influence future support from members who value science and diversity.
- Ongoing Support: There is intent to continue supporting the Georgia AFS chapter.
- Parent Society Resources: The Parent Society has a wider breadth of influence and resources, including the *Fisheries* publication and online journals, but dues can be preventative.

Thank you to the 20 individuals who completed the Membership Survey in March. The Georgia AFS EXCOM would like feedback from more individuals whether you are a member or not. The survey link for the 2025 Georgia AFS Information Survey will remain accessible until the end of June for further participation.

Membership Dues

The Georgia AFS mission is to improve the conservation and sustainability of fishery resources and aquatic ecosystems by advancing fisheries and aquatic science and promoting the development of fisheries professionals. Your paid membership helps us achieve that mission.

Georgia AFS
Annual Membership Dues

\$10



What are some benefits of becoming a member of Georgia AFS?



Developing Relationships



Leadership Opportunities



Supporting Aquatic Conservation



Enhancing Your Resume



To vote on Chapter business/elections you must be a member of AFS.

AFS Membership Information

Membership in an AFS Chapter does not automatically make someone a member of the American Fisheries Society. To serve as an officer of Georgia AFS you need to be a member of AFS.

Consider joining the American Fisheries Society (AFS), the world's largest professional organization for fisheries scientists.



Understanding Climate Change and Its Impact on Fish

By Rebecca Brown and Camm Swift

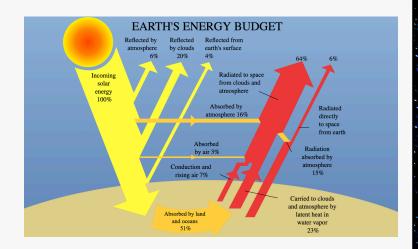
Before we can meaningfully discuss the effects of climate change on fish or other aspects of the environment, it's crucial to first understand what drives climate change. At the core of this understanding lies the Earth's energy budget. This budget explains how energy enters, moves through, and exits our planet, shaping the climate and weather patterns we experience.

Earth's Energy Budget

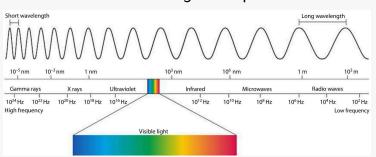
The Earth's energy budget is primarily driven by the Sun. Solar radiation enters the Earth's atmosphere in the form of shortwave radiation, including visible light and ultraviolet radiation. A portion of this incoming solar radiation is reflected back into space by clouds, atmospheric particles, and the Earth's surface (specifically, its albedo, or reflectivity). The remaining solar radiation is absorbed by the Earth's surface and atmosphere.

The absorbed solar radiation heats the Earth's surface, which then emits energy back into the atmosphere in the form of longwave radiation, primarily infrared radiation. Greenhouse gases in the atmosphere, such as water vapor, carbon dioxide, and methane, absorb a portion of this outgoing longwave radiation and reemit it in all directions, including back towards the Earth's surface. This process, known as the greenhouse effect has helped maintain the Earth's average temperature at a level suitable for life for millions of years.

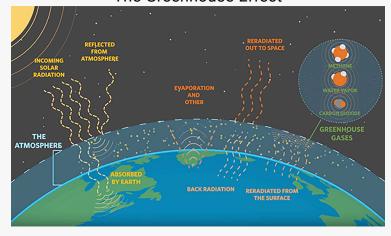
The balance between energy absorption and emission is delicate, and Earth's temperature is determined by this balance. Warming occurs when absorption is greater than emission, while cooling occurs when emission is greater



The Electromagnetic Spectrum



The Greenhouse Effect



than absorption. Climate change happens when this balance changes and greenhouse gases accumulate or diminish, leading to changes in the energy balance. Currently so-called greenhouse gases are increasing in the atmosphere and trap heat at higher levels. The rate of increase is much more rapid than past changes documented in the geological record making adaptation more difficult for both natural populations of organisms and human civilization.

The Enhanced Greenhouse Effect

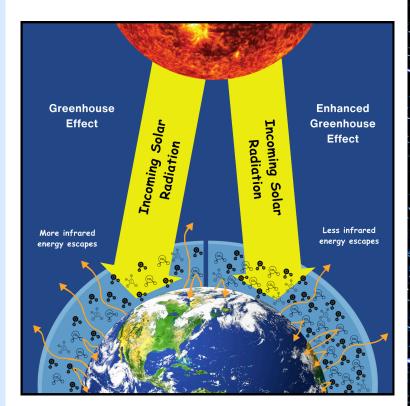
Since the Industrial Revolution, atmospheric concentrations of greenhouse gases have increased dramatically, leading to a stronger greenhouse effect and rising global temperatures. A key contributor to this trend is the widespread use of fossil fuels.

Fossil fuels are the remains of ancient plants and animals that lived millions of years ago. Over geological time, the carbon in their bodies was buried and subjected to intense pressure and heat, eventually transforming into coal, oil, or natural gas. This process effectively removed carbon from the active carbon cycle, storing it deep within the Earth. For millions of years, this sequestered carbon remained locked away, exerting little or no influence on atmospheric composition or climate.

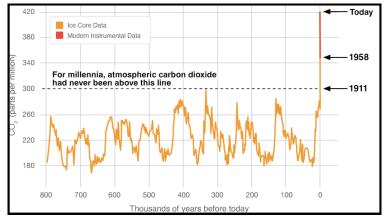
Industrialization, however, has reversed this long-term carbon storage. By burning fossil fuels, humans have reintroduced this once-sequestered carbon into the atmosphere at an unprecedented rate, disrupting the planet's energy balance and accelerating climate change.



Dr. Tyson explains under-emphasized elements of climate change and humanity's relationship to the Earth and our cities



The burning of fossil fuels releases vast amounts of carbon dioxide into the atmosphere leading to increased atmospheric carbon dioxide concentrations



How Climate Change Affects Fish and Aquatic Ecosystems

The consequences of climate change are farreaching, and aquatic ecosystems are among the most vulnerable. Rising temperatures, shifting habitats, disrupted life cycles, and altered food webs all pose serious challenges to fishes and the environments they inhabit.

As water temperatures increase, species that were once limited to warmer climates are now expanding into previously cooler freshwater regions. These non-native fish, plants, and invertebrates can outcompete native species for food and habitat, spread diseases, and destabilize ecosystems. Native fish, already stressed by changing conditions, may not survive these additional pressures.



According to modeling from researchers at <u>Oregon State</u>
<u>University</u> native fish will compete with non-native fish
fleeing their own warming and dwindling waters

Climate change also alters precipitation patterns and increases the frequency of extreme weather events such as droughts and floods. Reduced rainfall and higher evaporation rates can lower water levels in rivers and lakes, shrinking available habitats and isolating fish populations. On the other hand, intense storms can destroy spawning grounds, erode riverbanks, and disrupt nesting sites critical for reproduction.



In 2023, <u>Mississippi River water levels</u> in Memphis reached near-record lows, with the river level at a gauge in Memphis reaching -10.26 feet on September 26, 2023, close to the record low level of -10.81 feet measured on October 21, 2022. (National Weather Service)

Climate change is especially problematic in estuarine environments, where freshwater and saltwater mix. Extended droughts can decrease freshwater flow into these ecosystems, leading to higher salinity levels. This increased salinity can harm or eliminate species that rely on a specific balance of salt and freshwater, such as certain fish and shellfish. Ultimately, these changes can weaken the entire food web and decrease the overall productivity of these critical ecosystems.

Warming also is thawing many glaciers and causing rising sea levels that will push estuaries inland, often in areas where they do not have room to expand. This will reduce the available estuarine habitat. In other areas expansive coastal estuaries actually protect against ocean incursion onto the land if a natural transition to terrestrial habitats exists. Advance planning is urgently needed to develop strategies to facilitate these anticipated changes.

Another major consequence of climate change is ocean acidification. As atmospheric carbon dioxide levels rise, more of it is absorbed by the oceans, intensifying acidification. This change in ocean chemistry poses a serious threat to marine ecosystems. Coral reefs, shellfish, and other marine organisms that rely on calcium carbonate to build their shells and skeletons struggle to survive in more acidic waters. This, in turn, disrupts food chains and affects biodiversity, fisheries, and coastal economies.



The US seafood industry, encompassing both commercial and recreational fisheries, generated \$321 billion in sales and supported nearly 2.3 million jobs in 2022 (NOAA)

Fisheries are a major source of food and income for millions of people around the world. As fish stocks decline or migrate away from traditional fishing grounds, communities may face food insecurity and economic hardship. This is especially true in developing countries where alternatives may be limited.



Fishermen in Micronesia with their catch of the day - tuna



Salmon harvest is a lifeline for many in rural Alaska. Here, subsistence fishing provides food security for communities that otherwise must pay high prices for food staples.

As the climate continues to change, so too will our aquatic ecosystems. Fish and other aguatic species will be forced to adapt, migrate to new areas, or face the risk of The resulting extinction. shifts in fish populations and distribution will have significant consequences for fisheries globally, impacting the communities that depend on them for sustenance and income. Globally, fisheries play a vital role in supplying essential nutrients to hundreds of millions of people, highlighting the urgent need to protect and ensure the sustainability of these valuable resources.

strengthening the resilience of fish Bv protecting populations and aquatic environments, we can safeguard biodiversity, support sustainable livelihoods, and ensure food security for present and future generations. The health of our planet. humanity, and our oceans and freshwater ecosystems are all interconnected. It is imperative that we take bold and decisive action to address the impacts of climate change on fish and aquatic ecosystems and to ensure a sustainable future for all.

What Can You Do?

Climate change poses a significant threat to both marine, estuarine and freshwater ecosystems. For fishery workers to help protect fish and their habitats, they can:

- Stay updated on the latest research about how climate change affects fisheries.
- Raise awareness by educating others about its impact on aquatic environments.
- Participate in conversations and share reliable, science-based information.
- Incorporate greenhouse gas reductions into account when planning life and work activities.

Understanding the causes and effects of climate change is the essential first step. With knowledge and action, we can work toward lasting solutions that preserve the health of our planet and its ecosystems for future generations.

Resources

- Earth's Energy Budget
- NOAA Fisheries
- NASA Climate Global Temperature
- Climate Scientist Answers Earth Questions from Twitter
- AFS: Fisheries Why Climate Change Matters
- How Fish Are Being Affected by Climate Change
- Climate Change and Fishing



PBS: Biggest Myth about climate change



TEDx: The tipping points of climate change



Impacts of climate change on fisheries



Rising temperatures in the Gulf of Maine and its impact on the lobster industry



GEORGIA RESILIENCY CONFERENCE 2025

October 20 - 21, 2025

Jekyll Island Convention Center

The Georgia Resiliency Conference is hosted by the Georgia Department of Natural Resources and brings together more than 430 leaders and experts from the public, private, nonprofit and academic sectors to collaborate, raise awareness of work across the state, highlight progress and identify opportunities to do more. They are focusing on two areas:

- · What does a changing climate mean for Georgia?
- · What can we do about it?









Planning for the Georgia Resiliency Conference 2025 is currently underway. Please check the conference website, social media, or visit their website and sign up for email updates.







Registration will open in July of 2025.

Spensor Highlight

Our sponsors are critical to the success of our annual meeting and our efforts to promote the conservation and sustainability of our fishery resources and aquatic ecosystems in Georgia.



"Our goal is to provide our customers with great quality fish, with even better customer service, to help them create the pond of their dreams. We are here to stock ponds, help achieve the goals of trophy bass, and provide a variety of other services to keep your pond healthy and your fish happy!"

Edge's Aquatic Services specializes in lake management services, including fish stocking, aquatic vegetation control, and water quality monitoring.

VISIT THEIR WEBSITE

FOLLOW THEM ON FACEBOOK













In 2025, the United States celebrates the 75th anniversary of one of the most impactful pieces of conservation legislation in its history, the Sport Fish Restoration Act of 1950. Commonly referred to as the Dingell-Johnson Act, this landmark law laid the foundation for modern sport fishery management, restoration, and conservation across the nation. For three-quarters of a century, the Act has played a crucial role in preserving aquatic ecosystems, supporting recreational angling, and fueling local economies dependent on fishing and outdoor recreation.

The Sport Fish Restoration Act was modeled after the highly successful Pittman-Robertson Wildlife Restoration Act of 1937, which focused on wildlife conservation through a similar user-pay, user-benefit system. Introduced by Congressman John Dingell Sr. and Senator Edwin Johnson, the 1950 legislation aimed to reverse the steep decline in fish populations and habitat quality that had resulted from industrialization, pollution, and unregulated fishing.

The Act has generated over \$11 billion since its passage. These funds are used for the conservation and restoration of sport fish species and their habitats, and also support outdoor recreational opportunities and aquatic resources education programs that connect people with nature.

Through a federal excise tax on fishing tackle and motorboat fuel, along with license sales and charitable contributions, the sportfishing community contributes \$2 billion annually to angler and boater access, fisheries conservation, and habitat restoration efforts.

Sport Fish Restoration funds are formulated on 40 percent of the state's size in square miles (includes land and both inland and coastal waters) and 60 percent on the number of fishing licenses sold annually within the state. No state or territory receives more than five percent, nor less that one to one-half of one percent of the total funds available nationally.



Recreational fishing is more than just a pastime, it is a powerful economic engine. The latest report from Sportfishing in America shows that recreational fishing contributions continue to grow, now generating more than \$230.5 billion annually for the U.S. economy and supporting 1.1 million jobs nationwide. Additionally, the industry contributes \$70 billion in salaries and wages, reinforcing its role as a vital economic force.

How Sport Fish Restoration Act Funds are Used



The funds support the operation of fish hatcheries, both freshwater and coastal.



Funding can also be allocated for research and inventory projects related to fisheries.



The funds are used to improve and increase public access to waters for recreational boaters and anglers.



Up to 10% of the funds can be used for aquatic resource education and fisheries outreach programs.

\$381 million dollars were available to states and territories in 2024

- 200+ species of sport fish managed, studied, and monitored
- 9,000+ boating and fishing access areas for public use to be maintained and operated
- · 320+ hatcheries to stock more than 1 billion fish
- 850,000 students to receive aquatic education and be introduced to fishing

As we mark the 75th anniversary of the Sport Fish Restoration Act, we celebrate not just a piece of legislation, but a vision of conservation that continues to thrive. The future of America's sport fisheries will depend on continued support, innovation, and public engagement. By honoring the legacy of the past 75 years, we also recommit to protecting aquatic resources for the next generation of anglers, conservationists, and outdoor enthusiasts.

Georgia AFS Trash2Art Contest



The Georgia AFS EXCOM wants to invite you to participate in our Georgia AFS Trash2Art Contest. This is an opportunity to upcycle trash and create a two-dimensional or three-dimensional art piece representing fish and aquatic ecosystems.

Artwork will be scored on:

- Relevance to fisheries or aquatic ecosystems
- Creativity and Originality
- Use of discarded or repurposed material
- Artistic skill and execution

Georgia AFS Photo Contest

The Georgia AFS photo contest is a great way to interact with our fisheries community and showcase the talent and creativity of our chapter members. The theme for 2026 is "Human-Water Connection."

Photos will be scored on:

- · Relevance to the theme
- Visual and emotional impact
- Cultural or ecological storytelling
- Caption clarity and informativeness
- Technical quality







Plugged In

Take a break and listen to your favorite podcast or try one of the podcasts listed below.



AFS Sections Roundup: Student & Early Career Professional Subsection

Join us for another stop on our tour of AFS Sections! In this episode, we're featuring the Student and Early Career Professionals Subsection of the Education Section. Hadley Boehm, the current president of the Subsection, joins Beneath the Surface to chat about the Subsection's projects, as well as the benefits of mentoring and getting involved with AFS.



Bullhead Catfishes!

Katrina and Guy dig into one of America's native catfish groups: the bullheads!

Learn how to find and identify these fish, and get hyped to complete the bullhead slam for all seven species! This episode also includes a dive into the latest fanmail darter, so take a listen to hear what's on listeners' minds!



Should I keep this fish?

Corey and Ben chat with coastal biologist Mason Collins about his experience as a new hire at the Wildlife Resources Commission. They dive into fish harvest and the ethical questions posed by anglers. If you've ever wondered how fish biologists view fish harvest, this is the podcast for you!



The Sicklefin Redhorse and maintaining aquatic diversity with Dr. Luke Etchison

Preston sits down with the North Carolina Wildlife Resource Commission's Dr.

Luke Etchison. They discuss the recently described Sicklefin Redhorse and the impacts that Hurricane Helene had on restoration projects in western North Carolina. They also discuss the creation of the Blue Ridge Snorkel Trail and ways that conservation projects can be aided by getting support from public stakeholder groups.



United States of Aquarium

Wes chats with Dr. Mike Sandel and his graduate student, Tobin Davidson discuss the aquatic invasive species and their impacts.

Volunteers Needed

Steve and Marjorie Harvey 2025 Mentoring Camps

We need anglers and conservation outreach specialists



Marjorie Harvey's Girls Who Rule the World

Legacy Ranch
The Rock, GA
(Upson County)



Steve Harvey's Mentoring Program for Young Men



Volunteer Registration Form



bit.ly/4ilm9EE



Have questions? Email Rebecca Brown, GeorgiaAFS@gmail.com

Special thanks to the following organizations for their support

















DID YOU KNOW?

Scientists use the Lancetfish to help them understand the marine food web.

The two species of Lancetfish, *Alepisaurus ferox* and *Alepisaurus brevirostris*, are large bathypelagic fish that can grow up to 7 feet long. *A. ferox* is found in the Pacific Ocean, while *A. brevirostris* inhabits both the Atlantic and Pacific Oceans.



Lancetfish have a slow digestion process, which some suggest doesn't begin until food reaches the small intestine. This allows scientists to easily identify the contents of their stomachs, providing valuable insight into the mid-range of the marine food web. Research has shown that Lancetfish are cannibalistic and that the species *A. ferox*, in particular, has a diverse diet consisting of 97 different prey families. In

addition to other marine life, Lancetfish have also been found to consume plastic debris, including bags, twine, hair clips, straws, bottles, and other plastic fragments.

Source: How an Odd, Cannibalistic Fish Is Helping Us Understand the Mysteries of the Deep (NOAA Fisheries, June 18, 2028)



Other Interesting Facts About Lancetfish

- Alepisaurus, means "scaleless lizard." Lancetfish are scaleless fish, with smooth skin and pores along the lateral line.
- They swim to depths more than 1 mile below the sea surface.
- Lancetfish are hermaphrodites, possessing both male and female sex organs simultaneously.
- Their flesh is watery and gelatinous and enjoyed by large predators like sharks, tuna, fur seals, and other Lancetfish. But not humans.
- Many new species descriptions of fish, squids, and octopuses are based on specimens from lancetfish stomachs.

Fishy News Around the World

Click on title to access article

BROWN TROUT PROVEN TO SUCCESSFULLY NAVIGATE BEAVER DAMS

A groundbreaking study, led by the University of Southampton (UK), has revealed that brown trout can successfully navigate beaver dams -- obstacles which were previously thought to pose a significant barrier to their movement.

EVALUATING THE IMPORTANCE OF MESOPELAGIC PREY TO THREE TOP TELEOST PREDATORS IN THE NORTHWEST ATLANTIC OCEAN

In a study published recently in the ICES Journal of Marine Science, the MIT student-led team reports that the twilight zone is a major food destination for three predatory fish—bigeye tuna, yellowfin tuna, and swordfish.

SHARKS ARE DYING AT ALARMING RATES, MOSTLY DUE TO FISHING. RETENTION BANS MAY HELP

Nearly one-third of sharks are threatened with extinction, mostly due to fishing. While mandated releases are helpful, researchers discovered that they aren't enough to stabilize shark populations.

THREATENED BY WARMING WATERS, BROOK TROUT MAY BE ABLE TO ADAPT TO HOTTER WEATHER

Brook trout may have a genetic trick up their scales when it comes to adapting, with limitations, to heatwaves that threaten their existence.

DRUG POLLUTION ALTERS SALMON MIGRATION

The study, led by the Swedish University of Agricultural Sciences, revealed that commonly detected environmental levels of clobazam – a medication often prescribed for sleep disorders – increased the river-to-sea migration success of juvenile salmon in the wild.

OCEAN EDDIES -- THE FOOD TRUCKS OF THE SEA

Researchers from the GEOMAR Helmholtz Centre for Ocean Research Kiel and MARUM - Centre for Marine Environmental Sciences at the University of Bremen have revealed for the first time the lipidome composition of mesoscale eddies and their precise role in nutrient transport and the carbon cycle.



Leadership



Running an Effective Work Meeting (Great meetings take work)

Additional Resource:

10 Common Work Meetings and How to Facilitate Them

Communication



5 Techniques to improve your storytelling and improve your communication skills

Invasive Species



Trailer for the video - available for streaming on AppleTV, YouTube, and Amazon Prime

J.K. Simmons narrates The Fish Thief, which explores the mystery behind how and why the fish most prized by people nearly disappeared from the largest freshwater ecosystem on Earth: the Great Lakes.

Climate Change & Fisheries



Dr. Bryan Swistock discusses the effects of climate change on watersheds and stream flow



BUBBA BASS SAFETY TIP May is Electrical Safety Month

LITHIUM-ION BATTERY SAFETY





Only use manufacturer-provided or authorized batteries and charging equipment. All equipment should be certified by a nationally recognized testing laboratory.



If a battery overheats or you notice an odor, change in shape/color, leaking, or odd noises from a device, stop using immediately. Move the device away from anything that can catch fire.



Close before you doze! Remove the battery or charging device from power source once charging is complete.



Fire Safety Research Institute



Do not charge the battery at temperatures below 32°F or above 105°F.



Use a Class D fire extinguisher for smaller battery fires. Dropping a burning battery in a bucket of water works too.



Do not put lithium-ion batteries in the trash. Take them to a battery recycling center or household hazardous waste collection point.











List of Items that use lithium batteries

Bubba's Friends: Walleye (Sander vitreus)

Walleye is a freshwater fish native to much of Canada and the northern United States. In Georgia, Walleye are naturally found in the Tennessee River drainage and the Coosa River Valley, which flows through counties in northeast and northwest Georgia.

The name "walleye" comes from its pearlescent eyes caused by the reflective tapetum lucidum which, in addition to allowing the fish to see well in low-light conditions, gives its eyes an opaque appearance. Their vision affects their behavior. They avoid bright light and feed in low light on fish that cannot see as well as they do.

- Adults migrate to tributary streams in late winter or early spring to lay eggs over gravel and rock
- A highly regarded freshwater fish for eating, known for its mild, slightly sweet, and flaky flesh
- In February 2016, Wes Carlton caught a 14 lb 2 oz Walleye from Lake Rabun



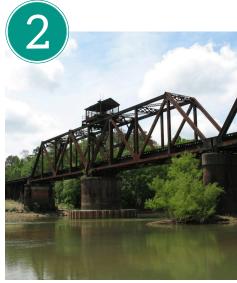
Georgia DNR WRD Fisheries Biologist, John Damer, with a Georgia Walleye

Georgia DNR Walleye Fishing & Stocking Information

Fin and Games

How well do you know your Georgia landmarks/historical sites?



















2025 Georgia AFS Sponsors

Thank you for your Support!

Platinum



Gold



Warnell School of Forestry & Natural Resources UNIVERSITY OF GEORGIA





Silver



















Bronze









Lake pecialist







Georgia AFS 2025 Fundraising Donors

Thank you for your Support!







































































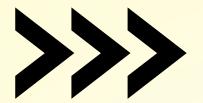




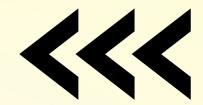












The benefits of being a member of the American Fisheries Society:

- Build your professional network support: you have access to more contacts, more
 resources, and more information; chances are, someone in AFS has "been there/done that";
 you can participate in one of the AFS Sections to connect with others who are likeminded
 and/or working in the same niche you are
- Demonstrate your professionalism: your membership demonstrates a commitment and dedication to your profession; you serve as a role model for those entering the field as well as have an opportunity to share your own insights and expertise with peers and colleagues
- Build your own skills: AFS has opportuinities for you to take on a leadership role that might
 not yet be available at work; participate in AFS workshops and webinars; present at
 conferences; write a newsletter article; become a mentor
- Have a voice: one of the important roles AFS is advocacy that is, helping decision makers understand what members
 do in the workplace and why it is important; a larger group
 has a louder voice
- Give yourself an advantage: build your professional reputation and boost your credibility; build your resume; connect with more experienced professionals



MORE ABOUT AFS



AFS PUBLISHES
JOURNALS



AFS ADVISES POLICY





AFS HAS A VARIETY
OF SECTIONS YOU
CAN JOIN
DEPENDING ON
YOUR INTERESTS



AFS SUPPORTS THE HUTTON JUNIOR FISHERIES BIOLOGY PROGRAM



AFS/SDAFS MEETINGS

Future AFS Annual Meetings



- 2025 San Antonio, TX: August 10 14
- 2026 Columbus, OH: August 30 September 3
- 2027 Pittsburgh, PA: September 26 30

Volunteer to Serve on an AFS Committee

Any active member of the American Fisheries Society (AFS) is welcome to serve on AFS Committees.





sd.fisheries.org/

Future SDAFS Meetings

- 2026 New Orleans, LA: March 4-7, 2026
- 2027 Alabama (Location and date TBD)
- 2028 Mississippi (Location and date TBD)

General Information

Support for Fisheries Conservation and Sustainability









Do you have a specialty license plate that supports the conservation of Georgia's fisheries and aquatic ecosystems?

More information: https://gadnr.org/license-plates

Click on the license plate for more information

80 percent of that \$25 fee goes directly to wildlife programs (\$19 the first year, \$20 with every renewal). Only \$5 goes to the State of Georgia General Fund.







Certified Fisheries Professional

There are many reasons for seeking professional certification. For some it represents achievement of a career goal while for others it represents a credential necessary to perform their job.

Frequently Asked Questions about certification

AFS Application Process and due dates

Pesticide Applicator License

If you wish to purchase or use a restricted use pesticide (RUP), you or your supervisor must have a pesticide applicator's license from the Georgia Department of Agriculture.

UGA Extension Pesticide Safety Education

Pesticide License Exam Study Videos

Job Hunting

AFS maintains an excellent Career Center page on its website. AFS provides several resources to help you find that fisheries job you want.

AFS Career Center

Do you want to improve your chances of getting that dream fisheries job?

Georgia AFS Interviewing Tips

Internships

Internships are a great way to gain valuable work experience employers look for in potential new hires.

Georgia AFS maintains a list of internships for fisheries students on its webpage.

GAAFS Internship listing page

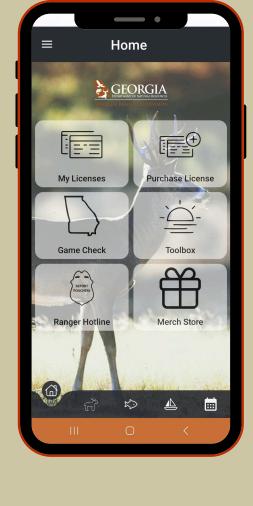


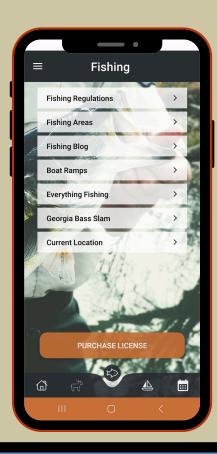
Have you tried the Go Outdoors GA app?

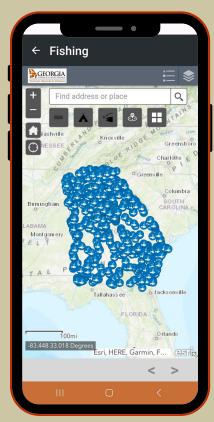
The Outdoors GA app, free in <u>Google Play</u> or <u>Apple store</u>, has multiple uses.

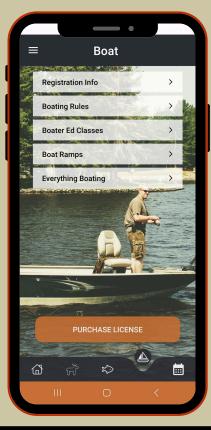
- Fishing regulations some rules change each year
- · Boating rules know before you go
- Fishing locations
- · Boat ramps plan your next kayaking adventure
- Tide information
- Purchase your fishing license (don't forget your SIP)
- · Store your fishing license avoid awkward moments
- Event calendar find a KFE near you
- Georgia DNR Fisheries Blog
- · And it has hunting stuff too

DOWNLOAD THE APP TODAY AND PLAN YOUR NEXT OUTDOOR ADVENTURE









GEORGIA AFS 2025-26 OFFICERS/EXCOM



President

Jackson Sibley
Ecologist
Edwards-Pitman

oceansibley@gmail.com



President-Elect

Jonathon Pritchard Silver Lake PFA Manager Georgia DNR

jonathon.pritchard@dnr.ga.gov



Recording Secretary-Treasurer

Dawn Franco Marine Biologist Georgia DNR CRD

dawn.franco@dnr.ga.gov





Executive Secretary-Treasurer

Rebecca Brown Retired Educator

GeorgiaAFS@gmail.com



Past - President

Chad Kaiser Fisheries Biologist Georgia DNR

chad.kaiser@dnr.ga.gov



Science Worth Sharing. Stories Worth Telling.

The Chapter newsletter aims to highlight the exciting work of fisheries professionals and students, share details about upcoming meetings and events, and offer other valuable information relevant to the fisheries community. We encourage a wide variety of submissions related to research, ideas, and developments in marine and freshwater finfish and shellfish, along with their respective fisheries and environments. Contributions can range from a short paragraph to three pages in length. If you have an idea for an article but are unsure whether it's a good fit, feel free to reach out, we're happy to discuss it. Suggested topics include, but are not limited to, the areas listed below.

- Fisheries science research updates or innovative ideas
- Articles with advice for students and young professionals
- Accomplishments such as recently publishing a research paper, giving a talk at a community event, being interviewed for a podcast series, and anything in the realm of communications and outreach
- Environmental concerns related to fisheries and aquatic ecosystems
- Safety tips for fisheries professionals and students

Send your submissions to Rebecca Brown at GeorgiaAFS@gmail.com.

Stay Connected

GAAFS Website

Facebook

Instagram

LinkedIn

Bluesky

Newsletter Editorial Board

Rebecca Brown
Jamie Roberts
Marion Baker
Kevin Cavallaro
Jim Page
Brent Hess
Dawn Franco
Camm Swift

Answers to Fin & Games

- 1. Big Chicken, Marietta
- 2. Train Swing Bridge (Ocmulgee River), Lumber City
- 3. Titan Missile, Cordele
- 4. Horton House, Jekyll Island
- 5. Rolater Park, Cave Spring
- 6. Covington Film Garden
- 7. West Point Depot
- 8. Ray Charles Memorial, Albany

Want to Know More?



9. Mary Willis Library, Washington (Oldest library in GA & our first free public library)