

Under the Dock

July-August 2026



Newsletter of the Georgia Chapter of the
American Fisheries Society

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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.

gaafs.org

Mark Your Calendar

Aug. 5

**GA AFS
Lunch-n-Learn**

Need to sign-up



Aug. 30 - Sep 3

**156th AFS
Annual Meeting
Columbus, OH**



Oct. 26 - 30

**SEAFWA 80th
Annual Meeting
Nashville, TN**



Nov. 21

**Gift of AFS
Membership
Application Due**



Feb. 2 - 4

**Georgia AFS
2027
Annual Meeting**

March 4 - 7

**SDAFS 2027
Alabama AFS Host
Location TBD**

Georgia AFS maintains a calendar on its [website](#)

NEWS & UPDATES

Save the Date: Georgia AFS 2027 Annual Meeting

The Executive Committee (EXCOM) of the Georgia Chapter of the American Fisheries Society is thrilled to announce that the 2027 Georgia AFS Annual Meeting will take place from February 2 to 4, at the Rainwater Conference Center in Valdosta.

After evaluating several exceptional venues, the EXCOM chose the Rainwater Conference Center for its outstanding meeting facilities, convenient location, and proximity to key academic and natural resource partners in South Georgia. Valdosta is home to Valdosta State University and is near Abraham Baldwin Agricultural College, offering fantastic opportunities to engage with students, faculty, researchers, and fisheries professionals from across the region.



The theme for the 2027 Annual Meeting is "Mountains to Marshes: Conserving Georgia's Aquatic Resources." This event will continue the Chapter's tradition of bringing together fisheries scientists, resource managers, educators, students, consultants, and conservation professionals from throughout the state. It will provide a platform for sharing research, tackling emerging management challenges, exchanging innovative ideas, strengthening professional networks, and exploring strategies for the conservation and sustainability of Georgia's diverse aquatic ecosystems—from the coldwater streams in the North Georgia mountains to the thriving estuaries and salt marshes along the coast.

Please save the dates and plan to join us in Valdosta from February 2 to 4, 2027. More information regarding registration, abstract submissions, sponsorship opportunities, lodging, and symposium ideas will be shared in the upcoming months.

We look forward to seeing you in Valdosta for another outstanding Georgia AFS Annual Meeting!

Georgia AFS Lunch-n-Learn in August

Title: *Integrated Pest Management (IPM) for Nuisance Aquatic Plants: Science, Strategy, and Implementation*

Date and Time: August 5, 2026 (11:00 AM - 12:00 PM)

Presenters: Dr. Robert Bringolf, Wesley Gerrin, and Dr. Jay Shelton

Target Audience: Lake managers, fisheries professionals, natural resource agencies, consultants, lake associations, and aquatic resource stakeholders.

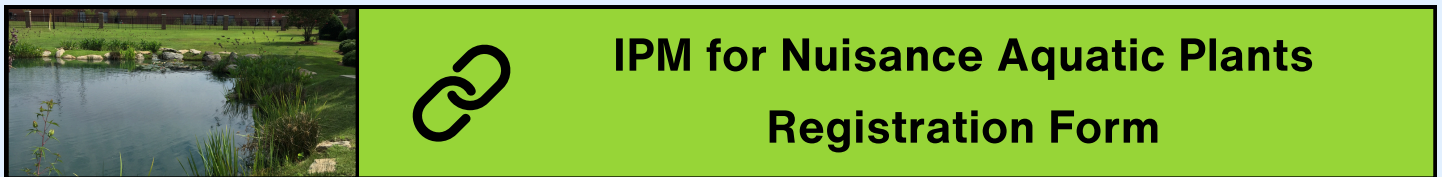
CEU Credit: 1 CEU credit for pesticide applicator license recertification

Cost: Free for Georgia AFS members.

Not a member yet? Join Georgia AFS through our [online store](#).

Registration: Be sure to complete the registration form to receive the webinar login information before the event.

Additional information on the [Georgia AFS Workshop](#) **website.**



Georgia AFS to Host 2030 SDAFS Spring Meeting

The Puerto Rico Chapter of the American Fisheries Society was recently selected to host the 2030 Annual Meeting of the American Fisheries Society. As a result, Puerto Rico is no longer available to host the 2030 Spring Meeting of the Southern Division of the American Fisheries Society, despite having previously volunteered.

The Georgia Chapter is well-positioned to successfully host this event. The Chapter is currently in a strong organizational and financial position, has a proven track record of delivering high-quality meetings, and possesses the volunteer capacity necessary to support a divisional conference. Additionally, Georgia has not hosted an SDAFS Spring Meeting since 2015, making 2030 an excellent opportunity to once again welcome fisheries professionals, students, and stakeholders from across the Southern Division.

Georgia Chapter Membership vs. American Fisheries Society Membership

One point that sometimes causes confusion is the difference between membership in the Georgia Chapter of the American Fisheries Society (Georgia AFS) and membership in the parent organization, the American Fisheries Society (AFS).

Joining the Georgia Chapter does not automatically make you a member of the American Fisheries Society. The Georgia Chapter and the Parent Society maintain separate memberships and dues structures. As a result, some individuals are members of the Georgia Chapter only, while others maintain membership in both the Georgia Chapter and the American Fisheries Society.



Membership in the Georgia Chapter offers participation in activities, meetings, and committees, while supporting fisheries conservation in Georgia. In contrast, membership in the Parent Society provides benefits such as access to AFS publications, professional development, networking opportunities, leadership roles, policy engagement, and involvement in AFS Sections and Divisions.



We encourage everyone to consider joining both organizations. Maintaining membership in the Parent Society helps support fisheries science, management, education, and conservation efforts at a broader scale while strengthening the collective voice of fisheries professionals across North America and beyond.

If you are unsure whether you are a member of the Parent Society, please check your membership status through the AFS membership portal or contact Rebecca Brown for assistance. By supporting both the Georgia Chapter and the American Fisheries Society, members help advance the profession and ensure a strong future for fisheries and aquatic resource conservation.

Update on Georgia AFS Art and Photo Contests

To boost participation in the Georgia AFS Art and Photo Contests, we have revised a few entry rules and adjusted the award categories.

Trash2Art Updates

Prizes awarded to the winner of each category.

- Best Overall Aquatic Upcycling Entry
- Best Fisheries Conservation Message
- Best Use of Reclaimed Fishing Equipment
- Best College Student Entry
- People's Choice Award

Artwork must be constructed primarily from discarded, broken, reclaimed, recycled, repurposed, or unwanted materials. These items can be found around your home, office, school, etc.

**Visit the website for more details
on how to enter.**



Contests for Members

Photo Contest Updates

We are keeping our overall theme: Human-Water Connection. There are four distinct award categories. You may submit a maximum of two photographs.

Guardians of the Fishery Award

- Photographs of individuals engaged in the management, conservation, study, or stewardship of aquatic resources.

Working the Water Award

- Photographs of individuals whose livelihoods depend directly on aquatic resources, including commercial fishermen, shellfish harvesters, and fishing guides.

Water and Wellness Award

- Photographs depicting the positive impact of aquatic environments on human health, well-being, and quality of life.

The Volunteer Spirit Award

- Photographs highlighting conservation, volunteerism, and responsible care of aquatic resources, such as cleanups, habitat restoration, and citizen science.

Georgia Chapter Members Featured on the Georgia Outdoor News Podcast

Georgia Outdoor News podcaster, Jake Rowe, interviews Chris Smith (Georgia DNR Fisheries Biologist) and Dr. Andrew Taylor (University of North Georgia). Chris and Andrew discuss fishing, Georgia’s Black Bass, the Smallmouth Bass found in Lake Allatoona, and much more.



WATCH NOW



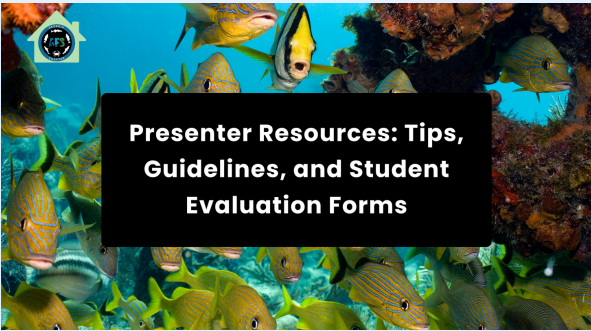
WATCH NOW



New and Improved Online Resource for PowerPoint and Poster Presenters

The Georgia AFS Communications Committee, alongside members of the Student Presentations Awards Subcommittee, collaborated to refresh and enhance the Chapter’s Presentation Resources webpage.

Whether you're a student preparing for your first professional presentation or a professional looking to strengthen your presentation skills, these resources are designed to help you communicate your science with clarity, confidence, and impact.



Presenter Resources

Designing Your PowerPoint	
Tip	Example
It is easier for audience members with dyslexia if you select familiar sans serif fonts such as Arial, Calibri, Helvetica, with adequate spacing between letters. Comic Sans remains one of the most legible fonts for dyslexic readers. Avoid using all capital letters and excessive italics or underlines.	Helvetica (no spacing b/w letters) Helvetica (some spacing b/w letters)
Select a <u>font size</u> that is easily visible to all audience members. Ballrooms are much larger than small meeting rooms.	Large ballroom: 30 - 34 pt for body text and 44 - 54 pt for titles Small meeting room: 24 - 28 pt for body text and 36 - 44 for titles
Use color-blind-safe colors. Most issues for colorblind people come from the prevalence of red-and-green combinations as a pair of opposites in design. The first rule of making a <u>palette for colorblind</u> - avoid combining	Red on green

McDuffie Public Fishing Area Campground Reopens

After extensive repairs resulting from damage caused by Hurricane Helene, the campground at McDuffie Public Fishing Area has officially reopened to visitors. The restored campground once again offers anglers, campers, and outdoor enthusiasts a convenient base for enjoying the fishing area's lakes, trails, and natural beauty.



Did you know Georgia has six Public Fishing Areas (PFAs) that offer overnight camping, ranging from primitive tent sites to RV hookups.

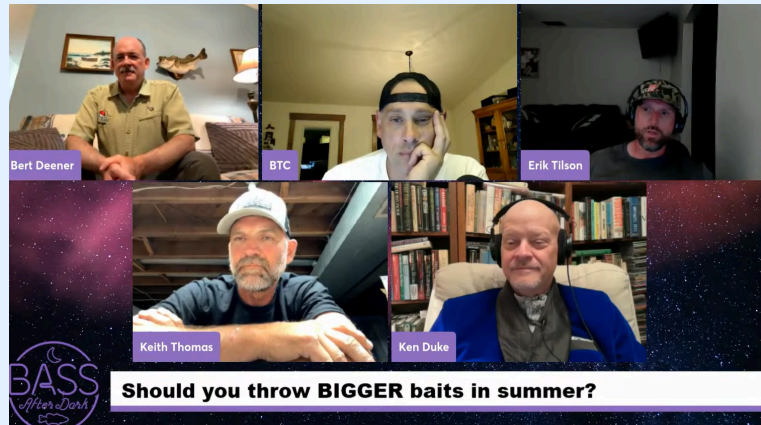
- [CEWC Clybel WMA \(Marben PFA\)](#)
- [Dodge County PFA](#)
- [Evans County PFA](#)
- [McDuffie PFA](#)
- [Paradise PFA](#)
- [Rocky Mountain PFA](#)

Reserve your campsite online:

[**gooutdoorsgeorgia.com**](https://gooutdoorsgeorgia.com)



Did You See These Posts on Social Media?



The Women of Fisheries June Fish Sister profile highlighted Dr. Margaret Murphy, Fish Program Manager for Vermont Department of Fish and Wildlife and current American Fisheries Society (AFS) president-elect! Margaret enjoyed fishing from an early age at her family's fish camp in the Adirondacks and translated that passion into various roles over 35 years – consultant, business owner, and state agency manager.



Click to Learn more about Margaret



#619: *Micropterus pucpuggy*

The [ETYFish Project](#) is a Facebook page that explains over 43,800 genus- and species-level fish names. It was featured on the USFWS Fish of the Week podcast back in February. (website: etyfish.org)

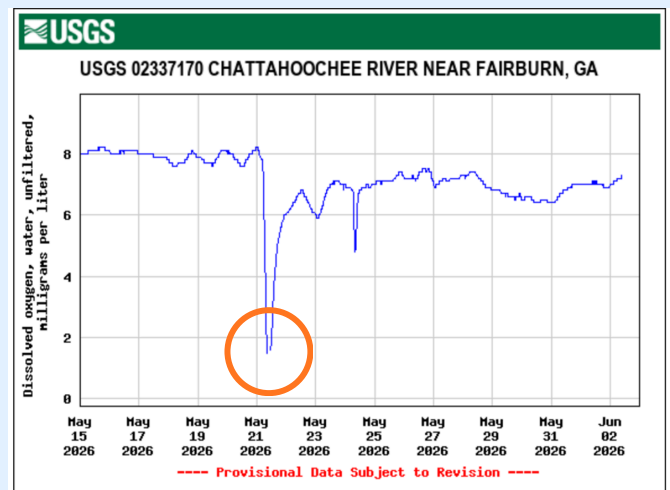


Click to read about why Bud and Mary Freeman chose *Micropterus pucpuggy*.

Chattahoochee River Fish Kill May 2026

In late May 2026, an unprecedented fish kill affected approximately 20 miles of the Chattahoochee River downstream of Peachtree Creek in metropolitan Atlanta. Thousands of fish died after dissolved oxygen concentrations in the river rapidly declined, resulting in widespread fish mortality. Environmental organizations and state and local agencies launched investigations to determine the contributing factors.

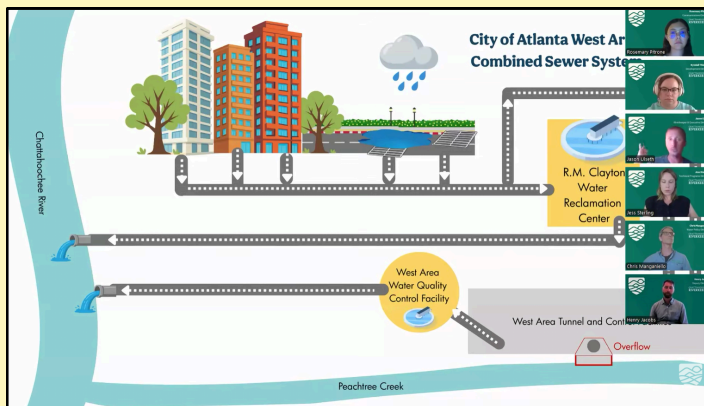
Preliminary findings indicated that a combination of events led up to the fish kill. Experts point to a combination of prolonged drought, exceptionally low river flows, heavy rainfall following an extended dry period, stormwater runoff, and combined sewer overflows that introduced large amounts of organic material into the river. As bacteria decomposed this material, dissolved oxygen levels dropped to concentrations too low to support aquatic life.



**Georgia DNR WRD
Fish Kill Report**



**Chattahoochee Riverkeeper
Blog**



Chattahoochee Riverkeeper Let's Chatt: Atlanta Fish Kill

This webinar discusses Atlanta's West Area CSO Tunnel at Peachtree Creek, the events that led up to the fish kill, and more.





When Storms Overwhelm Sewer Systems: Understanding CSOs

Most of us appreciate the benefits of clean water in our daily lives, whether we are fishing in a nearby lake, kayaking along a river, or simply turning on the tap at home. However, many remain unaware of a critical infrastructure challenge that poses a threat to water quality in several major urban rivers: Combined Sewer Overflows (CSOs). Comprehending the implications of CSOs is essential for anyone concerned about clean water, public health, and the vitality of local fisheries.

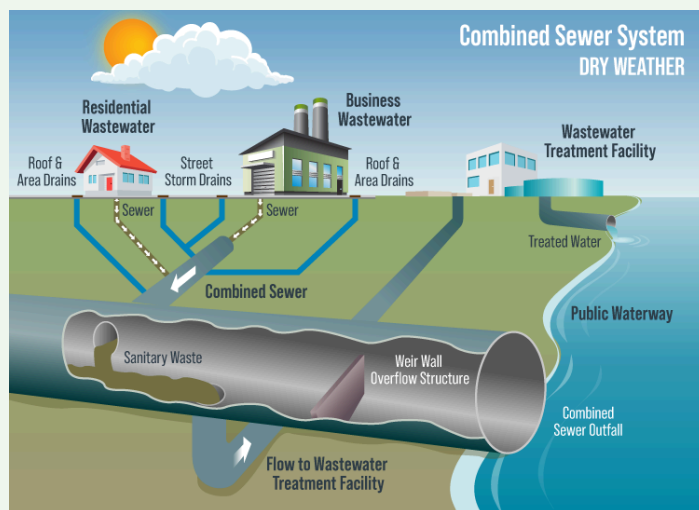
What is a Combined Sewer Overflow?

A combined sewer system is designed to collect both sanitary sewage from homes and businesses and stormwater runoff from streets, parking lots, and rooftops. Under normal weather conditions, the combined flow is transported to a wastewater treatment plant, where pollutants are removed before the water is discharged into a river, lake, or coastal waterway.

Problems arise during heavy rainstorms. When large volumes of stormwater enter the system, the pipes and treatment facilities may become overwhelmed. To prevent sewage from backing up into homes, streets, and businesses, the system is designed with overflow points that release excess water directly into nearby waterways. These discharges are known as Combined Sewer Overflows.

While CSOs may prevent flooding and property damage, they also release untreated or partially treated wastewater into the environment. The overflow water

can contain a mixture of stormwater, human sewage, industrial waste, trash, chemicals, nutrients, bacteria, viruses, and other pollutants.



It is important to note a CSO is a specific type of Municipal Sewer Overflow (SSO). While both events release hazardous, untreated human waste into the environment, CSOs are generally a planned engineering mechanism to prevent sewage from backing up into homes and streets. SSOs, by contrast, are typically considered unpermitted and accidental emergencies requiring immediate maintenance.

CSOs in Georgia

The most notable example of CSOs in Georgia is found in the metropolitan Atlanta area. A large portion of Atlanta's sewer infrastructure were constructed decades ago, when combined sewer systems were common engineering practice. As the city expanded and development led to increased pavement, stormwater runoff intensified, putting significant strain on the system during heavy rainfall events.

Historically, CSOs in the Atlanta metro area have been discharged into tributaries that eventually flow into the Chattahoochee River on the west side, or the South River, which is just south of Atlanta's Hartsfield-Jackson Airport. The Chattahoochee River serves as a source of drinking water for millions of residents and provides valuable recreational opportunities, including fishing, boating, and kayaking. The South River is a headwater to Georgia's largest freshwater system that feeds the Atlantic Ocean on Georgia's coast.

In the late 1990s and early 2000s, the City of Atlanta entered into major agreements with federal and state regulators to reduce sewer overflows and improve wastewater infrastructure. Billions of dollars have since been invested in sewer system upgrades, storage facilities, **tunnel projects**, and treatment improvements. These efforts have significantly reduced the frequency and volume of CSO events compared to historical levels. Although efforts have been made, challenges remain.



Before Atlanta's massive sewer system overhaul, Tanyard Creek experienced 60-80 sewage overflows a year from a CSO.



Panola Shoals, South River



West Combined CSO Storage Tunnel, Atlanta, GA

CSOs are currently creating significant environmental and public health problems.



Human Health Concerns

Overflow events can introduce disease-causing microorganisms into rivers, lakes, and coastal waters used for swimming, boating, and fishing. Exposure to contaminated water may increase the risk of gastrointestinal illnesses, skin infections, and other health problems. Following significant overflow events, public health officials may issue swimming advisories or temporarily close recreational waters.

For anglers, paddlers, swimmers, and other outdoor enthusiasts, understanding recent rainfall and water quality conditions can help reduce potential exposure to contaminated water.

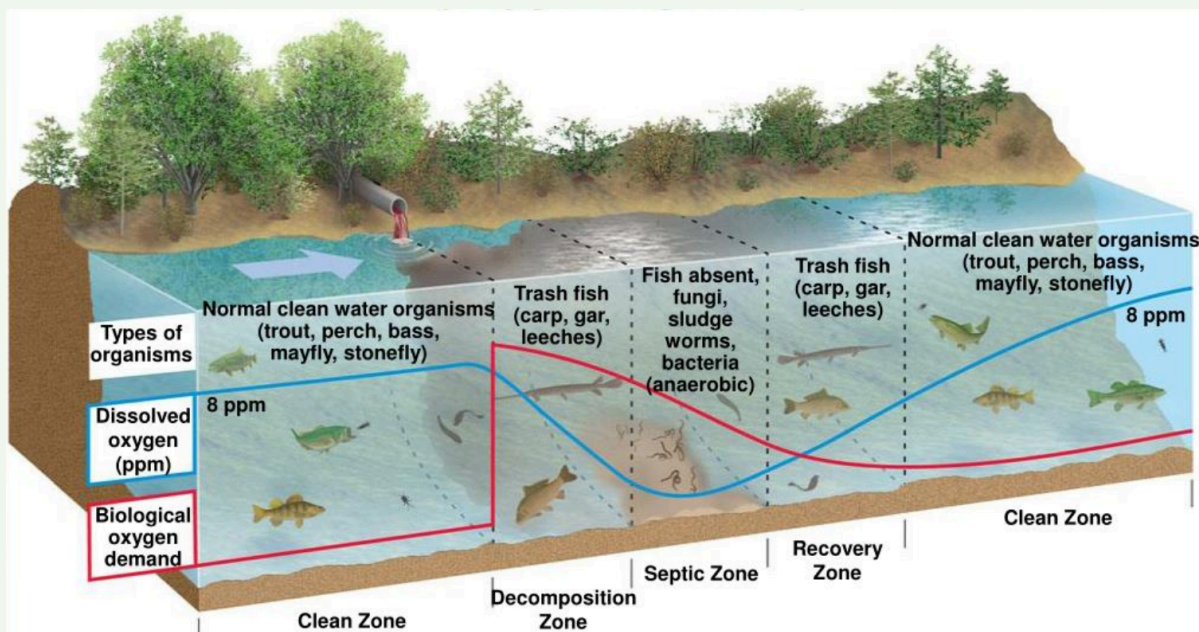


Toxic algal bloom

People, Pets, Livestock, and Wildlife

Harmful algal blooms (HABs) can arise from nutrient-rich wastewater overflows that release nitrogen and phosphorus into water bodies, promoting rapid growth of algae and cyanobacteria. Some HABs produce toxins that can be harmful or even deadly to people, pets, livestock, fish, birds, and other wildlife. Human exposure can occur through swimming, boating, fishing, or drinking contaminated water, potentially causing skin irritation, gastrointestinal illness, liver damage, or neurological symptoms. Livestock and pets are particularly vulnerable because they may drink directly from affected waters. Harmful algal blooms can also reduce water clarity, produce unpleasant odors, and contribute to low dissolved oxygen levels when the algae die and decompose, creating additional stress on aquatic ecosystems.

In addition to the impacts of toxins, dense algal blooms can significantly affect dissolved oxygen dynamics. During daylight hours, algae photosynthesize and produce oxygen; however, at night they respire, consuming oxygen from the water. In severe blooms, nighttime respiration can cause dissolved oxygen concentrations to drop to critically low levels or even reach zero by early morning, resulting in fish kills and other aquatic life impacts. Large concentrations of herons and egrets along marshes, shorelines, and canals may indicate these low-oxygen conditions, as the birds take advantage of fish and crayfish that are forced to the surface in search for aerial oxygen.



Increase Biological Oxygen Demand and Creation of Oxygen Sag Curves

Loss of oxygen can also result from CSOs significantly increasing the biological oxygen demand (BOD) of rivers and streams by introducing large amounts of organic waste, including sewage, food waste, and other biodegradable materials. Once these materials enter a waterway, bacteria begin decomposing them, consuming dissolved oxygen in the process. If the amount of organic matter is substantial, oxygen consumption can outpace the river's ability to replenish oxygen through atmospheric exchange and photosynthesis. This creates an oxygen sag curve, where dissolved oxygen concentrations progressively decline downstream from the overflow discharge point, reach a minimum level, and then gradually recover farther downstream. During the lowest point of the oxygen sag, dissolved oxygen levels may fall below the threshold needed to support fish and other aquatic life. Sensitive species may become stressed, while severe oxygen depletion can result in widespread fish kills. In addition to affecting fish, low dissolved oxygen conditions can harm freshwater mussels, aquatic insects, and other organisms that form the foundation of healthy aquatic ecosystems.

Shifting Climate Patterns Increase Challenges for CSOs

Although Georgia's average annual rainfall has not significantly changed, it has experienced more frequent and intense rainfall events. Extreme precipitation events increase the challenges associated with CSOs, placing additional stress on aging water infrastructure that was designed using historical rainfall patterns. This results in higher nutrient and pathogen releases, degrading water quality and threatening public health and aquatic ecosystems. Additionally, warmer temperatures may exacerbate these issues by promoting harmful algal blooms and reducing oxygen levels in waterways, increasing the likelihood of fish kills and ecological disturbances.

What Can Citizens Do to Help Reduce the Impacts of CSOs and Stormwater Runoff?

Reduce Stormwater Runoff

- Install rain barrels to capture roof runoff
- Create rain gardens that absorb stormwater
- Use native plants and landscaping
- Reduce unnecessary paved surfaces
- Install permeable driveways and walkways when feasible
- Minimize, eliminate or replace harmful materials around the household and garden.
- Timely maintain septic tanks



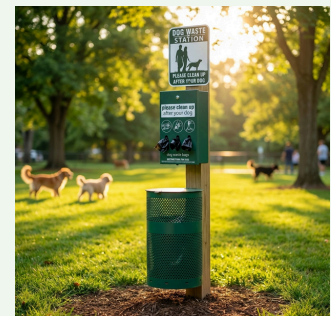
Properly Dispose of Waste

Residents should avoid pouring fats, oils, grease, paint, chemicals, or medications down drains, as they can cause sewer blockages and treatment difficulties. Flushing non-flushable items like wipes and paper towels can also lead to clogs and increase the risk of sewer overflows.



Pick Up Pet Waste

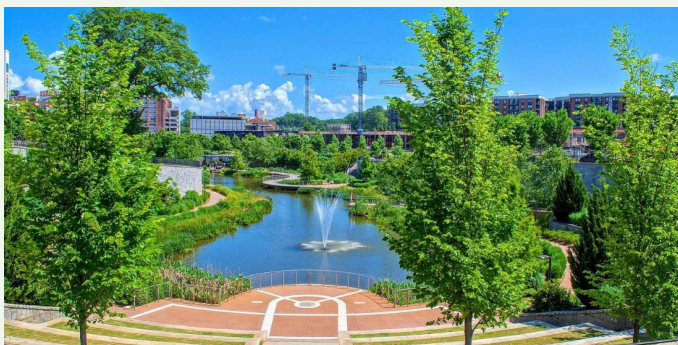
Pet waste left in public areas can wash into storm drains during rain, contributing to bacteria and nutrient pollution in local waterways. Proper disposal is essential to mitigate this issue.



Support Green Infrastructure Projects

Many Georgia communities are investing in green infrastructure such as bioswales, urban tree planting, restored wetlands, and permeable pavement. Supporting these projects through local planning efforts can help reduce runoff and improve water quality.

These flood zones were turned into parks to capture, store, and filter stormwater.



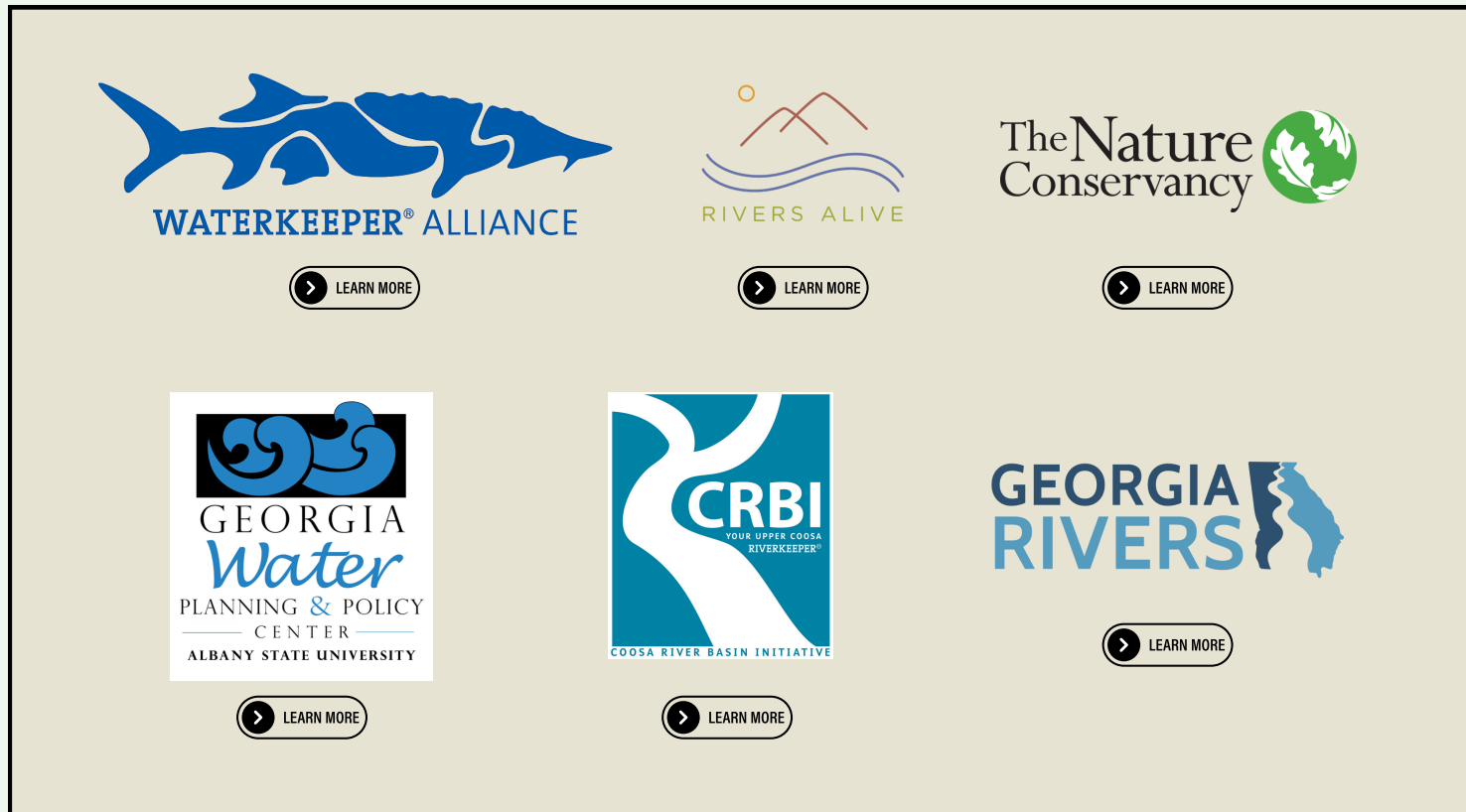
Historic Old Fourth Ward, Atlanta, GA



Rodney Cook Park, Atlanta, GA

Stay Informed

Citizens can learn about local water quality issues, attend public meetings, participate in watershed organizations, and volunteer for stream cleanups. Public engagement often plays an important role in securing funding and support for infrastructure improvements.



Looking Ahead

As population growth and extreme rainfall events place additional pressure on urban systems, continued investment and public participation will remain essential. By understanding how CSOs occur and taking simple steps to reduce stormwater runoff and pollution, we can help protect our valuable waterways for future generations. Clean water is a shared responsibility, and every action that keeps pollution out of rivers and streams contributes to healthier communities and healthier aquatic ecosystems.





156TH ANNUAL MEETING

COLUMBUS

AUGUST 30 - SEPTEMBER 3, 2026

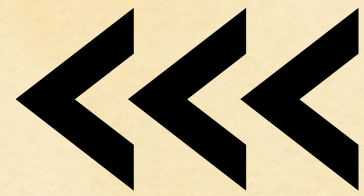
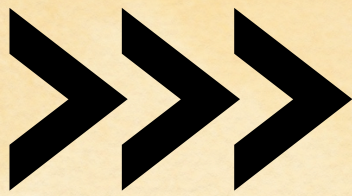
THE HEART OF SUSTAINABILITY: HABITAT AS THE FOUNDATION OF PRODUCTIVE FISHERIES

In 2026, the American Fisheries Society returns to the city of Columbus, Ohio, for the first time since 1933. President Gary Whelan, the North Central Division, and the Ohio Chapter invite you to join us August 30 – September 3, 2026 on the banks of the Scioto River.

MEETING INFO

SYMPOSIUM SESSIONS

EXHIBITOR INFORMATION



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 opportunities 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**

Learn More



HAVE YOU COMPLETED AN APPROVED BOAT EDUCATION COURSE?

All persons born on or after January 1, 1998, who operate any motorized vessel on the waters of the state of Georgia must have completed a boat education course approved by Georgia DNR prior to such operation.

[Click here to view boat education courses approved by Georgia DNR](#)



75-80%

of operators involved in fatal boating accidents had no boating safety education.

4,000+

recreational boating accidents in the U.S. annually.

Membership Dues

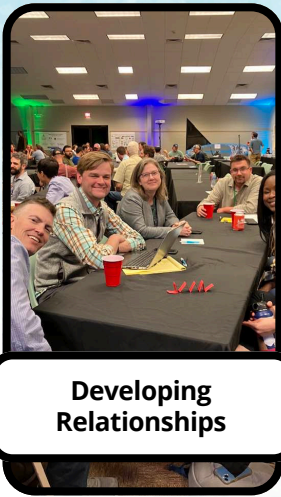
The Georgia AFS mission is to improve the conservation and sustainability of fishery resources and aquatic ecosystems by advancing fisheries and aquatic science and promoting the development of fisheries professionals. Your paid membership helps us achieve that mission.

Georgia AFS
Annual Membership Dues

\$ 10

JOIN NOW

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.



Do you know your ticks?



Fisheries professionals often work in habitats where ticks are abundant, including stream corridors, wetlands, riparian forests, grasslands, reservoir shorelines, and aquatic vegetation management sites. Because ticks can transmit diseases such as Lyme Disease, Rocky Mountain Spotted Fever, Ehrlichiosis, and Alpha-gal Syndrome, preventing tick bites should be considered an important part of every field safety plan.

LYME DISEASE

Lyme disease is the most commonly reported tick-borne illness in the United States. It is caused by the bacterium *Borrelia burgdorferi* and is transmitted primarily by blacklegged ticks, also known as deer ticks.

One of the earliest signs of Lyme disease is a distinctive bull's-eye rash called erythema migrans, which develops in many, but not all, infected individuals. Other symptoms may include fever, chills, headache, fatigue, muscle aches, and swollen lymph nodes. If left untreated, Lyme disease can spread to the joints, heart, and nervous system, causing more severe complications.



ANAPLASMOSIS

Anaplasmosis is caused by the bacterium *Anaplasma phagocytophilum* and is spread by blacklegged ticks.

Common symptoms include fever, headache, chills, muscle aches, nausea, and fatigue. Severe cases can lead to respiratory failure, bleeding disorders, or organ damage, particularly in older adults and individuals with weakened immune systems.



EHRlichiosis

Ehrlichiosis is caused by bacteria in the *Ehrlichia* group and is transmitted primarily by the lone star tick. Cases are common in the southeastern and south-central United States.

Symptoms usually develop within one to two weeks after a tick bite and may include fever, chills, severe headache, muscle aches, fatigue, nausea, and loss of appetite. Some patients may develop a rash, particularly children. Early treatment with antibiotics is highly effective.



ALPHA-GAL SYNDROME

Unlike other tick-borne illnesses, Alpha-gal Syndrome is an allergic reaction linked to bites from the lone star tick. The condition causes sensitivity to a sugar molecule called alpha-gal that is found in red meat and certain animal products.

Symptoms may occur several hours after eating beef, pork, lamb, or other mammalian meats and can include hives, itching, stomach pain, nausea, diarrhea, and in severe cases, anaphylaxis.

ROCKY MOUNTAIN SPOTTED FEVER

Despite its name, Rocky Mountain Spotted Fever occurs throughout much of the United States, including the Southeast. It is caused by the bacterium *Rickettsia rickettsii* and is transmitted by several species of ticks. The American dog tick (*Dermacentor variabilis*) is the most common carrier, found primarily east of the Rocky Mountains and along the Pacific Coas

Symptoms typically appear within a few days to two weeks after a tick bite and may include high fever, headache, nausea, vomiting, muscle pain, and fatigue. A spotted rash often develops several days after the fever begins, although not all patients develop a rash. Rocky Mountain spotted fever can become life-threatening if treatment is delayed, making early diagnosis critical.



TIPS TO AVOID TICK BITES

- When practical, wear long-sleeved shirts and long pants. Tuck pant legs into socks or boots to create a barrier that makes it more difficult for ticks to reach exposed skin.
- Light-colored clothing makes it easier to spot ticks before they attach.
- Apply EPA-registered insect repellents containing active ingredients such as DEET, picaridin, IR3535, or oil of lemon eucalyptus according to label instructions.
- When possible, walk on established trails, roads, levees, or open areas rather than pushing through dense vegetation.
- During field work, periodically inspect clothing and exposed skin for crawling ticks.
- A shower within two hours of returning from the field can help remove unattached ticks and provide an opportunity to conduct a thorough tick check.
- Wash field clothes promptly and dry them on high heat, which can kill ticks that may remain hidden in fabric.

Plugged In

Some of our favorite podcasts.



[Atacama Trench Snailfishes VS Abyssal Plains Assfishes!](#)

Get to know the "albatross" of the abyssal plain, the unfortunately (or fortunately?) named Robust Assfish, AND the Atacama Trench Snailfishes in our first ever compare and contrast episode. Our guest, Dr. Thom Linley, is Curator of Fishes at the Museum of New Zealand Te Papa Tongarewa and co-host of The Deep-Sea Podcast.



[Take a Warrior Fishing, Inc.](#)

Ben and Corey are joined by Ken and Pete from Take a Warrior Fishing, Inc. They discuss the organization's mission of creating connection, camaraderie, and healing for the veteran community through free fishing experiences across North Carolina and beyond. They also talk fishing techniques, favorite spring opportunities, and how "Fishing Heals" both on and off the water.



[Tennessee vs. Alabama Bass](#)

Preston sits down with Tennessee Tech's Tom Miles and TWRA's Cole Harty to discuss the invasive Alabama Bass and how it is impacting Tennessee's black bass fisheries. From competition issues to hybridization impacts, this nonnative species is a serious cause for concern for black bass managers and anglers in Tennessee and throughout most of the southeast.



[From Fish Cars to Freezers: The Future of Fisheries](#)

From ice-packed milk cans shipped by train to modern hatcheries and high-tech freezers storing fish genetics, America's fisheries have always adapted to meet new challenges. In this episode, we dive into the evolution of fisheries conservation, where it began, how it's changing, and the innovations shaping a future where both fish and people can thrive.



[Clean Water Is Bipartisan](#)

In this episode of Equity In Every Drop, Tonya Bonitatibus of Savannah Riverkeeper discusses protecting the 400-mile Savannah River system across Georgia and South Carolina. She highlights the need to work across political divides and build trust with rural communities and industries.

Stay Safe - Avoid Heat Stress

People need to take precautions to maintain their body temperatures during hot weather. It's important to understand heat safety tips because they can help you prevent instances of heat exhaustion, heat stroke, and other types of heat-related illnesses.

HEAT SAFETY TIPS

- Wear light-colored clothing and light-weighted clothing
- Drink plenty of **WATER** before and during work (Don't wait until you are thirsty)
- Shorten work times with frequent breaks (adjust work schedule when possible)
- Wear a wide-brimmed hat to prevent direct sun exposure
- Use a cooling cloth on the back of your neck
- Use a buddy system - check on each other
- Understand the signs of heat-related illnesses

HEAT-RELATED ILLNESSES

WHAT TO LOOK FOR

WHAT TO DO

HEAT STROKE

- High body temperature (103 F or higher)
- Hot, red, dry, or damp skin
- Fast, strong pulse
- Headache
- Dizziness
- Nausea
- Confusion
- Passing out

- Call 911 immediately (medical emergency)
- Move the person to a cooler place
- Help lower the person's temperature with cool cloths or a cool bath
- **DO NOT GIVE** the person anything to drink

HEAT EXHAUSTION

- Heavy sweating
- Cold, pale, and clammy skin
- Fast, weak pulse
- Nausea or vomiting
- Muscle cramps
- Tiredness or weakness
- Dizziness
- Headache
- Passing out

- Move to a cool place
- Loosen your clothes
- Put cool, wet cloths on your body or take a cool bath
- Sip water

GET MEDICAL HELP RIGHT AWAY IF

- You are throwing up
- Your symptoms get worse
- Your symptoms last longer than 1 hour

What's Cooking?

BLUEGILL CROQUETTES AND CUCUMBER SALAD



A good summertime recipe.

Cucumber and Tomato Salad

Ingredients

- 12 medium cucumbers
- 2 medium tomatoes
- 1/2 medium red onion
- 1/2 teaspoon salt, or to taste
- 2 to 3 tablespoons red wine vinegar
- 6 to 7 tablespoons Spanish extra-virgin olive oil

Watch the video for cooking instructions.



Fish Croquettes

Ingredients

- 16 oz. (2 cups) of Bluegill
- salt and pepper
- 1 cup of very thick white sauce (recipe below)
- 1 tsp of oregano
- 1/8 tsp of nutmeg
- 3 eggs for coating – lightly whisked
- 1 1/2 cups of low-carb breadcrumbs for coating
- Vegetable oil for frying

Ingredients for Very Thick White Sauce

- 8 oz cream cheese
- 1 cup heavy cream
- 1/2 cup water
- 1 egg yolk
- 1/2 teaspoon of guar gum

Cooking instructions are also found in the video description.

Fundraising Donor Spotlight

Our fundraising donors are critical to the success of our annual fundraiser and our efforts to promote the conservation and sustainability of our aquatic resources in Georgia.

thank you!



Georgia State Parks protect some of the state's most valuable natural and cultural resources while providing opportunities for outdoor recreation, education, and conservation. These parks support healthy ecosystems, safeguard wildlife habitat, preserve historical sites, and contribute to local economies by attracting millions of visitors each year to experience Georgia's diverse landscapes.



[Map of state parks and historic sites](#)

[ParkPass, Rules & More](#)

[Friends of GA State Parks & Historic Sites](#)

Did you know Georgia has 48 state parks?

8 have golf courses

More than half offer [fishing opportunities](#)

They protect approximately 84,000 acres

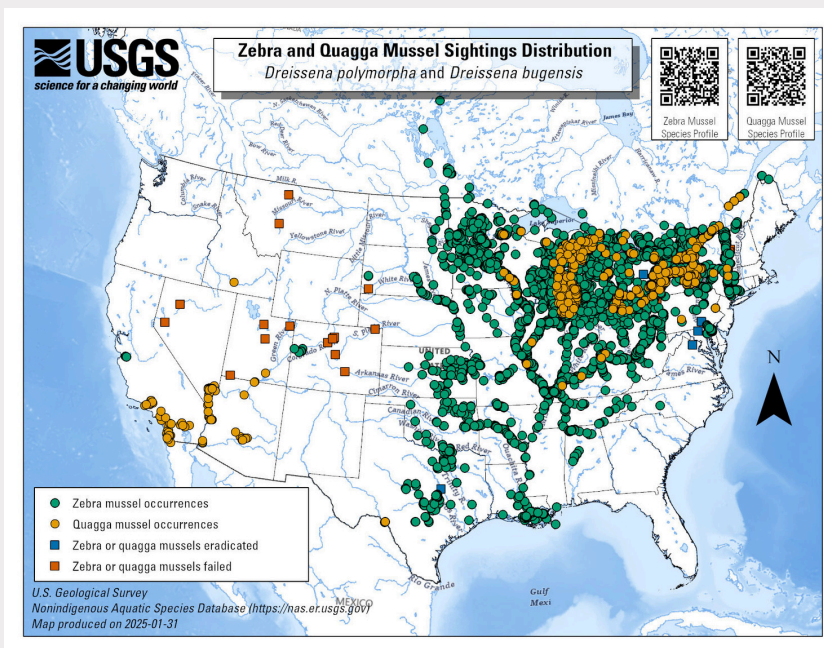


Their park pass includes both state parks and historic sites

DID YOU KNOW?

Tiny Invaders With a Big Impact

Zebra mussels were carried to North America in the ballast of ships from Europe. The first established population was discovered in 1988 at Lake St. Clair, which straddles the border between the U.S. and Canada and which connects to Lake Erie and Lake Huron. The map below shows how far zebra mussels have spread since they were first discovered in the U.S.



Zebra mussels have byssal threads that allow them to attach to hard surfaces such as boats and propellers. They can even attach to native freshwater mussels which hinder the native mussels' ability to feed, move, and reproduce, resulting in population declines and potential local extinctions.

Interesting Facts

- A single female can produce up to 1 million eggs per year
- Each zebra mussel can filter approximately one liter of water per day.
- They form dense colonies. Densities exceeding 700,000 mussels per square meter have been documented.
- Adult zebra mussels can survive days to several weeks out of water under cool, humid conditions.



Fishy News Around the World

Click on title to access article

OTHERWORLDLY THUNDER OF ATLANTIC STURGEON INSPIRES AWE

When a team of researchers recorded a low thundering underneath the surface of the Hudson River, they thought they were hearing the muffled rumble of trains.

A closer look, and listen, led to a much more interesting discovery: the thunder came from Atlantic sturgeon.

FOREVER CHEMICAL REACHES FISH BEFORE THEY EVEN HATCH

There is a forever chemical lurking in the world's oceans that could be fundamentally altering the biology of marine life before it even hatches.

INCHEON NATIONAL UNIVERSITY STUDY EVALUATES EDNA METABARCODING FOR FISH DIVERSITY ASSESSMENT

Jeong states that eDNA metabarcoding is effective for detecting fish diversity, but its reliability relies on methodological choices like primer selection and the quality of reference databases.

EXPLORING FISH REPRODUCTIVE BIOLOGY AND IMPLICATIONS FOR FUTURE FOOD

Fascinated by fish traits, Professor Kohei Ohta shares insights into the fascinating aspects of fish reproduction, the potential of aquaculture technologies, and the outlook for sustainable food production.

FOREVER YOUNG AQUAPONICS FARM: A PROOF OF CONCEPT FOR THE FUTURE OF SUSTAINABLE AGRICULTURE

At Forever Young Aquaponics Farm in Clayton County, Georgia, innovative food production combines engineering, sustainability, and aquaponics to tackle food security, resource consumption, and supply chain resilience, all near Hartsfield-Jackson Atlanta International Airport.

FROM CLIMATE RISKS TO COMMUNITY SOLUTIONS: FISHERIES COMMUNITIES IN KAGERA CO-DESIGN THEIR OWN CLIMATE ADAPTATION PLAN

For communities in Muleba District and Bukoba Municipal Council, climate change is no longer a future concern. It is already affecting livelihoods, food security, and the ecosystems that support fisheries.



Bubba Bass

Video Picks

Leadership

What wolf packs can teach us about leadership | Oliver Starr | TEDxSHSU



TEDx Talks



Workplace Safety

Safety Meeting on Situational Awareness



Weeklysafety

Conservation

Our Water Crisis Is WAY WORSE than You Think...Here's Why

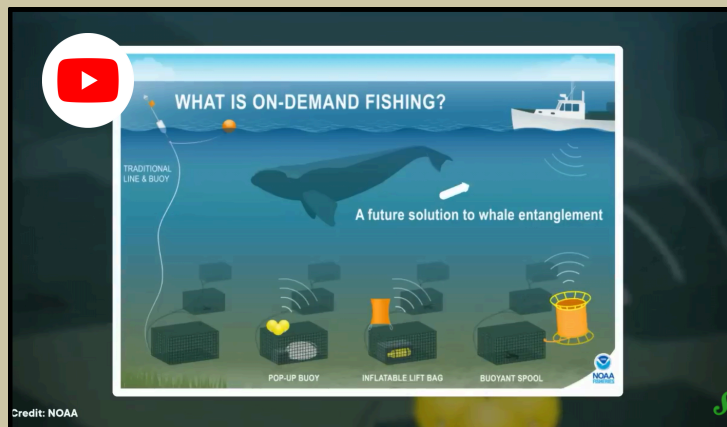


PBS Terra



Fisheries

6 Futuristic Fishing Nets



SciShow

BUBBA BASS SAFETY TIP

Situational Awareness

Look Up, Down, and Around

Watch for:

- Changing weather conditions
- Slippery banks and rocks
- Hidden underwater hazards

Be Aware of Human Factors

Remain alert for:

- Aggressive individuals
- Unsafe boating behavior
- Impaired anglers

Slow down enough to see what is changing. Most incidents occur when workers stop noticing changes in their environment.

Watch the Entire Team

Monitor co-workers for:

- Heat stress
- Dehydration
- Unsafe behavior

Avoid Complacency

Tasks most likely to cause injury are:

- Routine boat launches
- Driving between sites
- Routine equipment operations

Bubba's Friends: Freshwater Mussels

Freshwater mussels are among the most important yet often overlooked animals in Georgia's aquatic ecosystems. Living partially buried in rivers, streams, and reservoirs, they help maintain healthy waterways by filtering water, improving water quality, and recycling nutrients that support aquatic food webs.

Many mussel species rely on specific fish hosts to complete their life cycle, creating a unique ecological connection that supports the health and diversity of Georgia's aquatic ecosystems.

Without healthy fish populations, mussel populations decline. Without healthy mussel populations, water quality and aquatic habitat can suffer. This relationship demonstrates how closely fish and mussels are connected.



Shinyrayed Pocketbook
georgiabiodiversity.org

Fin and Games: "Fish Tails"

Name the Fish

Use your skills to identify these Georgia fish.

1



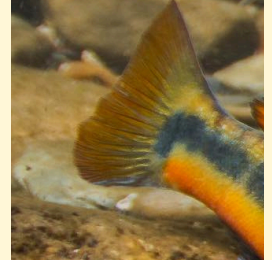
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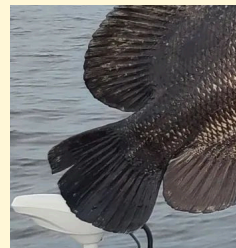
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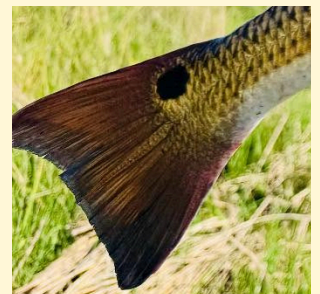
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11



12



Answers on the back cover page.

2026 Georgia AFS Sponsors

Thank you for your Support!

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Sea Grant



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Kleinschmidt

In-Kind Donation

INSPIRE

2026 Georgia AFS Fundraiser Donors

Thank you for your Support!



Vera Bradley



HIGH MUSEUM OF ART ATLANTA



AFS/SDAFS MEETINGS

Future AFS Annual Meetings



American Fisheries Society

- 2026 Columbus, OH: August 30 – September 3
- 2027 Pittsburgh, PA: September 26 – 30
- 2028 Honolulu, HI: May 14 – 19

Volunteer to Serve on an AFS Committee

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

MORE INFO



The Southern Division
of the American Fisheries Society

sd.fisheries.org/

Future SDAFS Meetings

- 2027 Alabama (March 4 – 7; Location TBD)
- 2028 Mississippi (Location and date TBD)
- 2029 Florida (Location and date TBD)

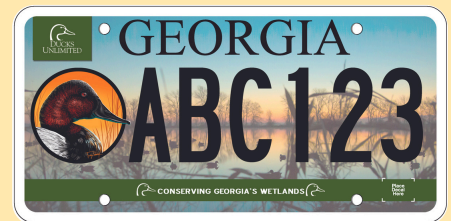
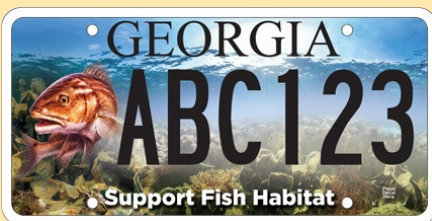
General Information

Support for Fisheries Conservation and Sustainability

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



Click on the license plate for more information



It is only \$25 more than the standard plate! (\$20 is a standard charge applied to all plates.) 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. For more information:

<https://gadnr.org/licenseplates>

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](#)

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

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Newsletter

Editorial Board

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

Answers to Fin & Games

- | | |
|---------------------|-----------------------|
| 1. Channel Catfish | 7. Tripletail |
| 2. Spotted Seatrout | 8. Black Sea Bass |
| 3. Brook Trout | 9. Northern Hogsucker |
| 4. Tangerine Darter | 10. Flier |
| 5. Etowah Darter | 11. Bowfin |
| 6. Brown Trout | 12. Red Drum |