

# Under the Dock

November 2021



**Newsletter of the Georgia Chapter of the  
American Fisheries Society**



# WHAT'S INSIDE

- [2022 Membership Information](#)
- [Georgia AFS Student Scholarships](#)
- [Dockside: What's Up With the Golden Ray](#)
- [Georgia AFS 2022 Annual Meeting](#)
- [Call for Abstracts](#)
- [Award Nominations](#)
- [2022 Fundraising Information](#)
- [News and Updates](#)
- [Call for Nominations](#)
- [SDAFS Annual Meeting Information](#)
- [Q and A with Jay and Sarah](#)
- [Did You Know](#)
- [Test Your Knowledge](#)
- [Georgia Chapter AFS Spotlights](#)
- [Props!](#)
- [Bubba's Place](#)
- [Fishy News from Around the World](#)

**Click on title to go directly to page**



## Student Scholarships and Travel Stipend Awards

Information and the application forms  
<https://gaafs.org/students/>

The Ronnie J. Gilbert Student Scholarship provides \$500 to one outstanding student who is a member of the Georgia Chapter of the American Fisheries Society at the time of their application.

The undergraduate travel stipend will provide lodging and meeting registration for student members of the Georgia Chapter to attend the GA-AFS annual meeting.

## 2022 Georgia Chapter Membership

Membership in the Georgia Chapter of the American Fisheries Society is open to anyone interested in the progress of fisheries science and education in Georgia in addition to the conservation and management of fisheries and aquatic ecosystems in Georgia.

All memberships are for a calendar year. New memberships and renewals received after September 1, 2021 will be processed for a full membership beginning January 1, 2022.

Additional information is on our website.  
<https://gaafs.org/membership/>

**Georgia Chapter 2022 AFS Membership Form**  
<https://forms.gle/Nm8AnHsLfQCo6sLV7>

**The newsletter is interactive - click on anything underlined or highlighted for more information and click on a laptop image for a video**



**Don't forget to nominate someone for the Professional and/or Student Spotlight**

**Professional Spotlight Nomination Form**  
<https://forms.gle/T4cwW4A1zxkmzs7X6>

**Student Spotlight Nomination Form**  
<https://forms.gle/Xger4SyZozZx8fUg7>

## Submissions

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. Submissions are due on the 23rd of each month unless told otherwise.

Contact Rebecca Brown  
([georgiaaafs@gmail.com](mailto:georgiaaafs@gmail.com)) if you have questions about content and suitability. We also welcome suggestions for a species of fish to highlight, safety tips, and ideas for the section *Did You Know*.

Professionals and students are encouraged to submit articles for consideration.



# DOCKSIDE

## WHAT'S UP WITH THE GOLDEN RAY

By Rebecca Brown



Most mornings you can find me walking in the City of Dawsonville park with my mom. Some days when I drop her back off at her house my dad is sitting on the front porch rocking away waiting for our return. That is my clue to get out and sit a spell to discuss the recent news or how the fish are not cooperating at the lake. Just recently the front porch conversation was about the Golden Ray that capsized in St. Simons Sound two years ago. My dad asked how much longer will they be working on the Golden Ray.

On Monday, October 25th, the last big chunk of the Golden Ray was removed from the environmental protection barrier. A few large pieces and a lot of debris still remain to be picked up. They expect to finish cleaning up all of the debris by the end of the year.

The Golden Ray capsized September 8, 2019, with around 4,200 automobiles in its cargo decks. The U.S. National Transportation Safety Board concluded the Golden Ray capsized because the unbalanced load left the center of gravity too high causing the vessel to capsize.

The demolition of the Golden Ray began on November 6, 2020. The process of cutting the Golden Ray into sections was a difficult task. The chain they were using to cut through the Golden Ray broke on several different occasions and they had to deal with that one massive fire that occurred on May 14, 2021.

After the last of the Golden Ray is shipped off to Louisiana there is still more work to be done. Some oil did escape from the containment area and polluted local beaches and salt marshes. Our coastal waters are monitored by a great team of scientists who will make sure all is well with St. Simons Sound.



The last piece of the Golden Ray exiting the environmental protection barrier




The ship's rudder, stern tube section, and propeller were placed in about 50 feet of water to provide essential habitat for fish and other marine life.



The Minorcan Mullet video of the last section





# Georgia Chapter of the American Fisheries Society 2022 Annual Meeting February 1 - 3

## ***Exchanging Ideas, Removing Barriers, and Forging Partnerships for Healthy Aquatic Ecosystems***

**Join us as we share research and ideas relevant  
to marine and freshwater finfish and shellfish  
and their respective fisheries and environments**

**CALL the Villas by the Sea Resort on Jekyll Island to make reservations  
(912) 635-2521 Room rate # 514539**

**Visit our website for more information  
[gaafs.org/2022-annual-meeting/](https://gaafs.org/2022-annual-meeting/)**



# 2022 ANNUAL MEETING

[gaafs.org/2022-annual-meeting/](http://gaafs.org/2022-annual-meeting/)

Join us February 1 – 3 at the Villas by the Sea Resort on Jekyll Island as we share research and ideas relevant to marine and freshwater finfish and shellfish and their respective fisheries and environments. Our annual fundraising raffle and silent auction will take place at the same time. Proceeds from the annual fundraiser support our aquatic education outreach projects, student scholarships, habitat restoration projects, and continuing education workshops.

## REGISTRATION

Each individual attending the meeting needs to complete the [electronic registration form](#).

A word document registration form is available on our website for those who need a copy.

Payment can be made by check or credit card using our online store.

Details about the 2022 annual meeting can be found on the website.

## ABSTRACT SUBMISSION

We welcome topics including, but not limited to, fisheries management, aquatic invasive species, fish health, aquaculture, endangered species, genetics, economics, fisheries ecology in the urban interface, and all topics relevant to marine and coastal fisheries. This is a wonderful opportunity to share your knowledge and research with various professionals and students.

Interested individuals are encouraged to email their abstracts to Carolyn Belcher (Carolyn.Belcher@dnr.ga.gov) by **January 6, 2022**. Abstracts (300 words max) should be submitted as an attachment in a Word document and include the following information:

- Presentation Title
- Presenting Author (with contact information; work address and email)
- Co-authors (with contact information)
- Abstract (300 words max)
- Presentation type: Oral or Poster (Posters should be 48" x 36")
- Please also indicate if you are a student presenter

***Oral presentations are 15 minutes (10 minutes for presentation and 5 minutes for Q&A)***

***Poster presentations will take place during the Tuesday Night Social***

Member Type	Before January 21, 2022	After January 21, 2022
<b>PROFESSIONAL</b>		
AFS and GAAFS Member	\$75	\$75
GAAFS Member Only	\$80	\$100
Not Member of GAAFS	\$90	\$110
<b>STUDENT</b>		
AFS and GAAFS Member	\$30	\$30
GAAFS Member Only	\$35	\$50
Not Member of GAAFS	\$45	\$60
<b>RETIRED</b>		
AFS and GAAFS Member	\$45	\$45
GAAFS Member Only	\$50	\$50
Not Member of GAAFS	\$60	\$60
<b>ONE-DAY REGISTRATION</b>		
Professional GAAFS Member	\$50	\$50
Professional Non-member GAAFS	\$60	\$60
Student GAAFS Member	\$20	\$20
Student Non-member GAAFS	\$30	\$30
* Non-member rates include Georgia Chapter AFS membership dues		

### Attention Students

**Awards are earned for the top 3 oral presentations and the top 3 poster presentations**



# 2022 ANNUAL MEETING

[gaafs.org/2022-annual-meeting/](https://gaafs.org/2022-annual-meeting/)

## HOTEL ACCOMMODATIONS

Please visit our website for up-to-date information as you make plans for attending the 2022 annual meeting. **You must call the front desk of Villas by the Sea at (912) 635-2521 to make your hotel reservations.** Let them know you are with GA AFS and provide them with our room block number 514539. Do not try to make reservations online.

We suggest you check our website for more information about the different room types so you can plan accordingly.

[gaafs.org/villas-by-the-sea-information/](https://gaafs.org/villas-by-the-sea-information/)



Room Type	Island-side Room Rate	Oceanside Room Rate
Mini Villa/Studio	\$89	---
One Bedroom Villa	\$109	\$129
Two Bedroom Villa	\$149	\$169
Three Bedroom Villa	\$179	\$199

## Recognizing Excellence

### AWARD NOMINATIONS

The Georgia Chapter of the American Fisheries Society values its members and all those who work to improve the conservation and sustainability of our fishery resources and aquatic ecosystems. Randy Pausch once said, "Showing gratitude is one of the simplest, yet most powerful things humans can do for each other." One way our Chapter shows its gratitude is by presenting outstanding individuals or organizations for their achievements and excellence in support of the Chapter's mission and objectives.

We have made a few changes to the award nomination procedures. Nomination forms have been created for the GAAFS Fisheries Professional of the Year in Fisheries Management, Fisheries Professional of the Year in Fisheries Science and Research, and Fisheries Conservationist of the Year. The nomination forms will ONLY be used to determine the top three finalists for each award category. Each finalist and their nominator will be asked to answer a set of questions that will be evaluated by our team of judges. More information about the judging process can be found on our website.

Access to nomination forms: <https://gaafs.org/award-nominations/>

Visit our website for more information about each Georgia Chapter AFS Award: <https://gaafs.org/awards/>



We simply cannot function without the generous support of our sponsors and fundraising donors. We greatly appreciate everyone who help make our annual meeting a success and assist with our efforts to improve the conservation and sustainability of fishery resources and aquatic ecosystems in Georgia.

# Thank You!

## Individual Contributors

Captain Bert Deener  
Steven Patrick  
Camm Swift  
Carolyn Belcher  
Kady Lyons  
Chris Harper  
Richard Schulte  
Kevin Cavallaro  
Lauren Carroll  
Dan Marotta  
Rebecca Brown

## 2021 Georgia Chapter AFS Sponsors

### Platinum Sponsor



### Silver Sponsor



### Bronze Sponsor



Warnell School of Forestry  
& Natural Resources  
UNIVERSITY OF GEORGIA

## 2021 Georgia Chapter AFS Fundraising Donors





# GA AFS 2022 ANNUAL FUNDRAISER

Each year at our annual meeting our Chapter hosts a raffle and silent auction to raise funds to support the Chapter's mission. Proceeds from the annual fundraiser support our aquatic education outreach projects, student scholarships, habitat restoration projects, and continuing education workshops.

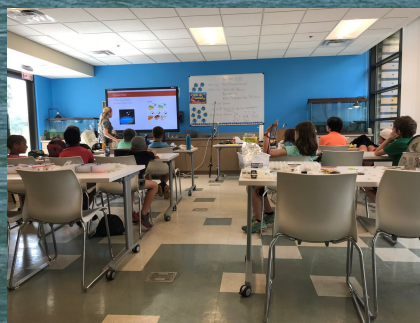
## WE NEED YOUR HELP

Our members can help our fundraising efforts by personally contributing an item or soliciting from a local business, organization, or person. Items may include outdoor cooking supplies, camping/hiking equipment, artificial lures, gift certificates, coolers, tackle bags, trail cams, hats, museum/aquarium/event passes, guided fishing trips, handmade flies, backpacks, fishing rod/reels, kayak/whitewater rafting trips, original artwork, prints, or other fish and wildlife-related items.

Since we are a 501(c)3 nonprofit organization, all donations are tax-deductible.

You can contact our fundraising chair, Jackson Sibley, for more information: [oceansibley@gmail.com](mailto:oceansibley@gmail.com)

## FUNDRAISING DOLLARS HELP SUPPORT



Restoring the  
Chattahoochee River  
One Tributary  
at a Time



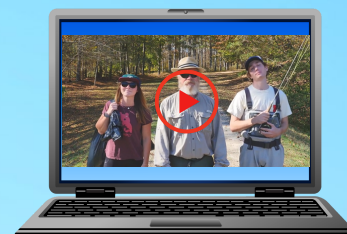
# NEWS & UPDATES

## Pick the Dang Stuff Up!

Clean My Water was founded in 2019 by the Upper Chattahoochee Chapter of Trout Unlimited. The goal is to encourage people who enjoy the outdoors to pick up trash while they recreate to help clean up their local waterways. The movement has caught national attention and they now see posts from 41 states using #cleanmywater. This year, #cleanmywater included a sweepstake for anyone who participated to win some incredible prizes during TU's annual Trout Week (September 25 – October 2, 2021).

Participants had to take a picture of the trash they picked up while out fishing on the river and post it to Instagram.

#CleanMyWater is just one initiative of many ways you can get involved with helping keep our waters clean. October was National Rivers Cleanup Month. The American Rivers website is a great place to look for a river cleanup event near you or you can organize your own river cleanup with family and friends. Bill Nye once said, "To leave the world better than you found it, sometimes you have to pick up other people's trash." Help keep our waters clean and pick up trash whenever you are out fishing or boating.



5 Rivers UGA PSA



*What you do  
makes a difference,  
and you have to decide  
what kind of difference  
you want to make.*

~Jane Goodall

## Georgia Fish Art Contest

### Help spread the word!

Youth have the opportunity to win prizes and recognition while learning about fish species, behaviors, aquatic habitats, and conservation. Using art and writing, the Georgia Fish Art Contest (part of the international Wildlife Forever Fish Art® Contest) can ignite children's imagination and inspire them to discover more about fish and fishing.

Children wishing to enter the Fish Art Contest may choose **ANY** fish species. To enter, youth in Kindergarten through 12th grade can create an original illustration of their chosen fish species and a one-page creative writing essay. However, there are also many additional Specialty award categories, including the Invader Crusader Award. For example, the Invader Crusader Award encourages students to enter artwork that depicts both an invasive species and another fish species impacted by it. Examples specific to Georgia may include pairing a flathead catfish (invasive) with a redbreast sunfish OR pairing a lionfish (invasive) with a grouper. These additional contest opportunities may have different species and/or entry requirements so visit the Wildlife Forever website for more details. Contestants entering this international competition may choose to apply for one or more specialty awards. Essays will be judged and awarded, but are not required, for contestants in Kindergarten, 1st, 2nd, and 3rd grade or from countries other than the USA.



Georgia Entry Form

[bit.ly/GA\\_FISH\\_ART\\_CONTEST](https://bit.ly/GA_FISH_ART_CONTEST)

Visit the Wildlife Forever  
website for more  
information

[www.fishart.org](http://www.fishart.org)



### The Not So Great PFA!

PFA does not just stand for Public Fishing Area. The per-and polyfluoroalkyl substances (PFAS) are a group of chemicals used to make fluoropolymer coatings and products that resist heat, oil, stains, grease, and water. Fluoropolymer coatings can be in a variety of products. These include clothing, furniture, adhesives, food packaging, heat-resistant non-stick cooking surfaces, and the insulation of electrical wire.

These PFAS are of concern because they do not break down in the environment, they can move through the soils and contaminate drinking water, and they bioaccumulate in fish and wildlife. Humans can be exposed to these PFAS by consuming contaminated food or water in addition to using products that contain PFAS.

Additional research is necessary to learn more about how these PFAS affect human health. Laboratory animals given large amounts of PFAS have shown PFAS affects reproduction, thyroid function, the immune system, and injure the liver.

Some state agencies, the Wisconsin Department of Natural Resources and the Wisconsin Department of Health Services, have tested fish in their state waters for PFAS and have updated their fish consumption advisory guidelines because PFAS do bioaccumulate and can stay in your body for years.

Although scientists are still learning how PFAS bioaccumulate in fish and the EPA is still working to develop PFAS standards, using the precautionary principle seems to be the right approach at this time.



**More Information:** <https://www.epa.gov/pfas/our-current-understanding-human-health-and-environmental-risks-pfas>

### The Key to Making Great Presentations

Giving presentations is an important part of sharing your work. A presentation is your story. It needs a beginning, a middle, and an end.

- Begin with the big-picture context of your work. What questions does your research answer? You need to catch the attention of the audience and make it personal.
- In the middle, you need to highlight what you did. Avoid going into too much detail.
- End your presentation summarizing the importance of your work. What do you want the audience to take away from your presentation?

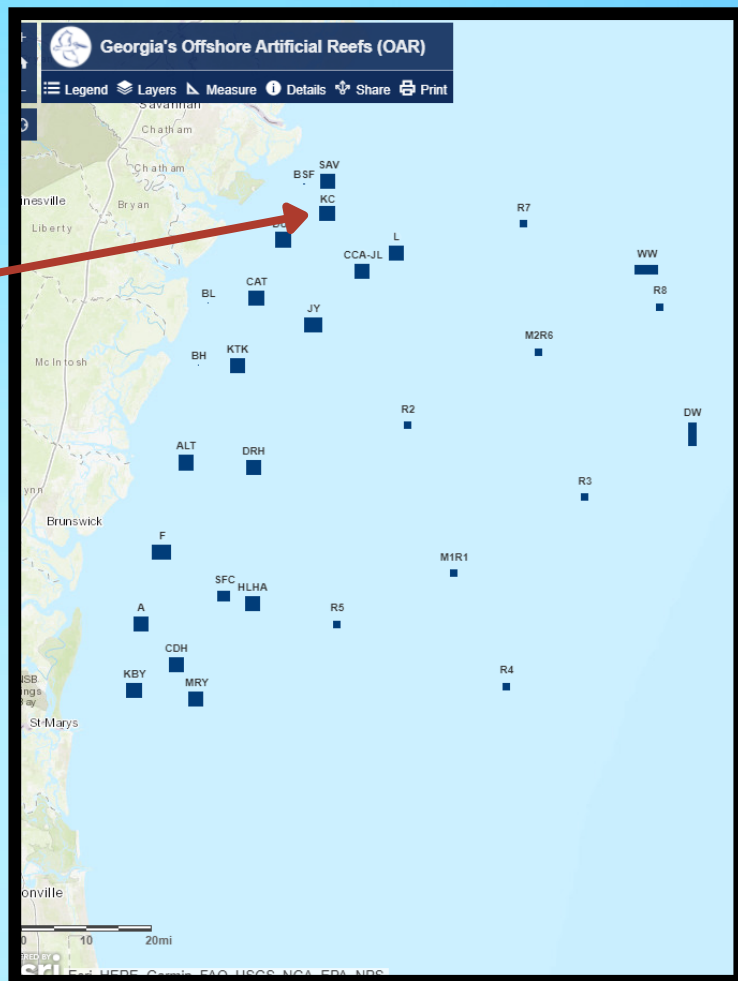
Visit our website for both oral and poster presentation resources.  
<https://gaafs.org/presentation-resources/>



**How to Give an Effective Scientific Presentation**  
Chuck Hages (UF)



### Georgia DNR CRD Adds Three Vessels to Offshore Artificial Reefs



Reef KC: 53-foot tugboat 9 nautical miles east of Ossabaw Island in 52 feet of water at coordinates 31° 49.566'N, 80° 46.870'W

Since the early 1800's artificial reefs have been used to improve angler success. Surplus vessels make excellent artificial reefs. A sunken vessel promptly provides a stable structure that attracts a variety of marine life.

The continental shelf off the coast of Georgia is mostly flat sand or a sand/mud mix. Without artificial reefs, there would be far fewer fishing and diving opportunities. The 31 artificial reefs Georgia has constructed have created a "bluewater" fishery that attracts tunas, wahoo, and mahi-mahi.

The Department of Natural Resources' Coastal Resources Division (CRD) recently sank three more vessels at artificial reefs off St. Catherine's and Ossabaw islands as part of a partnership between CRD, the Coastal Conservation Association (CCA) of Georgia, and Biblia Inc., a contractor who sank the vessels.

The additions were made possible in part by a donation of \$9,000 from CCA, which covered about 12 percent of the project's \$73,500 total cost. The remaining costs were covered by the sale of Georgia fishing licenses.

Source: <https://coastalgadnr.org/crd-adds-three-vessels-offshore-artificial-reefs>



### Burton Trout Hatchery Re-Opens

The Georgia Department of Natural Resources officially re-opened the Burton Trout Hatchery on October 21st.

From the Georgia DNR Press Release

The Burton Trout Hatchery is one of three state-operated trout hatcheries that helps produce over one million fish each year for stocking in public waters, and it recently completed a major two-year-long renovation that will ultimately provide tremendous value to anglers and others, according to the Georgia Department of Natural Resources Wildlife Resources Division.

"We are so excited to get this renovated facility open so we can get back to the business of raising quality trout to better serve the angling public," said trout program coordinator John Lee Thomson.

The Burton Trout Hatchery, originally built around 1938, was in need of renovation due to crumbling hatchery raceway walls, lack of climate-controlled facilities to house trout food, insufficient equipment storage space, and dilapidated offices. Additionally, one of the most critical issues – drought -was able to be addressed. In extreme drought years, fish would have to be moved to another facility or even stocked prematurely, impacting both the stocking program and trout anglers.

Renovations include a new trout production building, office building, residence, warehouse, and a climate-controlled feed storage building, an oxygen injection system, new dam/water intake, and repaving the parking area and boat ramp. In addition, new technology was incorporated into the design allowing nearly 100 percent of the water flowing from the circular tanks to be cleaned and reused in downstream raceways, further enhancing Burton's new drought-resistant operating system.

Source <https://gadnr.org/burton-trout-hatchery-re-opens-after-massive-renovation>

*These tanks are buried partly underground to allow for a safe height to work and can help insulate the water*





# Call for Nominations

It is time to nominate someone for Georgia Chapter AFS President-Elect and/or Recording Secretary-Treasurer. Dawn Franco has agreed to run again for Recording Secretary-Treasurer.

Nominees should be members in good standing with the Chapter and the American Fisheries Society. The incoming President-Elect and Recording Secretary-Treasurer shall be elected at the annual meeting. The person elected President-Elect will serve for one year as President-Elect, followed by one year as President, and one year as Past President. The Recording Secretary-Treasurer shall hold office for a 2-yr period and may be re-elected.

A complete list of duties and responsibilities for each elected Chapter officer is outlined in our bylaws. The bylaws are available on our website:

<https://gaafs.org/bylaws/>

**Use our nomination form to nominate someone or yourself.**

**<https://forms.gle/csjoC2ZVakqdSCfi6>**

## Check out what we created for the 2021 AFS National Meeting




Today is our future video



Click on image for pdf copy of poster





## 2022 SDAFS Annual Meeting

Charleston, South Carolina

January 19 – 23, 2022

Charleston Marriott

### ***The South Carolina Chapter is excited to host the 2022 Southern Division AFS Annual Meeting in Charleston!***

#### **Call for Abstracts**

We are soliciting papers and posters that exemplify the latest research in fisheries science from students through retired professionals, covering a variety of topics applicable to freshwater and marine environments with the aim of advancing fisheries ecology, conservation, and management. We encourage submissions covering a wide range of topics from those of broad interest to those that focus on particular topics, including topics of regional significance. We encourage you to browse the preliminary list of accepted symposia.

#### **Accepted Symposia**

Aquatic Connectivity and Collaboration: From the Science to the Stream  
Listen In: Using Passive Acoustics and Acoustic Imaging to Examine Fish Habitat Use  
and Behavior in Estuaries  
Recent Advances in Stock Assessment  
Instream Flow in Southeastern Rivers  
Value and Challenges of Long-Term Fishery Independent Surveys  
Best Student Presentation

**The submission deadline is Friday, December 17 at 11:59 PM EST.**

**Click Here  
for more  
information**

#### **Student Volunteers Needed!**

As part of the meeting, the chapter will be looking for student volunteers to help with the meeting (AV, registration, etc.). In exchange, the Southern Division will be providing hotel accommodations for those students. There will be a limited number of slots available. If you are interested, please contact Keith Whalen at james.whelen@usda.gov. The deadline for submitting students for these positions is December 6th.



# Q and A

With Jay and Sarah

**Join us for a little insight into being a young fisheries biologist. Both Jay and Sarah work for the Georgia Department of Natural Resources' WRD Fisheries Division. Jay works with warmwater fishes and Sarah works with coldwater fishes.**



## Jay Payne



Jay is a fisheries biologist for Georgia Department of Natural Resources' Wildlife Resources Division, Fisheries Section. He is from Lilburn, Georgia, and as a kid, he casually fished a few times. He really came to love and pursue fishing in high school when he was looking for more direction in his life. After high school, Jay attended the University of Georgia's Warnell School of Forestry and Natural Resources where he concentrated in fisheries science. Jay ventured to Tennessee Tech University for graduate school. His graduate research looked into the effects of lake depth on algae blooms and water quality/oxygen dynamics in highly impacted oxbow lakes of the Mississippi Delta region. Jay really enjoys working as a fisheries biologist and on his days off he spends time with his family or enjoys a day of fishing, camping, hunting, or cycling.



Continued on next page



## **What are your responsibilities at Georgia DNR?**

I have a variety of responsibilities over the rivers and reservoirs in the east-central region of Georgia (or the CSRA) that vary from routine fish sampling to habitat enhancement projects to providing technical guidance on FERC relicensing committees for local locks and dams. I also oversee the McDuffie warmwater fish hatchery, public fishing area, and environmental education center in Dearing as well as other local resources.

## **What skills are needed for your job?**

People skills, objective problem-solving skills, time and task management skills to name a few. I mostly acquired these skills from experience, which is a nice way to say I learned from my mistakes.



## **What do you find most rewarding and most challenging as a fisheries biologist?**

It's hard to say, but maybe the season I spent doing fieldwork on trout streams near Missoula, Montana. Although coming back to Georgia after that may be an even better memory, I was surprisingly homesick.

## **What is your advice to students thinking about pursuing a career in fisheries science?**

Be prepared to move. Career opportunities and advancements often require moving.



## **Give an example of when you had to think outside the box to solve a problem/issue.**

This feels like an everyday requirement for this job. Between brainstorming ways to improve hatchery protocols, meet fish management goals, or even reduce technician workload, it feels like I am constantly pushing to think outside the box and consider new innovative alternatives. This could be as simple as modifying aerators to keep them running in a pinch or larger-scale projects like collaborating with tournament anglers to combat invasive species in large reservoirs.

## **If money was no object, what is one project that you would like to work on?**

A full-scale facility renovation at McDuffie including a historic cabin and grist mill that are on site.

## **What is your favorite fish? Why?**

The kind that are biting. But really, it's almost impossible not to say largemouth bass. I think my whole career could be traced back to the excitement I felt the first time I saw a largemouth strike at a spinnerbait, and I didn't even catch that fish.



# Sarah Baker



Sarah Baker is the trout biologist for the Georgia Department of Natural Resources' Wildlife Resources Division, Fisheries Section. She has been tromping through streams with electricity for the past 8 years in search of answers related to salmonid population dynamics, habitat utilization, riparian restoration, and nonnative species interaction. Sarah is originally from Idaho and spent the majority of her childhood hiking under Tamaracks and through wildflower fields. The enormous amount of public land secured in Idaho tremendously influenced her desire and ability to spend time outside, for which she is very grateful. Now, she is enjoying her hikes under hemlocks and through rhododendron in Georgia. She has worked extensively with trout in riverine systems in Idaho, Utah, Nevada, Washington, Alabama, and now Georgia.



She developed a passion for trout while conducting research as an undergraduate at The College of Idaho where she received her Bachelor of Science in Biology and minored in Veterinary Science, Environmental Humanities, and Psychology. Her interest in fisheries began as she learned more about how fish can serve as an important indicator to human health. Her professor, Dr. Christoph Walser, had a tremendous influence on her fisheries career and supported her through her undergraduate research. She used genetic data to better understand the movement of Redband Trout, *Oncorhynchus mykiss gairdneri* in Dry Creek, Idaho to assess whether a culvert was a barrier to fish passage. In addition to her undergraduate research, she also interned with Trout Unlimited's Science Staff for two summers. For these internships, she primarily conducted fieldwork evaluating the effects of cattle exclosures on stream health and habitat quality. After college, she worked for a private company where she estimated fish-habitat relationships as part of a long-term monitoring program and assessed the effects of habitat management actions on Steelhead populations and overall ecosystem health throughout the Columbia River Basin. She then went on to complete her Masters in Fisheries at Auburn University. For her graduate research, she assessed the movement of stocked Rainbow Trout and predation of trout by Striped Bass in an Alabama tailwater. She absolutely loves being outside with her husband and enjoys baking, hiking, backpacking, hunting, and of course,

Continued on next page



fishing! She has fallen in love with Georgia's mountain streams and flings flies into them every Saturday that she can.

### **What are your responsibilities at Georgia DNR?**

I find it to be a great honor and privilege to be a biologist for Georgia DNR. The position is a full one! I continue long-term monitoring surveys, and organize restoration and enhancement projects, to protect, evaluate, and improve trout populations and habitat. I collaborate with other government agencies and citizen groups to help conserve Brook Trout populations. I participate in planning processes at the state, county, and local levels to address cold-water resources concerns. I review major development projects and provide comments to regulatory agencies that will help avoid or minimize impacts to trout waters. I provide technical assistance to other agencies and private landowners on the optimal management of trout stream resources. And most importantly, I encourage and equip people to go trout fishing!



*Ladies Fishing Club*



*Sarah and her team sampling a North GA stream*

### **What skills are needed for your job?**

The most important skill needed for my job is maintaining a positive attitude. Time in the field can be demanding, exhausting, and discouraging when things aren't going as planned, so it is necessary to keep pressing forward cheerfully to complete the job. Secondly, flexibility is the name of the game. I am a planner, but the weather doesn't usually like my plans. We're also often short-handed, so it's important that I can be ready to jump in and help out my colleagues. It's incredibly helpful to know my resources well so that I can appropriately guide my customers to places where they can have a fun fishing experience. Lastly, being able to communicate and connect with others well is also a very important part of being a fisheries biologist for GA DNR. I'm thankful for the opportunity to have acquired these skills from observing and learning from experienced staff in my Region.



**What do you find most rewarding and most challenging as a fisheries biologist?**

Managing trout resources while accounting for the conflicting and strong desires of multiple stakeholders is the most challenging aspect of my position.

My position is very rewarding; Every day, I get the opportunity to share with someone about the amazing, and unique biodiversity in Georgia, and how by supporting trout fisheries in the headwaters of the state, you're supporting healthy habitats for species throughout Georgia. It's all connected!



**What is your favorite memory from your career so far?**

I have a lot of great memories in just two years of being with DNR, but my favorite memory is when Leon and I were sampling a stream to investigate the presence of wild trout, and came across TWO hellbenders! They are incredible creatures and I had been hoping I would get the opportunity to see one.



**What is your advice to students thinking about pursuing a career in fisheries science?**

My advice to students thinking about pursuing a career in fisheries science is to spend time outside. Learn the rivers/streams/lakes/oceans nearby you, ask questions about the things that you observe, and then investigate those questions. If you honestly enjoy doing these things often, then you should certainly pursue this field. Next, focus your academic efforts on improving your quantitative and spatial understanding.

**If money was no object, what is one project that you would like to work on?**

Oh my goodness, I have so many projects I'd like to work on. My top project would be to conduct genetic monitoring of Brook Trout populations throughout Georgia to more fully evaluate local extinction risks.

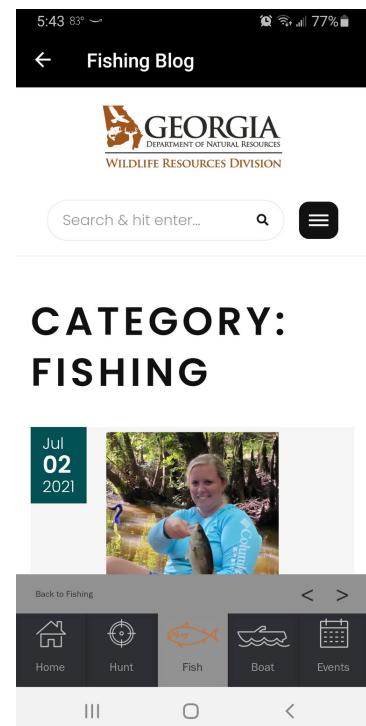
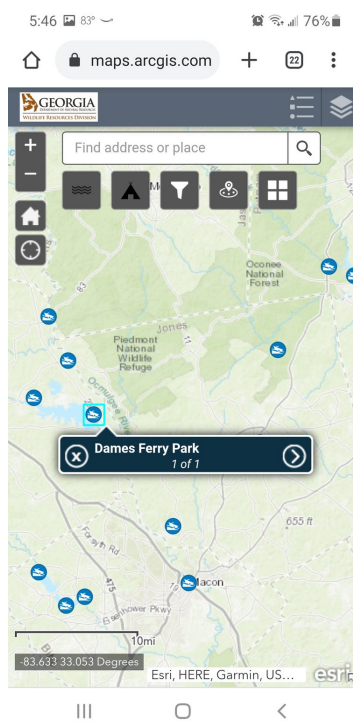
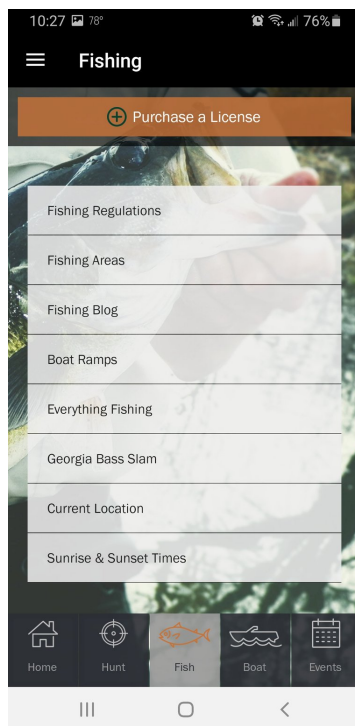
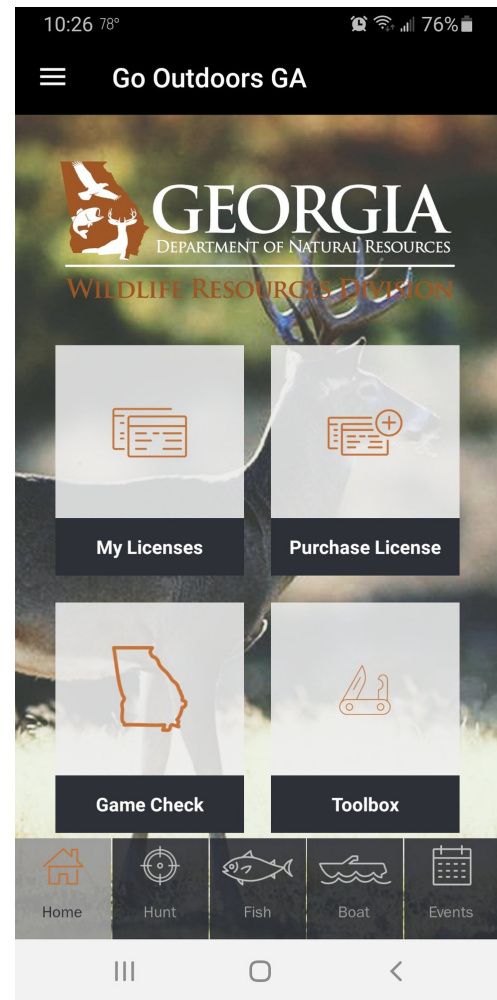


**What is your favorite fish? Why?**

My favorite fish changes, but right now it is the Brook Trout because it is such a special and iconic fish to Appalachia. I am thankful that we still have robust populations of this incredible salmonid in Georgia.

## Have you tried the Go Outdoors GA app?

The Outdoors GA app, free in [Google Play](#) or [Apple store](#), has multiple uses, including purchasing and storing fishing licenses, finding fishing areas, the weekly [GA DNR WRD Fishing blog](#), and help to locate boat ramps.  
(and it has hunting info too)







# DID YOU KNOW

## Fishing Regulations in Other Countries

### Scotland

- There is no fishing license required except in the Border Esk Region of Scotland
- No fishing for salmon or sea trout on Sundays

### England

- Licenses for children aged between 13 - 16 are free, but they still need to get a junior license
- License prices depend on the type of fish you are fishing for and the number of rods you use
- A 12-month trout and coarse fish (in the British Isles any fish not a salmonid) 3-rod limit is £45 (\$62)
- Failure to obey fishing bylaws one could face prosecution and be fined up to £50,000 (\$69,000)

### Germany



- You must first pass a fishing exam to earn a permit that allows you to purchase a fishing license
- Before taking the exam you must attend a 30-hour course (ichthyology, hydrology, fish diseases, laws)
- In some places you can be fined up to €25,000 (\$29,000) for fishing without a license or a permit
- Practicing catch and release is forbidden except when a fish is under the size limit or caught out of season
- The use of artificial bait with a total length of more than 2 cm in the period from January 1 to April 30 of each year is prohibited in Berlin's waters





# TEST YOUR KNOWLEDGE

These are sample questions from a test German anglers must pass to show proof of confidence in order to purchase a fishing license (questions were translated from German to English)

1.  This type of fish is characterized by a peculiarity. Which one is it?
  - A. An anadromous migratory fish
  - B. A catadromous migratory fish
  - C. A still fish
2.  Which family does this fish belong to?
  - A. Cyprinids
  - B. Coregonids
  - C. Salmonids
3. At the gill surface
  - A. Oxygen is given off by the blood and carbon dioxide is taken up
  - B. Oxygen is taken up by the blood and carbon dioxide is given up
  - C. Oxygen and carbon dioxide are taken up by the blood
4. Which parts of the fish's body can be used to determine the approximate age of the fish?
  - A. In the thickness of the skin and the number of rays of the fin
  - B. In the number of gill arches and in the length of the same
  - C. On the scales
5. Which of the following fish have no swim bladder?
  - A. Pike and perch
  - B. Lampreys and mackerels
  - C. Carp and trout
6. Why are fish called cold-blooded animals?
  - A. Because their body temperature adjusts to the respective water temperature
  - B. Because they can change their body temperature regardless of the water temperature
  - C. Because despite the changing water temperature, their body temperature always remains constant
7. When do fish have an increased need for oxygen?
  - A. Never, because the oxygen demand is always the same
  - B. At high water temperature
  - C. At low water temperature
8. Pick the correct answer!
  - A. Cyprinids have 2 adipose fins and a two-part swim bladder
  - B. Cyprinids have no adipose fin and a one-piece swim bladder
  - C. Cyprinids have no adipose fins and a two-part swim bladder





## Professional Spotlight

Tim Barrett

Tim is currently the Region 6 (Coastal) Supervisor for the Georgia Department of Natural Resources' Fisheries Management Section. He started his career in this region back in 1997 as a Fisheries Biologist. Although Tim grew up in Carrollton, Georgia, he says saltwater now runs through his veins. Tim is an avid fisherman and a pretty darn good cook! He has served the Georgia Chapter as our Chapter President and he continues to support the Chapter and its mission in a variety of ways.



### What got you first interested in fisheries science?

*I loved the outdoors as a youngster and cannot remember a time when I didn't dream of going to work every day in a bass boat. As to what sparked that interest all I can say is the good Lord made me that way. It's not a general love for all things outdoors, I love fishing!*

### Where did you go to school and what did you study?

*I was accepted to the University of Georgia (Go Dawgs!) in a time when a perfect SAT score and 2000 hours of volunteer time at the local soup kitchen were not required for admittance. I studied freshwater fisheries management at the Warnell School of Forestry and Natural Resources. Here I earned a BS and an MS in Fisheries prior to graduation in 1996.*

### Describe one or two projects you are currently working on as part of your current position.

*A couple of projects of interest I have been working on of late is the construction of the new Richmond Hill Fish Hatchery and Office complex and the design and construction of the first large RV campground run by the Fisheries Section. These two projects taught me how much I don't know about the design and the construction process. It was both challenging and rewarding to see these two projects come to life and thrive.*



*Tim's approach to fisheries management is complemented by both his experience managing diverse resources and his instincts as an avid angler. As a fish culturalist, few folks have had as wide-reaching of an impact. He was instrumental in streamlining Georgia's striped bass production process and since starting as a biologist at the Richmond Hill Fish Hatchery in the late-1990s, Tim has had his hand in the production of 400 million Morone fry!*

~ Jackson Sibley, Fisheries Biologist, Georgia DNR, WRD



## Professional Spotlight Continued

### Describe the most rewarding experience you have had during your career.

*I would say one of the most rewarding things that I have experienced in my time with GA DNR is the opportunity to somewhat improve the States' Morone culture program. One thing that I find very enjoyable about working for fisheries is that the leadership is always willing to give you all the flexibility and resources you need to find a better way. This trust has led to some big increases in efficiency.*



### What advice would you give to someone pursuing a profession in fisheries science?

*If you are looking to pursue a career in fisheries, be ready and willing to get some good hands-on experience after your schooling by volunteering. This experience and know-how seem to be the difference-maker in the interview process. If you can find out what you love to do in this life that's great. If you can find out how to get paid to do that thing, that's even greater. I have never regretted taking the risk to what I was most passionate about, you won't either. Find it and get after it.*



*"Tim has been a crucial component in the advancement of Morone propagation for GA DNR throughout his career. Building on the industry-revolutionizing ideas of his predecessors, Tim, using his simplistic yet attention-to-detailed approach, helped to streamline many of the Morone production techniques that have led to the extremely efficient program that we have today. Through time, as Tim's role at GA DNR has become more leadership-based, his teambuilding strategies have created a productive and cohesive work environment, producing positive results for the department while emphasizing the importance of each employee and their families."*

~ Joel Fleming, Fisheries Biologist, Georgia DNR, WRD

### What is your favorite quote?

*One of my favorite quotes is from scripture and found in John 14:6 here Jesus says "I am the way, and the truth and the life. No one comes to the Father except through me."*

### What is something about yourself that others may be surprised to know about you?

*In 1989, Tim marched in the 100th Tournament of Roses Parade with the Carrollton High School Marching Band while playing the Snare Drum. (anonymous source)*







# Student Spotlight

Justin Smallwood

Justin is from Carrollton Georgia and he is currently an undergraduate student at the University of West Georgia. He will graduate this December with a degree in Biology. Justin's study interests include freshwater fish diversity and ecology as well as herpetology and wildlife studies.



## What attracted you to pursue a science degree?

*I was attracted to a biology degree with a focus on fisheries/aquatics by my outdoor lifestyle which has included hunting and fishing my entire life. I also enjoy the amazing diversity of fishes found throughout our waterways.*

## Describe any projects you are currently working on as a student at the University of West Georgia.

*I am currently working on a program with a fellow student researching the Coosa Redeye bass and what water temperature range they can live in successfully. I am also working on a project of capturing and documenting the many fish species of the Tallapoosa River system, in hopes to create a field identification guide with all of the native species included. I am also currently working on a project to identify the living range of each subspecies of patent-leather beetle found in the southeastern United States, which will help us to determine the level of protection they need as far as conservation goes.*

## What is one of your favorite memories as a University of West Georgia student?

*My favorite memory as a student at West Georgia was getting to go on my first research trip that took me to Arkansas, Oklahoma, and a few other states to find patent-leather beetles. That was the first time I had been that far west and it came with many new experiences, as well as many new stories that I will be able to share for the rest of my life.*

## What is your favorite quote?

*"No man ever steps in the same river twice, for it is not the same river and he is not the same man."*

- Heraclitus





## Student Spotlight Continued



**What advice would you give other students?**  
*The most important advice I would give to other students is to get involved with professors early on and get involved with research projects to get your foot in the door, which may lead to the best school/research experience you will ever have.*

*Justin is what all mentors look for in a student research assistant: a go-getter who takes the initiative, with a curious and nimble mind eager to learn more. The projects Justin has worked on make consistent forward progress due to his dedication, and he intuitively knows how to bring the relevant aspects of his skills and previous experiences to the table to improve outcomes and work collaboratively as part of the team. And it certainly doesn't hurt that he knows all the best fishing spots!*

~ Dr. Janet Genz, University of West Georgia

### **In 10 years, what would you like to have accomplished?**

*In ten years, I would love to be living happily in South Carolina, working a biology job that will allow me to spend the majority of my time in the field working with animals and nature hands-on. I hope to be fishing and working with snakes as much as I can and enjoying every second of being in nature, and as close as I can be to God.*



### **What are some of your favorite extracurricular activities?**

*My favorite extracurricular activities include Fishing (any and all kinds of course), working with reptiles (snakes especially), hunting, and woodworking.*

### **What is something about yourself that others may be surprised to know about you?**

*Many people find it surprising when they first meet me due to the fact that I have grown up in and around Carrollton Georgia, but I am an avid fly fisherman. I am by no means a professional but I love to fly fish and I go after many different species both native to my area and areas to which I have to travel.*



# Props!



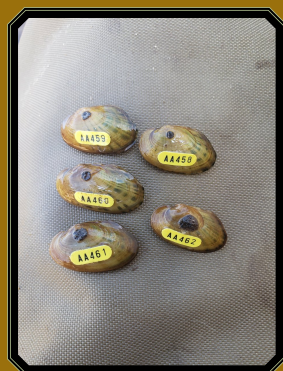
Do you have a picture of a fish you recently caught and want to share? Send your pics to Rebecca Brown at [georgiaafs@gmail.com](mailto:georgiaafs@gmail.com)





## WHERE'S BUBBA

Bubba has been spending a lot of time doing fieldwork. He recently helped to install and monitor mussel silos. These silos make it easier to monitor survival and growth rates at potential restoration sites.



## BUBBA'S VIDEO PICK

**Fish Are Way Smarter  
Than You Think**



## BUBBA RECOMMENDS

Are you looking for some gift ideas? Be sure to visit some of our fundraising donors who might have just what you need. Click on their logo to visit their website.



**THE CANOE HOUSE**  
— DRY GOODS + SUPPLY CO. —  
ROME, GEORGIA



**TEMPLE FORK**  
OUTFITTERS





## Safety Tip

from Bubba Bass



As some of you know, many fisheries professionals do not work in the office and often find themselves working in areas where professional emergency care is not readily available. Fisheries professionals and fisheries students should consider taking a first aid course and becoming CPR and AED certified.

**Students check with your school to see if they offer free classes.**

- <https://www.redcross.org/take-a-class/cpr/cpr-training/cpr-online> (Red Cross)
- <https://cpr.heart.org/en/course-catalog-search> (American Heart Association)



**Although we take all the safety precautions accidents can happen. Be prepared!**

**Don't Forget Your Float Plan**

## Fin and Games

**Some know me, but many do not. Use these clues to discover my name.**

**My inner shell is full, but my outer shell is only 7/8 full. If you know my number you have my name and vice versa. When you're in your element my name will periodically lead you to the first letter of a common name for me.**

**The middle part of my name might be a little challenging but won't leave you flat on your back. This word is a homophone with many meanings. This word is used by golfers, fencers (the ones with a sabre), hunters, and it is used by fly fishing anglers.**

**You are almost there...one more letter to go. Folks in Waycross might get this clue. Watch out for these round signs warning you to be aware of these behemoths ...but it won't be Ol' Nine. You only need half of this sign to get the last letter to solve this brain teaser.**

(answer on last page)

## Bubba's Friends

### **Lake Sturgeon (*Acipenser fulvescens*)**

The lake sturgeon is a species that is found primarily in the Great Lakes and Mississippi River drainage area but was also found in the Coosa River basin in northwestern Georgia and northeastern Alabama. Unfortunately, the original population of lake sturgeon disappeared from the Coosa River system in the 1960s. The Georgia Department of Natural Resources, Wildlife Resources Division (WRD) initiated a long-term effort in 2002 to restore lake sturgeon to the Coosa River system in Northwest Georgia.

The two primary goals of the reintroduction program are to re-establish a native sportfish and the other is the conservation of one of our state's rare species. Female lake sturgeon do not reach reproductive age until the age of 14 - 23 so it will be sometime before we see the stocked lake sturgeon start reproducing on their own.

Until then Georgia DNR WRD fisheries staff will continue to stock and monitor the lake sturgeon in the Coosa River basin. And don't forget, if you happen to catch one, handle it with care and release it as soon as possible. People are encouraged to report lake sturgeon catches and sightings to Georgia DNR: 706-295-6102

Read more about the Lake Sturgeon reintroduction to the Coosa River basin by visiting the Georgia DNR website: <https://georgiawildlife.com/lake-sturgeon-reintroduction-program>







# Don't Forget Nominate Someone for a Georgia Chapter AFS Award

## Reminder

We have developed a new nomination process and separated the GAAFS Fisheries Professional of the Year (FPY) into two separate categories: GAAFS FPY in Fisheries Management and GAAFS FPY in Fisheries Science and Research.

Nomination forms have been created for the GAAFS FPY in Fisheries Management, FPY in Fisheries Science and Research, and Fisheries Conservationist of the Year. The nomination forms will ONLY be used to determine the top three finalists for each award category. Each finalist and their nominator will be asked to answer a set of questions that will be evaluated by our team of judges.

**DEADLINE TO NOMINATE SOMEONE FOR ONE OF THESE 3 AWARDS IS DECEMBER 20, 2021**

**GAAFS FPY in Fisheries Management Nomination Form:**

<https://forms.gle/uc2dVYypJoPKHWmZ6>

**GAAFS FPY in Fisheries Science and Research Nomination Form:**

<https://forms.gle/QnyRNhGWgnAFXTdHA>

**GAAFS Fisheries Conservationist of the Year Nomination Form:**

<https://forms.gle/1U3Xf9mgsP7VQG1i9>

### **ADDITIONAL CHAPTER AWARDS**

Do you want to nominate someone for one of the following Georgia Chapter AFS Awards: Career Contribution, Unsung Hero, Distinguished Service, or Certificate of Appreciation? Submit a nomination letter describing the qualifications of the nominee and how the nominee meets the criteria for the award. Your letter should be 500 words or less and please include a picture of your nominee (working, fishing, etc.). Guidelines are available to assist you with the nomination process. All nominations for these awards need to be submitted by January 15, 2022, to Steve Sammons at [sammosm@auburn.edu](mailto:sammosm@auburn.edu).

Click Here  
for all of the  
Award  
Descriptions

Click Here  
to download the  
Nomination  
Guidelines

Click Here  
to learn about the  
Judging Process



# FISHY NEWS AROUND THE WORLD

## **The Fish Site**

### A BREATH OF FRESH AIR: HOW NANOBUBBLES CAN MAKE AQUACULTURE MORE SUSTAINABLE

Depending on parameters, traditional aeration systems usually allow the culture of up to 40 kilos of seafood per cubic metre. With nanobubble technology, this can be raised to 80 kilos or more. From 30HP to 200HP of traditional paddlewheel aerators are typically used per hectare, but more efficient nanobubble generators can better aerate water using less energy.

## **Stony Brook University**

### LONG ISLAND WATER-QUALITY ASSESSMENT SHOWS CAUSE FOR CONCERN

Stony Brook University scientists have completed their assessment of water quality in Long Island's estuaries in 2021, and the news is not good. During the months of June through October, every major bay and estuary across Long Island was afflicted by toxic algae blooms and oxygen-starved, dead zones.

## **PHYS.ORG**

### GENETIC ANALYSIS REVEALS DIFFERENCES IN MATE CHOICE BETWEEN WILD AND HATCHERY COHO SALMON

A new study of the genetic profiles of wild and hatchery coho salmon demonstrates important distinctions in how the two types of fish form mating pairs. These findings by Oregon State University researchers provide new insight into subtle differences between wild and hatchery fish that could lead to changes in how hatchery fish are mated to promote the success of hatchery fish and conserve and protect wild fish.

## **Eureka Alert (AAAS)**

### STUDY TO EXAMINE GENETIC CONNECTIVITY OF FISH, SNAILS, AND SHRIMP NATIVE TO GUAM AND MARIANAS RIVERS

In an effort to manage and conserve diadromous fish, snails, and shrimp that are native to rivers in Guam and the Marianas, a researcher from the University of Guam will be working over the next four years to collect and genetically analyze species found in the region's watersheds.

## **Yale E360**

### ON THE KLAMATH, DAM REMOVAL MAY COME TOO LATE TO SAVE THE SALMON

The planned demolition of dams on the Klamath River was expected to help restore the beleaguered salmon on which Indigenous tribes depend. But after a record drought and wildfire this summer, many are worried the salmon could be all but gone before the dams come down.

## **PHYS.ORG**

### MARINE HEATWAVES DURING WINTER COULD HAVE DIRE IMPACTS ON NEW ZEALAND FISHERIES AND HERALD MORE SUMMER STORMS

The ocean around New Zealand is getting warmer, and extreme warming events have become more frequent over the past years. These marine heatwaves can have devastating impacts on ocean ecosystems. When they happen in summer, they usually receive a lot of attention. But those happening during winter, when the ocean is cooler, are often ignored.



# AFS AND SDAFS INFORMATION

## Southern Division American Fisheries Society Annual Meeting



**The South Carolina Chapter is excited to host the 2022 Southern Division AFS Annual Meeting in Charleston!**

While we plan on having a very successful in-person 2022 SDAFS annual meeting, the Planning Committee has the utmost concern for the health and safety of our members, meeting attendees, and their families. We are closely monitoring local trends in Covid-19 and variant rates in our city, state, and region. Additionally, we are working closely with the hotel and local authorities to monitor potential governmental guidance restricting gatherings or required social distancing protocols. If we feel trends are heading in an unsafe direction for our attendees, we reserve the right to impose protocols to ensure the safety of our attendees and families – with potential options including, but not limited to, vaccine mandates, mask mandates, meeting format changes (hybrid or virtual), and/or postponement. We will make a final decision by early December and will refund registration costs for those already registered.

**Click on Bubba for more information about SDAFS 2022**



## Are you a member of the American Fisheries Society?

- Membership to the Georgia Chapter is separate from being a member of the American Fisheries Society (AFS). Please visit the AFS membership website to learn more about being part of the largest professional society of fisheries scientists in the world.



<https://fisheries.org/membership/types-of-membership/>

Some benefits for becoming a member of AFS:

- Free online and mobile app access to AFS publications
- Discounts on books in the AFS bookstore
- Discounted registration fees
- Opportunities for AFS travel grants
- Attend continuing education courses at reduced registration rates
- Access to online webinars
- Able to vote on Society and Chapter business

Learn more about AFS: <https://fisheries.org/about/>



**Click on the laptop to watch a video**



# SUGGESTIONS? LET MINNOW!

**You can contribute. We need your input. Help keep the GA AFS members connected.**

Are you working on an interesting project you'd like to share with other Georgia AFS members? Do you have news to share with colleagues? Please make note of upcoming events, projects, personnel changes, issues, or anything else of interest to other Georgia AFS members, and pass them on to us for inclusion in the next newsletter.

Do you have any pictures you want to share with us to use on our website or newsletter? We are always looking for fish pictures, pictures of you working, aquatic scenic pictures, etc.

Do you have someone you want to nominate for the professional or student spotlight?

Have you caught a fish recently you want to submit for our "Props!" page? We also welcome immediate family members pictures of fish they recently caught.

You can send your nominations, requests, pictures, suggestions, and comments to Rebecca Brown at [georgiaafs@gmail.com](mailto:georgiaafs@gmail.com).

## Stay Connected

### GAAFS Website

[gaafs.org](http://gaafs.org)

### Facebook

[facebook.com/groups/georgiaafs.org](https://facebook.com/groups/georgiaafs.org)

### Twitter

@GeorgiaAfs

### Instagram

@georgiaafs

### Newsletter Editorial Board

**Rebecca Brown**  
**Jamie Roberts**  
**Marion Baker**  
**Kevin Cavallaro**  
**Jim Page**  
**Brent Hess**