

Under the Dock

May 2022



Newsletter of the Georgia Chapter of the
American Fisheries Society

WHAT'S INSIDE

Click on title to go directly to page

- [Dockside: What is your story?](#)
- [News and Updates](#)
- [Boater Safety Training](#)
- [Plugged In](#)
- [Sponsor Highlight](#)
- [Our 2022 Sponsors](#)
- [Our 2022 Fundraising Donors](#)
- [Our Battle with Weed Control](#)
- [SDAFS Small Impoundments Technical Committee](#)
- [Chapter Spotlight](#)
- [Did You Know](#)
- [Bubba's Place](#)
- [The Book Shelf](#)
- [Fishy News from Around the World](#)
- [AFS information](#)

Mark Your Calendar

- **May 6**
 - Complete survey for R workshop
- **May 10**
 - National Shrimp Day
- **May 16 - 20**
 - Joint Aquatic Sciences Meeting in Grand Rapids, MI
- **May 21**
 - World Fish Migration Day
- **June 4 - 12**
 - National Fishing and Boating Week
- **June 25**
 - National Catfish Day
- **August 21 - 25**
 - AFS National Meeting in Spokane, WA
- **February 15-17, 2023**
 - GAAFS Annual Meeting

OUR MISSION

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

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

<https://gaafs.org/>

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



Send us your fish photos for the Props! bulletin board



While fishing in the Bahamas, John Damer caught this barracuda with a whopper plover.

Do you have an idea for an article?

We welcome a broad range of submissions that address research and ideas relevant to marine and freshwater finfish and shellfish and their respective fisheries and environments. Submissions are due on the 21st of each month unless told otherwise.

Contact Rebecca Brown (georgiaaafs@gmail.com) if you have questions. We also welcome suggestions for an aquatic species to highlight, safety tips, and ideas for the section *Did You Know*.

DOCKSIDE

WHAT IS YOUR STORY?

By Rebecca Brown

What inspired us to choose a career in fisheries? For most of us, we were introduced to the world of fish at a young age when a family member took us fishing for the first time. For me, it was my dad. For my dad, it was his mom. A lot of great memories have been created from fishing trips with family and friends.

My earliest recollection of fishing was in first grade. My memory is not about catching fish as much as how much fun I had catching bullfrog tadpoles. I took a few to school and we all enjoyed watching them grow. They died before they became frogs. I am not sure who overfed them. I blamed my teacher, Mrs. Bundy.

My fondest memories are fishing with my best friend Steve. I met Steve in fifth grade when my family moved to Alpharetta toward the end of the school year. I think it was sixth grade when he and I were allowed to go fishing by ourselves at Mr. Ed's pond which was about a 10-minute walk from my house. We had a lot of great fishing adventures and created wonderful memories that will last our lifetime.

As we gained more trust from our parents and Steve's younger brother Jonathon was able to join us we extended our fishing adventures to the two ponds located in the woods back

behind our elementary school. It was about a half-mile hike through the woods from my house. On those days we packed a lunch because we would leave in the morning and return late afternoon no matter how the fish were biting. I think we were 12 or 13 years old at the time.



Steve, Me, and Jonathon, 1982

As kids, we learned a lot from fishing. Angling requires good problem-solving skills. Anglers pick through their tackle box trying to decide how to catch a fish using what they have. Most days we relied on ourselves to find our own bait because we had very few of our own lures. Today my tackle box has more lures than I will ever need or use.

We handled most of our own first aid requirements except for the time I had the Heddon Tiny Torpedo stuck in my leg and

Steve had to run to my house to get my mom to drive over to the lake and pick me up. And around my house, we did not go running to the emergency room for small first aid requirements. A razor blade was the only thing needed to cut the hook out of my leg. And if it ever happens again my friend Marion taught me how to remove an embedded hook without the need for sharp instruments.

Many days were spent sitting on the pond bank with my friends waiting for the trigger of a bouncing float while talking about everything and anything that came to our minds. Not much kept us from fishing until we grew a little older and had other priorities. I miss those days.

Mr. Ed's lake is still there but is now surrounded by houses. And the two ponds behind the old Newtown Elementary School were drained and developed into a neighborhood.

Today I mostly fish alone. I don't mind because it is just me, the fish, and my thoughts. Every now and then I go fishing with my dad. I love spending time on the boat with my dad.

Whether you were inspired by fishing as a child or something else, I think most of us can say that our interest in fisheries science budded from an experience we had with fish whether it was fishing or something else. What is your story?



Have you paid your 2022 Georgia Chapter dues?

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 and the conservation and management of Georgia's fisheries and aquatic ecosystems.

Your membership dues help support fisheries conservation in Georgia.

Annual dues are \$10 and can be paid using our online store.



American Fisheries Society Climate Change Resources

We are connected to fish through our recreational activities and the food we eat, but a rapidly changing climate is threatening the balance of nature.

AFS has created a website that serves as a hub for resources to educate fisheries stakeholders on how climate change is affecting fish and their habitats.

<https://climate.fisheries.org/>

BENEFITS OF FISHING

Contributes to conservation

Decrease in stress/anxiety

Creates social bonds

Boosts economy

Burns calories

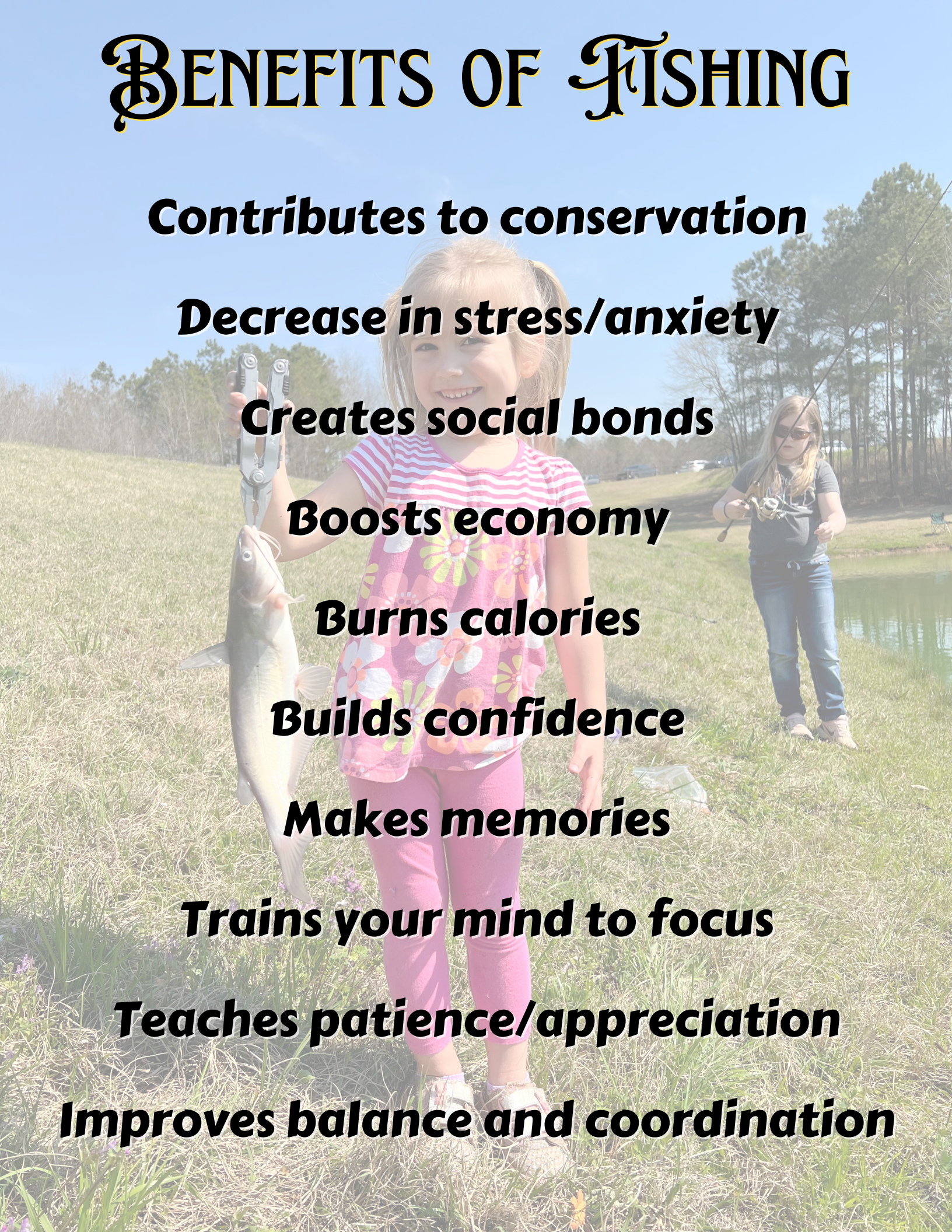
Builds confidence

Makes memories

Trains your mind to focus

Teaches patience/appreciation

Improves balance and coordination



ON THE CALENDAR

May 10 - National Shrimp Day

The annual harvest of shrimp in Georgia averages around two million pounds. Most of the commercially caught shrimp in Georgia waters are white and brown shrimp.

Maintaining a sustainable fishery

To help inform fishery decisions, data is collected about shrimp populations year-round along the Georgia coast each month. Biologists record data about how many shrimp are caught and the total weight.

The commercial shrimp season typically runs from around mid-June to the end of December. The season can be extended depending on data collected by the biologist.



May 21 - World Fish Migration Day



Did you know Georgia has several species of fish that migrate between feeding and breeding areas?

Atlantic sturgeon are representative of a group of highly migratory species that migrate hundreds or perhaps thousands of miles between feeding and breeding areas; other highly migratory species include American eels, striped bass, several species of shad, and mountain mullet.



While most of our fishes do not make these epic journeys to complete their life cycle, movement between feeding, breeding, and refuge habitats has been shown to be important for even small species like minnows and darters. For example, the trispot darter (*Etheostoma trisella*) is known to migrate from large river feeding habitats into the tiniest headwater streams for spawning in late winter and early spring.

NEWS & UPDATES

We are planning an R Statistical Computing and Graphics Workshop

The Georgia Chapter American Fisheries Society Continuing Education Committee is planning an R workshop for students and professionals. The Committee needs your help as they finalize the location and dates for the workshop. **WE ARE ASKING EVERYONE WHO IS INTERESTED IN ATTENDING THE WORKSHOP TO COMPLETE A SURVEY.** The survey should take about 3 to 5 minutes to complete. <https://forms.gle/hpeNZKC3ei32PhoG7>

This workshop will provide both a basic introduction to using R and RStudio and provide opportunities to work with data, conduct selected analyses, and construct publication-quality graphics using R and RStudio. It is intended for students and professionals who are interested in using R for summarizing and analyzing data. A more detailed description of the training workshop can be found on our website. <https://gaafs.org/workshops/> (scroll to "Future Workshops")

Do you want to know more about R? <https://www.r-project.org/about.html>



Georgia Fish Art Contest Judging



There were many great entries this year for the statewide youth fish art contest. The top winners in each of the specialty categories qualify for the international competition sponsored by Wildlife Forever.

Judges Emilia Omerberg and Laura Wenk (pictured left) joined Amory Cook, Rebecca Brown, and Zack Brock as judges this year.

The winning entries from all age groups can be seen displayed at the Go Fish Education Center in Perry.

A big thank you to Marion Baker and Chrystal Sherwood who did a phenomenal job organizing the event and making it easy for the judges to view all of the entries. Contact Marion Baker (Marion.Baker@dnr.ga.gov) if you are interested in judging next year.

National Fishing & Boating Week: June 4-12, 2022



National Fishing and Boating Week, a national celebration of fishing and boating, is the perfect reason to get out on the water and experience the joys of boating and fishing. Coinciding with most states' free fishing days, National Fishing and Boating Week occur each year during the first full week of June.

Time spent fishing and boating is a great opportunity to talk, laugh, relax, reconnect and create good memories with friends and family.

How can you celebrate?

- There are dozens of kids fishing events held during the week of June 4-12. It is a great opportunity for your child to catch their first fish, to meet people, get expert advice, and spend time together.
- In Georgia, there are two FREE fishing days held during National Fishing and Boating Week: June 4 & June 11, 2022.
- Georgia also offers one additional FREE fishing day on September 24, 2022 on National Hunting and Fishing Day!

GA DNR Fishing with Kids



Find a Kids Fishing Event Near You



Another State State Record Broken

The Georgia Department of Natural Resources (DNR) announced a new men's state saltwater gamefish record for vermilion snapper (*Rhomboplites aurorubens*), also known as beeliners.

Mark Brandon Neville of Richmond Hill landed the 5-pound, 11.68-ounce vermilion snapper on Monday, April 11, 2022, at Artificial Reef DW, about 70 nautical miles east of Sapelo Island. Neville's catch beats the previous 3-pound, 11-ounce record of Scott Funderburk of Guyton from 2018.

Neville, 34, caught the fish while jigging in about 160 feet of water. His catch was weighed at DNR's Richmond Hill Hatchery using a certified scale.

Vermilion snapper are found in the Atlantic Ocean from Cape Hatteras, N.C., to southeastern Brazil, including the Gulf of Mexico. They can live up to 15 years and grow to be as long as 2 feet and weigh 7 pounds. In 2020, recreational anglers landed approximately 2.5 million pounds of vermilion snapper, according to the NOAA Fisheries

Neville will receive a certificate acknowledging his record catch, and the record will be added to the list published at CoastalGaDNR.org/SaltwaterRecords. It will also be included in the 2023 Georgia Sport Fishing Regulations Guide.

For the current list of men's and women's saltwater fishing records, as well as information on how to submit a catch to the Georgia Saltwater Gamefish Record, please visit CoastalGaDNR.org/RecreationalFishing.

Original article: <https://coastalgadnr.org/richmond-hill-man-breaks-vermilion-snapper-state-record>



How well do you know boater safety laws?

You are headed toward open water and we see only one green buoy ahead, would you keep the buoy on your right side or keep the buoy on your left side? You are boating at night and you see a red and white light, would you maintain your current speed or slow down?



As many of you know Georgia Boating Laws require all persons born on or after January 1, 1998, that operate any motorized vessel on the waters of the state must have completed a boat education course approved by the department prior to such operation. Even if you are of the age that you are not required to take the course, you should at least review the Georgia boating laws and responsibilities. A person is exempt if he or she is:

- a person licensed by the U.S. Coast Guard as a master of a vessel;
- a person operating on a private lake or pond;
- a non-resident who has in his or her possession proof that he or she has completed a NASBLA-approved boater education course or equivalency examination from another state.

You can take a boating education course in a classroom setting with the Department of Natural Resources, the United States Coast Guard, or the United States Power Squadrons. You can also take one of our approved on-line courses from the service providers listed below under On-Line Courses. Some courses have an associated cost, while others may be free.

More information: <https://gadnrle.org/boating-education>



Are you interested in serving on one of our GA AFS committees?

One way you can support the Chapter and its mission is by serving on one of our standing committees. A brief description of the committees seeking additional members is provided along with the committee chair's contact information. Visit our website if you want to see the list of all members of a particular committee. <https://gaafs.org/committees/>

Membership and Student Affairs Committee shall recruit new members for the Chapter and the Society; ensure continued membership of current members; promote student involvement; and identify concerns of members and students related to Society structure, function, and activities.

Committee Chair: Lauren Carroll (lmc80753@uga.edu)

The Fundraising/Raffle Committee shall solicit donations and contributions for various Chapter and/or Society events, including the annual Chapter meeting.

Committee Chair: Jackson Sibley (oceansibley@gmail.com)

Arrangements Committee shall assist in organizing and carrying out various duties associated with the annual Chapter meeting or other assigned events.

Breaks and Poster Social Committee Chairs: Kevin Cavallaro (cavallaro@fultonschools.org)

Registration and Awards Banquet Committee Chair: Brent Hess (Brent.Hess@dnr.ga.gov)

Policy, Bylaws, and Resolutions Committee shall review current bylaws and policies and develop resolutions, proposed changes/updates, or other items prudent for consideration by the Chapter membership.

Committee Chair: Dawn Franco (Dawn.Franco@dnr.ga.gov)

Awards Committee shall be responsible for reviewing nominations for the Chapter's professional awards and judging student presentations at the annual Chapter meeting. The Awards Committee is divided into Professional Awards and Student Awards.

Professional Awards Committee Chair: Steve Sammons (sammoss@auburn.edu)

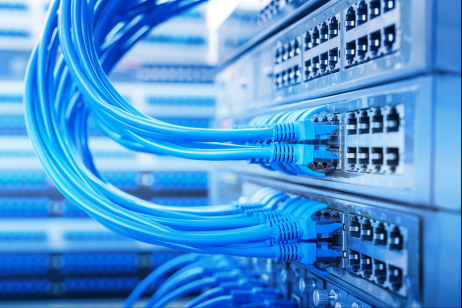
Student Awards Committee Chair: Chalisa Fabillar (Chalisa.Fabillar@dnr.ga.gov)

Communications Committee shall seek to disperse information pertaining to the GA Chapter members via multiple outlets, including the GA Chapter website, Facebook, newsletters, AFS Fisheries Magazine, or other appropriate forms of media.

Committee Chair: Rebecca Brown (georgiaafs@gmail.com)

Environmental Concerns Committee shall seek to identify issues pertaining to the conservation and responsible management of aquatic species and their habitats; provide a forum by which ideas and information may be exchanged; and consider a position when deemed appropriate.

Committee Chair: Jordan Steele (jordan.h.steele@gmail.com)



PLUGGED IN

Do you listen to podcasts? Podcasts can be entertaining, educational, motivational, and inspirational.

If you are interested in exploring podcasts these are a few you might want to try.



U.S. Fish and Wildlife Service *Fish of the Week*

Through easy conversations, listeners learn fascinating facts about fish big and small, common and rare, beautiful and downright strange. Walk away not just neat bits of trivia, but also practical information about how to connect with and conserve our amazing finned friends.

<https://www.fws.gov/fish-of-the-week-podcast>

The Fisheries Podcast

A weekly podcast sharing stories of the amazing people and projects that make up the fisheries science profession.

<https://fisheriespodcast.podbean.com/>



The Woman Angler and Adventurer

Their mission is to inspire women with a passion for fishing and the outdoors to get out there and experience amazing adventures, together blazing a trail for themselves and generations of women to come.

<https://thewomanangler.com/>

Ask About Fly Fishing

This podcast brings together the experts on fly fishing to tell you in their own words the secrets to their success in both Freshwater and Saltwater.

<https://www.askaboutflyfishing.com/>



Sponsor Highlight

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



**Marine Extension and
Georgia Sea Grant**
UNIVERSITY OF GEORGIA



By advancing research, education and training, and outreach, UGA Marine Extension and Georgia Sea Grant promotes the economic, cultural and environmental health of Georgia's coast and prepares citizens to become good stewards of coastal ecosystems and watershed resources.

The Georgia Sea Grant College Program is part of a national network of 34 Sea Grant programs located in every coastal and Great Lakes state, Puerto Rico, Lake Champlain, and Guam. These programs serve as a core of a dynamic university-based network of over 300 institutions involving more than 3,000 scientists, engineers, educators, students and outreach experts.



Visit their website for more information

<https://gacoast.uga.edu/>



Visit the following website to explore their diverse fellowship and internship opportunities for undergraduate and graduate students.

<https://gacoast.uga.edu/education/college-students/student-opportunities/>



Thank you for your Support!

GAAFS 2022 Sponsors

Click on image to visit website

Platinum

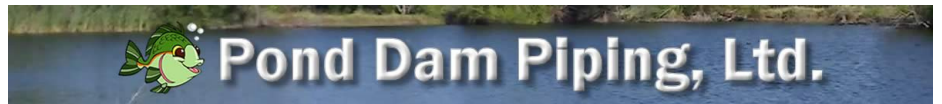


Georgia
Power

Gold



Silver



Marine Extension and
Georgia Sea Grant
UNIVERSITY OF GEORGIA



Bronze



In-Kind
Donation

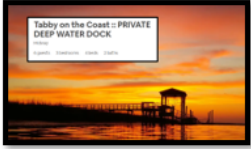


Northeast Georgia Health System, Inc.™

Thank you for your Support!

GAAFS 2022 Fundraising Donors

Click on image to visit website





OUR BATTLE WITH WEED CONTROL: Using Integrated Pest Management to Control Aquatic Nuisance Plants

by Rebecca Brown and Jim Page

Weedy pond. For the angler and the lake manager, rarely are these two words together seen as a favorable and desirable thing. Yet virtually all anglers and lake managers have faced this challenging environment, sometimes the result of introduced non-native plants. In this scenario, one thing is commonly observed: management of aquatic nuisance plants is not easy! Regardless, the battle to regain control must ensue.

Federal and state agencies spend a lot of time and money educating people about strategies to prevent weedy ponds and reduce the transferring of nuisance aquatic plants from one aquatic habitat to another. Despite all their efforts, aquatic nuisance plants still find their way into our waterways. Once introduced, they can form dense mats of organic material that can result in economic loss as they interfere with recreational activities such as boating and fishing. Ecologically, an overabundance of aquatic vegetation can cause oxygen depletion, resulting in fish kills.



As anglers and managers strategize on how to win this impending battle, one effective concept to strongly consider is the use of integrated pest management (IPM). IPM is a cost-effective approach to controlling nuisance aquatic vegetation. It uses a logical sequence of events: gathering data, disseminating information, making decisions, taking action, and monitoring results. Integrated management of nuisance aquatic plants includes **PREVENTATIVE**, **PHYSICAL**, **MECHANICAL**, **BIOLOGICAL**, and **CHEMICAL** techniques. The goal of the IPM plan is to utilize some or all of these various methods to reduce the amount of chemical pesticides needed to control or eliminate the nuisance aquatic plant. The desire to reduce the complete dependency on chemical treatments is for a multitude of reasons. These include desiring to aid in reducing the likelihood of the pest developing a resistance to the chemical pesticide; concerns about the potency and lifespan of chemicals in the environment; and the potentially significant cost of only using chemicals. IPM is not a single pest control method but, rather, a series of pest management evaluations, decisions, and controls.

Ideally, **PREVENTION** is the most economically and ecologically desired approach with regard to non-native introductions. With that in mind, it cannot be overstated that *THE EASIEST INVASIVE SPECIES TO DEAL WITH IS THE ONE*



Pond overtaken by Giant Salvinia

THAT IS NEVER INTRODUCED. Once invasives have become established, the challenges in controlling or eradicating them are greatly enhanced. Preventive strategies to manage aquatic plants in ponds include creating buffer zones of taller vegetation around the pond to filter stormwater nutrients; decreasing the amount of fertilizer used near the pond; constructing a barrier to keep livestock and their waste away from the pond; locating septic fields so they do not drain toward the pond; and deepening the edges of the pond. Sterile grass carp (*Ctenopharyngodon idella*) can be introduced as a preventive strategy to control the growth of some types of aquatic vegetation. Warning signs can be posted informing people about not dumping aquarium plants and cleaning their boating and fishing equipment properly so they will not accidentally spread aquatic nuisance plants to ponds and other waterways.

While prevention is key, sometimes preventive strategies fail, and aquatic nuisance plants are introduced via man or nature and become established in a pond or reservoir. Once an introduction has occurred, the battle has begun, and the first step in the battle is identifying the enemy. Aquatic plants are classified by similar growth habits as algae, floating plants,

submerged plants, emersed plants, and marginal plants. Before devising an effective management plan, it is important to first identify the target aquatic nuisance plant species properly. Once identification of the plant has occurred, consideration of the various techniques to control or eradicate it should be considered.

In the right situation, **MECHANICAL** control of invasive plants may be an effective strategy. Rakes, draglines, cutters, and other mechanical devices can be used to pull the aquatic nuisance plants from the water. While this technique may be effective in limited situations, it is not without drawbacks. This type of management can be labor-intensive and, depending on the equipment used, can be costly. Because some aquatic nuisance plants reproduce by fragmentation, this strategy is unsuccessful when used as the only control method.



Using a specially designed rake to remove hydrilla

BIOLOGICAL control is a popular method of control used in large and small water bodies. This technique entails the use of living organisms to control the nuisance species. It is considered more environmentally friendly than using chemicals but has its limitations. Special consideration should be considered so that the

solution does not become a problem. Sterile triploid grass carp can effectively control submerged vegetation that has soft/tender, non-fibrous stems and leaves. Some common plants they will readily consume are hydrilla, elodea, bladderwort, coontail, najas, milfoil, potomegton spp. (pondweeds), chara, and nitella. However, they dislike and typically do not eat woody or hardy-stemmed plants such as cattails, lily pads, sedges, primrose, and many more. Alligatorweed flea beetles (*Agasicles hygrophila*) and alligator weed thrips (*Amynothrips andersoni* O'Neill) are two insect species that have had some success in controlling alligator weed in warmer climates.



Sterile grass carp are often used for biological control

Of course, **CHEMICAL** control certainly continues to be an effective tool for controlling nuisance plants, and it is often an important part of the IPM strategy. As part of the IPM approach, chemical control of aquatic nuisance species is very effective when used properly and combined with other strategies. Several herbicides approved by the United States Environmental Protection Agency for aquatic use are available to control specific vegetation. Only people who are licensed pesticide applicators should handle the chemicals used to treat ponds. Improper use of herbicides may

cause harm to people, livestock, and wildlife. When treating ponds with an herbicide it is important you treat only about 25% of the pond at a time with 10 - 14 days between treatments. Dissolved oxygen concentrations can decrease below tolerable levels for the fish during massive plant die-offs because the number of aerobic decomposers will increase to consume the dead plant material in the pond.

For the resource manager, the objective is to manage the aquatic nuisance plants utilizing strategies that consider both economic and ecological impacts and those providing the least possible hazard to people, property, and the environment. There are a multitude of tools available to use, and thorough consideration of all of them should be done before the war begins. Though the complete elimination of the aquatic nuisance plants is usually impossible, the battle to reduce impacts to an acceptable level can be won with a well-thought-out IPM plan.

To learn more about effective strategies for plants that you may be battling, consider visiting <https://aquaplant.tamu.edu/plant-identification/>. Additionally, seek out conversations with your local County Extension Agent, or utilize the expertise of other professionals or professors in your area. Lastly, take advantage of teaching opportunities to learn more about aquatic plant management, like that being offered by the Southern Division AFS Small Impoundments Technical Committee (see their aquatic vegetation control survey on the following page). With knowledge and the right tools and techniques, victory may be in sight in your battle with weedy ponds.

SDAFS AQUATIC PLANT TREATMENT PLANS

The **Small Impoundments Technical Committee** is planning to host an aquatic plant workshop at the 2023 SDAFS annual meeting. Our goal is to provide identification as well as up-to-date control information for the most problematic aquatic species we are faced with within the Southeast. By polling SDAFS representatives from each state, we have developed a list of the top 23 problematic aquatic plants in southeastern impoundments. As new products and techniques are being used to control aquatic vegetation in both private and public water bodies in the Southeast, the informational literature is outdated. Therefore, we are polling professional applicators across the Southeast to gather more up-to-date control information that can be available to applicators. Please use this form and answer the questions for each plant listed below based on your own personal experiences, and in as much detail as you are willing.



<https://forms.gle/TEoQRESKwq1Eonrh9>

NOTE: Obviously, choosing the best, comprehensive weed control program for a particular body of water can be very subjective and requires a level of experience literature can't provide. This poll is just intended to provide the best biological and chemical tools available to battle each plant species. Thus, for now, there is no need to mention other techniques such as retreatment, combining biological and chemical, shading with fertilization or dyes, deepening shallow areas, nutrient reduction, etc. There is no need to indicate any state restrictions for biological control or chemical control agents. Applicators should be aware of this already. Also, refrain from listing specific chemical application rates or possible water quality/toxicity issues as this information is listed in the product label and should be left to the discretion of the applicator in each situation.

ANOTHER NOTE: You will be asked to provide the most effective chemical treatment for each plant; however, a different chemical treatment may be more practical or affordable in some situations. Provide that info in the "Additional Notes or Comments" section at the bottom. Also, if your control information for one plant is the same as another plant on the list, then you can just indicate that besides the plant's name. If you have no experience controlling a particular plant, just leave blank.

Alligator weed

American Lotus

Bluegreen Algae

Brazilian Elodea

Cattails

Coontail

Duckweeds

Eurasian Watermilfoil

Filamentous Algae

Fragrant Water Lily

Giant Salvinia

Hydrilla

Muskgrass (Chara sp.)

Parrot Feather

Pondweeds (Potamogeton spp.)

Southern Naiad

Spatterdock (or Cow lily)

Water Hyacinth

Water Lettuce

Water Pennywort

Water Primrose

Watermeal

Watershield



Chapter Spotlight

Tim Bonvechio

Tim is currently a senior fisheries biologist with the Georgia Department of Natural Resources Wildlife Resources Division (WRD) where he has been for the past 15 ½ years. Previously, he worked for 3 years as a fish biologist for the Florida Fish and Wildlife Conservation Commission. Some of his current duties with WRD include: managing the Oconee River from Dublin down to the confluence, three public fishing areas (PFA's): Dodge County PFA, Hugh M. Gillis PFA, and Ocmulgee PFA, and the county lake, Lake Lindsay Grace.

Tim specializes in population dynamics and management of sportfish, conducting age growth studies on several species of fish. Tim and co-authors have developed several relative weight equations. He has published and co-authored 27 peer-reviewed publications, working on several species of freshwater fish along the way such as Black and White Crappie, Blue and White Catfish, Lake Chubsuckers, Bluegill, Redear Sunfish, Redbreast Sunfish, Bowfin, Flathead Catfish, Largemouth Bass, Shoal Bass, and Suwannee Bass.



What got you first interested in fisheries science?

I grew up fishing and working with my two other brothers on my father's drift fishing boat, "The Capt. Bob" as well as many other local drift boats and sportfishing boats out of Palm Beach, Florida. I saw some really cool things growing up on the blue water. Every summer, it was like the discovery channel on the Atlantic Ocean when several customers would hook up on a little tunny, Bonita, King mackerel, or the occasional bluefish. I still would consider that my dream job, but my father wisely

advised me to go to school because he saw the handwriting on the wall, and it's much harder to make a living at that profession nowadays. There is a lot more competition in that business and the fishing is much more regulated and there are a lot more people fishing on the water than when my father was running his business. I heard a stat the other day that there are one million boat registrations in Palm Beach alone, where I grew up.

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

I grew up in Palm Beach Gardens, Florida, then migrated slightly north to Gainesville where I pursued a Bachelor of Science in Natural Resource Conservation (2000) and Master of Science in Fisheries Management (2003) from the University of Florida. I started in the Fall of 2000, working on a water level project for Dr. Allen as a technician but had no idea until a little bit later in the fall that this would be my Master's project that Mike had planned for him to take on. My research was entitled "Relations between hydrological variables and year-class strength of sportfish in eight Florida waterbodies" (published in Hydrobiologia in 2005).

Chapter Spotlight Continued

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

Stocking, growing, and monitoring giant trophy bass. I electrofished a 13lb bass with fisheries technician Aaron Gray (Now a Master's student at Texas Tech) in Feb 2020 on Ocmulgee PFA. I knew we had big fish in the lake, and up to that point, the largest we had shocked was 11.5lb bass and that bass was 4 years old (via pit tag verified). I also knew the oldest fish in the lake were age 5. So, I was shocked when I got back to the office and looked up the fish pit tag and it was only a 4-year-old fish. Ends up I stocked the fish in Feb 2017 as 3/4lb- 1-year-old from the Richmond Hill hatchery. I didn't recapture her until she was 7.82lbs as a 3-year-old in 2019. And then in 2020 as a 4-year-old and 13lbs...the fish grew 5.18 lbs between ages 3 and 4 and had a relative weight of 165!



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

There is no substitute for hard work. Volunteer first to get your foot in the door. You must crawl before you walk. Skills are cheap and can be learned but passion for what you do is priceless and becoming rare. Work hard in silence, and let your success be the noise. Always do the right thing, even when no one is looking even if it is not the popular choice, it's called integrity.

Describe a project you are currently working on as part of your current position.

It would have to be the female-only trophy bass strategy at Ocmulgee PFA. I cannot take credit for this stocking strategy. A previous WRD fisheries biologist and regional supervisor Les Ager, came up with the stocking strategy as he saw it being done in private pond management with some success. Normal stocking rates are 50 to 100 bass per acre of both genders, depending on if it is fertilized or an unfertilized system. Our warmwater hatcheries have perfected the recipe of growing out advanced catchable bass in a forage soup of threadfin shad, and bluegill in their first year to 10 to 12 inches long. At 10 to 12 inches, fish are sexed on harvest day from the pond and females get pit tagged and put on the trailer. Our goal was to get to around 20 bass per acre to maximize better catch rates for anglers but also produce some monster bass. It took around 5 years at 1 to 5 bass per acre (approximately +-500 bass a year in 4 years on the 106-acre lake). Since 2020, we have sampled dozens of fish over 10lbs and 1 fish that exceeded 13lbs. Unfortunately, males have gotten into the system from an upper drainage pond, so the genie is out of the bottle so to speak, and I am now seeing recruitment of both sexes that do not have pit tags. So, based on electrofishing recaptures we are somewhere in the woods of about 25 to 30 per acre now in the lake. Most recruitment (no pit tag present) is actively being removed during electrofishing events but recruitment is still steadily growing in the population.

Chapter Spotlight Continued



What do you most enjoy about your current position?

For now, the most enjoyable part of my current position is that I continue to apply a lot of the tools I acquired back in school at UF. As a Fisheries Management biologist, lots of the population parameters that I studied on fish in grad school, (Growth, Mortality, and Recruitment) are still my central focus in my current job when it comes to managing sportfish populations to their optimum levels. We have conducted several age and growth studies, and a few exploitation studies and we are always monitoring to keep a good handle on the pulse of our

fisheries. It's gratifying to know that my education is being put to good use. I am forever thankful to have worked under such an excellent professor (Dr. Mike Allen), that taught me so much about the profession.

What is your favorite fish and why?

*Suwannee Bass (*Micropterus notius*), My major professor, Dr. Mike Allen introduced me to this magnificent football-shaped fish. It's a super cool black bass that only exists in Florida and Georgia. It actually describes my life to a T. So, many ties to both states, except for Football. Lol! I bleed orange and blue! Florida Grown but now working and living in Georgia for most of my adult life.*

My coauthors and I ended up doing age and growth on this fish and found in my thesis that year-class strength through residual analysis was negatively related to lower flow rates in the Florida Rivers. This was similar to what VDGIF biologist Scott Smith saw with Smallmouth bass on the New River, Virginia and low flows being tied to strong year-classes. Later in my career, we also developed a relative weight equation for the Suwannee Bass and just recently I worked with Dr. Marty Hamel and the University of Georgia on an exploitation and movement study on these special black bass. We did this study in Georgia because we were promoting our black bass slam on 10 different species in Georgia: The good news is that despite the ideal high reward study design and Covid effect of bringing people out of the woodwork (higher fishing participation), We still found that exploitation was low for these special black bass across 2 South Georgia rivers.



What is your favorite quote?

Vince Lombardi: The price of success is hard work, dedication to the job at hand, and the determination that whether we win or lose, we have applied the best of ourselves to the task at hand.

Chapter Spotlight Continued



How have you benefited from being a member of the American Fisheries Society?

Being a member of AFS has allowed me to be involved and network in many ways and has opened many doors professionally for me. As a certified fisheries professional with the American Fisheries Society, I have been very active within the Southern Division holding the Georgia Chapter AFS president title from 2013-2014, and have been a member of the Georgia chapter since 2007. I was the recipient of the 2010 Fisheries Worker of the Year Award, presented by the Georgia Chapter of the American Fisheries Society. I have been a member of the board of appeals on the parent society of AFS for several years and was also the chair of the Catfish technical committee within the Southern Division of the American Fisheries

Society from 2014 to 2016. Also, I have been active in the Small Impoundments Committee and am the current Georgia WRD representative on that committee. Also, I was an associate editor with the North American Journal of Fisheries Management a few years back and am an annual reviewer for the prestigious fisheries management journal. Ultimately, all of these titles, chairs, experiences, awards, and accolades have helped me become a much better and well-rounded fisheries professional.

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

So, everything in my life came full circle in the last year of my undergrad work in 2000. I took an introduction to fisheries course at UF in the spring of 2000. This involved electrofishing Lake Alice several times during the semester and writing up a management plan. I was hooked from that point on. I had finally found what I wanted to be in life, a fisheries biologist. There was a TA in that class, Beth Sargent who was a Fisheries graduate student. She mentioned her roommate, Kim had a project working on Lake Kissimmee setting block nets with rotenone and evaluating a habitat restoration project and she was looking at the fish communities and biomass in these evaluated areas.

So, I volunteered on that project in June 2000. This graduate student, Kimberly Tugend, was under the direction of Dr. Mike Allen. Apparently, I won over both people with my work ethic and maybe a little charm because Mike invited me on for the rest of the summer as a full-time fisheries technician in his lab entering my final semester of undergraduate work, and Kim, well we started dating, and four years later we were married. Now, here we are almost 18 years later married and have two wonderful children, Hannah and Lily.



DID YOU KNOW

The Opah is the only warm-blooded fish

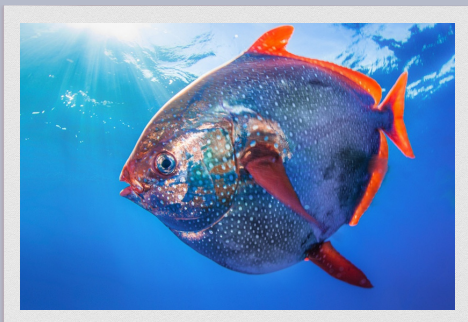
Also known as the moonfish, the opah (*Lampris guttatus*) is the first fish species found to be fully warm-blooded. Because opah are not a major commercial seafood species and they live in the deep ocean, scientists know very little about their biology and ecology. They average about 100 pounds with a diameter of 3 feet. Opah are found in tropical and temperate waters around the world.

The opah produces heat through the constant “flapping” of wing-like pectoral fins and minimizes heat loss through a series of counter-current heat exchangers within its gills. Unlike other fish, opah distribute warmed blood throughout the body, including to the heart and other internal organs, enhancing physiological performance while foraging in the cold, nutrient-rich waters below the ocean thermocline.

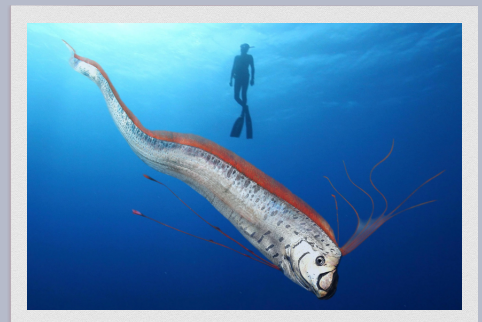
<https://www.science.org/doi/abs/10.1126/science.aaa8902?sid=f6b31170-f5fc-4207-8757-3559705b0010>



Although not sought out by commercial anglers, people say opah are tasty and suitable for any manner of cooking. They are flavorful whether grilled, pan-fried, seared, poached or stir-fried. You can serve it raw as sashimi, cure it for pastrami or grind it and turn it into fish tacos, chili, meatloaf, burgers, Bolognese sauce or even sausage.



The opah is not related to the ocean sunfish. It is more closely related to the giant oarfish.

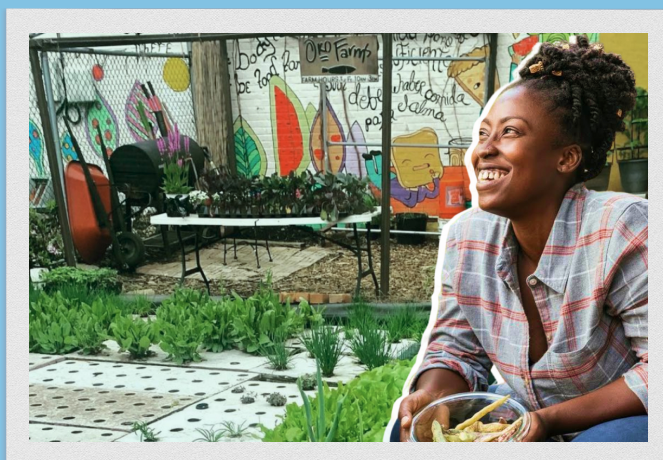


Other fish such as some sharks and tuna have the ability to stay warmer than the water around them but they cannot maintain their warm body and must seek warmer waters when they start to cool down.



COFFEE BREAK

Using aquaponics can provide healthy food for people and decrease the prevalence of food deserts.



Yemi Amu established NYC's first and only publicly accessible outdoor aquaponics farm - Oko Farms. She is one of NYC's leading aquaponics experts.
<https://www.okofarms.org/>

BUBBA'S VIDEO PICK

Learn about Oko Farms and how Yemi Amu created her first aquaponics farm in Brooklyn



BUBBA'S PLACE

BUBBA BASS RECOMMENDS

Are you looking for a Mother's Day gift or maybe a graduation gift? Shop with one of our 2022 annual fundraiser contributors. **Click** on the image to visit their website.

Mom might need a good fish finder!



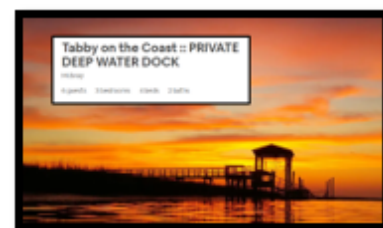
A guided trip trout fishing with Chris Scalley makes a great gift for your favorite angler!



Tifosi makes sunglasses for all sorts of outdoor adventures!



Or maybe someone you know needs a little time away at an Airbnb for some rest and relaxation!



Vera Bradley

The Vera Bradley outlet store in Dawsonville has great deals!

Safety Tip

from Bubba Bass



Fisheries professionals and students work around electrical equipment as part of their job.

First Aid for Electrical Accidents

- DO NOT TOUCH THEM!
- Unplug or turn off the source of electricity
- If you cannot turn off the power, use a piece of wood, like a broom handle or wooden oar, dry rope, or dry clothing, to separate the the victim from the power source.
- Keep the victim lying down. Unconscious victims should be placed on their side to allow drainage of fluids. Do not move the victim if there is a suspicion of neck or spine injuries unless absolutely necessary.
- If the victim is not breathing, apply mouth-to-mouth resuscitation. If the victim has no pulse, begin CPR.
- Try to prevent the victim from becoming chilled. Do not use a blanket or towel on any burned areas because loose fibers can stick to the burns.



**May is Electrical
Safety Month.**

Safety Starts with You.

#ElectricalSafetyMonth

Bubba's Friends

Arctic Grayling (*Thymallus arcticus*)

The Arctic grayling is one of the most beautiful of freshwater recreational fishes and a favorite for many people. There are six grayling species in the northern hemisphere, but the Arctic grayling is the only species found in North America. They are found in Arctic drainages from Hudson Bay to Alaska.



Ryan Haggerty, USFWS

Interesting facts

- The only populations native to the lower 48 states were in Michigan and Montana, and the Michigan population is now extinct.
- Lifespan: 32 years
- Diet: Mainly insects, sometimes smaller fish, on occasion voles and shrews
- Spawn for the first time between the ages of 4 and 7 years
- The Latin name (*Thymallus arcticus*) was given to the grayling because fresh-caught fish smell like the herb thyme.

Fin and Games

When sharing our information about fisheries science with the general public or with scientists from different fields of expertise we should avoid jargon. We can expand the knowledge of our audience when we avoid jargon and share our expertise to a level they can understand. Even anglers can be guilty of using jargon when sharing their expertise with others.

Let's test your knowledge of some terminology used by fisheries scientists/students, anglers, and others. Decide whether or not the statement is true or false.

1. Turbidity is the violent activity of water you often see when whitewater rafting.
2. Exophthalma is a condition in which a fish's eye swells and bulges from the socket.
3. The hackle is what allows a dry fly to float.
4. Chlorinated hydrocarbons are endocrine disruptors.
5. Mind maps are an effective metacognitive strategy to use when learning new concepts.
6. An octopus hook should be used for tying a Texas-rig.
7. Phytoremediation is a strategy to improve the plankton productivity of large reservoirs.
8. Swimbaits are crankbaits without a plastic lip.
9. Electric cars have a timing belt connected to the wheels to recharge the car's battery.
10. Flashing is a behavior often observed in fish with parasitic infestations.
11. Increasing total alkalinity in a pond can provide more carbon dioxide for photosynthesis.
12. Computer programmers will use a codend to indicate the last code of instruction.

(Answer on last page)

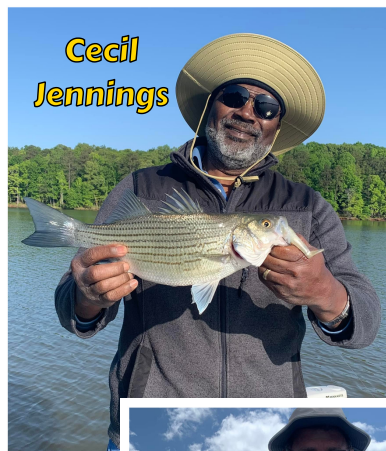
**Jonathan
Pritchard**



Rob Weller



**Cecil
Jennings**



**Robert
Bringolf**



Sira Weller



Tim Bonvechio



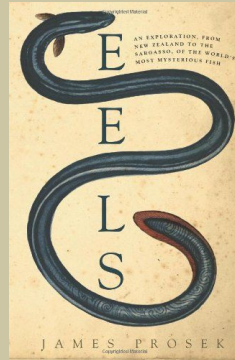
Don Harrison



PROPS!

The Book Shelf

ADULT NON-FICTION SECTION



Eels: An Exploration, from New Zealand to the Sargasso, of the World's Most Mysterious Fish

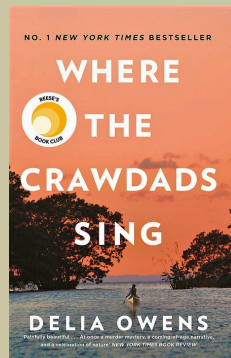
By James Prosek

Tour through the life history and cultural associations of the freshwater eel, exploring its biology in streams and epic migrations in the ocean, its myth and lore, its mystery and beauty.

[Learn More Link](#)



ADULT FICTION SECTION



Where the Crawdads Sing

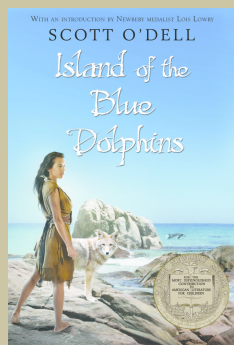
By Delia Owens

For years, rumors of the "Marsh Girl" have haunted Barkley Cove, a quiet town on the North Carolina coast. So in late 1969, when handsome Chase Andrews is found dead, the locals immediately suspect Kya Clark, the so-called Marsh Girl.

[Learn More Link](#)



YOUNG READER SECTION



Island of the Blue Dolphins

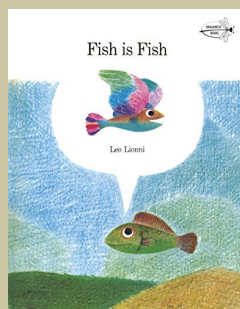
By Scott O'Dell

Scott O'Dell's Newbery Medal-winning classic is a gripping tale of survival, strength, and courage. Based on the true story of a Nicoleño Indian girl living alone on an island off the coast of California, Island of the Blue Dolphins has captivated readers for generations.

[Learn More Link](#)



EARLY READER SECTION



Fish is Fish

By Leo Lionni

Two best friends, a minnow and a tadpole are practically inseparable until the tadpole grows legs and decides to explore the world beyond the pond.

[Learn More Link](#)



FISHY NEWS AROUND THE WORLD

Rutgers University

CLIMATE CHANGE WILL RESHUFFLE MARINE ECOSYSTEMS IN UNEXPECTED WAYS

Warming of the oceans due to climate change will mean fewer productive fish species to catch in the future, according to a new study that found as temperatures warm, predator-prey interactions will prevent species from keeping up with the conditions where they could thrive.

University of Massachusetts Amherst

HOW TO TRACK A SHARK

An international team of researchers has compiled a massive dataset that overlays years' worth of information on the position, migration and interaction of sharks and game fish. This research has immediate relevance for anglers, who have been reporting increased contact with sharks over the years.

University of Southampton (England)

TURBULENCE FROM SPAWNING FISH KEEPS A HEALTHY CIRCULATION IN COASTAL WATERS

A new study has shown how fish influence ocean ecosystems in coastal regions, revealing for the first time how they circulate nutrients and oxygen around the waters when they spawn. This process is key to keeping the ecosystems running.

University of Colorado Boulder

WIN-WINS IN ENVIRONMENTAL MANAGEMENT HARD TO FIND

When a booming marine fishery can increase its shrimp catch while also reducing unintentional bycatch of turtles --that's an example of what environmental scientists and managers call a 'win-win.' Models often predict this ideal outcome is achievable, yet stakeholders rarely see it manifest in the real world.

University of Jyväskylä - Jyväskylän yliopisto (Finland)

FRESHWATER MUSSELS CAN INHIBIT BACTERIAL DISEASES

Researchers have found brown trout better survived a Flavobacterium disease outbreak if the fish had larvae of freshwater pearl mussel in their gills. In another study, duck mussels were observed to filter and remove Flavobacterium from the water.

NOAA

NOAA SHOWCASES NEW MAPPING TOOL FOR MARINE SPECIES

NOAA Fisheries is launching a new tool to better track the location and movement of marine fish in U.S. waters. The Distribution Mapping and Analysis Portal reveals that the ranges of many marine species are shifting, expanding and contracting in response to changing ocean conditions.

University of California Riverside

HOW MOUNTAIN STREAMS SIGNAL CLIMATE CHANGE

A new tool can better assess an important but overlooked indicator of global warming: the variety of bugs, worms, and snails living in high mountain streams.

AFS INFORMATION



What Do Fish Mean to Us? Perspectives Above and Below the Water

The American Fisheries Society, President Leanne Roulson, the AFS Western Division, and the Washington – British Columbia Chapter are excited to host the 152nd AFS Annual Meeting, August 21–25, 2022, in the second largest city in Washington State, Spokane. The city of Spokane is on the Spokane River, part of the Snake and Columbia River system, making it ideal for examining the variety of roles and meanings of fish in science and culture. The Spokane area, part of the unceded lands of the Spokane Tribe, is rich in resident and migratory fish and wildlife important to indigenous peoples of the area. We hope that you will take advantage of this opportunity to experience and explore this focal area for fish, fisheries conservation and management, and human resource use.

We will bring together professionals from across North America and countries around the world under the theme of “What Do Fish Mean to Us?”.

<https://afsannualmeeting.fisheries.org/>

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

Help us spread the word about interesting and insightful information about the conservation and sustainability of fishery resources and aquatic ecosystems.

The Chapter newsletter is designed to spread the word about the exciting work being done by fisheries professionals and students, deliver information about upcoming meetings and events, and provide other useful information about fish/fisheries/ and science. 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 can range from a paragraph to 3 pages. Let us know if you have an idea for an article but are not sure if it is suitable for the newsletter. Topics for the newsletter can include any of the ideas listed below.

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

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

Stay Connected

GAAFS Website

gaafs.org

Facebook

facebook.com/groups/georgiaafs.org

Twitter

@GeorgiaAfs

Instagram

@georgiaafs

Newsletter Editorial Board

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

Answer to Fin and Games
1. False 7. False
2. True 8. False
3. True 9. False
4. True 10. True
5. True 11. True
6. False 12. False