

# Southern Division News



**Election Results 3**

See the results from the SDAFS Elections for Vice President and Student Rep.

**Call for Papers 4**

Second Call for Papers for the SDAFS Annual Meeting in Puerto Rico!

**Updates 9**

See what our chapters and student subunits have been up to.

**Invasive Species 20**

Read a contributed article on how USGS is tracking storms and the spread of invasives!

## The President's Message

Wes Porak, SDAFS President

I have really enjoyed being a division officer. It provided the opportunity for me to give back to the society for all the years that I benefitted from AFS, both professionally and personally. I encourage all fisheries students, scientists, and managers to get or stay involved with AFS and don't hesitate to accept a leadership role when the opportunity arises. I provide the following progress report on my four goals as president:

•**Financial stability.** Division and Florida Chapter officers created a partnership to host the Tampa AFS meeting in August,

and our division will receive a portion of the revenue soon. Anticipated income from this meeting revenue will allow us to set up an investment account to help grow the division's reserve fund. Financial stability allows the division to support students, special projects of technical committees, and member services.

*(Continued on page 2)*

Photo above: Alligator Gar Committee Chair Matt Wegener releases an acoustic telemetry tagged Alligator Gar into the Escambia River, Florida.



- Alabama Puerto Rico
- Arkansas South Carolina
- Florida Tennessee
- Georgia Texas
- Kentucky Virginia
- Louisiana Washington D.C.
- Maryland West Indian
- Mississippi Islands
- North Carolina West Virginia
- Oklahoma

Questions/Comments:

Corbin D. Hilling  
SDAFS Newsletter Editor  
chilling@vt.edu

(President's Message Continued)

- **Promote mentorship.** The President's message in the last newsletter was all about mentorship, and I recently placed a reprint of an excellent article about mentorship on the division website, entitled *Leadership: A Tale of Six Mentors* by Jim Martin <https://sd.fisheries.org/leadership-a-tale-of-six-mentors-by-jim-martin/>.
- **Improve internal communication.** We created a Communications Team chaired by our EXCOM student representative Amy Cottrell. The committee focused on improving communications for Student Subunits by creating AFS Student Subunit Guidelines (<http://sd.fisheries.org/wp-content/uploads/2017/02/Student-Subunit-Guidelines.pdf>) and creating Gmail accounts for all cooperating Student Subunits. Turnover of Student Subunit leadership is typically high due to graduations and newly created Gmail accounts provide a permanent email address to improve communications. Communication team members also managed the division's website (Hae Kim), distributed AFS information and announcements for jobs and meetings via the Listserv (Brandon Peoples), and created two newsletters (Corbin Hilling). We recently appointed team member Andrew Taylor to be the Southern Division representative on the AFS Communications Committee. Hae Kim also managed the Tampa AFS website and helped division technical committees migrate their websites to [www.fisheries.org](http://www.fisheries.org). There will always be room for improving communication, but I am very proud of the Communications Team accomplishments this year.
- **Help make the meeting in Puerto Rico a success.** We have supported this year's division meeting 100% and will continue to do so. You can read more about the meeting in this newsletter. Please join us in San Juan this next March; it is going to be an excellent meeting!

*Wes Porak*

## A Note from the Editor

Corbin Hilling, Newsletter Editor

### Message to an Undergraduate: Never Pass Up an Opportunity to Make a Connection

We all have interests that drive our professional decisions, such as where we want to work and what discipline we like to study. We often avoid making new contacts with students or scientists from other disciplines or fields of science. During our undergraduate studies, we don't always understand how small the fisheries profession truly is. When I go to conferences now as a graduate student, I have started to network with people in other disciplines and always seem to meet someone that has worked with someone I know. Despite being in different fields of study, we always seem to have common interests and I have met some tremendously interesting people. We have a lot of great people in the fisheries profession and just about all of them are interested in helping students when they can. Therefore, networking with other students and scientists is never a waste of time. The take away message here is to always take time to meet new people, whether you think that they might share common interests or not. You never know how beneficial a 5-minute conversation can be.

*Corbin*



## SDAFS News

### SDAFS Summer 2017 Election Results

Thanks to all those who submitted their names to serve the Southern Division. Our organization survives (thrives really!) due to the selfless dedication of the many volunteers who support the goals and mission of the American Fisheries Society. If you're ready to do more, there are chapters, committees, sections, and divisions ready to assist in your professional growth. Please consider getting more involved.

Candidates for the Student Representative to the SDAFS Executive Committee were solicited and four students graciously accepted the challenge. Those four students were Tyler Steube, Texas A&M University - Corpus Christi; Christopher Pickens, College of Charleston; Lauren Halbert, Tarleton State University; and Kyler Hecke, University of Tennessee-Knoxville. The election, where only students could vote for the Student Representative, was close and Lauren Halbert and Kyler Hecke tied with the most votes. The EXCOM has decided to allow both to act as co-representatives with one vote in SDAFS EXCOM decisions.

Candidates for the SDAFS Vice President were Dr. Tom Kwak of NC State University and Dr. Vic Di Cenzo of Solitude Lake Management. Both candidates have long histories of professional fisheries work and service to their state AFS chapters, SDAFS, and AFS. In another close race, the most votes were garnered by Dr. Tom Kwak. Congratulations Dr. Kwak!

Dr. Kwak, Lauren Halbert, and Kyler Hecke will be installed to the Executive Committee at the SDAFS Business Meeting in San Juan, Puerto Rico in March 2018.

*Submitted by Dave Coughlan, SDAFS Past-president and SDAFS Nominations and Ballot Committee Chairs*

### 2017 Oklahoma podcasts are now available!

One of the great things about the Southern Division's annual meeting is the plethora of information that is crammed into a very short period of time. However, it usually ends up that two or three of the presentations you really want to see happen to occur during the same time period. Well, have no fear if you missed that talk you really wanted to see at the 2017 annual meeting in Oklahoma City, because the presentation podcasts are now available!!

[Click here for SDAFS 2017 Podcasts](#)

This year's meeting offered a wide variety of topics including Paddlefish Conservation, Benefits of Competitive Fishing, and Human Dimensions and now you have access to all of them! Simply go to the link above, find the symposium you are interested in, and then click on a talk. Press play and you are ready to go!

These podcasts are a great way to spread the amazing fisheries work being conducted by our members! Each podcast has its own unique website, making them easy to share among colleagues. This is also a helpful resource for professionals and students wanting to share project results at any stage of their research. While you are checking out this year's podcasts, don't forget about past meetings! We began capturing podcasts back in 2011 at the Tampa, Florida meeting and have the past seven years of podcasts available to you!! That's a LOT of research in one spot. To access past podcasts, click on the Meetings tab in the top right-hand corner of the SDAFS website and scroll down to past meetings. For each meeting, you will find the associated podcasts and abstracts.

Special thanks to Don Groom and the other members of the Oklahoma Chapter who made this year's podcast capturing possible! I also want to thank Hae Kim for making the podcasts available online so quickly.

Happy Listening!

*Jessica Baumann, SDAFS podcast coordinator*



***Second Call for Papers***  
***Southern Division American Fisheries***  
***Society Annual Meeting***

***March 7–11, 2018***

***Intercontinental Hotel, San Juan, Puerto Rico***

***The Meeting is On!***

Join the Puerto Rico Chapter of AFS in San Juan, Puerto Rico, to exchange ideas about the latest fisheries science and foster collegial support in a unique tropical seaside setting!

**Extended Submission Deadlines**

**Symposium proposals: December 1, 2017**

**All abstracts (symposium and contributed): January 15, 2018**

**Please submit symposium proposals and abstracts online at**

**<https://afs.confex.com/afs/sd18/cfp.cgi>**

- **Early registration discount ends February 5, 2018**  
**(Professional early \$195 vs late \$250; Student early \$85 vs late \$135).**
- **Reserve your discounted hotel room at \$195/night until February 5, 2018.**

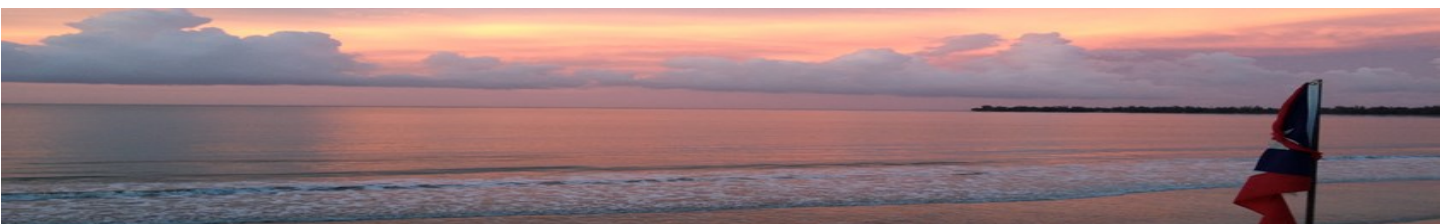
Members from all AFS divisions and international scientists are encouraged to attend and share their science. The meeting will be student-friendly with opportunities for free student lodging, student–mentor lunch, socials, and a Best Student Presentation Symposium. For more information, please contact the Program Committee.

**Symposia and Oral Abstracts:** Tom Kwak ([tkwak@ncsu.edu](mailto:tkwak@ncsu.edu)) & Craig Lilyestrom([craig\\_02@icloud.com](mailto:craig_02@icloud.com))

**Poster Abstracts:** Vilmarie Román([vroman@drna.pr.gov](mailto:vroman@drna.pr.gov)) & Alexandra Galindo([alexandra\\_galindo@fws.gov](mailto:alexandra_galindo@fws.gov))

**Continuing Education Workshops:** Steve Lochmann([lochmanns@uapb.edu](mailto:lochmanns@uapb.edu))

Up-to-date meeting information, including abstract submission, lodging, registration, meeting schedule, and tourism, will be available on the meeting website: <http://sd.fisheries.org/puerto-rico-2018-meeting>



## Why You Should Attend the 2018 SDAFS Annual Meeting in Puerto Rico

Given the destruction caused by Hurricane María, you might be questioning if the 2018 Southern Division meeting in San Juan, Puerto Rico, is still on or if you should go given the physical state of the island. The Puerto Rico Chapter would like to clearly and firmly let you know that the meeting is on — and you should definitely go!

If you are like me, witnessing the devastation caused by the recent wave of natural disasters has been incredibly difficult and has left you with a strong desire to help those who have been affected. Maybe you have donated some money, shipped goods, or even poured some of your sweat into recovery efforts; but it never feels like you're doing enough! Now, what if I told you that by holding the Southern Division of AFS meeting in San Juan this March, we as a society will be doing our part to help Puerto Rico get back on its feet at a time when help is needed most? One thing, among many, that this island desperately needs at this time is business and tourism travel. Every person who attends this meeting and pairs their visit with personal travel will be contributing to Puerto Rico's economic recovery by supporting local businesses and providing tax revenue to the government that can be used to restore the island's infrastructure. Of course, the more that attend the greater positive impact we will have! Moreover, this meeting will help to strengthen and rebuild the community of fisheries professionals and students in Puerto Rico at a time when it is still growing, but threatened by financial crisis and this natural disaster. Finally, attendees of the meeting will have the opportunity to participate directly in hurricane recovery through organized service events.

The destruction caused by María is mind-boggling and should not be minimized, but the unique character of this meeting is unchanged. Puerto Rico's natural environment, people, and science and management communities are remarkably resilient to these sorts of disasters. Right now, trees are leafing out (see photo), scientists are sampling aquatic environments to document hurricane effects, and natural resource managers are rebuilding facilities. Despite all of the hardships, the people of Puerto Rico do not let a hurricane—even one of this magnitude—stop them from living life to the fullest and neither should you when you visit the island. Restaurants, shopping, and nightlife are up-and-running in the metro area, the Intercontinental Hotel is fully functional, the beach is still beautiful, and the pool is open. We still anticipate a good turnout with international flavor, great presentations and workshops, and delightful collegiality at this meeting. The Southern Division is widely known for its generosity and big heart. So, this is one more call for you to do the right thing and come down to La Isla del Encanto!

Saludos,

Augustin (Gus) Engman

Puerto Rico Chapter of AFS President



## **The Student Affairs Committee is looking forward to the upcoming 2018 SDAFS Spring Meeting in San Juan, Puerto Rico! Opportunities for students include:**

### **Free Student Rooms Available!**

The SDAFS supports a limited number of complimentary hotel rooms for students attending the 2018 SDAFS Spring Meeting (March 7-11) at the Intercontinental Hotel in San Juan, Puerto Rico. For this meeting, **room space is for three nights, March 8, 9, and 10**, and these rooms are shared with 3 to 4 students per room. In order to be considered for a free room, students must be a current AFS member ([AFS – Student Membership](#)) and volunteer to assist the Puerto Rico Chapter during the 2018 SDAFS Spring Meeting. Students interested in these rooms should contact Nicole Rankin ([nicolemrankin@gmail.com](mailto:nicolemrankin@gmail.com)), the Chair of the Student Affairs Committee. Students receiving complimentary hotel room spaces will be notified in January 2018. If interested, please send Nicole an email that includes your name, complete mailing address, email address, phone number, university affiliation, current degree track (BS, MS, PhD) and your gender (so that appropriate room assignments can be organized).

### **Best Student Presentation and Best Student Poster Awards**

The SDAFS supports awards for Best Student Presentation and Best Student Poster at the annual SDAFS Spring Meeting. Students interested in competing for the Best Student Presentation and the Best Student Poster at the 2018 SDAFS Spring Meeting should indicate so with their abstract submission. Finalists for the Best Student Presentation and Best Student Poster will be selected based on submitted abstracts and notified prior to the meeting. Each selected finalist will be required to give his or her presentation in the Best Student Presentation Symposium on Saturday, March 10, 2018. Submissions for Best Student Poster will be judged during the Poster Session on Friday, March 9, 2018.

### **Student Mentor Lunch at 2018 SDAFS Spring Meeting**

The Southern Division of the American Fisheries Society encourages interaction between students and fisheries professionals through a Student Mentor Lunch. The Student Mentor Lunch at the 2018 SDAFS Spring Meeting will be at noon on Saturday, March 10. If you are a student interested in being paired with a mentor for lunch that day, please indicate your participation by making the appropriate selection on the registration form. You may also send an email to Gus Engman ([gusengman@gmail.com](mailto:gusengman@gmail.com)), stating your interest. We will try to match students with mentors that can offer specific career advice. If you email Gus, please indicate what school you attend, the degree you are working towards, whether you would prefer a mentor from an Academic Institution, State Agency, Federal Agency, or Private Firm, and provide your contact information.

Thanks!

Nicole Rankin

SDAFS Student Affairs Committee Chair

[nicolemrankin@gmail.com](mailto:nicolemrankin@gmail.com)

The SDAFS Resolution Committee has drafted the following resolution for the membership to consider. Send comments and suggested revisions on this resolution to Dennis Riecke, Resolutions Committee Chair at [dennisr@mdwfp.state.ms.us](mailto:dennisr@mdwfp.state.ms.us) by February 1, 2018. This resolution will also be posted to the SDAFS website page at: <https://sd.fisheries.org/resolutions> and will be voted on at the SDAFS 2018 Annual Business Meeting in San Juan, Puerto Rico.

## American Fisheries Society

### Southern Division

## RESOLUTION ON THE REVISION OF THE SHIPMENT CLAUSE OF THE LACEY ACT (18 U.S.C. § 42)

Whereas, there is growing recognition that the spread of nonnative aquatic invasive species can cause various deleterious impacts on native aquatic species and their habitats;

Whereas, since passage in 1900, the Lacey Act (18 U.S.C. § 42) has prohibited the importing of species found to be injurious to the agricultural and horticultural interests of the United States and that portion of the Lacey Act known as the injurious species provision has been amended several times, limiting the spread of those species among the states in the continental United States;

Whereas, the injurious wildlife provision of the Lacey Act (18 U.S.C. § 42(a)(1)) states, “The importation into the United States, any territory of the United States, the District of Columbia, the Commonwealth of Puerto Rico, or any possession of the United States, or any shipment between the continental United States, the District of Columbia, Hawaii, the Commonwealth of Puerto Rico, or any possession of the United States . . . is hereby prohibited.” The latter clause is known as the “shipment clause.”;

Whereas, since the 1960s the U.S. Fish and Wildlife Service (USFWS) has interpreted the shipment clause in the Lacey Act as giving them the authority to prohibit live shipments between the 49 states in the continental United States of species federally designated as “injurious wildlife” in the Lacey Act;

Whereas, the United States Association of Reptile Keepers, Inc (USARK ) filed a lawsuit in December 2013 challenging the USFWS 2012 rule which designated 4 species of large constrictor snakes as injurious species;

Whereas, USARK argued that the shipment clause speaks solely to shipments from one listed jurisdiction to another and, therefore, does not address interstate shipments within the continental United States itself.

(Resolution Continued)

Thus, USARK argued, the USFWS lacks authority under the shipment clause of the injurious wildlife provision of the Lacey Act (18 U.S.C. § 42(a)(1)) to prohibit “interstate transportation” of the listed species between the 49 continental States.

Whereas, on April 7, 2017, the United States Court of Appeals for the District of Columbia (D.C. Circuit) upheld the District Court’s May 19, 2015, issuance of a preliminary injunction against the USFWS and also reached a definitive judgment on the shipment clause’s meaning. It held that 18 U.S.C. § 42(a)(1) does not prohibit transport of injurious wildlife between States within the continental United States. The D.C. Circuit found the shipment clause to be unambiguous and its interpretation consistent with the legislative history.

Whereas, due to this ruling by the D.C. Circuit, any species of injurious wildlife can be legally shipped between any state in the continental United States that do not have state laws or regulations prohibiting such shipment which could increase the spread of nonnative aquatic invasive species;

Whereas, states can and have enacted laws and regulations to prohibit the import and export live injurious species within their respective state boundaries, it is recognized that strong federal laws and federal enforcement are desirable to provide a uniform regulatory framework;

Whereas, federal laws and federal regulations that provide a national prohibition on the shipment of live specimens of injurious wildlife throughout the 49 continental States provide clear, simple, uniform guidance for businesses and individuals to use to limit the spread of such species;

Whereas, wildlife enforcement efforts are strengthened and enhanced when federal and state laws and regulations are conjunctively used to achieve a common purpose;

Therefore, Be It Resolved, that the members of the Southern Division of the American Fisheries Society assembled here on the 9th day of March 2018, in San Juan, Puerto Rico at their annual business meeting recommend that the Lacey Act (18 U.S.C. § 42) code citation) be amended to revise the wording of the “shipment clause” to give the USFWS the authority to prohibit the shipment between and among the 49 states in the continental United States of live specimens of all species federally designated as “injurious wildlife” in the Lacey Act(18 U.S.C. § 42(a)(1));

Further Be It Resolved, that we urge all fisheries students and professionals, state fish and wildlife agencies, state and local private, nongovernmental conservation organizations and other advocacy groups to inform our federal legislators about this issue and urge them to act prudently to amend the shipments clause of the Lacey Act (18 U.S.C. § 42(a)(1) as stated in the preceding paragraph.



## Chapter Updates

### Louisiana Chapter

#### Louisiana Chapter members help preserve important fish collection

The University of Louisiana at Monroe (ULM) recently abandoned its museum's collections to make way for an improved running track. Hank Bart at Tulane University and a consortium of regional fish collections were able to acquire funds that help rescue this orphaned collection. After the collection was professionally packed and moved to the Tulane University Biodiversity Research Institute (TUBRI) the 126 pallets of jars needed to be unpacked and inventoried, which is no small task. The eventual goal is for parts of this ULM collection to be dispersed among fish collections at each of the consortium institutions based on state geography.

The TUBRI staff organized a number of volunteer-centered workdays throughout August and September to help unpack and inventory the collection. The Louisiana AFS Chapter used our member email lists and Facebook to spread the word about the need for volunteers. Our Chapter's members were able to help, in a small way, to ensure that these fishes and priceless natural heritage are saved for the future.



The ULM collection was packed into a total of 126 pallets, representing over 1 million specimens within more than 80,000 lots!



Once unpacked, each jar number was entered and divided onto rows based where it was collected.

#### Louisiana recognizes our student scholars at annual meeting

The Louisiana Chapter's annual meeting was held at its 'home away from home' in Thibodaux, LA. The theme for this meeting was "Beyond the Bayou: The Diversity of Louisiana's Aquascapes" and attended by 107 LA-AFS members. Over the two-day conference there were 19 oral presentations and 17 poster presentations. This meeting had 22 presentations from undergraduate and graduate students with many rewarded for their scholarship and research. Our student award winners included:

##### Best Abstracts:

(Louisiana Chapter Update Continued)

1<sup>st</sup> Place: **Jordan Logarbo**, C. Bonvillian. Physical and physiological thermal stress responses of two sympatric crayfishes in Louisiana, *Procambarus clarkii* and *P. zonangulus*

2<sup>nd</sup> Place: **William Budnick**, S. Passy, and M. Kaller. Identifying scale-dependent environmental drivers of crayfish community diversity in Louisiana streams

3<sup>rd</sup> Place: **Ivan Vargas-Lopez**, M. Kaller, and W. Kelso. Quantitative and qualitative assessment of crayfish harvesting practices in the southern Atchafalaya River Basin

#### Best Oral Presentations:

1<sup>st</sup> Place: **Lauren Kong**, and C. Bonvillian: Population characteristics of red swamp crayfish *Procambarus clarkii* from hydrologically impaired areas in the Atchafalaya River Basin

2<sup>nd</sup> Place: **Mackenzie Richards**, C. Healy, A. Mallozzi, S. Liste, J. La Peyre, J. Supan, R. Errera, and W. Xu. Molecular regulation of shell development in eastern oysters (*Crassostrea virginica*) in response to CO<sub>2</sub>-related ocean acidification

3<sup>rd</sup> Place: **Ashleigh Lambiotte**, G. LaFleur. Salinity tolerance in hatchlings of the Apple Snail (*Pomacea maculata*) collected from the Barataria-Terrebonne National Estuary

#### Best Poster Presentations:

1<sup>st</sup> Place: **Andrea Yammine**, C. Rice, and C. Green. Multigenerational effects of chronic exposure to the polycyclic aromatic hydrocarbon naphthalene in Gulf killifish (*Fundulus grandis*)

2<sup>nd</sup> place: **Kristen Chatelain**, and Sean Graham. Variation in soil shear strength and belowground biomass across wetland types in Louisiana

3<sup>rd</sup> Place: **Kellyn LaCour-Conant**, D. Johnson, J. Fleeger, D. Dies, Q. Lin, A. Hou, and Sean Graham. Long-term impacts of *Deepwater Horizon* oil exposure on marsh-stabilizing mutualism between

smooth cordgrass (*Spartina alterniflora*) and the southern ribbed mussel (*Geukensia demissa granosissima*)

## Mississippi Chapter

The 44<sup>th</sup> annual meeting of the Mississippi Chapter of the American Fisheries Society (MS AFS) will be held on February 7-9, 2018 in Oxford, MS. The meeting will take place at The Courtyard Marriott hotel located on Jackson Avenue East.

MDWFP Fisheries Bureau Director and MS AFS member Larry Pugh received the Award of Excellence from the Fisheries Management Section of the American Fisheries Society (AFS). The award recognizes individuals who demonstrate inspirational leadership in the fishery profession and substantial achievements for AFS and fisheries resources. Pugh



Mississippi Chapter member Larry Pugh (Right) receives the Award of Excellence from the Fisheries Management Section at the 147th Annual AFS Meeting in Tampa, Florida

(Mississippi Chapter Update Continued)



was presented the award at the Society's 147th annual meeting in Tampa, Florida.

The Jim Franks Merry Fishmas Fun Run will be held on December 9, 2017 in Ocean Springs, MS. This event is hosted by the Gulf Coast Research Lab subunit and will start at 9:00 a.m. The address is 703 East Beach Drive.

## Potomac Chapter

### AFS Potomac Chapter Members Feast on Crabs

The Potomac Chapter of the American Fisheries Society (AFS) held its annual crab feast at AFS headquarters in Bethesda, Maryland, on Saturday, October 28. The crab feast was attended by over 20 hungry individuals, including several current Sea Grant Knauss Fellows. The crabs, supplied by former Potomac Chapter President Ward Slacum, were big and tasty. The crab-eaters enjoyed very warm and sunny weather for late October. The Chapter looks forward to continuing this tradition in the fall of 2018.

## Virginia Tech Chapter

The Virginia Tech Chapter has been a busy bunch since the Summer SDAFS Newsletter was published. Members of the Chapter have attended and presented at professional meetings, completed outreach activities, held a workshop and hosted guest speakers at Chapter meetings.

The Virginia Tech Chapter has been represented at several professional meetings since June. Virginia Tech students and faculty made the trip to Tampa for the 147<sup>th</sup> Annual Meeting of the American Fisheries Society.

Several graduate students and faculty gave presentations and two undergraduate students attended the meeting, making the most of the networking opportunities the conference provided. Virginia Tech Chapter members also attended and presented at the Southeastern Association of Fish and Wildlife Agencies 71<sup>st</sup> Annual Conference in Louisville, as well as the Invasive Catfish Symposium hosted by the Chesapeake Bay Program.

This summer and fall have provided numerous outreach opportunities for the Virginia Tech Chapter. Over the summer, the Chapter provided hands-on experiences for middle school students from Higher Achievement Richmond, a non-profit that creates learning opportunities for underserved youth. The students had the opportunity to observe live stream fishes, as well as learn



Sea Grant Knauss Fellows enjoying some crabs at the annual Potomac Chapter Crab Fest.

(Virginia Tech Chapter Update Continued)

about their ecology and importance to stream communities. The Chapter also worked with historically underserved and underrepresented high school students through the Explore VT program. Chapter members again provided a hands-on experience, where students could see local fishes and ask questions about fish and fisheries science. Several students held their first fish and expressed an interest in fisheries science. The Chapter also led two children's fishing days this fall. The first was in conjunction with the Virginia Tech College of Natural Resources and the Environment 25<sup>th</sup> Anniversary Celebration and provided children an opportunity



A young angler proudly presents his first fish during the Virginia Tech College of Natural Resources and Environment 25th Anniversary Celebration. Photo by Heidi Ketler.

to fish at the Duck Pond on campus. Several of the young anglers caught their first fish and one caught an event-high three Brown Bullheads and was awarded a free fishing rod! The Second Annual Little Fishing Trip was held in cooperation with the Virginia Tech Child Development Center for Learning & Research (CCDLR). Chapter members led small groups of children and taught them the basics of fishing. Most of the children caught a fish, despite a slow bite at the beginning of the event. The children from CCDLR and Virginia Tech Chapter members seemed to enjoy the event and we hope to continue working together into the future. Most recently, Chapter members volunteered with Friends of Claytor Lake for a mussel salvage during a scheduled drawdown. In total, Friends of Claytor Lake volunteers returned 6,203 live mussels to the lake, including 24 state threatened Pistolgrip (*Tritogonia verrucosa*).

The Chapter provided an exciting new opportunity for its members this fall by offering a four-part workshop titled "Fisheries Analysis in R" led by President Corbin Hilling. A dozen attendees took part in the workshop and learned about the R language, data management, creating figures, regression analysis and some applied fisheries analyses. Overall, attendees enjoyed the workshop and several students were able to apply learned skills

to projects in their classes. We hope to offer the workshop again in coming years.



Virginia Tech Chapter Fundraising Committee Chair Haley Jenkins presents a Pistolgrip (*Tritogonia verrucosa*) collected during a mussel salvage at Claytor Lake, Pulaski County, Virginia.

The Virginia Tech Chapter has hosted four guest speakers this semester from diverse employer sectors, including Dr. Vic DiCenzo (SOLitude Lake Management), Nelson Dail (VADEQ), Samuel Vest (Trout Unlimited) and Dustin Smith (WVDNR). The Chapter is also excited to host Dr. Standish Allen from the Virginia Institute of Marine Science toward the end of the semester.

## Student Subunit Updates

### Clemson University

Since reestablishing our society in the Fall of 2016, the Clemson Fisheries Society has been rebuilding and expanding the fisheries program at Clemson University. Last school year we held multiple events to include a fly-fishing/camping trip to the Chattooga River, graduate student panel to talk with undergraduates about masters and PhD programs, and a camping trip in Chattanooga, TN to tour the Tennessee Aquarium and the Research Institute. This school year we have hosted a number of events that align with the mission of the American Fisheries Society. Events like our “Shock and Grill” and resume workshop furthered the growth of students looking to become fisheries professionals. Our “Shock and Grill” was an opportunity to show not only members but also high school students the techniques and use of backpack electroshocking. Our resume workshop included a presentation of how and where to find jobs in the fisheries field and a chance for students to have professors and graduate students look over their resumes. Events like our “River Clean up” and our presence at STEM Fair hosted by a local school allowed us to give back to our community. The “River Clean Up” provided an opportunity for members to clean up a local river by picking up trash and litter. Our presence at the STEM Fair provided an opportunity to talk with 4th - 7th graders about the many career opportunities in the fisheries field. All of these events have allowed for networking and the draw of community attention. As a society that is rebuilding and expanding this is extremely beneficial.

Clemson’s Fisheries program is also deeply invested in undergraduate

research. The Fisheries Society has members participating in all sorts of research projects in the areas surrounding the university. This research includes, but is not limited to: behavioral ecology of stream fish, biodiversity of streams, habitat fragmentation and culvert passage assessment, PIT tag retention, mark-recapture studies, Bartram’s bass spawning behavior, and Atlantic and Shortnose Sturgeon projects under the guidance of Dr. Yoichiro Kanno and Dr. Brandon Peoples. Future projects are also being constructed under the influence of Dr. Troy Farmer involving Southern Flounder and also lentic species in the Piedmont area. Two of our members were given the opportunity to present a poster on some of this research at the 147th Annual Meeting of the American Fisheries Society in Tampa, Florida. The program is also planning on presenting at least two posters at the upcoming Southern Division AFS meeting in Puerto Rico.

Recently published: <http://afs.tandfonline.com/doi/abs/10.1080/02755947.2017.1388886#.Wgs0imhSzIU>



Clemson Fisheries Society outside the Tennessee Aquarium Conservation Institute (Spring 2017).

## Mississippi State University

The Mississippi State University student sub-unit of the American Fisheries Society has been busy this school year. Activities have included: new member recruiting events at the beginning of the fall semester, a welcome back fish fry for student members, hosting guest speakers at each monthly meeting, conducting backpack electrofishing workshops, and participating in a student organization trick-or-treating event on the Mississippi State campus. Our sub-unit is working hard to provide members with a wealth of fisheries knowledge, advice from fisheries professionals, and hands-on experience. Our goal is to ensure that student members in the sub-unit gain experience not otherwise offered in a classroom setting which will benefit their professional development moving forward. We plan to continue these activities in the coming year with a variety of workshops, guest speakers, and public outreach events which will include stream clean ups and youth fishing events.



MSU student sub-unit members conduct backpack electrofishing in Panther Creek on the Tombigbee National Forest.

## Texas A&M University-Corpus Christi

Louisa Torrance, Outreach Committee Chair

The newly formed AFS Student Subunit at Texas A&M University - Corpus Christi (TAMUCC) is entering its second year with a focus on service, outreach, and recruitment!

This October we partnered with the TAMUCC Student Volunteer Organization during Campus Sustainability Day to teach students about marine debris and its effect on fisheries. This was followed with a Beach Clean Up where volunteers collected over six bags of trash along University Beach!

We've also formed strong ties with the Harte Research Institute, the CCA Marine Development Center, and local public schools. Members tabled at the Harte of the Gulf Film Competition, complete with a fish ID activity, make your own rod and reel, and aquatic coloring station for families. In November, we will be tabling at the Flour Bluff Elementary Science and Math Night and have coordinated with the CCA Marine Development Center to host a touch tank, which is a great opportunity to engage young students with local marine life.

Finally, membership continues to grow since 2016/17. As a Hispanic Serving Institution, we are working to increase undergraduate membership to reflect the wonderful diversity we have on our campus.

### Member Highlights

Subunit advisor Dr. Benjamin Walther (Past President, AFS Marine Fisheries Section) attended the Coastal & Estuarine Research Federation (CERF) biennial conference in Providence, RI. There, he co-convoked a session on "Diadromy across estuaries:

## (TAMUCC Subunit Update Continued)



“Our amazing members and volunteers came out to keep University Beach clean for local marine life and for students to enjoy! We collected lots of single use plastics, cigarette butts, and food packaging. However, we also saw plenty of healthy lightening whelk (the Texas State shell), small fish, and shorebirds. We love the Coastal Bend! “- Louisa Torrance, TAMUCC AFS Outreach Committee Chair

research, management and citizen science”. This session was co-organized by Tom Bigford (Past President, AFS Fish Habitat Section), Karin Limburg (Past President, AFS Estuaries Section) and Pedro Morais (UC Berkeley). The session focused on the ways in which migratory fishes connect estuarine ecosystems with inland and oceanic habitats in diverse regions across the US and the world. The session was also a great way to promote shared interest and shared membership between AFS and CERF. Future sessions to bridge these societies will definitely be welcomed! Dr. Walther also presented his latest work at CERF on hypoxia effects on Gulf of Mexico fishes using geochemical tracers in otoliths. This work has found that sublethal hypoxia exposure is relatively common in Atlantic croaker, with complex

effects on growth and food web interactions. This otolith tracer approach opens new doors to assess the lifetime impacts of exposure to this important stressor and will provide empirical estimates of model parameters necessary to forecast future ecosystem dynamics in the northern Gulf.

Tyler Steube and Louisa Torrance presented at the 2017 AFS Annual Meeting in Tampa, FL. Tyler was the Water Quality Section Annual Student Poster Winner for his poster entitled: Tracking Hypoxia Induced Trophic Shifts of Atlantic Croaker (*Micropogonias undulatus*) in the Gulf of Mexico Using Stable Isotopes, and Louisa presented her work with red drum in the Stable Isotope Symposium.

Michelle Bromschwig helped aboard the Oregon II during the Spring Plankton Cruise, Christian Camacho and Valeria Nuñez joined the National Science Foundation Rapid Plankton Research Cruise on the R/V Point Sur, and Tyler Steube worked on the Oregon II during Leg 2 of the Summer Groundfish Survey.



Texas A&M University-Corpus Christi Subunit President Tyler Steube (right) processes fish aboard the Oregon II.

(TAMUCC Subunit Update Continued)

Louisa Torrance has been elected the Southern Division Representative for the Student/Early Career Subsection of the Education Section for 2017/18.

### Issues in Fisheries and Conservation

In Dr. Richard McLaughlin's course on Coastal Management and Ocean Law, fisheries and marine science graduate students have been learning about changes regarding the 2015 Waters of the U.S. rule and the re-authorization of the Magnuson-Stevens Act, both topics addressed in recent AFS newsletters.

### Looking Ahead

Michelle Bromschwig will be presenting her work on ichthyoplankton food webs and Polly Hajovsky will be presenting her work on microplastic pollution and its occurrence in diets of juvenile stages of fish and shellfish at the 2018 AFS Larval Fish Conference in Victoria, Canada.

Many of our members will also be presenting and volunteering at the 2018 Texas Chapter AFS (TCAFS) Annual meeting in College Station, TX. TAMUCC Subunit founder Lizz Hunt was awarded a TCAFS Student Scholarship at the meeting last year, awarded to outstanding members pursuing fisheries degrees. We hope to continue Texas Gulf Coast representation this January!

### Connect With Us

Please visit our social media accounts to learn more about the Texas Gulf Coast and TAMUCC:

Instagram: @afs\_tamucc

Twitter: @afs\_tamucc

Facebook: @tamuccafs

## Awards

### George Palmer Wins SEAFWA Fisheries Biologist of Year!

George Palmer (Aquatic Biologist, Virginia Department of Game and Inland Fisheries) was awarded the Southeastern Association of Fish and Wildlife Agencies Fisheries Biologist of the Year Award at the 71st Annual SEAFWA Conference in Louisville, Kentucky.

George has demonstrated a strong commitment to aquatic resources throughout his career with VDGIF. George leads the Agency's Walleye Technical Subcommittee, a group that coordinates production at 4 hatcheries and management of walleye in 18 waterbodies. George also leads the development and implementation of the Agency's Walleye Management Plan, a comprehensive piece that covers stocking, assessment, management and research on walleye in Virginia's lakes and reservoirs.

In 2016, the Agency implemented new fish health guidelines that greatly restricted the importation of eggs and larvae from other states, complicating walleye production within Virginia. In response, George organized, coordinated, and implemented a plan that met all walleye production needs from in-state sources. Under George's guidance, hatcheries were able to adjust to the new broodstock source and meet full production targets – in just over a year.

Beyond statewide walleye coordination, George has been integral in the management of the unique New River strain of walleye. George initiated and leads the Southern Appalachian Walleye group, which contains representation from West Virginia, Kentucky, Tennessee and North Carolina. This group is actively working towards assessing, managing, culturing and raising awareness of this native strain (or strains) of walleye throughout the southeast.



(Palmer Continued)

George's contributions to fish management go beyond walleye. He also manages two large reservoirs, several small impoundments, multiple wild trout streams and the upper James River. Entrusted with all of these resources, George has demonstrated outstanding skill in managing these complex fisheries. His contributions to aquatic resource management have greatly enhanced these resources in Virginia and throughout the Southeast.

George has been a fisheries biologist with the Virginia Department of Game and Inland Fisheries (DGIF) since 2000. Currently serving as an Aquatics Biologist, George oversees a comprehensive aquatic resource management program within a 10 county area of south-central Virginia. He holds a B.S. in Fisheries Science and an M.S. in Fisheries Science from Virginia Tech. George is also an active member of the Virginia Chapter American Fisheries Society.



Virginia Department of Game and Inland Fisheries Aquatic Biologist George Palmer presents a Walleye from South Holston Lake, Virginia.

## Catfish Management Technical Committee Scholarship

This scholarship was created at the spring 2015 Southern Division meeting to provide financial assistance to a graduate student in the southeastern United States (Alabama, Arkansas, Washington D.C.,

Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, Missouri, North Carolina, Oklahoma, Puerto Rico, South Carolina, Tennessee, Texas, Virginia, Virgin Islands, West Virginia) who is studying catfish-related fisheries management. This scholarship was also developed in an attempt to garner more student involvement in the Southern Division Technical Committees. A 3-person sub-committee (Chair, Secretary-Treasurer, & Chair-Elect) will review the applications and select the scholarship winner.

One \$300 scholarship will be awarded annually to a student with outstanding research and academic performance. This award will be made directly to the student and not the student's educational institution. It can be used for any aspect of the graduate education including, but not limited to, tuition, textbooks, equipment, travel or living expenses. It is not intended to replace any funding obligated to the student. Scholarship recipients will be required to present the results of their study to the Committee during our annual meeting held in conjunction with the SDAFS spring meeting.

**The deadline for submitting the required information to the scholarship committee chair (Jerry Brown, [jerryb@mdwfp.state.ms.us](mailto:jerryb@mdwfp.state.ms.us)) is December 15, 2017.** The chair will distribute copies to the review committee members. Click [here](#) to access the application form.

## Grossman Elected Linnean Fellow

Dr. Gary Grossman (Professor, Animal Ecology, Warnell School of Forestry and Natural Resources, University of Georgia) has been elected a Fellow of the Linnean Society London. The Linnean Society of London is the oldest existing biological society in the world. Be sure to congratulate Dr. Grossman on this prestigious honor the next time you see him!

## Call for Award Nominations

### Deadline extended to January 15, 2018

The SDAFS Awards Committee is currently seeking nominations for the 2017-2018 Annual Awards. The SDAFS Awards is an opportunity to recognize colleagues for their noteworthy contribution to fisheries, as well as provide students scholarship opportunities for their outstanding work. For detailed nomination criteria, please visit the website at <https://sd.fisheries.org/southern-division-awards/>.

The following awards are accepting nominations:

#### **Distinguished Service Award**

The purpose of the Distinguished Service Award is to recognize outstanding contributions of time and energy for special projects or activities in service to the Southern Division.

#### **Outstanding Achievement Award**

This is our Division's highest honor. The purpose of the Outstanding Achievement Award is to recognize individuals for their noteworthy and long-standing contributions to fisheries, aquatic sciences, and the Division, thereby rewarding individuals for their contributions, enhancing visibility of the Division, and increasing the aspirations of the membership.

To nominate a member for the Outstanding Achievement Award, forward a letter to the Awards Committee Chair that outlines the nominees' contribution to the Division, the Society and the profession. Letters in support of the nomination from other members are strongly encouraged.

#### **Outstanding Chapter Award**

This goes to the Southern Division Chapter that displays a dedication to promoting membership and chapter and division involvement. To nominate a chapter, please compile chapter details such as background and organizational structure, a brief abstract as to why it is being nominated, membership details, chapter activities and communications, student involvement, special symposia/workshops/projects conducted, and special chapter/chapter member achievements.

#### **Best Student Subunit Award**

The Best Student Subunit Award's recognizes an outstanding student subunit within our division that demonstrates efforts to promote membership, involvement, and fundraising. To nominate a subunit, please submit a brief overview of the subunit, detailed membership totals and unit activities such as projects that focus on education and outreach; supporting documents or files are encouraged. Please include a letter of support from an academic advisor.

Please submit all nominations to Jessica Feltz at [Jessica.Feltz@myFWC.com](mailto:Jessica.Feltz@myFWC.com) with "SDAFS Awards" in the subject line. The deadline is January 15, 2018.

## Call for Nominations

### The Noreen Clough Memorial Scholarship

Applications are now being accepted for the 2018 Noreen Clough Memorial Scholarship for Females in Fisheries. In memory of the late Noreen Clough, the long-time U.S. Fish & Wildlife Service administrator and former National Conservation Director for B.A.S.S., her friends and colleagues established a scholarship honoring her contributions to the field of fisheries management and conservation as well as her trailblazing as an early female leader in the American conservation community.



This \$1,000 scholarship will be awarded at the 2018 Southern Division, American Fisheries Society meeting to a deserving student. Last year's recipient, former B.A.S.S. Conservation intern and University of Florida Law School student, Whitney Della Torre, was featured in an article on Bassmaster.com (<https://www.bassmaster.com/conservation-news/scholarship-awarded-honor-former-bass-conservation-director-noreen-clough>).

#### Criteria

All nominees should be a female student currently enrolled in a **graduate** program at a recognized institution in North America. This does not specifically have to be a fisheries science program, but the student must demonstrate a commitment toward a career in fisheries with an emphasis on management and conservation. The student selected to receive this award will be the applicant that best reflects Noreen's passion and commitment to the profession.

#### To Apply

Prepare an **essay**, no longer than 1,000 words, which describes why you believe you are deserving of this scholarship. Applicants may want to include career aspirations, personal interests or other relevant factors in the essay. Additionally, please attach a current **resume** which includes 1) full name, 2) complete mailing address, 3) e-mail address, 4) best telephone number, 5) school name and location, 6) degree sought, 7) expected graduation date, 8) summary of your education, 9) summary of work history, and 10) other relevant experience/qualifications/references.

E-mail the essay and resume, scanned together as a **single PDF file** by **December 31st, 2017** to:

Gene Gilliland

B.A.S.S. Conservation Director

[ggilliland@bassmaster.com](mailto:ggilliland@bassmaster.com)



Donations to the scholarship fund endowment can be made by visiting <http://sd.fisheries.org/students/noreen-clough-memorial-scholarship-for-females-in-fisheries/>

## Contributed Article

# NAS FaST: U.S. Geological Survey's Nonindigenous Aquatic Species Flood and Storm Tracker

Wesley M. Daniel, Matthew Neilson, Ian Pfungsten, and Pam Fuller

U.S. Geological Survey Nonindigenous Aquatic Species Program, Wetlands and Aquatic Research Center, 7920 NW 71st Street Gainesville, FL 32653

Invasive or nonindigenous species represent one of the most significant threats to the United States' en-

vironment, infrastructure, economy, and cultural resources. Inland flooding and coastal storm surge from hurricanes can assist range expansions of non-indigenous aquatic species through the connection of adjacent drainages, backflow of water upstream of impoundments, increased downstream flow, and creation of freshwater bridges along coastal regions. During these flooding conditions, introduced nonindigenous aquatic species can spread to new areas, including otherwise isolated water bodies where they could otherwise not gain access. The U.S. Geological Survey's (USGS) Nonindigenous Aquatic Species (NAS) program along with USGS's Advanced Applications Team have developed decision support maps, Nonindigenous Aquatic Species Flood and Storm Tracker maps (NAS FaST; <https://>

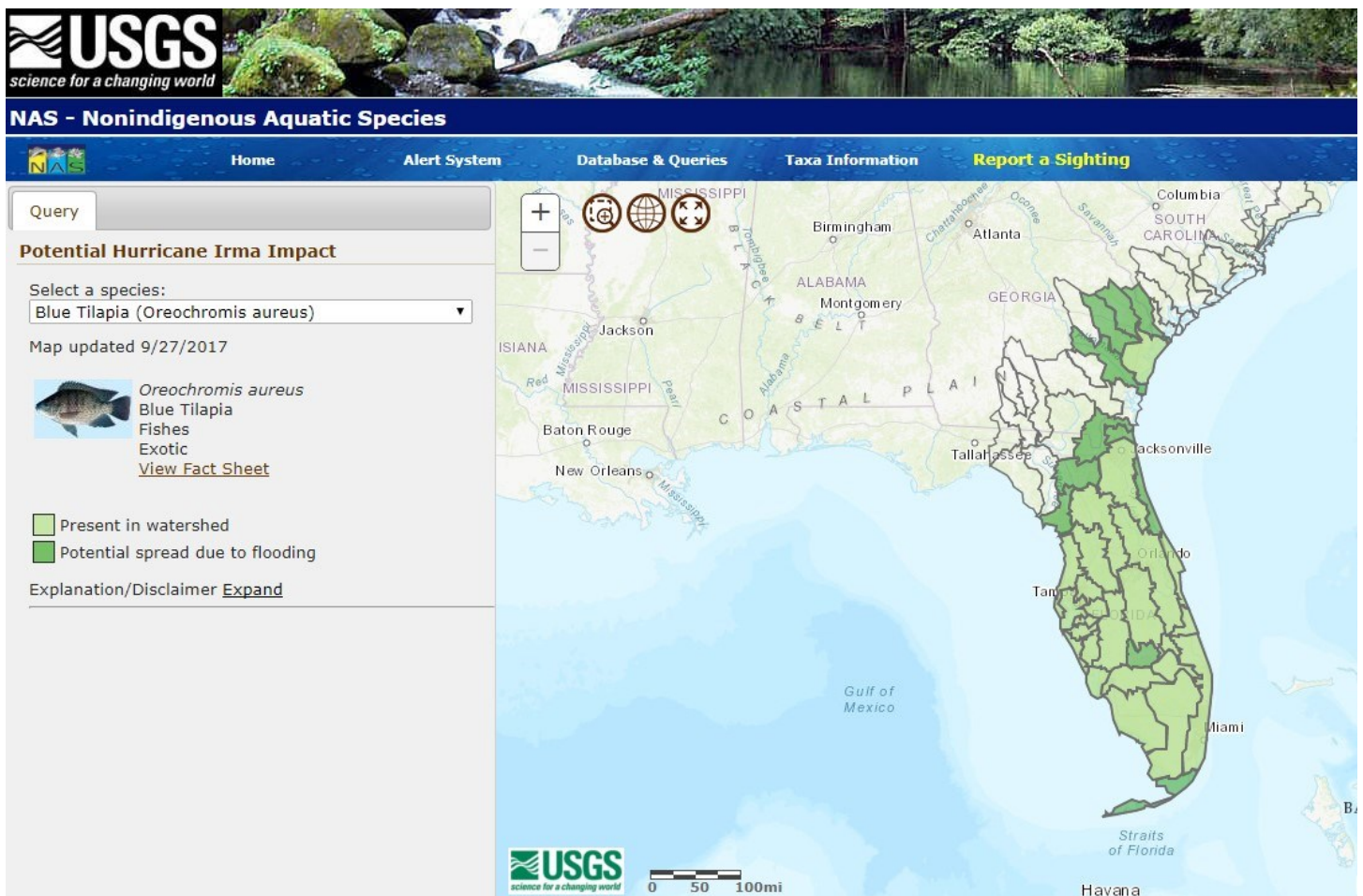


Figure 1. A map of the current occurrences (light green) and possible spread (darker green) of Blue Tilapia (*Oreochromis aureus*) between hydrologic units from flooding associated with Hurricane Irma.

(NAS FaST Continued)

[nas.er.usgs.gov/viewer/Flooding/](https://nas.er.usgs.gov/viewer/Flooding/)), to allow natural resource managers to view drainages, identified by hydrologic units that may have nonindigenous species spread due to flooding. The groups have created individual maps for recent Hurricanes (Harvey, Irma, Maria, and Nate), and have plans to assess previous flooding events (e.g., Hurricane Matthew and the 2016 North American storm complex) to look for effects on nonindigenous aquatic species. Information on previous nonindigenous species spread by flooding can help inform resource managers and how to effectively manage future storm events.

The NAS FaST maps combine information on potential flooding associated with a storm event with known locations of established or possibly established nonindigenous species from the NAS database. The USGS NAS database is the national repository for spatially referenced biogeographic accounts of nonindigenous freshwater species (<https://nas.er.usgs.gov/default.aspx>). The program tracks the distribution of > 1,250 nonindigenous species across the United States (contiguous US, Alaska, Hawaii, and US territories), and includes over half-million records for fishes, plants, reptiles, amphibians, mammals, and invertebrates. The initial NAS FaST maps are created within 2-3 days of an event, as a new tool of the Early Detection Rapid Response system, to quickly identify potentially flooded 8-digit hydrologic units (HUC-8s) based on USGS WaterWatch data; (<https://waterwatch.usgs.gov/>) within the event area. The maps provide information on both the established nonindigenous species within a HUC-8 and the potential species for new introductions (defined as established nonindigenous species in adjacent flooded HUC-8s) (see Figure 1 from the website). The second step of the NAS FaST maps refines the initial map of HUC-8s by identifying which adjacent hydrologic units may have been connected by flooding. We utilize information on the flood inundation area and height, which is collected and released weeks after a storm by USGS WaterWatch groups. This enhancement of the initial maps will assist natural resource managers in knowing where

to look for new invaders by providing a more accurate and finer scale view of the areas where flooding may have dispersed nonindigenous aquatic species across drainages.

In summary, the NAS FaST maps provide rapid information to assist post-storm detection and assessment efforts of potential new locations for nonindigenous species invasions. If nonindigenous aquatic species enter a new drainage through flooding events the goal is to detect, contain, and eradicate the incipient populations before they start to spread. The NAS FaST maps aids in the process by providing natural resource managers watchlists of possible new species and identifies potential locations of drainage connections.

## Workshops & Trainings

### AFS Annual Piscicide Training

May 14-18, 2018

Utah State University

Logan, Utah

\$1,200 (\$1,100 AFS Members)

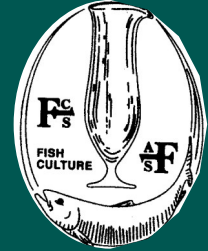
Contact Brian Finlayson for more  
information  
([briankarefinlayson@att.net](mailto:briankarefinlayson@att.net))

Click [here](#) for details

# Statistics in Aquaculture Workshop: The General Linear Model - a Unifying and Simplifying Theme of Statistics

February 19, 2018 — 8:30 - 4:30  
Aquaculture America Conference 2018

Sponsored by  
USAS & AFS-FCS



## Workshop

*“The focus will be on applied statistics  
with very little theory or equations”*

Most people in scientific fields like aquaculture have heard the litany of statistical terms: regression, t-test, ANOVA, ANCOVA, mixed-effects, multi-factor ANOVA, multiple regression, repeated measures, nested effects, logistic regression, and so on. With so many different statistical tests taught, it's no wonder that students and scientists alike can be overwhelmed and confused by even relatively basic statistics. However, all these tests are just different forms and extensions of the general linear model, a fact that is rarely taught in statistics classes. Yet by learning all these statistical tests from the unifying framework of the general linear model, understanding – and more importantly utilizing – those statistics becomes infinitely easier. **The current workshop will teach all of the basic and advanced statistics listed above from the perspective of the general (and generalized) linear model.** As such, it should be of use to a wide-ranging audience, from those who have little understanding of statistics to those who have a fairly firm grasp of the basics, but want to know more. **The focus will be on applied statistics, with very little theory or equations (other than the linear model itself).** Lots of examples will be used to enhance understanding, and examples will focus on topics from aquaculture and other biological and natural resource fields. Finally, analyses will be demonstrated using the statistical package R, which is extremely powerful, widely popular, and best-of-all, free.

### **Morning Session:**

- Regression
- ANOVA
- T-Test
- Non-linearity
- Multivariable models
- Interactions
- Collinearity

### **Afternoon Session:**

- Mixed effects models
- Repeated measures
- Nested effects
- Pseudoreplication
- Poisson regression
- Logistic regression
- Model building

## Content



## Instructor

Todd Steury

Auburn University School of  
Forestry and Wildlife Sciences

**Todd Steury** is Associate Professor of Wildlife Ecology at Auburn University. For the past 10 years, he has been **teaching applied statistics** at the basic and advanced levels to undergraduate and graduate students, post-docs, and professors in natural resources fields.

**Todd is widely known for his ability to explain statistics in a straightforward and easy-to-understand manner,** and he regularly wins awards for his teaching, including the “Harold E. Christen Award for Service to Teaching” from the School of Forestry and Wildlife Sciences, “Outstanding Faculty Member Award” from the Auburn University Student Government Association, and “Teacher of the Year”, which he has received 5 times from the Auburn University Chapter of The Wildlife Society.

Todd's research expertise is in carnivore ecology and conservation, quantitative ecology, and statistics. In his publications, he has used an incredibly diverse array of statistical and quantitative methods such as bootstrapping, Kalman filters, Fourier transforms, and simulation modeling. His favorite statistical method, however, is linearized models. Todd collaborates with and provides statistical consultations to other researchers in a variety of biological fields.

## Pricing Information

- ◆ Base Price - \$300
  - ◆ USAS or AFS-FCS Member - \$150\*\*
  - ◆ USAS or AFS-FCS Student Member - \$75
- \*\*WAS members can join USAS—only \$5.00

[Visit WAS.org](http://WAS.org) to register NOW!

OR email John Cooksey ([admin@was.org](mailto:admin@was.org)) for stand alone workshop registration

## Meeting Announcements

North American Eel Science Symposium	Dec. 12-13, 2017
Texas Chapter	Jan. 25-27, 2018
Alabama Chapter	Feb. 22-23, 2018
SDAFS Annual Meeting	Mar. 7-11, 2018
Florida Chapter	Apr. 11-13, 2018
Int. Congress on the Biology of Fish	July 15-19, 2018
Snakehead Symposium	July 17-19, 2018
Aquatic Resources Education Assoc.	Oct. 22-26, 2018

### **First North American Eel Science Symposium**

The Bi-National Eel Passage Research Center is hosting the 1st North American Eel Science Symposium that will be held on December 12-13, 2017, at Ontario Power Generation's St. Lawrence Power Development Visitor Center in Cornwall, Ontario. The symposium will consist of oral presentations focused on recent advances in anguillid eel biology, management, and protection. There is no fee to attend the meeting; however, attendees must pre-register as seating is limited. Please contact Paul Jacobson ([pjacobson@epri.com](mailto:pjacobson@epri.com)) or Tracy Maynard ([tracy.maynard@kleinschmidtgroup.com](mailto:tracy.maynard@kleinschmidtgroup.com)) to register or for additional information.



## Texas Chapter of the American Fisheries Society is headed to College Station!

Come join TCAFS at our 42<sup>nd</sup> Annual Meeting!

January 25-27, 2018

Hilton College Station & Conference Center



Call for Papers and Registration are OPEN! Please visit our meeting page for details:

<https://units.fisheries.org/tx/tc-meetings/2018-meeting-home-page/>

### Lodging information

Address: 801 University Dr., College Station, TX 77840

Phone: (979) 693-7500 Fax: (979) 260-1931

Room Block (*expires 1/3/2018*): "TCAFS 2018"

Rates: Single-\$107; Double-\$107; Triple-\$127; Quad-\$137

\*\*Please email [michael.homer@tpwd.texas.gov](mailto:michael.homer@tpwd.texas.gov) for more information\*\*

TCAFS thanks its current 42<sup>nd</sup> annual meeting supporters:

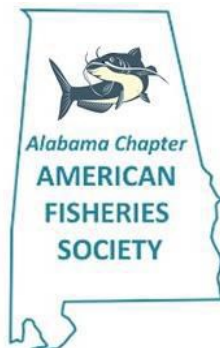


To learn more about Bryan College Station, Texas, please visit [www.experiencebcs.com](http://www.experiencebcs.com)





## American Fisheries Society - Alabama Chapter Meeting



- Meeting Dates:** Thursday & Friday, February 22-23, 2018
- Venue:** Little River Canyon Center at Little River Canyon and National Preserve, Fort Payne, AL
- Accommodations:** DeSoto State Park, Fort Payne, AL (see below)
- Registration:** Registration details TBA.
- Agenda:** Agenda schedule TBD.

**For more information and room reservations, please call the Lodge at 256-845-5380. When making reservations, please provide the Group ID Code: 1445**

A block of 25 rooms, 3 chalets and 2, two-bedroom log cabins are being held at the following prices **until February 8, 2018**. Motel rooms are \$79 per night, chalets \$282 and cabins \$299.76 (rates include ALL taxes and fees!). Full breakfast is **also included**. Contact the Desoto State Park Lodge at above number for further details.

The Alabama Chapter of the American Fisheries Society (AL-AFS) Program Committee **invites presenters** (university faculty, students, aquatic science professionals, etc.) who have current aquatic research projects with study results of interest to the membership at large. Acceptable presentations may cover a variety of topics on freshwater and marine science, including: fisheries dynamics, aquaculture, habitat use, ecology, invasive species, or other aquatic science-based projects.

***Inquiries on Meeting:*** Contact Dave Armstrong, President-elect: [\(251\) 626-5153](tel:2516265153) or [dave.armstrong@dcnr.alabama.gov](mailto:dave.armstrong@dcnr.alabama.gov)

## 1st Call for Oral & Poster Presentations

### 38<sup>th</sup> Annual Meeting of the Florida Chapter American Fisheries Society

We invite you to submit abstracts for the 2018 annual meeting of the Florida Chapter of the American Fisheries Society meeting. The meeting will take place **April 11-13, 2018 at the Florida FFA Leadership Training Center, located in Haines City**, on the shore of Lake Pierce. We hope you can join us!



The meeting will consist of both invited and contributed oral presentations and posters. The 2018 symposium is titled '**Improving communication and collaboration in fisheries science**'. In today's world, the need for us as fisheries researchers and managers to effectively communicate and collaborate with stakeholders and other fisheries professionals has never been more important. The **2018 symposium** will focus on how effective communication and collaboration can help us more efficiently work on complex fishery related issues both in marine and freshwater environments. This symposium will focus on the processes fisheries scientists use or have experimented with to communicate and collaborate with stakeholders and each other. This symposium invites speakers to discuss what has worked or has not worked for them in these areas, through reviews of established case studies or emerging research approaches. Talks should emphasize on the processes used to work in these areas. The goals for this symposium are to highlight methods for us to improve communication and collaboration skills which in turn allows stakeholders and collaborators to better understand the importance of what we do as fisheries professionals.

We strongly encourage submissions for the symposium, but will also accept submissions outside the scope of the symposium topic. Therefore, in your abstract submission please specify if you would like your presentation to be part of the symposium.

Deadline for abstract submission and early registration: **Wednesday, February 28, 2018.**

(Florida Meeting Continued)

### Abstract Submission

Please submit your abstract as a MS Word document to [nick.trippel@myfwc.com](mailto:nick.trippel@myfwc.com). Please follow these instructions for submission:

In the email subject line, please enter FLAFS 2018: followed by the author names in your abstract (e.g., FLAFS2018 SmithTaylorRosen)

Use the same name for the abstract file, e.g., FLAFS2018 SmithTaylorRosen.doc

Please include the associated information requested above with the abstract

### Abstract format

Abstract *word limit is 300 words* and should include the following information:

Presenter: Williams, Brian

Email: BrianWilliams@FloridaFish.net

Author(s): Williams, B.<sup>1</sup>, K. Rowley<sup>1</sup>, and P. George<sup>2</sup>

<sup>1</sup>Affiliation with address.

<sup>2</sup>Affiliation with address.

Title: Recommendations for New Limits on Some of Florida's Most Targeted Fish Species

Abstract: 300 word maximum

Student Presentation: No or Yes (work presented was completed while a student)

Presentation type: Oral or Poster

Would you like to be considered for the symposium? Yes or No

Are you willing to be a moderator? Yes or No

Are you willing to be a judge? Yes or No If so, oral presentation or poster?

### Presentation details

*Speakers will be given 20 minutes* for talks (15 minutes for presentations and 5 minutes for questions and/or discussion). We will have PowerPoint on a laptop capable of accepting your presentation on a flashdrive or other device.

(Florida Meeting Continued)

All posters will be presented on *Wednesday evening, April 11*, and can be left up for the entire meeting. Posters should be no larger than 150 X 100 cm (60" X 40"), but they can be set up either as portrait or landscape format on an easel. If you require other options for projection or poster formats, please contact the annual meeting's Program Chair, Nick Trippel, [nick.trippel@myfwc.com](mailto:nick.trippel@myfwc.com).

### Meeting details

The 2018 meeting will be held at the Florida FFA Leadership Training Center, 5000 Firetower Road, Haines City. Maps and directions will be available in the next issue of the Shellcracker or can be found on the Florida FFA Leadership Training Website at [www.flaltc.org](http://www.flaltc.org).

The meeting's schedule of events will be similar to past meetings with exception of serving lunch on the first day to help cut costs. We will begin in the afternoon on Wednesday, April 11th with the presentation of contributed papers. The poster session will take place following dinner on Wednesday evening. The 'Improving communication and collaboration in fisheries science' symposium will start on Thursday morning. The business meeting and raffle will follow dinner on Thursday night. We will hear more contributed papers on Friday morning, followed by lunch and the presentation of awards immediately following lunch.

### Registration, Lodging, Meals, and Chapter Dues

Early registration deadline is **Wednesday, February 28, 2018**. The cost for early full registration is \$45.00. The cost for full registration after Wednesday, February 28, 2018 is \$65.00. **We strongly encourage folks to register early because the venue needs estimates for meals and rooms several weeks in advance.** If you are staying at the FFA Leadership Training Center for this year's meeting, the cost for full meals and lodging is \$212.00. Costs of meals and lodging are higher for this year's meeting than they were in past years because the amenities offered at the FFA Leadership Training Center will be much better and gratuity is built into the cost. The full cost of meals and lodging is still cheap compared to most meetings. Linens will be provided including pillows, towels, and sheets.

For your convenience, **all registrations will be made online at** <https://flafs.regfox.com/38th-annual-meeting-of-the-florida-chapter-american-fisheries-society>

This link to the registration website will also be made available on our chapter's website at <https://units.fisheries.org/fl/>. **There will be no mail-in registration forms this year, however, you can still mail a check for your meeting costs.**

If you can't attend the meeting, we have a link on the chapter's website (<https://units.fisheries.org/fl/chapter-dues/>) where you can pay your \$10 annual dues electronically, or you can still mail a check for \$10 to the Secretary/Treasurer made payable to Florida Chapter AFS.

### Opportunities for student support

As in previous years, student travel awards will be available for the annual meeting. Master's and doctoral students are also eligible for the Roger Rottmann Memorial Scholarship, for which the recipient(s) will be

(Florida Meeting Continued)

announced at the annual meeting. More information and the application materials are available on the chapter's website at <https://units.fisheries.org/fl/awards-and-scholarships/>.

### 2018 Student Raffle

We need your help to make this meeting's raffle a great one. If you are interested in helping or donating items please email Andy Strickland ([Andy.Strickland@MyFWC.com](mailto:Andy.Strickland@MyFWC.com)) or Alan Collins ([lac96@bellsouth.net](mailto:lac96@bellsouth.net)). Remember all proceeds fund our student travel grants for the following year's meeting. Please contact us to get involved!

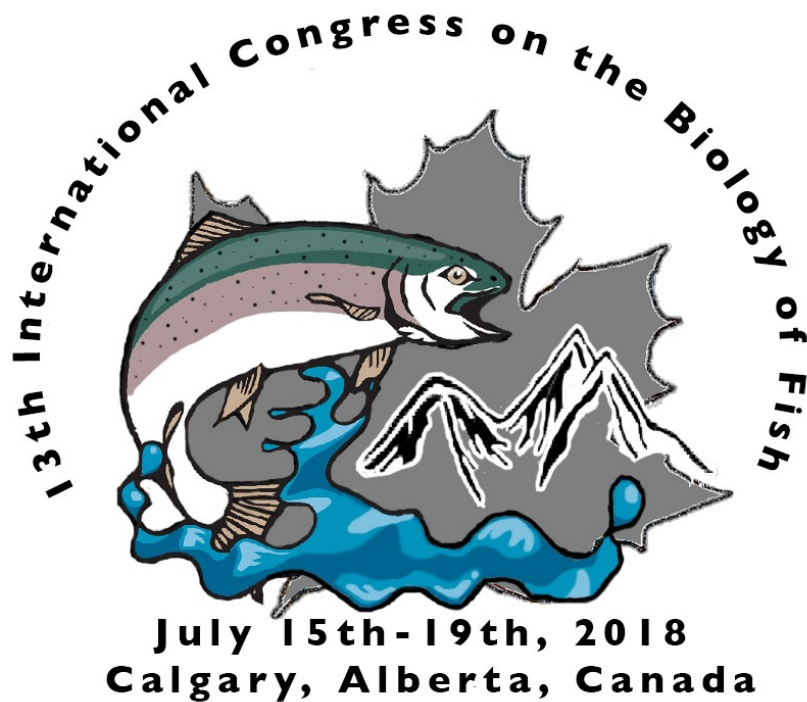
We look forward to seeing everyone in Haines City for our 2018 annual meeting!

Thanks,  
Nick Trippel

## 13th Biennial Aquatic Resources Education Association Conference & Training



The Aquatic Resources Education Association (AREA) is the professional organization of people that promote, through sound educational practices, stewardship and responsible use of aquatic resources, fisheries, and habitats to enhance the quality of life for current and future generations. AREA meets every two years. Don't miss the 2018 conference, October 22-26, 2018 at Lake Tahoe, CA, see <https://arenet.org>.



Bookmark this site [wcm.ucalgary.ca/icbf/](http://wcm.ucalgary.ca/icbf/)

Symposia, in addition to a plenary are listed below:

1. *Ion and Acid-Base Regulation in Fish*
2. *Fish in a Toxic World*
3. *Growth and Metabolism of Fishes*
4. *Climate change impacts on fish: vulnerabilities and adaptations*
5. *Stress Response: From Genes to Performance*
6. *Chronic Stress in Wild and Laboratory Fish: Evidence and Mechanisms*
7. *Second Undergraduate Research in Fish Biology Symposium*
8. *Sensing the Environment: Molecules to Populations: Integrating all senses*
9. *Physiological Trade-offs for Fishes Living in Challenging Environments*
10. *Swimming Physiology of Fish*
11. *Swimming Implications for Migration and Aquaculture (FITFISH: Cost Action FA1304)*
12. *Physiological Mechanisms Linked to Abiotic Environments*
13. *The Physiology and Control of Invasive Fish Species*
14. *The use of functional methods to assess fish physiology: past, present and future*
15. *Year of the Salmon*
16. *Improving Fish Culture Performance*
17. *Fish reproduction*
18. *Municipal wastewater effluent impact on fish physiology*
19. *Muscle growth and metabolism*



## The First International Snakehead Symposium July 17<sup>th</sup> – 19<sup>th</sup>, 2018 Old Town Alexandria, VA

Snakeheads, particularly Northern Snakehead *Channa argus*, have experienced dramatic range expansions in North America over the past two decades. Commensurate with this expansion has come publicity via a plethora of popular media outlets and a handful of peer-reviewed journal articles resulting from a flurry of research by various state, federal and academic institutions. This controversial group of fish has captivated audiences around the globe, but a great deal of misinformation remains in the public domain due to misconceptions and limited conveyance of legitimate biological and ecological information from the scientific community. Additionally, as *C. argus* continues to spread along the mid-Atlantic coast and now in the central United States, resource managers from newly colonized and neighboring states desire information to inform expectations and



implement management strategies. Despite some progress in describing certain aspects of snakehead biology and, to a lesser extent, ecology, the list of unknowns remains great. Snakeheads are often implicated as a vector of ecosystem destruction and/or restructuring, yet nearly no conclusive evidence of such exists. Furthermore, various facets of spawning behavior, early life history and recruitment are poorly understood at best. There is a paucity of studies describing interactions between snakeheads and other species, and their ecosystem effects are thus largely unknown. This symposium aims to fill some of these gaps and bring the most germane and timely research and management information to the forefront.

Please visit the VA Chapter AFS webpage for more information or contact John Odenkirk: [john.odenkirk@dgif.virginia.gov](mailto:john.odenkirk@dgif.virginia.gov). First call for presentations and early registration coming soon.



## Publications

Smith-Vaniz, W.F. and S.J. Walsh. "Revision of the jawfish genus *Lonchopisthus* with description of a new Atlantic species (Teleostei: Opistognathidae)." *Journal of the Ocean Science Foundation* 28 (2017):5 2–89.

Abstract: Synonymies, diagnoses, descriptions, illustrations, an identification key, and meristic frequency tables are provided for all species of *Lonchopisthus*. Most of the skeletal anatomy of *L. higmani* is also illustrated. A new jawfish, *Lonchopisthus ancistrus* n. sp., is described from the Gulf of Mexico and off Honduras based on 21 specimens 41–89 mm SL. The new species differs from other congeners by the following combination of characters: the posterior end of the maxilla strongly hooked; the cheek and opercle without scales; the membrane connecting the maxilla and premaxilla and the inner membrane covering the posterior part of the dentary pale; segmented dorsal-fin rays 11–13, with unbranched rays 2–5; longitudinal body-scale rows 33–39; and very long pelvic fins, 39.4–75.3% SL. *Lonchopisthus lemur* (and its synonym *L. meadi*) shares most characters with *L. ancistrus*, but differs in having shorter pelvic fins, 19.2–29.9% SL; fewer longitudinal body-scale rows, 26–33; the cheek and opercle scaled; and 5 infraorbitals (vs. 4). Both are relatively deep-water species, occurring from 100 m to at least 375 m (vs. 3–139 m in the other species). *Lonchopisthus micrognathus* is unique in having no branched caudal-fin rays at any size and the middle caudal-fin rays with free tips that may be used to maintain tactile contact with the substrate while hovering over its burrow. The western Atlantic *Lonchopisthus higmani* and eastern Pacific *L. sinuscalifornicus* are sister species that differ from the other Atlantic species in having the posterior end of the maxilla with a notch instead of a strong hook, the opercle with a large dark blotch, and one supraneural (vs. no supraneural).

Read the full text at <http://www.oceansciencefoundation.org/josf28f.html>



## Southern Division American Fisheries Society Contact List 2017

### **Wes Porak, President**

Lakefront Management and Research  
1216 Gray Ct  
Eustis, FL 32726  
(352) 455-2798  
wesporak@aol.com

### **Craig Bonds, President Elect**

Texas Parks & Wildlife Department  
4200 Smith School Rd  
Austin, TX 78744  
(512) 389-4643  
craig.bonds@tpwd.texas.gov

### **Wesley Neal, Vice-President**

Mississippi State University  
Box 9690  
Mississippi State, MS 39762  
(662) 325-8363  
wes.neal@msstate.edu

### **Kim Bonvechio, Secretary-Treasurer**

Florida Fish and Wildlife Conservation Commission  
601 West Woodward Ave  
Eustis, Florida 32726  
(912) 282-2363  
Kim.Bonvechio@myFWC.com

### **Dave Coughlan, Past-President**

Normandeau Associates, Inc.  
8261 Suite C, Hwy 73  
Stanley, NC 28164  
(704) 999-4622  
dcoughlan@normandeau.com

### **Amy Cottrell, Student Officer**

Auburn University  
203B Swingle Hall  
Auburn, AL 36849  
(920) 819-6421  
amc0125@tigermail.auburn.edu

### **Hae Kim, SDAFS Web Manager**

West Virginia University  
331 Percival Hall P.O. Box 6125  
Morgantown, WV 26506  
Morgantwn, WV  
(757) 339-4141  
hhk0003@mix.wvu.edu

### **Corbin Hilling, SDAFS Newsletter Editor**

Virginia Tech  
310 West Campus Drive, Cheatham Hall Room 106  
Blacksburg, VA 24061  
(304) 288-9336  
chilling@vt.edu

### **Brandon Peoples, SDAFS ListServ Manager**

Clemson University  
256 Lehotsky Hall, Jersey Lane  
Clemson, SC 29631  
(864) 656-4855  
peoples@clemson.edu