

# Southern Division News



Southern Division  
of the  
American Fisheries  
Society



## Save the Date 5

Mark your calendar for upcoming professional meetings!

## Updates 11

Read up on what our chapters and committees have been doing.

## AFS Fellows 20

Learn about the Society's new AFS Fellows Program.

## The President's Message: What "hooked" you into fisheries?

Dennis Riecke, SDAFS President

Do you remember when you decided to major in Fisheries? Was it your first choice? Did it come early in life or when you were in high school or college? Reflecting back on that decision, were there signs, events, and thoughts that occurred to you in childhood that may have contributed to your decision to embark on a career as a fisheries professional? For me, one of my earliest memories—must

have been between the ages of 4 and 6 years old—was going fishing for the first time. My dad had taken my brother, sister, and me to fish with hand lines on the long white pier that was in front of the Edgewater Hotel in Gulfport, MS. We caught small catfish and croaker on dead shrimp. Then, we got a goldfish bowl that had three goldfish in it—one for each of us. Then, I got a 10-gallon aquarium

AMERICAN  
FISHERIES  
SOCIETY



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:

Sasha S. Doss  
SDAFS Newsletter Editor  
doss@vt.edu

## (President's Message Continued)



*"Remember that every challenge is also an opportunity."*

*-Dennis Riecke*

and put various tropical fish in it. I continued fishing as I went through school. I never became a proficient angler, but I was always very satisfied with all the time I spent fishing. I enjoyed experiencing nature. Fishing was my first Boy Scout merit badge. Since I liked being outdoors on a regular basis, I stayed in Scouting and achieved the rank of Eagle Scout. In high school I really liked biology and took three years of it. So, when it was time to decide on a course of study in college, I figured that majoring in fisheries would allow me to combine my desire to be outdoors—around fish—with biology. Something "hooked" you into fisheries. Periodically, spend some time reflecting on what that

was and how you felt. All of us in the fisheries field are interested in some aspect of fisheries, and I hope we never lose that fascination, that wonder, that amazement.

### Challenges & Opportunities

I remember that one of my graduate school statistics professors told all the fisheries students that we were working in a difficult field—statistically. In some way or another—in some job or research capacity—we all are seeking to understand how fish populations respond to various factors. Due to the complexity and web of relationships in our natural world, this is huge endeavor. We sample fish populations and their environments. We study and we do experiments. We attempt to identify response variables and cause-and-effect relationships. Some of the challenges our fisheries face include invasive species, climate change, habitat fragmentation, habitat loss and alteration, sedimentation, lack of instream flow, overharvest, overcapitalization, user group conflicts, industry concerns, and economics. We perform research to understand how these factors impact fish populations. We present our findings to decision makers hoping they will listen so that we can wisely manage,

conserve, and protect our fishery resources.

Remember that science is only one of the factors decision makers consider when deciding what to do. Often, economics, politics, and social factors are considered more important than science when deciding on what to do. Natural resource professionals are hindered by a lack of economic data on the value of recreational fisheries and nongame fishes when opposing development projects whose advocates are armed with firm figures on economic impact, tax revenue, and job creation. Our scientific findings are considered but frequently rejected or not selected. People and economics are more important than nature and fish. This can be a frustrating situation, but we toil on. Why? We do it because it is our job to be advocates for fisheries resources. Remember that every challenge is also an opportunity. It is easy to become frustrated as a fisheries advocate, but be patient, persistent, and determined. Do good science and be proud of it.

### A Future Benefit of AFS Membership

The SDAFS officers and some recent SDAFS Past Presidents had a discussion concerning the registration fees for our annual

**(President's Message Continued)**

Spring Meeting. We have different fees for students and professionals, and both groups pay more if you register late. On the Society level, registration fees for our annual meeting are tiered with nonmembers paying more than AFS members. A reduced registration fee for that meeting is one of the benefits of AFS membership. All of the SDAFS officers agreed that in the future, AFS members, who are listed as such in our Bethesda office, should pay a reduced rate to attend our SDAFS Spring meetings. We will have to work out a process to verify the membership status of each registrant, but we believe that this should be a benefit of AFS membership.

**Be a Responsible Leader**

If you were elected, appointed, or volunteered to some AFS leadership position as an officer, committee chairman, or committee member, please perform your leadership tasks. The people that elected you or asked you to serve have put their faith in you. They are counting on you to fulfill those leadership responsibilities. If situations occur that prevent you from performing as a leader, do not be afraid to ask for help. Leadership within the AFS is a team effort, and you can

you. Asking for help or to be relieved of your duties is much better than failing to do your job.

**Chapter and Subunit Activities**

In Savannah, I asked each committee, chapter, and student subunit to revise your website and do one new project for a fishery. Have you done those things? Some subunits have revised their websites, but some still have some very outdated information on them. So, please update your website if needed to present a positive image of our professional organization.

**Member Activities**

In Savannah, I asked each member to promote the AFS, get certified, recruit a new member, and commit and engage with the AFS. So, how are you doing? I hope that you will decide to be more engaged with the AFS in the future and that you will decide that—sometime in your career—you will commit to volunteer to serve the AFS in some way. None of the AFS activities we benefit from would be possible without some of us volunteering a small bit of our time to work on them.

A simple way to get more involved is to **join a technical committee**.

Consult the list at <http://sd.fisheries.org/sdafs-committees/technical-committees> and contact the committee chairman. **Membership in our technical committees is open to anyone.** All you need to do to join is to contact the committee chair and express interest in joining.

**Remember to say "Thank You"**

My job as SDAFS President was a lot easier and less time-consuming because of the following AFS members. SDAFS leadership is a collective enterprise of team members.

Thank you to Brandon Peoples who served as the Student Representative to the SDAFS Executive Committee and who is our listserv administrator. Thank you to Zach Martin who—serving as our Webmaster—spent many hours updating the information on our website. Thanks to Sasha Doss who is serving as our Newsletter Editor for 2015. Thanks to Dr. Brian Alford and Hae Kim who are now also serving as our Webmasters. Thanks to Sarah Gilbert Fox at the AFS office for helping move our website to the AFS server after it got hacked. Thanks to Nicole Rankin for serving as our student affairs chairperson. Thanks to Bob Curry for serving many years as our



## (President's Message Continued)

representative for SEAFWA. Thanks to Steve Sammons for serving as SEAFWA Fisheries Editor. Thanks to Mike Perkins (lead judge), Rachael Hoch, Brena Jones, Kelsey Lincoln, Corey Oakley, Dave Stagliano, and Michael Gangloff for judging the 22 fisheries presentations at the 2015 SEAFWA meeting, and thanks Kevin Dockendorf for coordination and distribution of judging materials.

Thanks to Pat Mazik and the entire team of folks planning a great 2016 SDAFS in Wheeling, WV. I encourage everyone to register for this meeting.

Thanks to my fellow officers and officers to be for all the times they provided comments and advice on issues too numerous to recall or list: John Jackson, Past SDAFS President; Dave Coughlan, President-Elect; Wes Porak, Vice President; Kim Bonvechio, Secretary and Treasurer; Craig Bonds, incoming Vice President; and Andrew Taylor, incoming Student Representative to the SDAFS Executive Committee.

Finally, thanks to all of you who are serving in some capacity to the SDAFS or any AFS Chapter, subunit, or committee, and thanks for all you do for our fisheries resources.



*I'm trying to solve the mystery of what Muskellunge eat in the New River, VA. This is one Muskellunge giving up his lunch. Photo Credit: Roanoke Times*

## Note from the Editor

Sasha Doss

As a kid, you could usually find me outdoors—turning over rocks, digging a hole to China—I had a new mission each day. And any chance I got to go to the lake, river, or ocean, I took. There has always been something about the water and its fishes that mesmerizes me. Part of it is the secrecy with which fish lead their lives. Their underwater residence often precludes direct observation, and I cannot stand secrets. I have to know what they are up to. It is a mystery, and I love solving mysteries.

So now my work is solving those mysteries in some form or another. I put together pieces of information in a way that tells their story. I like solving mysteries, and I love fish. That is what “hooked” me (and of course the awesome people I get to work with). As you read this newsletter, I hope you are reminded of some of the reasons you got hooked and share those reasons with others.

Yours swimmingly,

Sasha Doss

## Meeting Announcements

### 2016 Southern Division Spring Meeting

**February 17<sup>th</sup> – 21<sup>st</sup>, 2016**  
**Wheeling, WV**

**Come to “Wild and Wonderful West Virginia!!”**

The West Virginia Chapter of the American Fisheries Society would like to invite everyone to attend the 2016 Southern Division Spring Meeting in Wheeling, West Virginia, from February 17<sup>th</sup> to the 21<sup>st</sup>, 2016. The meeting's theme is “Sharing the Water Resources.”

Workshops include Crayfish Field Methods and Identification, Identification of Freshwater Snails of North America, Algae Identification, Data Wrangling in R and R studio, Data Visualization in R using ggplot2, Occupancy Modeling, SARP Instream Flow, and How to Get Hired – What a Student Needs to Know. Symposia include Brook Trout, Genetics, GIS, Fish Health, and Crayfish. For information about the meeting, please visit the website at <http://sdafs.org/wvafs/meetings/>.

All pertinent registration information, student information, and abstract submittal can be found on the website.

Also, do not hesitate to make room reservation at the Oglebay Resort and Conference Center ([www.oglebay-resort.com](http://www.oglebay-resort.com)) starting now. We have a block of rooms at \$119 and these rates will only be available until **January 15, 2016**.

To make reservations online, use Group ID 17526 and Password 936006282. Or call 1-800-624-6988 and mention you are with the Southern Division of the American Fisheries Society to get our room rate. We need these rooms reserved so that we receive hotel meeting space for free.

If anyone has any questions about the 2016 SDAFS meeting, please contact Pat Mazik, General Chair at [pmazik@wvu.edu](mailto:pmazik@wvu.edu) or call 304/293-4943. See everyone in Wheeling.

### 2016 SDAFS - Pollution Committee Meeting

**February 18<sup>th</sup>, 2016**  
**Wheeling, WV**

The Pollution Committee of the Southern Division of the American Fisheries Society will be meeting at the 2016 Spring Meeting in Wheeling.

#### Major agenda items:

- Work on an update to Special Publication #30 entitled,

Southern Division AFS Meeting  
 February 17<sup>th</sup> – 21<sup>st</sup>

Southern Division Pollution Committee Meeting  
 February 18<sup>th</sup>

International Muskellunge Symposium  
 March 13<sup>th</sup> – 15<sup>th</sup>

World Fisheries Congress  
 May 23<sup>rd</sup> – 27<sup>th</sup>

AFS Annual Meeting  
 August 21<sup>st</sup> – 25<sup>th</sup>

International Trout Congress  
 October 2<sup>nd</sup> – 6<sup>th</sup>

SEAFWA  
 October 16<sup>th</sup> – 19<sup>th</sup>



## (Meeting Announcements Continued)

- *Investigation and Monetary Values of Fish and Freshwater Mussel Kills*
- Share information on causes, results, and investigation techniques of aquatic life kills among Southern Division member agencies, organizations, and individuals; and discuss approaches towards case resolution.

**Who we are:**

- Each game and fish state agency within the Southern Division appoints a state representative to the Committee. Any interested Southern Division member may join or be appointed as a member-at-large.

**Major accomplishments:**

- Publication of standardized and scientifically defensible protocols for conducting fish-kill investigations and assessing monetary damages resulting from these incidents.
- Publications are used by various state agencies and other professionals
- Publication dates: 1970, 1975, 1976, 1982, 1986, 1992\*, 2003\*†

\* In cooperation with Socioeconomics Section

† Incorporated freshwater mussel methods and values in cooperation with the Freshwater Mollusk Conservation Society

**Participants needed:**

- Pollution committee state representatives
- Individuals experienced with investigating kills of aquatic life
- Individuals experienced with assessing monetary values and damages for kills of aquatic life
- Individuals with experience in natural resource damage assessments



*Members of the Pollution Committee hard at work.*

## 3rd International Muskellunge Symposium

March 13<sup>th</sup>-15<sup>th</sup>, 2016  
Minnetonka, MN

Sponsored by MUSKIES, INC. and the Esocid Technical Committee, North Central Division - AFS

Plan now to attend and present at the 3<sup>rd</sup> International Muskellunge Symposium, to be held March 13<sup>th</sup> – March 15<sup>th</sup>, 2016, in Minnetonka, Minnesota. Muskellunge researchers, resource managers, and anglers from across North America will gather for three days of technical presentations, poster sessions, panel discussions, and great socials! **This symposium will also commemorate the 50<sup>th</sup> Anniversary of Muskies, Inc.**

**Venue:** The presentations and socials will be held at the Sheridan Minneapolis West, Minnetonka, MN. A block of rooms will be reserved at the Sheridan for a special symposium rate. Registration will include all breaks and socials; there will be a reduced fee for presenters and students.

**Arrangements:** Please check [Muskiesinc.org](http://Muskiesinc.org) for questions regarding meeting arrangements. Submit abstracts for presentations and posters to the program Technical Committee, c/o:

**Dr. Derek Crane, Lake Superior State University:**  
[dcrane1@lssu.edu](mailto:dcrane1@lssu.edu)



## 7<sup>th</sup> World Fisheries Congress

Planning for the 7<sup>th</sup> World Fisheries Congress is underway. Mark your calendar to attend the meeting from May 23<sup>rd</sup> to the 27<sup>th</sup>, 2016. The meeting will be held at the Busan Exhibition and Convention Center (Bexco).

It is my great pleasure to invite you to the World Fisheries Congress, which will be held in Busan, Korea in 2016. The World Fisheries Congress has been hosted by the World Council of Fisheries Societies since 1991. The first World Fisheries Congress was held in Athens, Greece in 1991, followed by Brisbane, Australia in 1996, Beijing, China in 2000, Vancouver, Canada in 2004, Yokohama, Japan in 2008, and Edinburgh, Scotland in 2012. The city of Busan in Korea is going to host the 7<sup>th</sup> World Fisheries Congress under the theme “Challenge to Sustainable Fisheries and Safe Seafoods” from May 23<sup>rd</sup> to the 27<sup>th</sup> in 2016.

Korea is surrounded by the sea.

The fishing industry has been a traditional industry with a long history. Korea has a well-established infrastructure in fishery, aquaculture, and fishery related industries, including training programs in universities. In particular, Busan is an ocean city and the second largest city in Korea. Thus, Busan is traditionally famous for marine fisheries in Korea. Busan is making great efforts to develop industry, science, and academia in marine fisheries. Busan will provide an excellent venue for knowledge exchanges and productive discussions of your most outstanding works with world-class scientists in fisheries.

Busan is proud of its wonderful sceneries, cultural heritage, great

fish markets, and fishing towns in the vicinities. Busan is also famous as the top fourth convention city in Asia and the ninth in the world (UIA, 2013). Busan is convenient for you to travel around with its well-established tourism infrastructure.

I hope you join the 7<sup>th</sup> World Fisheries Congress in 2016, and I look forward to seeing you in Busan, Korea.

Taek Jeong NAM, PhD  
Chair of the Organizational Committee for 2016 World Fisheries Congress



(Meeting Announcements Continued)

## 146<sup>th</sup> AFS Annual Meeting

Kansas City, MO  
August 21<sup>st</sup> – 25<sup>th</sup>, 2016

The Missouri Chapter and North Central Division of the American Fisheries Society invite you to attend the 146<sup>th</sup> AFS Annual Meeting in Kansas City, August 21<sup>st</sup> – 25<sup>th</sup>, 2016. This year's theme is ***Fisheries Conservation and Management: Making Connections and Building Partnerships.***

The 2016 Annual Meeting offers a chance to present your science to experts from around the world, enhance your job skills with hands-on Continuing Education Workshops, see the latest technology in the Trade Show, and network with colleagues old and new. This year's hotel and conference center are all under one roof at the Sheraton Kansas City at the Crown Center, giving you more free time to see presentations, meet with collaborators, and explore the city. And Kansas City's affordable, central-location, combined with its thriving arts culture, nightlife, and stunning natural resources, means that there is something for everyone to enjoy in August 2016!

## International Trout Congress

Bozeman, MT  
October 2<sup>nd</sup> – 6<sup>th</sup>, 2016

### Call for Symposia and Continuing Education

**Call Opens:** December 7<sup>th</sup>, 2015  
**Deadline:** February 1<sup>st</sup>, 2016

We are pleased to announce that the call for symposia, workshops and pre-conference training courses at The World of Trout – 1st International Congress is now open. The theme of the Congress is ***Conversations to Promote a Global Trout Conservation Network.***

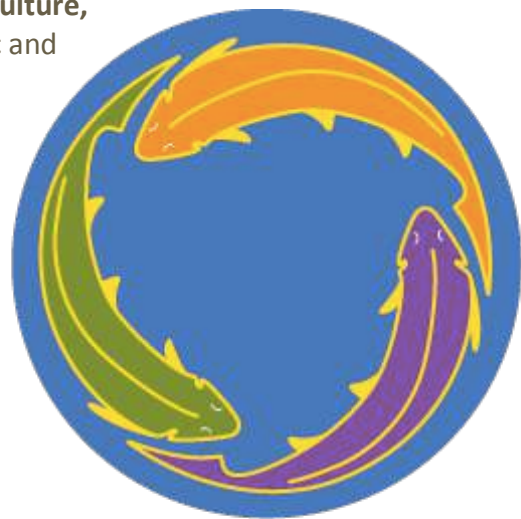
We welcome proposals related to the theme of the Congress that include **trout conservation and science, literature, art, culture, and education.** Scientific and conservation topics may include trout systematics, conservation, management, and restoration. We especially encourage **writers, artists, and educators** to organize activities around the Congress. The Congress will be held in **Bozeman, Montana,**

USA from 2<sup>nd</sup> – 6<sup>th</sup> October 2016, with pre-conference training courses taking place prior to the meeting.

Activities associated with the Congress include a **film festival, fiction writing competition, and photo competition.** We'll have other events throughout the Congress.

If you would like to contribute to the Congress program by organizing a symposium, leading an interactive workshop, or conducting a training course in conjunction with the conference, we encourage you to **submit your proposal by February 1<sup>st</sup>, 2016.**

**SUBMIT YOUR PROPOSAL at**  
<http://troutcongress.org/content/session-proposal>



INTERNATIONAL  
**TROUT CONGRESS**



(Meeting Announcements Continued)

## 70<sup>th</sup> Annual SEAFWA Conference

**Baton Rouge, LA  
October 16<sup>th</sup> – 19<sup>th</sup>, 2016**

The annual conference of the Southeastern Association of Fish and Wildlife Agencies is a forum for the exchange of ideas and critical information regarding the management and protection of fish and wildlife resources primarily in the southeast. The conference attracts over 500 representatives from state and federal agencies, citizen's organizations, universities, private wildlife research groups, fisheries and wildlife scientists, agency enforcement personnel, and other natural resource-related organizations.

Hosted by the Louisiana Department of Wildlife and Fisheries, the 70<sup>th</sup> Annual Conference, "Conserving Vital Habitats," will be held at the Hilton Hotel in the arts and entertainment district of downtown Baton Rouge, Louisiana, along the Mississippi River. The Hilton Baton Rouge Capitol Center was inducted into the Historic Hotels of America in November 2014 and is the only historical hotel in the city. While staying at the Hilton, guests will enjoy easy access to the Shaw Art Center, USS

Kid and Naval Museum, LSU, Louisiana Old State Capitol, and all that downtown Baton Rouge has to offer.

### Important Dates and Deadlines

Call for Symposia Opens –  
mid-January

Call for Symposia Closes –  
February 15<sup>th</sup>, 2016

Regular Call for Presentations  
Opens – February 15<sup>th</sup>, 2016

Regular Call for Presentations  
Closes – July 1<sup>st</sup>, 2016

Workshop Submission Deadline –  
April 15<sup>th</sup>, 2016



## Call for Awards

Please consider nominating your colleagues for one of the SDAFS awards. Our chapters and subunits are doing some excellent work that deserves recognition.

For details on these awards and the submission information go to: <http://sd.fisheries.org/southern-division-awards/>

The 2015 SDAFS Awards Committee is accepting nominations for four Southern Division Awards.

### ***Distinguished Service Award***

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

### ***Achievement Award***

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. It is our Division's highest honor.

Nominations are also being accepted for ***Best Chapter*** and ***Outstanding Subunit***. Nominations will be accepted until January 29<sup>th</sup>, 2016. Letters in support of the nomination from other members are welcome. Awards criteria and past winners can be found on the SDAFS

website. Submit nominations to the SDAFS Awards Committee Chair (Gene Wilde).

### ***Robert M. Jenkins Memorial Scholarship***

The Reservoir Committee of the Southern Division of the American Fisheries Society administers the Robert M. Jenkins Memorial Scholarship for graduate students doing fisheries research in reservoirs: <http://sd.fisheries.org/students/>. You will see on the website that the deadline for application is typically the end of the calendar year. Due to the low number of applications received, we have extended the deadline to January 22<sup>nd</sup>, 2016. The website provides background information and details for application.

## Committee and Chapter Updates

### Fisheries Management Section

The FMS is composed of people who wish to develop, apply, and evaluate effective management concepts or techniques as well as programs in education and information to solve fisheries management challenges. The Section promotes the exchange of fisheries management information and the results of applied research among professionals, students, user-groups, resource management agencies, and the general public who share interest in fish and the habitats supporting them. The Section sponsors workshops, symposia, topical sessions at professional meetings, and special projects to examine fishery management challenges.

The FMS had a productive meeting in Portland in August. Paul Colson with the Institute of Fisheries Management (U.K.) addressed a joint session with FMS and the Fisheries Administrators Section.

Paul shared his thoughts on similarities and differences in AFS and IFM, and about the benefits of the current exchange program between the professional organizations. Secretary/Treasurer Quinton Phelps presented the results of a survey conducted by the Young Professionals Committee of FMS, and discussed ongoing efforts to engage young fisheries professionals. Updates were given on FMS's sponsorship of the International Sampling Symposium held at the 2015 AFS meeting and the Angling Participation Symposium that is being planned for the 2016 AFS meeting in Kansas City. As part of

the aforementioned exchange program with the IFM, Rebecca Krogman, with the Iowa DNR, was presented the Young Professional Exchange Award for travel to the

next IFM conference. Finally, two new members were inducted into the FMS Hall of Excellence: Gil Radonski (Sport Fishing Institute, retired) and Steve Miranda (Mississippi State University).

### Arkansas Chapter

The Arkansas Chapter is pleased to announce the 2016 annual meeting will be held in Fairfield Bay, Arkansas February 10<sup>th</sup>-12<sup>th</sup>, 2016. The meeting location will be the Fairfield Bay Conference Center ([www.fairfieldbayconferencecenter.com](http://www.fairfieldbayconferencecenter.com)) and nearby lodging will be available in the adjacent resort community. Lodging reservations may be made by calling 501-884-4202.

Online meeting registration will be possible through the Chapter's new Wild Apricot program, which we hope will streamline much of the Chapter's normal business (<https://arkansasafs.wildapricot.org/>). As more information becomes available, please check the Chapter website (<http://sdafs.org/arkafs/AFS/>) or the AR-AFS Wild Apricot page.





## Florida Chapter

We invite you to submit abstracts for the 2016 annual meeting of the Florida Chapter of the American Fisheries Society. The meeting will take place March 2<sup>nd</sup>-4<sup>th</sup>, 2016, at the Florida FFA Leadership Training Center in Haines City. We hope you can join us!

The meeting will consist of both invited and contributed oral presentations and posters. The 2016 symposium on March 3<sup>rd</sup> is titled **'Improving Florida's Fisheries: Actions Today that Benefit Tomorrow.'** The 2016 symposium will focus on the three primary avenues to improve our fisheries: fish stocking, fishing regulations, and habitat enhancement. What do we do as researchers, scientists, or managers to improve fishing or fishing opportunities throughout the Sunshine State?

We strongly encourage submissions for the symposium. Please note if you would like your presentation to be part of the symposium, indicate it in your abstract submission.

Deadline for abstract submission and registration is **Friday, January 22<sup>nd</sup>, 2016**. We look forward to seeing everyone in Haines City for our 2016 annual meeting!

## University of Southern Mississippi Student Subunit

The USM AFS student subunit recently hosted our annual fundraising event, the Jim Franks Merry Fishmas Fun Run and 5K, on December 5<sup>th</sup>, 2015. We had about 50 runners in attendance and received great support from the local community. Profits from the run will be used to fund travel awards for active members of the USM AFS student subunit. FJ Eicke of the Mississippi Coastal Conservation Association (CCA) attended our November meeting to inform students about the purpose of CCA and their recent

activities. Our student subunit members have received several awards and publications. For example, David Dippold recently received a travel award from the Southern Association of Marine Laboratories (SAML) to support his attendance at the 2016 Southern Division AFS Annual Meeting in Wheeling, WV. Grant Adams also published his research titled "Climate-driven population size fluctuations of jellyfish (*Chrysaora plocamia*) off Peru" in the journal Marine Biology (<http://link.springer.com/article/10.1007%2Fs00227-015-2751-4>).



*Students from the Mississippi State Student Subunit try out their catfish impressions.*

## Mississippi State Student Subunit

The AFS student subunit at Mississippi State took part in a number of activities during the summer and fall of 2015. Members organized and attended a number of workshops, including fisheries techniques sessions for MSU veterinary students, boat trailer maintenance and repair demonstrations, and the MOCC small boat training through the US Geological Survey. Participation in community programs was well received, and included kids fishing derbies, a Halloween trick-or-treat event, and fish anatomy lectures for local grade schools. Subunit members also provided assistance to ongoing research projects pertaining to the effects of angling

on Largemouth Bass and riverine ecosystem management. Spring activities on the agenda include an organized camping/fishing trip, streamside cleanups, and our annual “fish dish” competition where members prepare a number of delicious, aquatic-based cuisines. Further information on our subunit as well as pictures, upcoming events, and announcements, can be found on our new website, [www.msuaafs.org](http://www.msuaafs.org).

## North Carolina and Virginia Chapters

### *Announcement and Call for Papers*

The 2016 Meeting of the Virginia and North Carolina Chapters of the American Fisheries Society will be Tuesday, March 15<sup>th</sup> to Thursday,

March 17<sup>th</sup>, 2016, at the Institute for Advanced Learning and Research in Danville, Virginia.

In keeping with recent meetings, a continuing education workshop (Conservation Genetics) will be held on Tuesday afternoon, March 15<sup>th</sup>. There will be oral and poster presentations and separate Virginia and North Carolina Chapter business meetings on March 17<sup>th</sup>. Final presentations will be on the afternoon of March 17<sup>th</sup>. Since we will be on the Dan River, scene of a major coal ash spill in 2014, we are organizing a symposium on impacts and ongoing assessment and recovery actions.

Important dates: Submit your abstract by January 15<sup>th</sup>, 2016. Authors will be notified of abstract receipt and acceptance by January 31<sup>st</sup>, 2016. Abstracts submitted after the deadline may be presented as a poster.



*Mississippi State Student Subunit*



## North Carolina State University Student Subunit

After receiving the prestigious “Outstanding Student Subunit Award” at the 2015 Annual Meeting of the American Fisheries Society (the club’s 4<sup>th</sup> parent society award), newly appointed President Ron Essig asked us, “How do you keep earning these?” Our answer was obvious, “Every year, the club’s members try to do more than they did the previous year.” North Carolina State University Student Fisheries Society (SFS) members participate in events related to aquatic community outreach, conservation, education, professional development, and

socializing with peers and professionals. So far this year, members have participated in events that address all of these categories—always with great enthusiasm. Members of the SFS enjoy sharing their knowledge with the community through outreach. During the spring of 2015, the SFS volunteered with the “Shad in the Classroom” Program. SFS members interacted with 18 elementary, middle, and high school classes—a total of 823 students. Using Rainbow Trout and shad specimens, SFS members taught hands-on, dissection-based lectures about the internal and external anatomy of fish. In all

classes, the students’ excitement was palpable and some even managed to sneak a few ‘selfies’ with their specimens before the teachers enforced the schools’ cell phone policies. This is the second year that SFS assisted with dissections, and we look forward to continuing our contribution to this program on an annual basis.

Conservation is also a very important goal for the SFS. The SFS officially adopted Rocky Branch, a headwater stream that runs through NCSU campus, and removes trash from the basin twice annually. As with most urban aquatic systems, Rocky Branch receives a lot of discarded fast food containers, plastic wrappers, and drink bottles.

Therefore, our role as stewards for this system is exceptionally important. This year alone we removed well over 200 lbs of trash from the basin! We are also excited to be part of a campus-wide bioblitz that took place this fall. We surveyed the fish and invertebrate species that inhabit Rocky Branch, and this information will be displayed on



*On Halloween, students dressed up to remove trash from Rocky Branch Creek, an urban stream flowing through NCSU’s campus. Photo credit: Gus Engman*





*SFS Co-President Casey Grieshaber dissects a shad with 8<sup>th</sup> graders as a part of the Shad in the Classroom program. Photo credit: Michelle Amato.*

educational signage across campus.

The SFS also provides its members with unique opportunities for education and professional development. We had very large turnouts for two fish identification workshops that were hosted at the NC Museum of Natural Sciences fish collection. Two of the area's most knowledgeable ichthyologists, Gabriela Hogue and Bryn Tracy, led exciting lectures and workshops that imparted participants with an understanding of local biodiversity. Students were also able to practice looking for identifying characters and the use of keys to ID species, skills helpful for identifying fish anywhere in the world. These abilities are absolutely invaluable for young professionals, and we had a strong undergraduate presence at this workshop.

In June, SFS members spent an exceptionally relaxing and educational weekend together, snorkeling, camping, and fishing on the South Toe and Cane Rivers. These two beautiful rivers, nestled in the North Carolina Blue Ridge

Mountains, provided the perfect venue for getting to know one-another and some of the state's native

fauna. The seventeen people who participated in this trip spent the majority of the weekend wearing wetsuits while watching colorful darters making their living in the riffles or large Redhorse swimming sluggishly in the deep pools—there was even a hellbender sighting!

Students were also able to practice backpack electrofishing, seining, and fish ID skills. The remainder of the time was devoted to making s'mores! Prior to donning their wetsuits, some members had the opportunity to tour the Conservation Aquaculture Center in Marion, NC, learning about the diversity and unique life history of

freshwater mussels and their conservation needs.

Before trekking back to Raleigh, everyone made a short pilgrimage to the top of Linville Gorge to gaze out upon one of North Carolina's most scenic overlooks.

The SFS is a strong and active club that is thankful for the recognition it has received. The enthusiasm of its members, active support from the NC AFS, and contributions from local professionals and fish enthusiasts have allowed the club to flourish. Meetings, which usually feature a guest speaker, are held monthly on NCSU campus. Everyone is invited to attend! Also, check out our Facebook page for up-to-date information about our activities and upcoming events (search "North Carolina State University Student Fisheries Society").



*SFS members electrofish along the Cane River. Photo credit: Mieko Camp*

## Oklahoma State Student Subunit

The Oklahoma State University (OSU) AFS Student Subunit has been very productive over the past semester. We were fortunate enough to host guest speaker Brandon Brown, Paddlefish

Research Supervisor at the Oklahoma Department of Wildlife Conservation's (ODWC) Paddlefish Research Center. Brandon educated us on the efforts of the Paddlefish Research Center and about the recent successes that have been taking place in terms of statewide paddlefish populations. During the homecoming celebrations this year at Oklahoma State University, the subunit placed first among all other student organizations in the College of Agricultural Sciences and Natural Resources in the annual homecoming window-decorating contest.

The subunit has also been active in our outreach efforts by volunteering at several local events. At the annual ODWC Wildlife Expo, the subunit hosted



*Oklahoma State Student Subunit members show off their decorated window for homecoming.*

a booth demonstrating the wide array of fish diversity found within Oklahoma's different ecoregions. Subunit members assisted the local Sierra Club Nature Camp in introducing children to aquatic natural resources by taking them fishing, many for their first time ever. Members have also volunteered on several occasions this semester to aid the ODWC in

some of their routine sampling on paddlefish. Not only has the subunit been active at a local level, but also at the division and national level by sending several students to both the 2015 SDAFS meeting in Savannah, GA and to the 2015 AFS annual meeting in Portland, OR.

The OSU AFS Student Subunit looks forward to another productive semester in the spring, as well as to representing the AFS at the upcoming 2016 Oklahoma Natural Resource Conference in Oklahoma City, OK.

## Potomac Chapter

The Potomac Chapter held its almost-annual crab feast on November 1, 2015, in Silver Spring,

Maryland. The crab feast normally is held at AFS headquarters in Bethesda, Maryland. However, due to the major construction going on next to AFS, the crab feast was relocated to nearby Silver Spring. About 20 people attended the crab feast, including Potomac Chapter Past-President Ward Slacum, and Tom Bigford from AFS headquarters. A contingent from George Mason



*Potomac Chapter members enjoying the Crab Feast.*



University also attended the crab feast, including 2015 Potomac Chapter Policy Travel Award winner Amanda Sills. The Potomac Chapter looks forward to a productive 2016!

## South Carolina Chapter

The 2016 Annual Meeting of the South Carolina Chapter and the South Carolina Fisheries Worker's Association will be at Camp St. Christopher Conference Center in Seabrook Island, SC.

<http://www.stchristopher.org/>

The meeting will begin the afternoon of February 24<sup>th</sup> and run through noon on February 26<sup>th</sup>. The meeting will be held at the Camp St. Christopher Conference Center on Seabrook Island, SC. The natural setting of one of South Carolina's beautiful barrier islands should provide a fun and stimulating background for our annual meeting. The meeting will include an opening general session on Wednesday, student poster session and social, a full slate of presentations Thursday and Friday as well as the Grand Social on Thursday night. Business meetings for both SC-AFS and SCFWA will occur on Thursday after the general sessions end. An additional

reminder for those submitting abstracts, don't forget to submit your registration as well. Also, if you are an advisor submitting abstracts for students, they must all be registered individually. The early registration deadline is January 20<sup>th</sup>, so think about submitting after the Holidays and also for those of you who have to get travel approval, begin to think about getting that taken care of in time.

Please mark the date in your calendar now and further information on guidelines for posters and presentations will be forthcoming. Additional registration forms available are also available on our website (<http://www.scafs.org>) as well as our Facebook site (South Carolina Chapter of the American Fisheries Society). If you have any questions please contact Chris McDonough using the information below. We look forward to seeing you in 2016.





## Miscellaneous Announcements

Unity College Fair  
NCSU Student Subunit Receives Outstanding Student Subunit Award  
AFS Fellows Program  
Assistantship at LSU  
Webmaster Position  
Southeastern Fisheries Council  
Statistics in Aquaculture Workshop  
Planning and Executing Successful Rotenone and Antimycin Projects

### Unity College Fair

Unity College will host New England's largest environmental job fair on February 9, 2016. Companies looking to add graduates with sustainability skills reserve now for Feb. 9 event. New England's largest environmental career fair returns to Unity College in 2016, and organizations looking to hire the next generation of environmental professionals are invited.

Any organization interested in recruiting graduating Maine college students with skills in sustainability science, outdoor education, adventure therapy, conservation law enforcement, captive wildlife care, and more, should sign up for a space at the event, joining as many as 80 employers that have made past fairs the biggest such annual job recruiting event in the state.

"Our annual environmental career fair consistently generates exceptional interest from potential employers," Director of Career Services Nicole Collins '00 said. "Participants will have the opportunity to conduct informational interviews, seek professional advice, establish professional connections, secure internships, refine their job search and, in some cases, make the right connection leading to a professional opportunity." The job fair will take place 10 a.m. to 2 p.m., Tuesday Feb. 9 at the Student Activities Center at Unity College. If you're interested in recruiting on behalf of your organization, contact Matt Dyer of the Unity College Career Services and Experiential Program at (207) 509-7271; email [crc@unity.edu](mailto:crc@unity.edu). There is no registration fee, and lunch is provided. Those interested in attending can [register here](#).

Website: <http://unity.edu/news/new-england-s-biggest-green-jobs-fair-seeks-recruiters>

UNITY COLLEGE CAREER  
SERVICES AND  
EXPERIENTIAL PROGRAMS

## NCSU Student Subunit Awarded Outstanding Subunit Award

The North Carolina State University Student Subunit received the “Outstanding Student Subunit Award” at the 2015 Annual Meeting of the American Fisheries Society (the club’s 4th parent society award). Subunit members say, “Every year, the club’s members try to do more than they did the previous year.” North Carolina State University Student Fisheries Society (SFS) members participate in events related to aquatic community outreach, conservation, education and professional development, and socializing with peers and professionals.



*Bryn Tracy gives a lecture on the fishes of North Carolina as part of an identification workshop. Photo credit: Casey Greishaber*



*AFS Past-President Donna Parrish presents NCSU SFS members with the award for “Outstanding Student Subunit” at the 2015 Annual Meeting of The American Fisheries Society. (Photo Credit: AFS, Rich Grost; Pictured, left-to-right: Gus Engman, Casey Grieshaber, Caitlyn Bradley, Donna Parrish, Dylan Owensby, Mary Henson, Jared Flowers, Crystal Lee Pow, Tomas Ivasauskas, Tiffany Penland)*

## Introducing the American Fisheries Society Fellows Program

As announced at the 145<sup>th</sup> Annual Meeting in Portland, Oregon, the Society has established a Fellows Program. AFS designates as Fellows of the Society certain members who have made outstanding or meritorious contributions to the diversity of fields that are included in the American Fisheries Society. Contributions can include, but are not restricted to, efforts in leadership, research, teaching and mentoring, resource management and/or conservation, and outreach/interaction with the public. The goals of the Fellows Program are:

- To honor AFS member who are recognized by their peers as distinguished for their outstanding and/or sustained contributions to the discipline.
- To help make outstanding AFS members more competitive for awards and honors when they are being compared with colleagues from other disciplines.
- To support the advancement of AFS members to leadership positions in their own institutions and in the broader society.

The program has three time phases: start-up, transitional, and steady state. The 2015 class of AFS Fellows is intentionally large to name those who have contributed from the past to the present. In the transitional phase, the target number will be less than 20 each year, and the steady state will be about five each year. Designation of the 2015 Fellows was conferred on AFS members who were regular AFS members for at least five years, members of the profession for at least 15 years, and belonged to at least one of the following categories:

- National members of academies associated with countries whose regular AFS members constitute at least 1% of all regular AFS members.
- Recipients of one of the following AFS Awards: Award of Excellence, Carl R. Sullivan Fishery Conservation Award, Emmeline Moore Prize, Excellence in Fisheries Education Award, and Meritorious Service Award.
- Editors of AFS journals for more than five years.
- Former presidents of AFS.

These criteria were used only during the start-up year and are not intended to influence Fellow selection criteria in future years when a nomination process will be implemented.

We hope the 2015 named Fellows list is complete. However, if we have missed anyone during this process, please contact AFS Unit Coordinator Jasmine Sewell at [jsewell@fisheries.org](mailto:jsewell@fisheries.org) by December 15, 2015. Nominations for 2016 Fellows will be due by April 1, 2016.





## 2015 AFS FELLOWS

Ira R. Adelman  
Bruce A. Barton  
Kenneth L. Beal  
Richard J. Beamish  
Vicki S. Blazer  
John G. Boreman  
Gerald R. Bouck  
Bradford E. Brown  
Carl V. Burger  
Dale P. Burkett  
Phyllis H. Cahn  
Robert F. Carline  
John M. Casselman  
Joseph J. Cech  
Charles C. Coutant  
Dennis R. DeVries  
Joe G. Dillard  
Mary C. Fabrizio  
William L. Fisher  
William G. Franzin  
Christopher Goddard  
Richard Gregory  
Carolyn A. Griswold  
Gary D. Grossman  
Christopher Guy  
James D. Hall  
Eric M. Hallerman  
Michael J. Hansen  
Fred A. Harris  
Ronald Hedrick  
Joseph E. Hightower  
Ray W. Hilborn  
Scott Hinch  
Wayne A. Hubert  
Raymond Hubley  
Janice S. Hughes

Donald C. Jackson  
Ambrose Jearld  
Barbara A. Knuth  
Christopher C. Kohler  
William C. Leggett  
Hiram W. Li  
Steve E. Lochmann  
John J. Magnuson  
F. Joseph Margraf  
Patricia M. Mazik  
Bonnie J. McCay  
Richard D. Methot  
Leandro E. (Steve) Miranda  
Stanley A. Moberly  
Christine M. Moffitt  
Peter B. Moyle  
Brian R. Murphy  
John A. Musick  
Larry A. Nielsen  
Jennifer L. Nielsen  
David L. G. Noakes  
Donald J. Noakes  
Richard L. Noble  
Larry L. Olmsted  
Nick C. Parker  
Daniel M. Pauly  
Robert G. Piper  
William S. Platts  
Geoffrey Power  
Thomas P. Quinn  
Frank J. Rahel  
Lee C. Redmond  
Henry A. Regier  
Stephen C. Riley  
Kenneth A. Rose  
Roger A. Rulifson

Frederick S. Scharf  
Carl B. Schreck  
William L. Shelton  
Roy A. Stein  
Trent M. Sutton  
William W. Taylor  
Arden J. Trandahl  
Fred M. Utter  
Gwen M. White  
Robert G. White  
Paul J. Wingate

## Graduate Research Assistantship in Alligator Nutrition

Aquaculture Research Station and  
School of Renewable Natural  
Resources Louisiana State  
University  
Baton Rouge, Louisiana, USA

Alligator farming is an established aquaculture industry in Louisiana with a farm-gate value of \$80 million annually. Farm-raised alligators are fed formulated, dry diets similar in composition and form to the extruded diets used in commercial farming of fish and shrimp. However, current information on proper nutrition and feeding of captive-reared alligator is inadequate.

A Graduate Research Assistantship is available with the Aquaculture Research Station and the School of Renewable Natural Resources, Louisiana State University Agricultural Center, for a MS student interested in conducting research to improve alligator diets by determining the nutritional requirements of farm-raised American alligator, with emphasis on amino acid or fatty acid nutrition. Research will be conducted at the Aquaculture Research Station, a branch station of the Louisiana Agricultural

Experiment Station, located a short distance from the LSU campus in Baton Rouge. Graduate coursework leading to the Master of Science degree will be taken in the School of Renewable Natural Resources and in other academic departments involved in the aquaculture/aquatic animal nutrition program.

Information on research programs and facilities of the Aquaculture Research Station is available online at [www.lsuagcenter.com/en/our\\_offices/research\\_stations/aquaculture](http://www.lsuagcenter.com/en/our_offices/research_stations/aquaculture). Additional information about Louisiana State University and academic programs available in the School of Renewable Natural Resources is available online at [www.lsu.edu](http://www.lsu.edu) and [www.rnr.lsu.edu](http://www.rnr.lsu.edu), respectively. Information about the Graduate School and an online application for admission to the graduate program in aquaculture can be obtained at <http://gradlsu.gs.lsu.edu>.

The assistantship provides a stipend of \$20,000 per year. Persons interested in this opportunity should contact Dr. Robert Reigh by e-mail ([rreigh@agcenter.lsu.edu](mailto:rreigh@agcenter.lsu.edu)) for additional information.

## SDAFS is looking for a Webmaster!

We are seeking a new Webmaster. Our website is now hosted by our Parent Society at <http://sd.fisheries.org>

The site on our old server got hacked but we were never able to locate the suspect file. Before her resignation from the AFS, Sarah Gilbert Fox migrated most of the web content to the AFS server.

Our former Webmaster Zach Martin provided the following position description:

I estimate that SDAFS Webmaster duties can take 15 - 20 hours/month. The website management platform (WordPress) is extremely flexible and user friendly. The most common tasks (e.g. posting announcements, updating links) are actually quite easy. We also now have website management and security support through the Parent Society which will be greatly helpful. There are major human resources and information management tasks on the horizon for the incoming SDAFS Webmaster as we lack up-to-date information on who manages committee, chapter, and subunit websites. Also, some committees, chapters, and subunits may look to update their own websites in the

future and the SDAFS Webmaster would help these groups with this process.

So, if you have these information technology skills and want to use them to help the SDAFS, I really need to hear from you ASAP. I'm sure we can get assistance from the staff at our Bethesda office to help with the transition tasks

Thank you and many thanks to Zach Martin at Virginia Tech for all his work to update and revise our website.

## Southeastern Fishes Council Update

*The Southeastern Fishes Council* (SFC) is a nonprofit scientific organization dedicated to the study and conservation of freshwater and coastal fishes of the southeastern United States. The southeastern region includes the greatest global biodiversity of temperate freshwater fishes, and has well over one-half of all species found in North America. The SFC was formed in 1975 by a group of scientists concerned with increasing environmental threats to rivers of the Southeast, and long-term protection of the southeastern fish fauna.

The SFC publishes peer-reviewed scientific papers, regional reports, announcements, and other news in a Biannual Proceedings that is distributed to dues-paying members. Anyone is encouraged to submit original research articles on the distribution, ecology, systematics, conservation, or other aspects of the biology of southeastern fishes for publication in the Proceedings.

The annual meeting of the SFC was held November 12-13, 2015 in Gainesville, Florida. The theme of the meeting was nonindigenous fishes, but there were many excellent papers presented on native fishes throughout the southeast. At the business meeting portion of the conference,

SDAFS and SFC leadership committed to work together to improve communication and collaborations between organizations to achieve our common goals to advance the science and conservation of fishes in the southeastern United States.

Please take some time to visit the SFC website and think about becoming an SFC member for a very reasonable membership fee.

<http://www.sefishescouncil.org/index.php>





## Statistics in Aquaculture Workshop

### Professional Development/Continuing Education Workshop

To be presented on Monday, February 22 at Aquaculture America 2016, Las Vegas, NV

### Statistics in Aquaculture – Multiple Comparisons and Response Surfaces including Mixture Experiments

#### Instructor

Dallas E. Johnson, Kansas State University, Manhattan, KS.

**Dallas Johnson** is Professor Emeritus and former Head of the Department of Statistics at Kansas State University. In a career spanning 35+ years, Dallas has held numerous consulting, research and teaching appointments and continues to teach short courses and workshops on a variety of topics in statistics. His outstanding teaching and professional achievements have been recognized through several awards from professional societies, faculty, and students alike, including election as a Fellow of the American Statistical Association. In addition to co-authoring Volumes 1, 2, and 3 of the seminal series *Analysis of Messy Data*, now in its second edition, he is the founding editor of the *Journal of Agricultural,*

*Biological, and Environmental Statistics* and has served on the editorial boards of *The American*

*Statistician, Communications in Statistics - Statistical Reviews, and Communications in Statistics - Simulations and Computations.*

### Workshop Description

Several studies have pointed out the misuse of multiple comparison tests in agricultural sciences. Aquaculture researchers have only recently begun to pay attention to this area of data analysis.

However, misconceptions and a lack of understanding are evident in our journal articles. The current workshop will critically address a variety of mean comparison techniques and give you the tools to understand and correctly apply those techniques to your data.

Response surface models are especially useful when one of the important goals of an experiment is to determine values for a set of treatment factors that will give near-optimum responses for the variable(s) being modeled. Mixture experiments will also be considered where there are restrictions on the predictor variables.

**Be sure to add this workshop when registering for Aquaculture 2016. Register online with the menu option to the left.**

### Cost

\$100 Students  
\$150 USAS/AFS members  
\$250 Non-members

### Workshop Outline

#### Morning Session

The One-way Means Model with Homogeneous errors

- Inferences on contrasts and linear combinations
- Linear, quadratic, and cubic contrasts
- Simultaneous tests on several contrasts/linear combinations
- Model Comparison Methods
- Examples and computer analyses

The One-way Means Model with Heterogeneous errors

- Tests for homogeneity of variances
- Inferences on contrasts and linear combinations
- Simultaneous tests on several contrasts/linear combinations
- Examples and computer analyses

Simultaneous Inference Procedures and Multiple Comparisons Error rates

- All pairwise comparison methods (Fisher's LSD; Bonferroni's; Scheffe's; Tukey-Kramer; Simulation methods; Sidak Procedure)

- Comparing all treatments to a control (Multivariate t method; Dunnett's procedure)
- Sequential Rejective Methods (Bonferroni-Holm; Sidak-Holm)
- Multiple Range Tests (Student-Newman-Keul's; Duncan's procedure)
- Simultaneous methods for orthogonal polynomial contrasts
- Examples using SAS (Examples of the above methods; SAS-Multi-test Procedure)
- (Linear, Quadratic, and Cubic models)
- Mixture designs with restrictions
- Statistical analyses of mixture experiments
- Examples using SAS

### Afternoon Session

#### Response Surfaces

- First order polynomial models
- Second order polynomial models
- Maximizing and/or minimizing the response
- Quadratic response surface model

#### Response Surface Designs

- First order designs
- Quadratic response surface designs
- SAS –ADX
- Statistical analyses of RSDs
- Examples using SAS

#### Mixture Experiments

- Mixture designs
- Simplex-lattice designs
- Modeling mixture experiments

## Planning and Executing Successful Rotenone and Antimycin Projects

### AFS Now Accepting Applications for 2016 Class

#### *Planning and Executing Successful Rotenone and Antimycin Projects*

The 2016 AFS continuing education class *Planning and Executing Successful Rotenone and Antimycin Projects* is now accepting applications for enrollment. The 4½-day course is recommended training by EPA for those using rotenone and Antimycin and has been accredited for continuing education hours in state Qualified Applicator License/Certificate programs. The course will be held at Utah State University, Logan from May 23-27, 2016, and interested applicants can apply by contacting Shawn Johnston at (301) 897-8616 ext. 230 or [sjohnston@fisheries.org](mailto:sjohnston@fisheries.org) or by registering on line at <http://fisheries.org>.

For more information contact Brian Finlayson or Don Skaar.

([briankarefinlayson@att.net](mailto:briankarefinlayson@att.net))  
([dskaar@mt.gov](mailto:dskaar@mt.gov))

*See something we  
could improve? Let us  
know!*

*Send suggestions and  
comments to the  
editor Sasha Doss at  
[dosss@vt.edu](mailto:dosss@vt.edu)*

## Contributed Article

### Tennessee Conservation Fisheries Inc. News Report

Conservation Fisheries, Inc. (CFI) continues to propagate, stock, and monitor Smoky and Yellowfin Madtoms, Citico Darters, and Spotfin Chubs in Tellico River. Evidence of reproduction was observed for all four species in 2015 and again included good numbers of Smokies & Citico Darters as in all recent years. After years of propagation difficulties, this marked the first year for releases of significant numbers of Ashy Darters. On a subsequent night snorkel monitoring survey a lone-tagged individual was observed--the first documentation of the species surviving in Tellico River!

Quantitative snorkel monitoring of restored Citico Darter and Smoky and Yellowfin Madtom populations in Abrams Creek was continued a fourth year by Great Smoky Mountains National Park and CFI. Results will be compiled and compared to earlier years as well as data from similar application of the protocol for the second year at seven sites in Citico Creek this year. The data collected will provide baseline information and quantify long-term population trends and reproductive success,

providing a model for similar future monitoring in Tellico River, and possibly elsewhere with similarly cryptic fish. As part of a long term "fish passage" plan to manage gene pools and in conjunction with the monitoring, a few individuals of each of these species were translocated for the first time from Abrams to Citico and vice versa. The releases to Abrams were part of a coordinated media event exemplifying aquatic conservation activities and publicly announcing the formation of the Little Tennessee River Native Fish Conservation Area. For more information see: <http://irmafiles.nps.gov/reference/holding/520389> and <http://www.littlet.org/>.

Efforts to propagate and restore Elk River Boulder Darters to Shoal Creek continued. Nearly 1200 juveniles were tagged and stocked. Monitoring in Shoal Creek in 2015 was minimal due to summer water conditions and time availability, with only a few Boulder Darters observed at three sites. At least 13 new brood stock (plus 3 juveniles) were collected from Richland Creek in October, the most we have ever observed at that locality, suggesting that that population is currently doing well. Only a single release of 2014-year-class Emory River Spotfin Chubs was made in

April, with none further planned for several years while population status is evaluated. None were observed during monitoring. The lack of recruitment observations suggest that the stocked fish may not be able to successfully reproduce, possibly due to the habitat differences between Emory River and Shoal Creek and associated population ecological adaptations. If the failure of Spotfin Chubs to establish a reproducing population is verified, a new reintroduction effort with a population from a more ecologically similar stream (Buffalo River) may be attempted in the future.

Efforts continued on the project initiated last year to hold, propagate, and maintain an ark/refugium population of Tuxedo Darters collected at the sites determined to be impacted by the return to historical operations of Lake Cumberland. CFI only minimally assisted TVA and COE with monitoring this year but collected a few additional broodstock from localities where low numbers were collected last year. A far greater field effort was devoted to collection of fish for tissue samples (fin clips) for a study of genetic diversity in the species throughout its range in the Big South Fork Cumberland River (by Dr. Rebecca Johansen at APSU). This required a multi-day float



from Station Camp Creek in Tennessee down to Bear Creek in Kentucky as well as paddling upstream to another locality (hey, it really WAS the only practical way!). At least 184 Tuxedo Darters were observed by snorkelers and 117 were collected with handnets and clipped at 10 sites spanning 12 river miles. This far outnumbers the sum total of all observations prior to 2015 and would appear to indicate substantial improvement in population status when compared to data from similar floats in 1996 and 2005. Minimal efforts to propagate the species in 2015 failed to produce any spawns and thus a more intensive effort will be undertaken in 2016.

This year marked the first collections of Olive Darters and Sickle Darters for broodstock for two new propagation projects. Olives were taken from the Oconaluftee River in hopes of producing young to stock in the restoration reach of the Cheoah River in NC. Sickles were collected from Little River in Blount County to attempt to restore to Tellico River. CFI has never propagated any close relatives of either species, so a steep learning curve may be encountered. Funding was provided by the Cheoah Fund and TVA, respectively.

Hatchery spawning and/or rearing included the following additional

species/populations in 2015: Sicklefin Redhorse, Tangerine Darter, Marbled Darter, Barrens Topminnow, Ashy Darter, Slackwater Darters, Spring Pygmy Sunfish, Kentucky Arrow Darter, Cumberland Darter, and Bluemask Darter. CFI attempted to further refine already-developed captive propagation techniques for the production and collection of Diamond Darter eggs and larvae, but utilized the closely related Crystal Darter as a surrogate to avoid collection of any additional Diamond Darters until success with the surrogate species is obtained. Unique (for CFI) larval microhabitat conditions and prey item(s) resulted in survivorship and development of a few subadults, a success that can hopefully be replicated and expanded in 2016 and then applied to Diamond Darters in the future.

A final significant new reintroduction effort was initiated this year with the collection of Yellowfin Madtom nests from the Powell River (TN & VA) to produce fish to stock in the North Fork Holston River beginning in 2016. The groundwork for this effort was laid with the designation of a nonessential experimental population (NEP) for the species in that river in 1988 by Richard Biggins. Better late than never...

Website info:

[www.conservationfisheries.org](http://www.conservationfisheries.org) &  
<http://www.facebook.com/pages/Conservation-Fisheries/377299094501>



*Top to Bottom: Citico Darter, Smoky Madtom, Spotfin Chub, Yellowfin Madtom, Ashy Darter reintroduced to Tellico River (note the purple VIE tag in the right dorsum)*