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President's Message

Spring is a busy time for many of us in the fisheries and aquatic science community. Although much of North Carolina has been experiencing spring for some time, we are just now seeing leaf out in Watauga County. The advent of spring, of course, can only mean one thing... field season is finally here!

The 2016 annual meeting in Danville, Virginia was a resounding success with more than 80 members from the North Carolina chapter and more than 40 from the Virginia chapter attending. I really enjoyed seeing old friends, making many new ones and learning about all of the exciting fisheries and aquatic biology work being conducted in the region. Highlights included Dr. Hallerman's Conservation Genetics workshop, the Dan River Coal Ash Symposium and the participation of the Southeastern Atlantic Slope Mollusk working group.

Speaking of meetings, the Executive Committee is considering several possible sites for the 2017 meeting and although we don't have any strong contenders at this time, we hope to have a location and dates finalized in time for the summer 2016 newsletter. We are seeking a more centralized (or even eastern) location for 2017 so if you have some ideas please feel free to email Corey Oakley or myself with suggestions.

I would like the central theme of my administration to be the advancement of the fisheries and aquatic science careers of young professionals. One of the ways that we can help promote this mission is to reach out to students

before they get to universities so that they are aware of career possibilities when they begin their post-secondary degrees. It is gratifying to see the society's work with students at the elementary and secondary levels and I would especially like to see us do more to increase awareness of Fisheries and Aquatic Science careers in some of North Carolina's less well-served communities.

That is all for now. Please have a safe and productive spring.

Sincerely,

Dr. Michael Gangloff

Submitted by Mike Gangloff, NCAFS President

2016 North Carolina Chapter of the American Fisheries Society Annual Meeting Summary

Institute for Advanced Learning and Research, Danville, VA, March 14–17, 2016

After last year's blizzard at the beach, I was a bit apprehensive that our customary mountain spring snows would impact the 2016 joint meeting of the North Carolina and Virginia AFS chapters at the Institute for Advanced Learning and Research (IALR) in Danville last month but fortunately the squalls held off for a few more weeks (we had snow in Boone in mid-April instead). The week of March 14 was a lovely one in the Dan



Institute for Advanced Learning and Research Conference Center

River Valley and the dogwood and cherry trees were in full regalia. We had an amazing turn out for an exciting week absolutely packed with Aquatic Science. Thanks to an exciting program we had 155 paid attendees (drawing attendees from as far away as Nashville, TN and New Hampshire!) at the meeting and each chapter wound up making a small profit. Beginning with the March 14th meeting of the Southeastern Atlantic Slope Mollusk Working Group, we availed ourselves of the IALR's state of the art

facilities and exceptional hospitality. We had 37 people show up in person for the mollusk group meeting and another 6 joined us remotely. The joint chapter meeting proper got off to an auspicious beginning Tuesday afternoon with Eric Hallerman's excellent conservation genetics workshop. Our sincere thanks to Dr. Hallerman and Nate Wilke for putting on an incredibly helpful workshop and for helping to de-mystify some of the magic surrounding genetic analyses.

Wednesday morning saw the beginning of formal talks and this year for the first time we had lightning talks, brief 7-minute talks that were popular presentation formats for agency personnel and students alike. Once again, our sincere thanks to Chris Wood for recording podcasts of nearly every presentation and helping to make sure the presentations wound up getting loaded onto the correct computers. Podcasts of the presentations will be available from the [meeting website](#), so if you were unable to attend (or you were running around helping out with the conference and missed most of the talks like me) you should soon be able to catch up on all of the exciting research presented by members of the North Carolina and Virginia chapters. You'll also be able to listen to Wednesday afternoon's Dan River Coal Ash Spill Symposium and hear about what strategies stakeholders have used to understand the short and long-term consequences of this unfortunate event.

I'd also like to thank my Co-Chair Craig Roghair, and the rest of people on the program committee (Bryn Tracy, Johnathan Harris, Eric Hallerman, Michael Perkins) for putting together the meeting program. We had so many submissions this year that we wound up having to run concurrent sessions and asking some presenters to switch to a poster format. While we were apprehensive about issues with keeping presenters on time and giving judges sufficient time to get to their assignments, it appeared (at least to me) that most sessions were able to stay on schedule (thanks so much, moderators!).

Congratulations to the NC State and Virginia Tech Student Fisheries Societies on their successful joint raffles. The NC State Student Fisheries Society raised over \$1200! Funds from these student raffles will be used to support student travel to regional and national meetings and thanks to everyone who contributed to this worthy cause.

We experimented with a new format for our business meeting. In order to increase attendance opportunities, we had the financial business and honorary awards portion of the meeting separate from the student and professional presentation awards. We had a productive discussion about the society's finances and the ways that we can use our financial resources to promote fisheries and aquatic science research and outreach opportunities. Please see the Awards Committee's report for details about this year's winners, Jennifer Archambault and Lisa Hollensead, and their excellent presentations.

Kim Sparks' last act as President was to install the new officers and relieve Brena Jones from her duties as Past President. Please join me in welcoming Corey Oakley to the EXCOM as your President Elect. Thanks again for helping to make the 2016 meeting a great success and I am looking forward to the 2017 meeting. Please feel free to contact me with your ideas or concerns at gangloffmm@appstate.edu.

Submitted by Michael Gangloff, NCAFS President



Members of the NC State Student Fisheries Society take a much deserved break following the banquet and raffle. From left to right: Casey Grieshaber, Bobby Cope, Wilson Xiong, Selena Ibarra, , and Tomas Ivasauskas

North Carolina Chapter of the American Fisheries Society 2016 Business Meeting

**Institute for Advanced Learning &
Research Center
Danville, VA
March 16 2016**



1. Call to Order, Kim Sparks, President
 - a. Meeting was called to order at 4:15 p.m.
2. Determination of Quorum, Bryn H. Tracy, Secretary/Treasurer
 - a. A quorum of at least 20 paid 2016 members was present
3. Welcome and Introductions, Kim Sparks, President
 - a. AFS Parent Society EXCOM in attendance – none
 - b. AFS Past President(s) in Attendance – Fred Harris
 - c. AFS Southern Division and Past-President(s) in attendance – Dave Coughlan (President-Elect) and Fred Harris
 - i. Comments by Dave Coughlan
 1. Reminder to submit Change of Officers form to SDAFS and AFS

2. Future SDAFS & AFS national meetings
 - a. [2016 – Kansas City, MO](#)
 - b. 2017 – Oklahoma City, OK and Tampa, FL
 - c. 2018 – Puerto Rico & Atlantic City, NJ
 - d. 2019 – Texas & Reno, NV
 - e. 2020 – Arkansas & Columbus, OH
3. Consider NCAFS members to donate money to NCAFS and SDAFS from their estates
- d. NCAFS Past-Presidents in Attendance – Mike Abney, Greg Cope, Dave Coughlan, John Crutchfield, Lawrence Dorsey, Brena Jones, Tom Kwak, Wilson Laney, Jim Rice, Christian Waters, and Chris Wood
4. February 2015 Business Meeting Minutes, Kim Sparks, President
 - a. Motion to Approve – Mike Swing
 - b. 2nd Motion to Approve – Ani Popp
 - c. Vote to Approve – Unanimous
5. Committee Reports
 - a. Program and Arrangements, Mike Gangloff, President-Elect and Chair
 - i. Sponsors – [thanks to all sponsors](#) (read list of sponsors)
 - ii. Attendance – 68 Chapter Members, 21 non-Chapter Members
 - b. Education and Outreach, Chris Wood, Chair
 - i. Future workshops – need new ideas and a poll will be conducted to determine members interest
 - c. Nominations, Brena Jones, Chair and Past-President, report to be published in the 2016 Spring newsletter
 - i. 42 paid members voted for President – Corey Oakley vs. Jake Rash
 - ii. President-elect – Corey Oakley
 - d. Newsletter, Kevin Hining, Chair, report to be published in the 2016 Spring newsletter
 - e. Environmental Concerns, Ben Ricks, Chair, report to be published in the 2016 Spring newsletter
 - f. Webmaster/Communications, Brena Jones, Member and Past-President, report to be published in the 2016 Spring newsletter
 - g. Finance Committee, Bryn H. Tracy, Secretary/Treasurer, report to be published in the 2016 Spring newsletter
 - h. Awards, John Crutchfield, Chair, report to be published in the 2016 Spring newsletter
6. Secretary Treasurer Report, Bryn H. Tracy, Secretary/Treasurer
7. Finance Survey Results, Bryn H. Tracy, Secretary/Treasurer
 - a. PowerPoint presentation was made (see attachments)

- b. Solicit information/opinions from Chapter members using specific/targeted e-mails rather than surveys
 - c. Discussion on survey: suggestions from membership
 - i. Use money for travel grants for undergraduates and graduate students
 - ii. Use money in matching grants for land acquisitions
 - iii. Use money for retirees to attend national meeting (this option is already in place)
8. NC State Student Fisheries Society, Tiffany Penland, Co-President
- a. Summary of activities that took place in 2016 -- stream clean-ups, Shad in the Classroom, Yates Mill Pond, Snorklepallooza, fish identification workshops, and social events
 - b. Upcoming events for 2016 -- Family Fishing Fiesta, Project Wild, and working with a high school in Wilmington on boat electro fishing
9. [Little Tennessee Snorkeling Project Proposal](#), Fred Harris, North Carolina Wildlife Federation and NCAFS Member
- a. Funding proposal hand been distributed via e-mail to members prior to annual meeting for review and discussion
 - b. Fred gave an overview of the proposal requesting full funding (\$6,385) for the project which will buy wet suits and other equipment for 30 participants and fielded questions
10. Proposal Discussion and Vote
- a. Motion to fully-fund the project at \$6,385
 - i. First motion – Dave Coughlan
 - ii. Second motion – John Crutchfield
 - b. Discussion
 - i. Request is a little high for the Chapter
 - ii. Suggest partial funding, ~ \$2,000
 - iii. Are wet suits needed?
 - iv. Suggested 50% funding the first year, then after the 1st year and after a status report is submitted to NCAFS the remaining 50% can be funded
 - c. Friendly amendment to the original motion to fund the project at 50% (\$3,218 for the first year with the remaining 50% to be funded the second year after receipt of a status report and review of the project)
 - i. Dave Coughlan agreed to the amend the motion
 - ii. John Crutchfield agreed to the friendly amendment
 - iii. Vote was unanimous; without any No or Abstention votes
11. Awards Presentation, John Crutchfield, Chair Awards Committee
- a. Jerry Finke Distinguished Service Award Recipient – Kevin Hining
 - b. Fred A. Harris Conservation Award Recipient – Andy Wood

12. Installation of Newly-Elected Officers, Kim Sparks, President
 - a. Brena Jones steps down as Past-President, but will remain active as the Chapter's webmaster and participant on the Communications Committee
 - b. Kim welcomed Corey Oakley as the President-Elect
 - c. Kim stepped down as President and will be the Past-President, turning the office over to Mike Gangloff

13. Remarks by Incoming President, Mike Gangloff, President
 - a. Mike made comments as new president
 - b. Bryn H. Tracy asked members to sign the 2016 NCAFS Chapter Committee Sign-up Sheet
 - c. Mike asked for a motion to adjourn the meeting
 - i. First Motion – John Crutchfield
 - ii. Second Motion – Chris Goudreau
 - iii. Vote was unanimous
 - iv. Meeting was adjourned at 5:30 p.m.

Submitted by Bryn H. Tracy, NCAFS Secretary/Treasurer

Awards Committee Report

Awards presentations are one of the highlights of our annual Chapter meeting. Several awards were presented during the recent joint annual NCAFS and VAAFS meeting held on March 16-17, 2016, in Danville, Virginia. Thanks to Mike Gangloff and Craig Roghair for hosting a very successful meeting! Awards were presented to chapter and non-chapter members for their contributions to the chapter and fisheries and environmental conservation in North Carolina.

Student papers were judged for the **Richard L. Noble Best Student Paper Award** and the professional papers were judged for the **W. Don Baker Memorial Best Professional Paper Award**. There were 7 presentations by students and 21 presentations by professionals. The quality of the paper presentations was outstanding. Thanks to all who presented papers and the judging panel!

The **2016 Richard L. Noble Best Student Paper Award** was awarded to **Lisa Hollensead**, a Ph.D. student in the Department of Biology and Marine Biology at the University of North Carolina Wilmington. [Lisa's presentation](#) titled "**Examining fine-scale movement of estuarine Southern Flounder (*Paralichthys lethostigma*) using a combination of active and passive acoustic techniques**" was co-authored by Dr. Fred Scharf. In addition to a Chapter award plaque, Lisa will receive a monetary award of \$600 from the Chapter's Ichthus Fund for travel to present the paper at the 2016 parent society meeting in Reno, Nevada.

Lisa's research applied a combination of three different telemetry approaches to examine fine-scale habitat use of Southern Flounder (*Paralichthys lethostigma*) in a tributary (Northeast Creek) within the New River estuary, North Carolina.

Jennifer Archambault was awarded the **2016 W. Don Baker Memorial Best Professional Paper Award** for her presentation [her presentation](#) entitled "**Assessing the Toxicity of the Clinch River Basin Sediment Load to the Endangered Freshwater Mussel *Epioblasma brevidens* (Cumberlandian Combshell)**".

The paper was co-authored by Christine M. Bergeron, W. Gregory Cope, Peter R. Lazaro, Jeremy A. Leonard, and Damian Shea.



Lisa Hollensead, recipient of the 2016 Richard L. Noble Best Student Paper, receiving her award from Dr. Mike Gangloff, NCAFS Chapter President-Elect.



Jennifer Archambault, recipient of the 2016 W. Don Baker Memorial Best Professional Paper, receiving her award from Dr. Mike Gangloff, NCAFS Chapter President-Elect.

Jennifer and her co-authors examined the toxicity of recently-deposited sediments on juveniles of the freshwater mussel *Epioblasma brevidens* (Unionidae), by collecting time-integrated sediment samples from the water column with sediment traps from 11 sites in the Clinch River Basin, including seven sites within an 88-km reach deemed a 'mussel zone of decline'.

The **Distinguished Service Award** recognizes Chapter members who have distinguished themselves by service to the Chapter, the American Fisheries Society, or the fisheries profession. At the 2015 meeting, Chapter membership unanimously approved to rename the Award as the **Jerry R. Finke Memorial**

Distinguished Service Award in honor of the late Jerry Finke (watch the video of the renaming of the Award at <http://youtu.be/wU51lI979j4>). Jerry, who passed away due to cancer during 2013, epitomized selfless dedicated service to the NCAFS Chapter and the Southern Division of AFS. Jerry provided invaluable IT support to the Chapter and Southern Division on developing and maintaining websites to publicize fisheries efforts in North Carolina and the Southeast. He was responsible for ensuring presentations at Chapter meeting went off without a hitch. Jerry also developed the Chapter's online dues and meeting registration system. The Chapter will remain forever indebted for his volunteer service.

The **2016 Jerry R. Finke Memorial Distinguished Service Award** was presented to **Mr. Kevin Hining** for his dedicated and unwavering support of the NCAFS Chapter.

Kevin has been a member of the Chapter for the past 13 years. During this time, he has served two terms, four years, as the Chapter's Secretary/Treasurer. Since the Spring of 2012, Kevin has taken over the responsibilities of the being the Chapter's Newsletter Editor and chairing the Communications Committee. Under his guidance, the newsletter has published more than 265 pages. In

addition, Kevin is a frequent technical presenter at Chapter annual meetings. He has been the recipient, twice, in 2009 and in 2015, of the W. Don Baker Award recognizing the best scientific presentation at the annual chapter meeting.



Mr. Kevin Hining, the 2016 Jerry R. Finke Memorial Distinguished Service Award Recipient receiving his award from Ms. Kim Sparks, NCAFS Chapter President.

The **Fisheries Conservation Award** recognizes non-Chapter members who have distinguished themselves by service or commitment to the Chapter or to the fisheries resources of North Carolina.

In recognition of his long-time commitment and service to the fisheries profession, the NCAFS Chapter renamed the Fisheries Conservation Award in honor of Fred Harris at the 2009 Annual Meeting. Fred served as Executive Director of the NCWRC and is a Past President of the AFS and was instrumental in forming the NCAFS Chapter. Fred has and continues to make many significant contributions to fishery conservation in North Carolina and across the nation.



Mr. Andy Wood, 2016 Fred A. Harris Fisheries Conservation Award Recipient receiving his award from Ms. Kim Sparks, NCAFS Chapter President and Mr. Fred Harris.

The **2016 Fred A. Harris Fisheries Conservation Award** was presented to **Mr.**

Andy Wood, owner of his environmental consulting firm, Andy Wood & Associates, LLC, and the director of the non-profit Coastal Plain Conservation Group.

Andy is recognized for his significant contributions to aquatic resource conservation in North Carolina especially with the imperiled Magnificent Ramshorn and the Greensfield Ramshorn snails. Andy has demonstrated unwavering support of conservation of the State's natural resources, and he has provided exceptional efforts to educate the public on the diversity of our Coastal Plain wildlife and habitats for over 25 years.

Finally, the Chapter recognized outgoing president, **Ms. Kim Sparks** for her hard work, dedicated efforts, and outstanding



Incoming NCAFS Chapter President, Dr. Mike Gangloff, presenting Past President Service Award to Outgoing Chapter President, Ms. Kim Sparks.

leadership to the Chapter with her **Chapter Past President Service Award**. A big thanks to Kim for her outstanding leadership to the Chapter during 2015!

Submitted by John Crutchfield, NCAFS Awards Committee Chair

Nominations Committee Report

The 2015 NCAFS Nominations Committee was chaired by Chapter Past-President Brena Jones and included Dr. Jim Rice (NC State University) and Tom Dickinson (Three Oaks Engineering). [Two candidates accepted nominations for 2016 NCAFS President-Elect](#): Corey Oakley and Jake Rash, both fisheries research coordinators with the NC Wildlife Resources Commission. After member votes were reviewed by the Past-President and Secretary/Treasurer, Corey Oakley was elected to serve.

Submitted by Brena Jones, NCAFS Nominations Committee Chair

Communications Committee Report

The Communications Outreach Committee (composed of Brena Jones, Jennifer Archambault, Kelsey Lincoln and Kevin Hining) made frequent submissions to the Chapter's website, Facebook page, and newsletter. A special thanks goes out to all the Chapter members that made submissions and provided ideas for these endeavors. We can't thank you enough for all the great material!

Also, a special thanks goes out to our Newsletter editorial staff, comprised of Brena Jones, Bryn Tracy, Dave Coughlan, and Ben Ricks. The newsletter staff put out 4 quarterly newsletters, comprised of 60 pages, and containing 43 articles. The newsletter editor (that's me) is not known for his grammatical skills, so these folks really have their work cut out for them! I really, really appreciate their help!

Any Chapter members with submissions, ideas, or just wishing to get involved with the Communications Committee can contact the following team leaders:

Facebook Page - Jennifer Archambault jmarcham@ncsu.edu

Newsletter - Kevin Hining kevin.hining@ncwildlife.org

Website - Brena Jones brena.jones@ncwildlife.org - See below for a summary of website activities.

Submitted by Kevin Hining, NCAFS Communications Committee Chair

Webmaster Report

Since its re-launch in January of 2015, the Chapter website and Facebook page have attracted increasing traffic, enhancing our ability to fulfill the part of our mission statement to “exchange...information among Chapter members and with the general public.” In the past 30 days alone, 68% of pageviews were new visitors. Our Facebook page ([details in Spring 2015 newsletter](#)) has nearly doubled since the new site’s inception, with posts reaching several hundred views instead of the 8-10 we began with. Many accolades to our primary Facebook administrator, Jennifer Archambault, for keeping it active with job postings, current events, and research news.

Over the past year, our web resources have been developed and expanded, including:

- Archived, curated past newsletters and meeting programs dating back to 1988
- A list of [past Continuing Education workshops](#) offered by the Chapter
- [Compiled student resources](#) with links to job boards, scholarship programs, Chapter award applications, and AFS student/young professional support
- Extensive archives of the Chapter’s [Environmental Concerns Committee](#) letters, reports to EXCOM, resolutions, and addressed issues
- A [dynamic calendar of fisheries and ecology conferences](#) across the US for easy access to deadlines, registration links, and upcoming opportunities
- Fully integrated online registration and payment ability for both Chapter dues and Annual Meeting registration
- Responsive abstract pages and podcasts of slides and oral presentations from [previous Annual Chapter Meetings](#), also archived and curated for viewing at user convenience
- A permanent home for special publications and reports ([introduced in the Winter 2015 Newsletter](#))...and more!

None of this would be possible without the help of Chapter members who scanned, sorted, searched, and sent boxes of paperwork and messages so please join me issuing a big THANK YOU to Dave McHenry (past Environmental Concerns Chair), Bryn Tracy, Mike Swing, Kim Sparks, Jim Rice, and Kevin Hining (among others) for helping bring together such a diverse library of information!

Communication is always a work in progress, but with the assistance of all our contributors, along with the invaluable support of the Bethesda staff of the Parent Society providing server space and hosting, I think we have made great strides. We will continue adding materials as they become available and are still looking particularly for meeting programs from 2000-2002. If you have an idea you’d like to see implemented (or would like share any materials, feedback or comments), send a note at <http://nc.fisheries.org/contact-us/>.

Submitted by Brena Jones, NCAFS Webmaster

Education and Outreach Committee Report

The Education and Outreach Committee (composed of Chris Wood, Jessica Baumann, Kevin Hining, and Jake Rash) completed the following projects between February 2015 and March 2016:

- Committee members led podcasting efforts at both the SDAFS and NCAFS 2015 meetings. Those podcasts were edited and uploaded to both websites and available for viewing ([2015 NCAFS Abstracts/Podcasts](#)).
- The Committee helped organize a fantastic Continuing Education Workshop at the 2015 NCAFS meeting at Carolina Beach. TR Russ and Tyler Black conducted a [Crayfish Identification Workshop](#) that was well attended and received excellent feedback.
- Committee members helped judge the McDowell County STEAM Science Fair and presented an award to the student best representing the mission of AFS.
- Committee members represented the Chapter at the 2016 SDAFS meeting in Wheeling, VA, by leading the podcasting efforts and assisting with AV issues. The completed podcasts should be available by winter.
- Committee members once again led the podcasting efforts at the 2016 joint NCAFS and VAAFS meeting in Danville, VA. The completed podcasts should be available by winter.
- Committee members have been discussing the development of a survey for Chapter members to determine upcoming Continuing Education Workshop topics. The Committee has discussed this with the NCAFS EXCOM and introduced the idea to the membership at the 2016 Chapter Business Meeting. A survey will be developed and available to the Chapter membership in the near future.

Submitted by Chris Wood, NCAFS Education and Outreach Committee Chair

NC State University Student Fisheries Society Report

We would first like to thank the NC and VA Chapter members for participating in our annual raffle. This raffle raises money to support outreach activities, student travel to meetings, and program costs. After ticket, t-shirt, and silent auction sales, we brought in just over \$1200!



NC State Student Fisheries Society members attending the recent 2016 NCAFS/VAAFS meeting. From left to Right: Wilson Xiong, Selena Ibarra, Ani Popp, Tiffany Penland, Casey Grieshaber, and Bobby Cope.

Annual Activities

Spring and Fall Rocky Branch stream clean-up on campus - Fall 2015, we combined our stream clean-up with a campus wide bioblitz. We sampled the fishes and macroinvertebrates before removing over 200 lbs of trash! We repeated the clean-up efforts in April 2016.

Shad in the Classroom participation - last year we led fish anatomy lectures and hands-on fish dissections for 18 elementary, middle, and high school classes (a total of 823 students!).

Yates Mill Pond Festival (Wake County): Cane Pole Fishing.

National Fishing and Hunting Day: Backyard Bass Fishing Activity.

Other Events

Fish ID workshops (led by Bryn Tracy and Gabriela Hogue).

Snorkelpalooza - A fun and educational camping and river snorkeling trip on the Cane and South Toe rivers.

Social events for SFS members and our wildlife counterparts.

Family Fishing Fiesta (see page 20) - Participated in multiple stations including fish filleting and cooking, lure demonstrations, and backyard bass fishing at Jordan Reservoir.

Upcoming Events

Environmental education workshops - Workshops (Project WET & Aquatic WILD) to help our members develop communication skills for K-12 outreach events.

Outreach event with South Brunswick High School - We will conduct boat electrofishing and lead hands-on educational stations for high school students with a background in aquaculture.



NC State Student Fisheries Society member Wilson Xiong provided an outstanding talk at the annual Chapter meeting in Danville, VA on a recent creel survey of Lake Raleigh.

Submitted by Tiffany Penland and Ani Popp, NC State Student Fisheries Society Co-Presidents

Spotlight on NCAFS Members

Ani Popp

Ani Popp is a graduate student serving as Co-President of the NC State University Student Fisheries Society. She has always enjoyed the outdoors and is thrilled to be pursuing a career in natural resources!

Ani hails from the metro Atlanta area. Though their day-to-day lives were located in suburbia, Ani's parents made a point to spend time outdoors. Family vacations were

spent camping, hiking, canoeing, and fishing along various beaches and rivers throughout the southeast. According to family lore, one of Ani's first words was "fish" on an early visit to the Tennessee Aquarium, and her love of aquatic critters has only grown since.

Ani completed her undergraduate studies at the University of Georgia with a degree in Wildlife and Aquatic Science. She was involved in the UGA subunits of the Wildlife Society and AFS, and these activities, along with encouragement from peers and professors, further stimulated her love of natural resources. Education did not stop during the summers! One summer was spent at the Chattahoochee Nature Center as a camp counselor, where Ani was able to share her love of the outdoors with enthusiastic middle schoolers (middle school and enthusiasm, a rare combination!). Ani also worked as a technician in northeastern Brazil, collecting data for a behavioral study of Bearded Capuchins. She was able to use a subset of these data for her senior thesis, where she examined transmission of nut-cracking behavior from adults to juveniles.



Ani Popp is excited to catch and release a nice ray.

While chasing monkeys around the backwoods of Brazil was a blast, it confirmed that Ani's true love was critters under the water. After graduation, Ani worked for the Georgia Department of Natural Resources as a Nongame Aquatics technician, surveying Georgia's streams for rare fishes and mussels. She began her graduate studies at NC State in 2014 with Greg Cope, examining the influence of propagation method on the chemical sensitivities of juvenile mussels.

When Ani is not in the lab, she enjoys hiking, camping, and canoeing, or any combination of the three! She is also an amateur granny-in-training, practicing skills like crochet, baking, and porch-rocking. Ani also enjoys travel, and whenever possible, the itinerary includes fish. Just before grad school, Ani was able to join an ichthyologist's dream vacation to the Amazon Basin in Peru. The group collected over 200 species by seining, cast-netting, and, of course, hook-and-line sampling. After graduation, Ani will pursue a career in the conservation and restoration of nongame aquatic species, incorporating public education and outreach in whatever she does.

Tiffany Penland

Tiffany Penland is a bug-picking, fish-squeezing, graduate student at NC State University and Co-President of the NC State University Student Fisheries Society!

Tiffany was raised in northwest Georgia, where she spent her childhood exploring the woods and climbing trees. In high school, she was a dog groomer and interested in the arts, in addition to nature and the outdoors. She attended Kennesaw State University in Georgia, majoring in Biology and graduated in 2011. In college, she attended several aquatic courses taught by Dr. Bill Ensign, and that sparked her interest in fisheries and aquatic ecology. She worked with him for a summer sampling fishes in urban streams and estimating their biotic integrity — and that set her path for the future!



Tiffany Penland likes fish — but she's a sucker for a sucker!

She then joined the NC Wildlife Resources Commission (NCWRC) as a Field Technician in the Aquatic Wildlife Diversity program in the Mountain Region. She worked long days afield with NCWRC staff biologists Steve Fraley and TR Russ sampling nongame fish, mussels, and crayfish. That experience and mentorship pointed Tiffany downhill to pursue a Master's degree at NC State, co-advised by Tom Kwak and Greg Cope. She is pursuing thesis research on food web trophodynamics and contaminant pathways in the Yadkin-Pee Dee River basin, with emphasis on the imperiled [Robust Redhorse](#) population in the river.

When Tiffany isn't in the river for her research, you might find her hiking the banks with her Lhasa Apso (that's a dog breed, y'all), Orey. Orey is not a sporting dog, so Tiffany pursued hunting and fishing without her and has completed learning experiences in the Becoming an Outdoors-Woman program with the NCWRC. She's also been woodworking lately and will hone that craft more after she graduates! Tiffany's future is a bright one — she'll pursue an agency job in fisheries and aquatic diversity for her next adventure.

Submitted by Tom Kwak and Greg Cope, NC State University

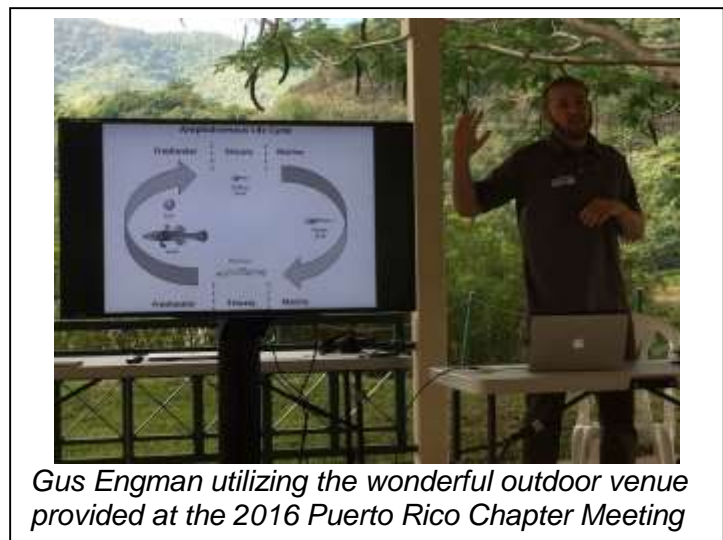
Wolfpack Goes Carib! - NC Members Attend Puerto Rico Chapter Meeting



The recently formed Puerto Rico AFS Chapter held its 2016 Annual Meeting at Cerillos Reservoir on January 8, and some NC Chapter members attended! Gus Engman, Rich Noble, and Tom Kwak (pictured on the left) joined our Caribbean fisheries colleagues for an interesting and fun meeting. Gus presented results of his dissertation research on recruitment of Caribbean amphidromous fishes (Tom Kwak and Jesse Fischer coauthors), and Tom co-

authored a presentation by GA Chapter member Bud Freeman on the Puerto Rico population of Chattahoochee Bass, *Micropterus chattahoocheae*, that was introduced by PR biologist Don Erdman in the 1950s and may be the only pure strain population on the globe! We enjoyed the outdoor venue of the meeting, and we highly recommend it for the NC Chapter, but would probably have to time our meeting for better weather!

News Flash: The Puerto Rico Chapter will host the 2018 Southern Division AFS Meeting in San Juan! Chapter members Dave Coughlan, Gus Engman, Jesse Fischer, and Tom Kwak are on the planning team. It's sure to be an exciting and informative meeting, so begin crafting your plan to attend now!



Submitted by Tom Kwak, NC State University

Little Tennessee River Snorkeling Project



At the Chapter's Annual Business Meeting in Danville, VA on March 16, 2016 and with a unanimous 'Yes' vote, Chapter members agreed to tap into the Chapter's General Mutual Fund and donate \$3,218 to the North Carolina Wildlife Federation to fund the first year of the **Little Tennessee Snorkeling Project**. The funds will be ear-marked for purchasing wet suits, masks, snorkels, viewing scopes, plus other equipment and supplies.

The Little Tennessee River Basin, which includes the Oconaluftee, Tuckasegee, and Cheoah Rivers in North Carolina, was designated as a Native Fish

Conservation Area (NFCA) in 2015 (<http://nc.fisheries.org/winter-2015-newsletter/>). NFCAs are areas where rivers are managed for the conservation and restoration of native fish and other aquatic biota through a non-regulatory, collaborative approach to conservation that incorporates both biological needs and local community values. The Little Tennessee Snorkeling Project is part of a multi-faceted NFCA education and outreach program to raise awareness of native fishes and the citizen's role in watershed conservation. This program would raise public awareness of aquatic issues while opening eyes to the incredible abundance and diversity of aquatic organisms in the Little Tennessee River watershed.

The Little Tennessee Snorkeling Project will be tailored after a highly successful snorkeling education initiative established by the Cherokee National Forest (CNF). In the past 5 years, this program has hosted about 40 events each year providing snorkeling opportunities to about 800 people per year. This program has been the subject of many news media stories, as well as a short documentary film, "A Deeper Creek", by Freshwaters Illustrated (<https://vimeo.com/103358996>). For the Little Tennessee Snorkeling Project, each snorkeling event will be tailored to the audience and setting, using the guidelines provided by the Freshwater Snorkeling Toolkit designed by the US Forest Service (see <http://www.fs.fed.us/outdoors/naturewatch/tools/toolkits/snorkeling/>; photograph courtesy of this web page).

If the project is successful in 2016, the Chapter is willing to consider funding an identical amount in 2017. As with other Projects funded by the Chapter and per our Chapter's Procedures Manual, the recipient will be required to submit a follow-up report detailing disbursement of funds and actual results of the funded activity. Stay tuned for further

updates on this exciting Project which is also, the Chapter's most expensive aquatic environmental education funded project to date using its General Mutual Funds.

Submitted by Bryn H. Tracy, NCAFS Secretary/Treasurer

Family Fishing Fiesta Event a Huge Success - Thank you NCAFS!!!!

The intent of this letter is to send a big thank you to the North Carolina Chapter of the American Fisheries Society (NCAFS) for their \$1000 donation towards the recent [Family Fishing Fiesta event](#) - a free Family Fishing program provided in partnership with Jordan Lake State Recreational Area on April 2, 2016.



The purpose of the Family Fishing Fiesta was to introduce families from the surrounding Latino and Hispanic community to fishing, fisheries and aquatic education, and water safety. An additional goal of the event was to build bridges and break down barriers between the participants and natural resource agencies such as NC Wildlife Resources Commission (NCWRC) and NC State Parks. Law Enforcement staff from county sheriff, parks and NCWRC were all on site meeting the public. Thanks to the energy and

flexibility provided by the start-up funds from NCAFS, this event became a tremendous success! Despite thunderstorms in the morning, turnout surpassed all expectations. We had approximately 650 attendees at the event. To break it down further, it is estimated that we had 300 youth, 100 teens, and 250 adults.

After the Welcome Table, activities like Backyard Bass, Cool Hand Luke and The Great Lifejacket race greeted arrivals as they learned the basics. After casting practice, and learning the importance of a PFD, families made their way down to a lures demonstration, through knot tying and then to fishing. Along the way they met fisheries biologists, NCWRC enforcement staff, park rangers and Chatham County Sheriffs to talk about careers, and wildlife. Flanking these experiences were beach play and backyard birding.

At the large Pavilion on the hill, guests enjoyed samples of grilled catfish, thanks to funding from NCAFS, through Friends of State Parks, from Locals Seafood Inc. Brochures about eating fish wisely and fish consumption advisories were provided from UNC Institute of the Environment. Locals Seafood donated freshly caught fish for

filleting demonstrations. Other exhibits included: a US Fish and Wildlife Service booth that taught folks about endangered fish species in the Cape Fear; Clean Jordan Lake led a trash-treasure-hunt; Chatham Waste Management demonstrated recycling; the Coast Guard Auxiliary discussed water safety and life jackets; and, SafeKids Chatham discussed summer heat exhaustion issues. The day ended with awards of poles and lifejackets for kids, provided by NCAFS funding, and dancing from a Latino folk-dancing group.



The event hooked a lot of folks, and we can't thank you enough for your assistance! There were many smiles all day long, and approximately half the participants were heard saying, "I have never fished before!" Indeed, many people were fishing for the first time, and many fish were caught! The biggest fish was a catfish caught by a young boy – who was so excited, he will probably remember this day for the rest of his life. And, if you had seen the young man who won the lifetime fishing license doing his happy-dance, you would remember that for the rest of yours!

NCAFS was recognized in all event handouts and during the awards ceremony. Also, I would be remiss to not mention the NC State Student Fisheries Society whose members were helpful before, during and after the event. They were there, digging in and making a huge difference!! All told, 18 agencies, non-profits and community organizations were involved, and about 75 volunteers came together to create what many hope will be an annual event. This event's success simply would not have happened without the support of NCAFS!



A thousand thanks,

CC

Submitted by CC King, NCWRC Piedmont Outreach Education Specialist

Officials Approve Plan to Curb Aquatic Nuisance Species in NC Waters

The NC Wildlife Resources Commission (NCWRC) is joining the NC Department of Environmental Quality (NCDEQ) and the NC Department of Agriculture and Consumer Services (NCDAC) in a collaborative effort to monitor and control the spread of aquatic nuisance species in North Carolina inland and coastal waters.

Donald R. van der Vaart, secretary of the NCDEQ; Gordon Myers, executive director of the NCWRC; and Vernon Cox, director of the Plant Industry Division of the NCDAC Services have reviewed and approved the NC Aquatic Nuisance Species Management Plan (ANSMP).

A year in development, the [ANSMP](#) lays the groundwork for a coordinated effort among state and federal agencies, local governments and others to fight plant and animal organisms that have been introduced to the state's waters and are causing ecologic and/or economic harm, as well as to prevent new introductions. A standing staff committee will be appointed to implement the ANSMP.



Red Swamp Crawfish – one of many aquatic nuisance species found in North Carolina

The ANSMP is non-regulatory, but it identifies potential gaps in rules and policies that need attention. Recommendations of the plan include:

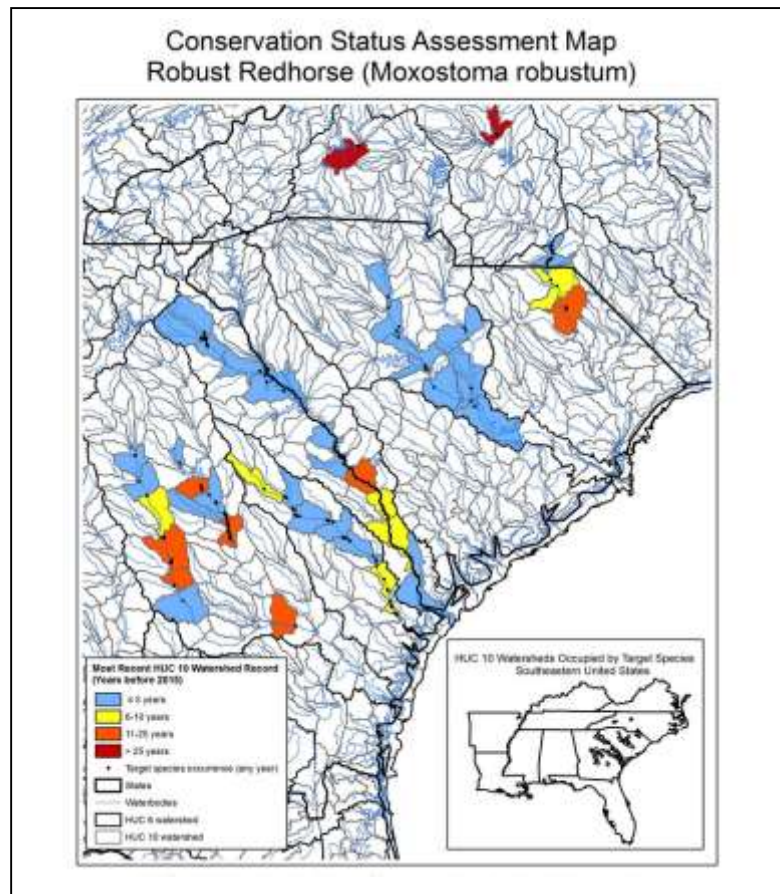
- Developing a “rapid response” strategy for newly identified ANS occurrences.
- Coordinating data collection on current and potential threats.
- Establishing systematic reporting mechanisms and monitoring protocols.
- Researching the economic implications of ANS introductions and proliferation.
- Leveraging funding to implement the ANSMP.

The ANSMP ranks current aquatic nuisance species based on ecological and economic impacts. A plant species, *Hydrilla verticillata*, earned the number one spot, and two species of lionfish claimed second and third places. Other highly ranked species include several crayfish, snails, and other plants.

“Aquatic nuisance species — either plants or animals — are organisms that cause ecological and/or economic harm if established,” said Chris Goudreau, biologist with the NCWRC Habitat Conservation Division. “The Aquatic Nuisance Management Plan will give us long-range tools that improve our ability to monitor and control these species in our waterways. An important piece of the plan involves raising public awareness of how we all can work to help prevent the introduction and spread of these nuisance organisms by being good stewards of our state’s aquatic resources.”

Release of Conservation Status Assessment Maps for Imperiled Minnows and Suckers

Conservation status assessment maps for 36 imperiled minnows and suckers were recently released for the southeastern United States (Jelks et al. 2008). These maps categorize HUC 10 watersheds by the most recent occurrence of a species and may also show actual occurrence locations when permitted by all data providers within the species' range. Over 15,000 species occurrence records were obtained from 23 different sources to generate the maps. These data sources represent major fish collections, state and federal sampling programs, and species-specific surveys and monitoring efforts in the southeast.



The maps were compiled by Albanese B, Kuhajda BR, Reuter C, and Krakow G, and are available online at http://georgiawildlife.com/minnow_sucker_status_maps

Call to Action!

If you want to contribute, have a story idea or would like us to include something in next quarter's newsletter, e-mail Kevin Hining kevin.hining@ncwildlife.org or give him a call at 336-877-1087. Also, if you want to become more involved with one of the many great NCAFS committees then please check the link below for information about each one, contacts, etc., <http://nc.fisheries.org/who-we-are/committees/>

Valuable Links

The [American Fisheries Society Home Page](#) offers a wealth of links to assist you in your fishy endeavors. Information on ordering AFS books, annual meetings, chapter links and joining the AFS can be found there.

This and [archived NCAFS newsletters](#), along with links, [chapter information](#), and [upcoming meetings](#), can be found on the [NCAFS website](#).

