#### PALMETTO PISCIFORUM

Newsletter of the South Carolina Chapter of the American Fisheries Society

October 7, 2011 ST

www.SCAFS.org

# President's Message

## Executive Committee

First and foremost I want to share that Liz Osier, our Secretary-Treasurer, has moved to take a new position out West to work on very challenging hydro-power permitting issues. We wish her the best of luck in this new position; she will no doubt do exceedingly well. Liz was an outstanding secretary-treasurer for the SC AFS chapter. She was dedicated and diligent. The success we have had with the meetings and workshops are in a very large part due to her hard work and dedication.

Shane Boring will be our new President and will be sworn in at our annual 2012 meeting. Shane has been working hard as the incoming President over the last two years and will make an excellent president.

This year we will be electing a new Incoming President and a new Secretary-Treasurer. I encourage all of you to consider serving the Chapter in one of these positions.

## Annual Meeting

As the annual meeting approaches I encourage you to think about presenting and encouraging our newer members and students to participate. We are open to full presentations and the idea of shorter (3-4 minute) topical presentations for those who may be interested. Posters, as always, are welcome.

This year we would like to hold a "post-meeting" workshop on climate change. We envision a few key presenters followed by Q and A. This would be open to everyone at no extra charge and last 2-3 hours.

## Workshops

Please bring your workshop ideas to the annual meeting. We are very interested in providing you with topics that are important to you.

## 2014 National Meeting

We are still working to host the 2014 national AFS meeting in Charleston SC. This would take the place of our annual meeting. However, based on interest, we can consider a symposium with a focus on SC issues.

Thank you for your continued membership and the valuable work you do on a daily basis.

Anna Toline SC-AFS President



## Fall Workshop

The 2010 Fall Workshop was entitled "Freshwater Mussel Biology, Ecology and Conservation" and was cosponsored by the SCFWA. The workshop was held on November 12 at SCDNR Region 2 Hub Office in Florence and was a huge success with nearly 30 attending. Among the highlights was an informative presentation on mussel biology and ecology by Erik Kruger (Nature Conservancy) and a hands-on taxonomy session led by John Alderman (Alderman Environmental). Presentations from the workshop are on our website.

In lieu of a 2011 Fall Workshop, a workshop focused on implications of climate change on fisheries is being planned in conjunction with the 2012 annual meeting. As discussed at the business meeting this past February, this workshop will convene either immediately prior to or following

the 2012 annual meeting. This approach was selected due to budget constraints and should eliminate the need to acquire travel funds for two SC AFS events during a single year.



# **Bayless Award for Best Professional Paper Tanya Darden, South Carolina DNR**

Tanya Darden of SCDNR's Marine Division was announced as the winner of the 2010 Bayless Award for best professional paper at our Annual Meeting on February 9-10, 2011 at Santee State Park on Lake Marion. The award was for Tanya's presentation "Population genetics of cobia - management implications along the southeast United States coast," co-authored with Matt Walker, Karl Brenkert, Justin Yost and Mike Denson (all of SCDNR) was presented at the 2010 annual meeting held at the SCDNR Marine Lab at Fort Johnson. Tanya's paper was also selected as Best Student Paper. Well done!

The Bayless Award was created in honor of Jack D. Bayless, to recognize the best South Carolina presentation/paper given at each annual chapter meeting. Each year, volunteer judges evaluate presentations based on the following criteria:

- Significance to aquaculture and/or fisheries,
- Experimental design and analysis,
- Organization,
- Presentation, and
- Quality of visual aids.

Presenters are scored on a scale of one to four, four being excellent, for each category. The presenter with the highest total score receives the award. Any members interested in volunteering as judges for the next annual meeting, or joining the Awards Committee, should contact SC-AFS President or President-elect.



## **Conservationist of the Year Award**

The 2011 Conservationist of the Year was presented to the South Carolina Aquarium at the Annual

Meeting social on February 9, 2011. This marked the first time that the Conservationist of the Year has been awarded to an organization. The Executive Committee voted unanimously to award the Conservationist of the Year to the Aquarium, citing its growing research program and unique ability to educate public stakeholders. Currently, the aquarium is conducting important research on Robust Redhorse (Moxostoma robustum), freshwater mussels and other aquatic biota, and since opening in May of 2000, has reached more than 5.3 million visitors of all ages and backgrounds regarding important conservation issues facing South Carolina fisheries. David Wilkins, freshwater fish curator for the aquarium, was on hand to accept the award.

The Conservationist of the Year Award is presented periodically at the annual SC-AFS meeting. This is the most prestigious award bestowed by the SC-AFS Chapter and it recognizes outstanding contributions in the conservation of South Carolina fishery resources. Chris McDonnough is accepting nominations for the Conservationist of the Year Award and you can contact him at McDonoughC@dnr.sc.gov.



## Secretary/Treasurer Elizabeth Osier Departs for New Position in Oregon

Elizabeth Osier, SCDNR Region 2 Freshwater Fisheries Coordinator and SC-AFS Secretary-Treasurer, has departed South Carolina to accept a new adventure with the Oregon Department of Fish and Wildlife. In this new role, Liz will serve as Hydropower Coordinator for the northeast region of Oregon. SC AFS sent Liz a silver platter in recognition of her service. We wish her all the best!

Shane Boring is serving as interim secretarytreasurer until a replacement is elected in February. Thanks Shane!



# **Report of the joint SC-AFS and SCFWA Annual Meeting**

The annual meeting of SC-AFS and the South Carolina Fisheries Workers Association (SCFWA) was held on February 9-10, 201 at Santee State Park in Santee, SC. The 2011 meeting was hosted by SCFWA. Special thanks to everyone who helped organize the meeting, especially Elizabeth Osier, Sarah Goldman, Bryan Frazier and David Wilkins. We also appreciate those who pitched in at the meeting to keep things running smoothly. Thanks to Kleinschmidt Associates and Cardno-Entrix for meeting sponsorship.

The meeting was opened with a welcome by Anna Toline, President of the SC-AFS. David Wilkins from the SC Aquarium and then-President of SCFWA served as Program Chair. The program consisted of nineteen presentations and thirteen posters.

Our business meeting was held on February 9. The membership discussed and agreed to pursue further the potential of hosting the 2014 Southern Division Mid-Year Meeting. Cecil Jennings, President of the Southern Division of AFS updated the chapter on regional matters. The group also discussed the potential of hosting a workshop either prior to or following the 2012 annual meeting focused on climate change and fisheries; organization of this was referred to the Executive Committee.

A wonderful social and dinner were held on the evening of February 9, with a lowcountry BBQ and oyster roast provided by Dixieland Delights.

Awards were announced at the social. Tanya Darden (SCNDR) was awarded both the Jack Bayless Award for Best Professional Paper and Best Student Paper for her presentation "Population genetics of cobia - management implications along the southeast United States coast," presented at the 2010 annual meeting. Thanks goes to all volunteers who served as judges for the annual awards. Congratulations to all recipients!

The social included a raffle that helped to offset meeting costs. Thanks to David Wilkins and Pam Corwin and the team of volunteers who worked hard to make the raffle a success. Thanks to all the members of SC-AFS and SCFWA for their efforts in organizing the annual meeting!

## **Presentations**

**Mark Scott**; SC Department of Natural Resources. A Cumulative Effects Approach to Managing Watersheds.

**Kevin Kubach\*** & Mark Scott; SC Department of Natural Resources. The South Carolina Stream Assessment: an Early Look At Regional Patterns.

**Joseph Quattro**; University of South Carolina. Redeyed Bass (genus Micropterus) Populations in the Santee River Drainage, Introduced or Native?

Margaret Jamison; SC Department of Natural Resources. Evaluation of Adult Red Drum Growth Rate, Movement, and Population Structure along the South Atlantic Coast of the United States.

**Treye Byars\* & Chad Holbrook**; SC Department of Natural Resources. Evaluation of Implanted Transmitter Retention in Blue Catfish.

**Cathy Marion**; SC Department of Natural Resources. Application of a Tri-Lateral Life History Model to SC Coastal Plain Fishes.

**Elizabeth Cushman**; SC Department of Natural Resources. Boy or Girl? Development of a Genetic Tool For Non-Lethal Sex-Determination In Two Fish Species.

**Michael Hodges**; SC Department of Natural Resources. Conducting Large-Scale Oyster Restoration as Mitigation in South Carolina Estuarine Waters.

**Jesse Waldrip**; Kleinschmidt Associates. Engineering Design Of Downstream Fish Passage Facilities.

**Christopher McDonough**; SC Department of Natural Resources. The Status of Spot in South Carolina and the Atlantic Coast of the United States.

**Barbara Taylor**; SC Department of Natural Resources. Impact Of Stocking Time On The Forage Requirements of a Brown Trout Population.

**Justin Lewandowski**; University of South Carolina. Genetic stock identification and migration in black sea bass (*Centropristis striata*) along the western Atlantic coast and Gulf of Mexico.

**Dawn M. Glasgow**; SC Department of Natural Resources. Photographic Evidence of Temporal and Spatial Variation in Hardbottom Habitat and Associated Biota of the Southeastern U.S. Atlantic Continental Shelf.

**Carolyn Hendrix**; College of Charleston MES & SC Department of Natural Resources. Retention of Three Types of Tags Applied to Adult Red Drum.

Shiffman\*, D. (GPMB, College of Charleston), Frazier, B. (SCDNR), Kucklick, J. (NIST, Hollings Marine Lab), Roumillat, B. (SCDNR), Sutton, T. (Virginia Institute of Marine Science), Parsons, K. (Virginia Institute of Marine Science), Abel, D. (Coastal Carolina University), and Sancho, G. (College of Charleston). Detection of an Ontogenetic Shift In the Diet of a Heavily Exploited Shark Species (Carcharhinus plumbeus, nardo 1827) Using Minimally Invasive Δ13C and Δ15N Stable Isotope Analysis.

**Joseph C. Ballenger**; SC Department of Natural Resources. Population Dynamics of Black Sea Bass along the Southeastern Coast of the United States: Temporal and Spatial Patterns.

Marcel Reichert\*; Jessica Stephen, Joseph Ballenger, and David Wyanski, SC Department of Natural Resources. Trends of CPEU And Life History Trends of 15 Reef Fish Species From Atlantic Waters Off the SE US Coast (1980-2010).

**Robert Wiggers**; SC Department of Natural Resources. The South Carolina Marine Game Fish Tagging Program. Education, Outreach, and Research through a Public Partnership.

**Ron Ahle**; SC Department of Natural Resources. Setting Instream Flows for Saluda Hydroelectric Project No. 516.

#### **Posters**

**Kyra Marsigliano**; University of South Carolina. Building a DNA Barcoding Database for Atlantic Billfishes.

**Alexandra Hooks**; University of South Carolina. Phylogenetic Relationships of an Imperiled Undescribed Species of Madtom (Genus *Noturus*).

**Katherine Allen**; University of South Carolina. Genetic Evaluation of Recent Population Bottlenecks in Gag Grouper (*Mycteroperca microlepis*).

**Lindsay Gerze**l; Furman University. Biomarker Responses of Chubs and Sunfish to Polyaromatic Hydrocarbons (PAH).

**Peter Calomiris**; Furman University. The Use of Biomarkers to Determine Tolerance of *Centrarchidae* to Polyaromatic Hydrocarbons in the Saluda River, Northwestern, South Carolina, USA.

Daniel Farrae\*, Justin Yost, Karl Brenkert, Tanya Darden & Mike Denson; SC Department of Natural Resources. Evaluation of Habitat Utilization, Recruitment Bottlenecks and Movement of a Coastal Striped Bass Population.

Matt J. Walker\*, Tanya L. Darden, and Michael R. Denson; SC Department of Natural Resources. Potential Genetic Tool for Age Estimation of Long-Lived Fishes.

**Carolyn Tarpey\*, Beth Cushman, Tanya Darden & Bill Post**; SC Department of Natural Resources. Population Recovery of American Shad in the Edisto River, SC: Using Genetics to Characterize Population Dynamics and Stocking Contribution.

**C. Michelle Willis**; SC Department of Natural Resources. Weakfish, *Cynoscion regalis*, Diet: A Preliminary Glimpse.

Nancy J. Brown-Peterson, David M. Wyanski\*, Susan K. Lowerre-Barbieri, Francisco Saborido-Rey, Jonna Tomkiewicz and Beverly J.

Macewicz; University of Southern Mississippi, SC Department of Natural Resources, Florida Fish and Wildlife Conservation Commission, Instituto de Investagaciones Marinas, Technical University of Denmark, National Marine Fisheries Service. Reproductive Cycles in Southeastern U.S. Fishes: Importance of Standardized Terminology.

**Blaik Pulley**; SC Department of Natural Resources. Boater Sewage and how the South Carolina Clean Vessel Act Program is Working to Protect Aquatic Resources.

**Sarah Goldman\*, Angela Rourk, Mark Collins & Marcel Reichert**; SC Department of Natural Resources. Effects of Simulated Commercial Harvest on Mummichogs in Tidal Creeks in South Carolina, USA.

**Laurie DiJoy**; SC Department of Natural Resources. A Comparison of the Age, Growth, and Reproductive Biology Of Bank Sea Bass, *C. ocyurus*, and Black Sea Bass, *C. striata*, off the Atlantic Coast of the Southeastern United States.



#### Save the Date!

The 2012 Joint Meeting of the South Carolina Chapter of the American Fisheries Society and the South Carolina Fisheries Workers Association will be held on February 15th and 16th at Camp St. Christopher on Seabrook Island. Stay tuned for registration information and Call for Papers!



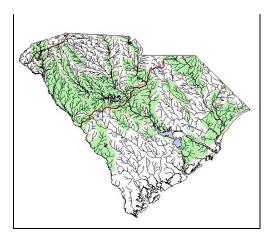
## **Reports from our Membership**

Updates to The Freshwater Fishes of South Carolina by Fritz Rohde (Fritz.Rohde@NOAA.gov).

The hard-working biologists at DNR and others are turning up new records of fishes around the state, for example the banded killifish in Lake Marion. So alas, *The Freshwater Fishes of South Carolina* is already out-of-date!

To aid in forthcoming updates to occurrence maps, Jeff Foltz has a new link on his webpage where you can enter new species data. If it's for a species that can be difficult to identify, a photo would be appreciated also. The webpage for entering new occurrences can be found at the following address: <a href="http://people.clemson.edu/~jwfoltz/scfish/newdata.h">http://people.clemson.edu/~jwfoltz/scfish/newdata.h</a> tm

Immediate plans are to publish online versions of updated range maps based on data submitted, such as the one included below for yellow perch.



Finally, in case you may have found some errors or mis-statements in the book, we would appreciate knowing about them so that we can issue an errata sheet at some point or correct if the book is reprinted.

Columbia Fish Passage Project by Jennifer Hand, biologist, Kleinschmidt Associates (Jennifer.Hand@KleinschmidtUSA.com)

Kleinschmidt completed final design of the Columbia fish passage in the fall of 2004, and construction was completed in 2006. The two-part project consisted of an upstream passage via a fishway located on the east end of the Columbia diversion dam, and a downstream passage through the project powerhouse. A result of a diadromous fish restoration plan, the project targets passage for American shad and blueback herring. The objective for the upstream passage is to provide access to

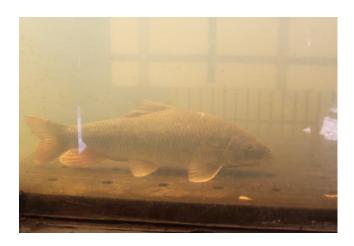
historic spawning areas where access has been blocked.



In addition to constructing the overall Columbia Fishway design, Kleinschmidt Biologist designed and implemented a monitoring program to document the usage of the Columbia Fishway by target species (American shad and blueback herring). This effort included extensive consultation with US Fish and Wildlife Service (USFWS), SC Department of Natural Resources (SCDNR) and National Marine Fisheries Service (NMFS) to develop a study scope that met agency data needs while remaining cost effective for the City of Columbia. Five years of monitoring at the Columbia Fishway have been conducted to evaluate the timing and abundance of target species utilizing the fishway. During the 2010 monitoring season, 45 American shad were observed passing through the Fishway, which extrapolates out to be approximately 323 American shad.

In addition to fishway monitoring, Kleinschmidt staff assisted the City of Columbia in developing an effectiveness testing plan for the Columbia Fishway. This plan was developed cooperatively with the USFWS, SCDNR and NMFS, with the objective to identify and evaluate upstream and downstream fish passage effectiveness.







## **SCAFS Officers**

PRESIDENT Anna Toline 843-545-0216 president@scafs.org

PRESIDENT-ELECT Shane Boring 803-462-5625 president-elect@scafs.org

SECRETARY/TREASURER Shane Boring (Interim) 803-462-5625 secretary@scafs.org

PAST-PRESIDENT Jeanne Riley 803-561-4076 pastpresident@scafs.org

## **Membership**

Dues to: Shane Boring Kleinschmidt Associates 204 Caughman Farm Lane, Suite 301 Lexington, SC 29072



## Microscope Available for Student Use

A compound microscope donated to the SCAFS Chapter is available for student use. For more information, please contact Marcel Reichert at ReichertM@dnr.sc.gov.



#### **AFS Book Warehouse**

AFS books are available by contacting the orders department operated by Books International.

Five ways to order:

• AFS online bookstore: www.afsbooks.org

Phone: 703-661-1570Fax: 703-996-1010

- E-mail: bimail@presswarehouse.com
- Mail: American Fisheries Society c/o Books International PO Box 605 Herndon, VA 20172



The Summer 2011 Edition of the Southern Division AFS newsletter is now available on the SDAFS web site at http://www.sdafs.org. Download your copy now!



## **Meetings**

Joint Annual Meeting of South Carolina Chapter of American Fisheries Society and South Carolina Fisheries Workers Association -February 15-16, 2012, Camp St. Christopher, Seabrook Island, South Carolina.

**South Carolina Environmental Conference** – March 11-13, 2012 in Myrtle Beach, South Carolina.

**2012 Southern Division of AFS Spring Meeting -** January 26-29, 2012 in Biloxi, Mississippi.

**65th Annual Conference of the Southeastern Association of Fish & Wildlife Agencies (SEAFWA) -** October 22-26, 2011 in Nashville, Tennessee.

**South Atlantic Fishery Management Council Meeting** – December 5-9, 2011, Raleigh, North Carolina.



# South Carolina Chapter of the American Fisheries Society

## **Conservationist of the Year Award**

The Conservationist of the Year Award recognizes outstanding contributions in the conservation of South Carolina fisheries resources. It is one of the most prestigious awards bestowed by the SC AFS Chapter. This award is generally presented each spring and nominations are accepted until December 31 of the previous year.

Nominations can be made by electronic submission to the president of the SC-AFS at president@scafs.org.

Conservationist of the Year Award nomination form
Date:
Nominated by (name):
Affiliation:
Phone number:
E-mail address:
Relationship with nominee:
Nominee (name):
Address:
Affiliation:
Why should this nominee be considered for the Conservationist of the Year Award?
Provide a short description of the nominee's professional career and accomplishments, in particular where they pertain to the Conservationist of the Year Award.
Provide a website or publication information that may assist the award committee in their decision (if

available).