# PALMETTO PISCIFORUM

NEWSLETTER OF THE SOUTH CAROLINA CHAPTER OF THE AMERICAN FISHERIES SOCIETY

www.SCAFS.org

### **President's Message**

Hello all! I hope this message finds you wrapping up a rewarding and productive year and preparing for a much deserved and relaxing holiday season. It has been quite a year for the SC AFS. Our most noteworthy development was the acceptance by the Southern Division of our chapter's proposal to host the 2014 Southern Division Spring Meeting. The meeting will be held at the Francis Marion Hotel in historic downtown Charleston on January 23-25, 2014. The Francis Marion should prove to be an excellent venue, walkable to most downtown attractions, including just a short walk to the South Carolina Aquarium, which has graciously agreed to host the evening social. We expect an engaging and fun-filled meeting with over 400 participants, so mark your calendars!

Planning for the 2014 SD Meeting has been in full swing for several months with a number of committees having been formed, including finance, fundraising, local arrangements, and program. While we have filled the ranks of these committees with talented and committed folks, we always welcome more help, so please contact an officer if you're interested in serving on a committee. Now that the venue has been settled, the majority of planning activity is focused on raising the \$50k - \$60k needed to put on such a large meeting.

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December 2012

Leo Lentsch of IFC International has graciously agreed to serve as the Fundraising Committee Chair, with Amy Dukes of SCDNR serving as local chair for the Charleston Area (Thanks Leo and Amy). Please contact either myself, Leo or Amy if you know of a potential donor who might be interested in supporting our very worthy cause.

In the meantime, our Joint Annual Meeting of SC AFS and SCFWA is planned for January 30 – February 2, 2013, at Hickory Knob State Park on Lake Thurmond. Many thanks go out to the SCFWA ExComm, as they have graciously agreed to host the annual meeting again in 2013 to allow the SC AFS ExComm to focus on planning for the 2014 SD Meeting. Registration is open and a call for papers has been issued, so pull out those presentation ideas, grab your golf clubs and/or fishing road and plan to join us at Hickory Knob.

In closing, I want to urge each of you to pull your head out of the river, laboratory, computer or classroom, forget about fish for a few days, and spend some time this holiday season with those that are most important – family and friends. Here's wishing that each of a happy a joyous holiday season. – Shane Boring

#### **SCAFS Workshops**

The 2012 Winter Workshop was entitled "SCAFS Climate Change Workshop" and was held in conjunction with the annual meeting. Dr. Geoff Scott of NOAA presented a lecture entitled 'Additive effects of Climate Change and Coastal Development: A Recipe for Disaster'. Dr. David Werth of the Savannah River National Laboratory presented a lecture entitled "The Use of Statistical Downscaling to Project Regional Climate Changes'. The lectures were followed by discussion and a Q & A session.

In lieu of a 2013 Winter Workshop, an afternoon workshop focused on the organization and implementation of the 2014 SDAFS meeting will be held in conjunction with the 2013 annual meeting.



### 2012 SCAFS Annual Meeting Report

The annual meeting of SCAFS and the South Carolina Fisheries Workers Association (SCFWA) was held February 15 - 16, 2012 at Camp St. Christopher on Seabrook Island. The 2012 meeting was hosted by SCFWA. Special thanks to everyone who helped organize the meeting, especially Sarah Goldman, Bryan Frazier, Anna Toline, and Shane Boring. We also appreciate those who pitched in at the meeting to keep things running smoothly. Thanks to Kleinschmidt Associates for meeting sponsorship.

The meeting was opened with a welcome by Bryan Frazier of SCDNR, Bryan also served as Program Chair. The program consisted of twenty-three presentations and ten posters.

Our business meeting was held on February 15th. The membership announced the acceptance of the SC Chapter's proposal to host the 2014 Southern Division Meeting in Charleston. Since planning for the 2014 SDAFS meeting will be time-intensive, a motion was proposed and accepted to let SCFWA host the 2013 annual joint-meeting. Dave Coughlin from Duke Energy provided remarks on behalf of the Southern Division, highlighting the outcomes of the 2012 meeting in Biloxi. New officer elections were held and Chris McDonough of the SCDNR Marine Resources Division was elected as President-Elect, and Cathy Marion of the SCDNR Freshwater Fisheries Division was elected as Secretary-Treasurer.

A wonderful social and dinner were held on the evening of February 15, with a lowcountry BBQ and oyster roast provided by Dixieland Delights and Home Student presentation awards were Team BBO. announced at the social. Jennifer Hein won best student paper for her presentation entitled 'Anguillicoloides crassus, an invasive parasite in the American eel: survey and health effect on fish in selected estuaries in South Carolina'. Carolyn Tarpey won the award for best poster entitled 'Genetic characterization of the Savannah and Pee Dee River populations of robust redhorse. Moxostoma robustum'. Thanks goes to all volunteers who served as judges for the annual awards. Congratulations to all recipients!

The social included a raffle organized by Gregg Davis that helped to offset meeting costs. Thanks to all the members of SCAFS and SCFWA for their efforts in organizing the annual meeting!



Best Student Paper Award



**Oyster Roast** 

### SCAFS OFFICERS

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

PRESIDENT-ELECT Chris McDonough 843-953-9231 president-elect@scafs.org

SECRETARY/TREASURER Cathy Marion 864-982-1188 secretary@scafs.org

PAST-PRESIDENT Anna Toline 843-545-0216 pastpresident@scafs.org

### CALENDAR OF EVENTS

**SCAFS/SCAFWA Joint Annual Meeting -** January 30<sup>th</sup> - February 1st, 2013, Hickory Knob State Park, McCormick SC.

**2013 Southern Division of AFS Spring Meeting** – February 7-10, 2013 in Nashville, Tennessee.

**2013 Annual AFS Meeting** - September 8-12, 2013, Little Rock, Arkansas.

**South Carolina Environmental Conference** – March 10-12, 2013, Myrtle Beach, South Carolina.

Annual Conference of the Southeastern Association of Fish & Wildlife Agencies (SEAFWA) - October 13-16, 2013, Oklahoma City, Oklahoma.

**Southeastern Fishes Council Annual Meeting** – November 8-9, 2012, New Orleans, Louisiana

South Atlantic Fishery Management Council Meeting – December 2-6, 2013, Wilmington, North Carolina.

### 2014 Southern Division Meeting Update

The 2014 AFS Southern Division Meeting will be held on January 22 - 26, 2014 at the Francis Marion Hotel in Charleston, SC. The hotel is situated in an ideal downtown location that is pedestrian friendly, and close to overflow hotels. The hotel management has agreed to provide us with all of their available meeting spaces, including 6 meeting rooms, a ballroom, and a pre-conference room. Additionally, the South Carolina Aquarium has agreed to host a social on January  $24^{\text{th}}$ .

An executive committee has held monthly conference calls since March 2012 to organize meeting logistics; Shane Boring has served as the executive committee chair. The following individuals have agreed to serve as sub-committee chairs: Fundraising (Leo Lentsch and Amy Dukes), Student Affairs (Mark Scott), Finance (Tanya Darden), Program (Chris McDonough), Local Arrangements (Marcel Reichert). If you would like to volunteer to serve on any of these committees and have not already signed up to do so, please contact Shane Boring (president@scafs.org).

We are hosting a SDAFS planning/organizational workshop to be held in conjunction with the 2013 Joint Annual Meeting of SCAFS/SCFWA, at the Hickory Knob State Park in McCormick. We strongly encourage all committee chairs and members to participate in this organizational workshop, where we will review meeting details and discuss committee and individual responsibilities.

Hosting the 2014 SDAFS meeting will provide the South Carolina Chapter with a great opportunity to display the natural beauty of our state, and showcase our great fisheries programs and personnel. The planning committee with provide an outstanding program, exciting socials, and a great information sharing opportunity for everyone to enjoy. We are excited about this wonderful opportunity and look forward to working as a team to host a great meeting!

### **Clemson University Student Sub-Unit**

### OFFICERS

PRESIDENT

Seth Mycko 864-593-1880 smycko@clemson.edu

#### VICE-PRESIDENT

Kyle Cox 803-640-9339 kjcox@clemson.edu

#### SECRETARY

Miles Brown 864-982-1188 Miles6@clemson.edu

#### TREASURER

Alan Norris 803-603-5997 ranorri@clemson.edu

## ADVISOR

Lance Beecher 864-654-1863 lbeeche@clemson.edu

### **TREASURER'S REPORT**

Date: November 2012Checking Account Balance:460.50TOTAL CHAPTER ASSETS:460.50

The Clemson University sub-unit became officially recognized by Clemson University in February of 2012, and has been getting stronger every month. The group's primary goal is to provide Clemson students with great opportunities to learn about South Carolina's fisheries resources and conservation needs. There are currently 10-20 members which actively participate in group meetings. The sub-unit has hosted fly tying demonstrations, participated in Clemson's events such as the First Friday Parade, and educated its members on how to pursue a career in the fisheries field. In order to raise funds to attend professional meetings and other similar holdings, the sub-unit has two big fundraisers planned for the Fall season. One event will be a Pancake Breakfast at the Main Street Deli & Coffee House in Central, SC, and the other is a Fish Fry, held at the famous Esso Club in Clemson. The club is growing every day and will hopefully continue to do so. - Seth Mycko





### Twenty (plus) Years of Trammel Netting in South Carolina

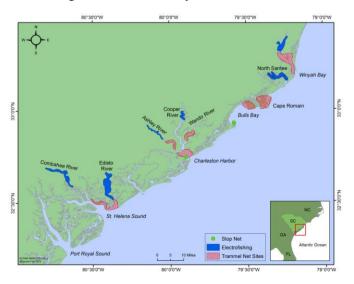
#### AUTHOR: C. McDonough

The trammel net survey of SCDNR's Marine Resources Research Institute had its twentieth birthday in 2010.

The first official net set was made on 13 November, 1990 in Charleston Harbor. Since then, the survey has expanded and now covers nine estuarine strata along the South Carolina coastline, including Charleston Harbor and Wando River (both started in 1990), Ashley River (1992), ACE Basin (1994), Bulls Bay and Cape Romain (1997), Winyah Bay (2002), and Colleton and Broad Rivers (2009).

The trammel nets used by the survey are 600 feet long by 7 feet deep, with 14 inch stretched outer meshes and a 2.5 inch stretched inner mesh. They are set using specially designed 'mullet boats', which have an outboard engine located towards the bow. This allows the net to be deployed easily form the stern, and enables the boat to run over very shallow oyster reef and marsh-front habitat, where sets are made.

The trammel net survey was designed to monitor recreationally important finfish such as red drum, spotted seatrout, southern flounder, black drum and sheepshead. It uses a stratified random design and is primarily used for generating long-term indices of population abundance. It is also used for collecting an array of biological samples for a wide variety of projects. These include routine, long-term investigation of important life-history information such as age, sex and maturity.



From 1991 through 2011, a total of 18,173 trammel net sets made that captured 336,268 fish representing 110 different species. Seven recreationally important fish made up 77.5% of the total catch. The most numerous species was red drum, followed by striped mullet, spotted seatrout, spot, southern flounder, black drum and sheepshead.

Most Abundant Species Captured by the SCDNR
Trammel Survey: 1990-2011

1.0	Tranimer Survey. 1990-2011					
Fish Species	Number Percent					
	Captured	Frequency				
Red Drum	68,273	20.3%				
Striped Mullet	66,273	19.8%				
Spotted	55,825	16.6%				
Seatrout						
Spot	44,450	13.2%				
Southern	19,601	5.8%				
Flounder						
Black Drum	4,245	1.3%				
Sheepshead	1,799	0.5%				

In addition to general population monitoring, an important aspects of the trammel survey has been its ongoing tagging program for important recreational species.

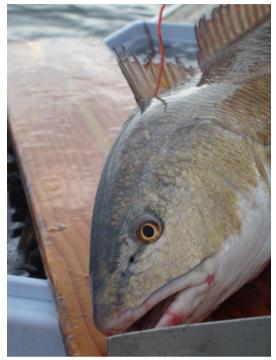
Fish Tagged	by the	<b>SCDNR</b>	Trammel	Survey.	by Species
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Year	Atlantic	Black	Red	Sheeps-	Southern	Spotted	Total
	Tripletail	Drum	Drum	head	Flounder	Seatrout	
1990		9	106		13	110	238
1991	4	55	915	15	113	812	1914
1992		60	1669	32	507	602	2870
1993	5	119	1933	21	707	546	3331
1994	14	91	2454	118	320		2997
1995	11	64	2075	38			2188
1996	1	49	2287	59			2396
1997	6	61	2357	63			2487
1998	1	87	1808	53			1949
1999	5	119	1773	59			1956
2000	7	152	1264	83			1506
2001	9	77	1467	63	6		1622
2002	13	217	2308	63			2601
2003	4	155	3254	85			3498
2004	23	93	3478	76			3670
2005	6	35	2613	79			2733
2006	11	134	2265	83			2493
2007		113	1742	73			1928
2008	6	176	2013	87			2282
2009	8	156	1954	98			2216
2010	4	86	2703	133			2926
2011	4	37	2087	94			2222
Total	142	2145	44525	1475	1666	2070	52023
%Freq	0.27	4.12	85.59	2.84	3.20	3.98	

Since 1990, the trammel survey has tagged 52,023 fish, averaging 2,365 a year. Four species (red drum, black drum, sheepshead, and Atlantic tripletail) have been tagged throughout the entire program, while spotted seatrout and southern flounder were only tagged in the early years. Red drum accounted for the majority of all tagged fish at 85.6%.

Approximately 25% of the tagged red drum have been recaptured and reported to SCDNR. Most of these were recaptured by the trammel survey itself, but a large number are also reported by recreational anglers, as well as other SCDNR surveys, such as the offshore adult red drum longline survey.

Red Drum with Shoulder Tag



While most of the red drum recaptured by the trammel survey were caught within a mile of the location of their initial tagging, tagged adults have been captured outside their natal estuaries in locations as far ranging as St. Augustine, Florida and Cape Lookout, North Carolina. The majority of red drum that have been recaptured outside of South Carolina have come from North Carolina, but out of state recaptures only represent 0.37% of the total number of red drum recaptures.

Hauling the trammel net in the ACE Basin



More recently, the trammel survey has also served as an important source of genetic data for recreational sportfish. Several thousand finclips are now routinely collected per year. These are used for genetically identifying stocked individuals (red drum, striped bass, and spotted seatrout), for examining population structure, and delineating stock management units. The long term monitoring of the trammel survey allows the SCDNR to directly observe and measure the effects stocked fish have on wild populations as well as use these fish in population level experimental models because of the long term nature of the data set. This is particularly important in following relatively long lived species like red drum.

How much time and effort does all this field work represent? To put it into perspective, here are some time and effort comparisons to what those 18,173 trammel sets represent:

- Total distance of netting deployed = 2,065 miles (Charleston to Las Vegas)
- Total net soak time was 7572.8 hours, or 318 days and 12 hours. Of that time, approximately 223 days were spent pulling the net in by hand (makes my back sore just thinking about it).



The importance of the data generated by the trammel survey over the last twenty years for estuarine finfish in the southeastern United States cannot be understated. The data set represents one of the longest and most complete data resources for important recreational finfish in the region, and has been used for population monitoring, stock assessments, and numerous projects on life history, ecosystem health, fish parasitology, mercury monitoring, fishery management regulations, and fish movement patterns. Findings from the survey are routinely published in the both the gray and peer reviewed scientific literature. The trammel survey provides various beneficial outcomes, beyond its primary scientific and management mission. These include aspects such as community outreach and education. The survey regularly takes volunteer field workers out on the boats, and currently hosts five graduate students projects and one minority summer intern position. Even the scraps left over from lab workups have a use: they are used as feed at the Center for Birds of Prey in Awendaw, SC.

The Trammel Net survey will continue to be an important part of the SCDNR's fisheries monitoring program, providing valuable data that will be needed to properly manage and preserve South Carolina's fisheries resources into the future.

### **Membership Information**

Interested in becoming a member of SCAFS? Contact the chapter president, Shane Boring, or download the membership form at <u>www.scafs.org</u>. The 2013 annual dues for South Carolina Chapter members is \$5. If you would like more information about our chapter and its activities, call or email:

Shane Boring president@scafs.org 803-462-5625 Kleinschmidt Associates 204 Caughman Farm Lane, Suite 301 Lexington, SC 29072

### **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: 703-661-1570
- Fax: 703-996-1010
- E-mail: bimail@presswarehouse.com
- Mail: American Fisheries Society

c/o Books International PO Box 605 Herndon, VA 20172

### SCAFS Treasurer's Report

Date: November 2012					
Checking Account Balance: 7,981.9					
Savings Account Balance:	1,184.61				
6-Month Certificate of Deposit:	3,932.85				
TOTAL CHAPTER ASSETS:	13,099.45				

### Save the Date!

Annual Joint Meeting of SCAFS/SCAFWA: January 30th- February 1st, 2013 Hickory Knob State Park, McCormick SC

