

AMERICAN FISHERIES SOCIETY

MARCH 2012 NEWSLETTER

INSIDE THIS ISSUE

President's Message

Secretary-Treasurer's Report

Awards Committee

News from around North
Carolina

Meetings of Interest

Valuable Links

We would appreciate your comments on this electronic version of the NC Chapter Newsletter. Please send all responses to Jerry Finke (jerry.finke@ncwildlife.org).

President's Message

What a success!! The 2012 meeting in Raleigh was one of the most attended annual meetings in NC AFS history with 93 registrants. Special thanks to all who were involved in planning and administering the meeting, including Brena Jones and Jessica Baumann (Program Committee), Mike Abney (President), Kevin Dockendorf (Past-President), and Kevin Hining (Secretary-Treasurer). Thanks to Joe Hightower, Kim Sparks and Chris DeRolph for their hard work with the GIS Continuing Education workshop and to Kim Baker and the NC State Student Sub-unit for another fabulous raffle and auction.

Thanks to all 23 presenters and congratulations to Jessica Baumann (Best Professional Paper), William Smith (Best Student Paper), Jerry Finke (Distinguished Service Award), and Eddie Bridges (Fred A. Harris Fisheries Conservation Award). Congratulations to the entire membership for once again winning the SDAFS membership challenge. NC AFS has the highest proportion of Chapter members that are also parent society members in the entire Southern Division. This level of dedication is something to be proud of. We received a monetary award from SDAFS of \$250.00 for this accomplishment. Please consider joining the parent society for another year or for the first time if you have not done so already. Let's keep this award in NC!

A big portion of our Chapter's success is a function of the outstanding NC State Student Sub-unit. A special congratulation is warranted to these amazing students for winning the Southern Division Student Sub-unit award for the fifth year in a row! Thanks to each and every student for their hard work, quality research, and dedication to AFS.

President's Message (continued)

Spring is upon us and field season is here. Whether you are wearing a snorkel mask looking for displaying mussels, standing on the bow of an electrofishing boat netting stripers, or seining for rare suckers, remember to enjoy your time on the water and be safe. If you need assistance with your field studies, please utilize the NC AFS website to announce volunteer opportunities. As we learned from Mathew Stillwell's wonderful talk at the 2012 meeting, young students and recent graduates are seeking opportunities for hands-on experience. Share your expertise with these future biologists and take advantage of the volunteer work force.

Lastly, thanks for the opportunity to serve as your President. It is an honor and I look forward to working with Greg Cope (President-elect), Julie Harris (Secretary-Treasurer), and Mike Abney (Past-President) over the next year. Feel free to call me at 828-659-3324 ext. 222 or email chris.wood@ncwildlife.org anytime to discuss Chapter business. I'm always excited to hear from Chapter members and hope that each one of you will try to become involved.

Thanks again and have a wonderful and productive Spring,

Chris Wood

Secretary-Treasurer's Report

2012 Annual Business Meeting Minutes Treasury Report

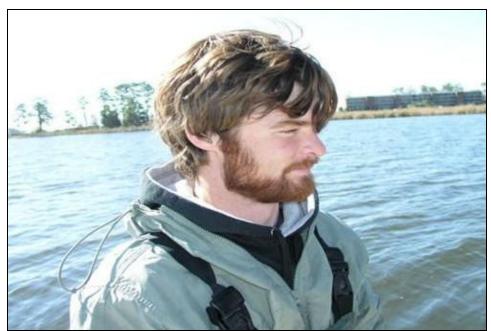
Submitted by Kevin Hining, Secretary-Treasurer

Awards Committee

Awards presentations are one of the highlights of our annual Chapter meetings. Several awards were presented during the annual NCAFS meeting in Raleigh, N.C. during February 28-29, 2012. The meeting was well attended and the host facility and program were outstanding. During the Chapter's annual business 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 ten presentations by students and twelve presentations by professionals. Student papers were judged by Jessica Baumann, Dave Coughlan, Brena Jones, and Mike Swing. The professional papers were judged by Kyle Briggs, Greg Cope, John Crutchfield, and Michael Fisk. Thanks to all who presented papers and the volunteer judges!

The 2012 Richard L. Noble Best Student Paper Award was awarded to William Smith for his paper entitled "Tropical Island Fish Assemblages are Resilient to Flood Disturbance Mortality" coauthored by William Smith, Thomas J. Kwak, and Patrick Cooney. William will receive a monetary award of up to \$600 from the Chapter's Ichthus fund for travel to present the paper at the 2012 parent society meeting in St. Paul, MN. The paper was co-authored by James T. Peterson, University of Georgia.



William Smith, NC State University, Recipient of the 2012 Richard L. Noble Award for best student paper.

The 2012 W. Don Baker Memorial Best Professional Award was awarded to Jessica R. Baumann for the paper entitled "The Effectiveness of Different Fish Attractors in North Carolina Reservoirs" coauthored by Jessica Baumann, N. Corey Oakley, and Brian J. McRae.



Chapter President Michael Abney presenting the 2012 W. Don Baker Memorial Best Professional Paper to Jessica Baumann.

The Distinguished Service Award recognizes Chapter members who have distinguished themselves by service to the Chapter, the American Fisheries Society, or the fisheries profession. The 2012 award was presented to Mr. Jerry Finke. Mr. Finke has tirelessly served the AFS at the local and division levels by providing IT support of the Chapter's and Southern Division's website. He has also help orchestrate meeting presentations over the past several years. His efforts helped promote the goals and initiatives of the AFS. Jerry has been an NCAFS Chapter member for many years and, since 2004, he has served as the Webmaster for the Chapter. The Chapter website is often the first point of reference for NCAFS members, and Jerry has done an excellent job of keeping the information on the site up to date and available. He has also managed the online voting process for chapter officers, something that few chapters were doing when the NCAFS began this process.

Jerry also served as the SDAFS Webmaster for several years, being involved with the creation and maintenance of the SDAFS Spring Meeting homepage. The SDAFS Spring Meeting homepage required substantial time each year to create and update prior to each SDAFS Spring Meeting. Without Jerry's efforts, SDAFS members and meeting attendees would have not been provided with pertinent information regarding each year's meeting.

In addition to his Webmaster duties, Jerry has served as the Registration Chair for the 2003 and 2010 SDAFS Meetings. This work has involved the processing and tracking of hundreds of registrations prior to the meeting and the seamless distribution of registration packets at meeting sites. Jerry has also provided technical audio-visual support for the SDAFS and Chapter meetings which is an understated task to make meeting technical presentations go smoothly.



President Michael Abney presenting the Distinguished Service Award to Jerry Finke.

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 NC AFS Chapter EXCOM renamed the Fisheries Conservation Award in honor of Fred Harris. Fred served as Executive Director of the NCWRC and President of the AFS and was instrumental in forming the NC AFS Chapter. Fred made many significant contributions to fishery conservation in North Carolina and across the nation.

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. The 2012 award was presented to Mr. Eddie Bridges.



Fred Harris presents the Fred A. Harris Fisheries Conservation Award to Eddie Bridges.

Mr. Bridges was recognized for his dedicated work as an advocate for wildlife conservation. Mr. Bridges has demonstrated outstanding leadership and environmental stewardship in his tenure with the North Carolina Wildlife Resources Commission and with the formation of the N.C. Wildlife Habitat Foundation. The Wildlife Habitat Foundation has been a vital organization that has led the way in acquiring, managing and protecting wildlife habitat within North Carolina.

Fisheries resources in North Carolina have benefited from Wildlife Habitat Foundation grants. A few examples include the Jordan Reservoir spawning gravel project, a cooperative effort by NC State University and the Wildlife Resources Commission to evaluate the influence of introduced gravel beds on the survival and growth of young-of-year largemouth bass; the creation of fish friendly piers at Lake Norman; trout stream restoration at Peak Creek; and the Buck Paysour Fishing Pond at Bur-Mil Park near Greensboro. Numerous other Foundation grants have supported land purchases that conserve riparian areas which help protect aquatic resources. Finally, the Foundation led the development of the Frank Sharpe, Jr. Wildlife Education Center

at Bur-Mil Park where annually tens of thousands of people visit to encounter fish and wildlife and learn about conservation work.

Finally, the Chapter recognized outgoing president, Michael Abney for his hard work, dedicated efforts, and outstanding leadership to the Chapter. A big thanks to Michael for his outstanding leadership to the Chapter during 2011!



Incoming Chapter President Chris Wood presents Certificate of Appreciation to outgoing President Michael Abney for a job well done for leading the Chapter in 2011.

Congratulations to all of these award recipients for a job well done!

Submitted by John Crutchfield, NCAFS Awards Committee Chair

News from Around North Carolina

Illustrating Trout Video - Joe Tomelleri Submitted by Wayne Starnes, NC Museum of Natural Sciences and Tom Kwak, NCSU

Ever wonder where all that mysteriously beautiful, and morphologically accurate, fish art in our books and on our walls comes from? Check out the wonderful video that Joe Tomelleri made showing his secrets!

http://www.americanfishes.com/video.htm

North Carolina Brings Home Awards from the SDAFS meeting in Biloxi, MS Submitted by Mike Abney, Duke Energy

NCAFS was awarded the *Membership Challenge Award* at the recent Southern Division AFS meeting in Biloxi, MS. It reads "Awarded annually to the SDAFS chapter or student unit with the highest percentage of members who also are members of the parent society". We had 83% dual membership. We also won it in 2009.



Mike Abney accepting the Membership Challenge Award from Steve Lochmann, Southern Division President.

The North Carolina State University Student Fisheries Society was awarded the *Outstanding Student Subunit* award. The award is presented by the Southern Division of the American Fisheries Society and marks the 5th straight year (and 6 out of 7) that the subunit has won the award. This is in addition to being named the Outstanding Student Subunit of the American Fisheries Society back in September at the Seattle meeting.



Jessica Baumann accepting the Outstanding Student Subunit award on behalf of The North Carolina State University Student Fisheries Society.

North Carolina's Imperiled Fish Fauna, Part VII Submitted by Bryn H. Tracy, Wayne C. Starnes, and Stephen J. Fraley on behalf of the NCWRC's Scientific Council of Fishes

As mentioned in the Chapter's 2010 and 2011 newsletters, there are approximately 215 indigenous, described and undescribed species of freshwater fish in North Carolina. Of these, 26% are considered imperiled as either state or federally listed Endangered (17), Threatened (17), or Special Concern (22) (Harris et al. 2010). It is the responsibility of the 15 member Scientific Council on Freshwater Fishes to submit its recommendations to the Nongame Advisory Committee of the North Carolina Wildlife Resources Commission (NCWRC) if changes in imperilment classifications for any species are warranted. To communicate our findings with the chapter membership, this is the 7th of 16 planned articles on the species that the Council believes have become more imperiled since the last listing in 2006. Thus acquainted, it is hoped that chapter members can serve as additional "eyes and ears" to expand our vigilance for these rare or highly localized fishes.

Sharpnose Darter, *Percina oxyrhynchus* (Hubbs and Raney 1939) Current Status: Special Concern, Proposed Status: Endangered



Photograph courtesy of Southeastern Fishes Council (http://ichthyology.usm.edu/sfc/index.php)

Type Specimen and Type Locality

The Sharpnose Darter was described by Hubbs and Raney (1939) based upon specimens collected in 1935 from the Cheat River, a tributary of the Monongahela River in West Virginia and from the New River in Virginia and West Virginia in 1899, 1935, and 1936. The type locality is the Cheat River at Cheat Bridge, Randolph County, WV. The holotype specimen is at the University of Michigan Museum of Zoology (UMMZ Catalog No. 118422).

<u>Description</u> The Sharpnose Darter is an elongate darter with a sharply pointed snout and broadly joined gill membranes. The species is nearly identical to the Olive Darter, *Percina squamata*, but the breast is either unscaled or only partly scaled with a few embedded scales (Page and Burr 2011). Adults vary from 55-90 mm standard length (Jenkins and Burkhead 1993) or up to 120 mm total length (Page and Burr 2011).

Range The Sharpnose Darter is indigenous to the Ohio River basin and occurs in southern tributaries to that basin from the Kentucky River drainage in eastern Kentucky to the Monongahela River drainage in western Pennsylvania and West Virginia and south in the New River drainage into North Carolina (Thompson 1980; Page 1983; Page and Burr 2011). In Virginia, the Sharpnose Darter is localized in the Big Sandy River and the New River and its

tributaries (Hocutt and Hambrick 1973; Denoncourt et al. 1977; Jenkins and Burkhead 1993). In North Carolina the species is known from the mainstem of the New River, South Fork New River, and the lower Little River in Ashe and Alleghany counties (Menhinick 1991; Menhinick and Braswell 1997; UMMZ and North Carolina State Museum of Natural Sciences (NCSM) collections records queried December 13, 2011). Based upon UMMZ and NCSM collections, only 10 specimens are known from North Carolina. It has not been found in any other tributaries in the New River drainage in North Carolina (NCSM and DWQ databases queried December 13, 2011; North Carolina Wildlife Resources Agency database queried December 21, 2011).

<u>Habitat</u> The Sharpnose Darter occupies moderate-gradient large creeks and rivers. Adults are typically found among unsilted gravel, rubble, and boulders in runs and riffles; juvenile are more frequently taken over sand in lesser current (Jenkins and Burkhead 1993). Data collected by Stauffer and Hocutt suggested a distribution related to stream flow and age class (Denoncourt et al. 1977). Adult specimens have been found almost exclusively from fast, turbulent riffles and runs to a meter in depth with large rubble and small boulders interspersed with bedrock; in other words in areas that are extremely difficult places to collect. Juveniles have been found in sandy, cove/beach areas and in areas with slight to moderate current over gravel and small rubble (Denoncourt et al. 1977).

<u>Life History and Ecology</u> Little biological information is available. Jenkins and Burkhead (1993) reported that like most darters, Sharpnose Darters ate mayfly, caddisfly, midge, and blackfly larvae. Thompson (1977, 1980) inferred a late April to possibly early June spawning period as judged from tuberculation and condition of the gonads. Like another member of the *Swainia* subgenus, Sharpnose Darter are suspected of burying their eggs (Jenkins and Burkhead 1993).

Rationale for Designation Populations in North Carolina are experiencing habitat degradation and ongoing threats to water quality. For example, in October 2003, 3,000 gallons of sodium hydroxide were spilled into the Middle Fork South Fork New River from the Town of Blowing Rock's water treatment plant in Watauga County. The spill, on a tributary to the South Fork New River, killed more than 14,000 fish (including trout, sculpins, cyprinids, catostomids, and darters) and amphibians. Although the kill extended approximately six miles downstream, the kill did not extended to the known reach where Sharpnose Darter are found. However, additional wastewater treatment plants at Boone, Jefferson, and Sparta and sediment from land clearing activities can potentially threaten downstream water quality in the South Fork, New and Little rivers. Habitats in many reaches throughout the New River system in North Carolina have become relatively homogeneous, with over-widened channels and long reaches of shallow runs with uniform depth and smaller substrate particles. Good habitats for Sharpnose Darters are increasingly rare. The Wild and Scenic River status of critical parts of the New River offers some protection to this species.

Extensive collecting in North Carolina has resulted in fewer than 10 specimens, perhaps in part because of the difficulty of sampling fast, deep riffles. There has been little effort devoted to collecting juveniles. Recent surveys throughout the New River Basin in 2008 detected only a single specimen from the lower Little River. A State Endangered status is recommended.

<u>Recommendations</u> Special care should be taken to ensure that the New River retains its high water quality in this rapidly developing part of the state. The New River from the confluence of the North Fork New River and South Fork New River to the last point at which the New River crosses the North Carolina-Virginia state line is classified by the NC Division of Water Quality as Outstanding Resource Waters

(http://portal.ncdenr.org/web/wq/admin/bog/netsupport/bimsreports). Special emphasis should also be placed on the highest level of the treatment of wastes discharged into the river and control of siltation from land clearing and agricultural practices.

Literature Cited and Recommended Readings

- Denoncourt, R. F., Hocutt, C. H., and J. R. Stauffer, Jr. 1977. Notes on the habitat, description, and distribution of the Sharpnose Darter, *Percina oxyrhyncha*. Copeia 1977:168–171.
- Hocutt, C. H., and P. S. Hambrick. 1973. Hybridization between the darters *Percina crassa roanoka* and *Percina oxyrhyncha* (Percidae: Etheostomatini), with comments on the distribution of *Percina crassa roanoka* in New River. American Midland Naturalist 90:397–405.
- Hubbs, C. L. and E. C. Raney. 1939. *Hadropterus oxyrhynchus*, a new percid fish from Virginia and West Virginia. Occasional Papers of the Museum of Zoology. University of Michigan, Ann Arbor, MI. 396:1-9.
- Jenkins, R. E. and N. M. Burkhead. 1993. Freshwater fishes of Virginia. American Fisheries Society, Bethesda, MD. 1080 pp.
- Menhinick, E. F. 1991. The freshwater fishes of North Carolina. North Carolina Wildlife Resources Commission. Raleigh, NC. 227 pp.
- Page, L. M. 1983. Handbook of darters. T. F. H. Publ., Inc., Neptune City, N.J. 271 pp. and B. M. Burr. 2011. Peterson field guide to freshwater fishes. Second edition. Houghton Mifflin Harcourt, Boston, MA. 688 pp.
- Thompson, B. A. 1977. An analysis of three subgenera (*Hypohomus*, *Odontopholis*, and *Swainia*) of the genus *Percina* (tribe Etheostomatini, family Percidae). Ph.D. dissertation. Tulane University, New Orleans, LA.
- ______. 1980. *Percina oxyrhyncha* (Hubbs and Raney), Sharpnose Darter. Page 733. Lee, D. S., Gilbert, C. R., Hocutt, C. H., Jenkins, R. E., McAllister, D. E., and J. R. Stauffer, Jr. eds. Atlas of North American freshwater fishes. North Carolina State Museum of Natural History. Raleigh, NC. *i-x* + 854 pp.

Your (AFS) Vote Counts! Submitted by Tom Kwak, NCSU

As you know, our chapter is recognized for maintaining among the highest proportions of chapter members that are active AFS parent society members. With that parent society membership, comes the right and responsibility to select our Society leadership. I hope that you've all received a notice from the parent society with voting instructions to do so. We have two outstanding candidates this year for second vice-president from whom to choose -- Bob Curry (NC) and Ron Essig (MA). My observation is that when there's a candidate from the Western Division, they hold a strong advantage if members vote their division, but this year's candidates are from the Southern and Northeastern divisions, so the election is wide open.

My note today is as AFS Nominating Committee Chair and just a reminder to vote in this important election. These candidates are among our most respected, experienced leaders, with a strong group spirit and generosity with their time and talent, and their respective agencies have the foresight to support their candidacy. We owe it to these candidates and our Society to do our part and vote for the individual that we think will best lead us into the future. Don't forget to click your ballot, the polls close **May 31** -- your vote counts!

The Fisheries Blog Submitted by Patrick Cooney, NCSU

The Fisheries Blog provides weekly posts to promote, inform, and discuss fisheries topics in a quick and easy read. Is there a topic you would like to know about, or an area of expertise you would like to write about? Take a look and be a participant. www.thefisheriesblog.blogspot.com

Contacts: Patrick Cooney, Steve Midway, and Dana Sackett TheFisheriesBlog@gmail.com

Meetings of Interest

2011 NCSU Student Fisheries Society– First Wednesday of each month, Raleigh, NC. http://clubs.ncsu.edu/sfs/

5th East Coast Trout Management and Culture Workshop, hosted by the Southern Division AFS Trout Committee - June 11-13, 2012 Frostburg State University in Frostburg, Maryland. http://www.sdafs.org/news/2012/final%20%20call%20for%20papers%20ECT%202012%20(2).pdf

142nd Annual Meeting of the American Fisheries Society— August 19-23, 2012, St. Paul, MN.

AFS Southern Division Spring Meeting - February 7-10, 2013, Nashville, TN. A special Black Bass Diversity Symposium will be held in conjunction with the Spring meeting. Abstracts for presentations are due on 10/31/2012. More information is available at http://www.fisheriesconservationfoundation.org/pdf/black_bass.pdf.

143rd Annual Meeting of the American Fisheries Society— September 9-12, 2013, Little Rock, AR.

Valuable Links -

The American Fisheries Society Home Page offers a wealth of links to assist you in your fishery endeavors. Information on ordering AFS books, public outreach, annual meetings, chapter links and joining the AFS can be found at http://www.fisheries.org/. You can subscribe to the NCAFS list serve at ncafs@lists.fisheries.org/. You can also follow current discussions on the SDAFS blog at http://www.sdafs.org/blogs/.