



INSIDE THIS ISSUE

[President's Message](#)

[Secretary-Treasurer's Report](#)

[Awards Committee](#)

[Environmental Concerns Committee](#)

[NCSU Student Subunit](#)

[Division of Water Quality News](#)

[Spotlight on Students and Young Professionals](#)

[News from around North Carolina](#)

[Meetings of Interest](#)

[Employment Opportunities](#)

[Valuable Links](#)

President's Message

Fall is my favorite season. Outside of work, one can usually find me enjoying a football game with my wife or spending time at my favorite crappie fishing spot. Yet, those aspects of my life will change by the arrival of our first child, a daughter, and I look forward to sharing time with her during all seasons of each year!

As I think about family, I often think about my extended family of fisheries professionals comprised of special folks like all of you. I truly appreciate the fellowship as we share a common bond. I suppose this is a general statement for all specialized groups of professionals, yet it is so applicable to us. For those of you returning from the AFS meeting in Pittsburgh, I'm sure you enjoyed the great opportunities the meeting offered!

More opportunities to meet with fellow fisheries professionals and promote your research will continue. The Florida Chapter is busy preparing for the 2011 Southern Division AFS meeting on January 13-16 at the Grand Hyatt Tampa Bay. Note the following link for the meeting:

<http://www.sdafs.org/meetings/2011/default.htm>. Alternately, you may find more information on the SDAFS meeting and other regional news at <http://www.sdafs.org/blogs/>. I really enjoy the revolving information globe!

Check out all the details in this newsletter for upcoming meetings, especially the 2011 NCAFS chapter meeting in North Charlotte in February! Michael Abney, David Goodfred and Jeff Debardinis are currently planning the meeting and let them know if you are available to assist with meeting planning. Or, if you have an interest in serving on any of the committees, I encourage you to contact any of the committee chairs to inquire where you may lend a hand.

Please consider joining, or renewing your membership with, the AFS parent society. With the highest percentage of members who were also parent society members, we are the defending chapter of the SDAFS membership challenge. Last year, our top ranking afforded us the opportunity to donate our winnings of \$250 to the Emmeline Moore Fund. Let's go for two in a row and complete your membership today!

On behalf of the Executive Committee of NCAFS, I would like to introduce an electronic application form for formal funding requests pursuant to Section 4.0 of the procedures manual. The pdf form with instruction sheet is available in this newsletter and the form may be completed and sent to EXCOM for project consideration.

Please feel free to drop me a line at kevin.dockendorf@ncwildlife.org or call me at 252-335-9898 to discuss any upcoming chapter activities, address topics that require my attention, or provide any new parent advice you may have to offer to a fellow fisheries biologist! ☺



All the best and enjoy the fall!

Kevin J. Dockendorf, President

[NCAFS Funding Request Form](#)
[NCAFS Funding Request Form Application Instructions](#)
[NCAFS 2010 Bylaws](#)
[NCAFS 2010-2011 Governing Board Roster](#)

Secretary-Treasurer's Report

September 2010 Treasury Report

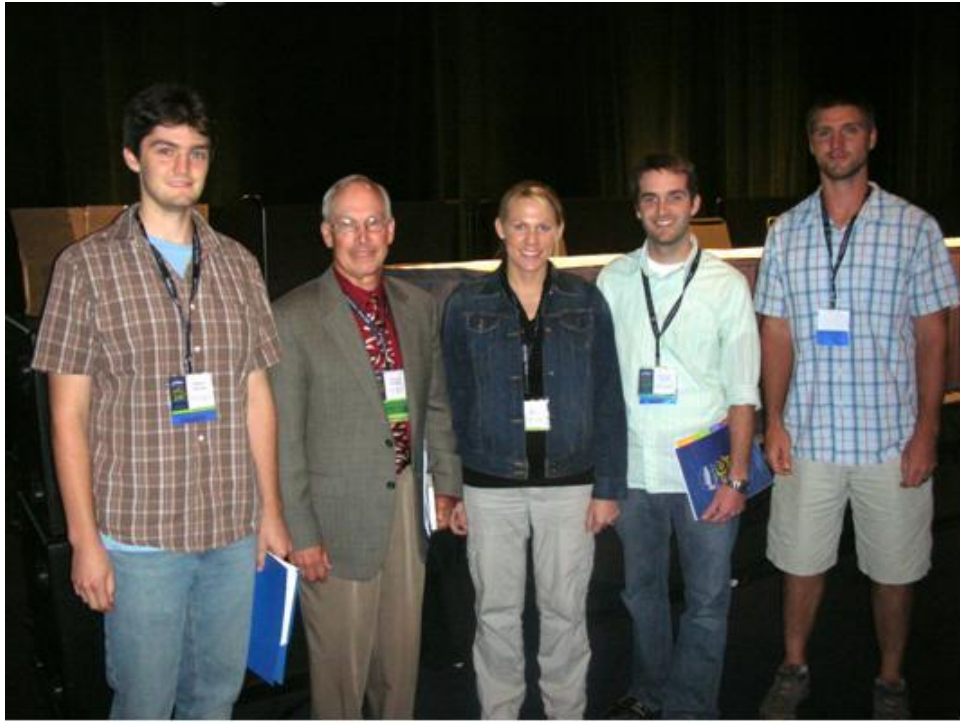
Submitted by Kevin Hining, Secretary-Treasurer

Awards Committee

The N.C. AFS Chapter established a Student Travel Award Program in 2005 for the specific purpose of encouraging professional growth of students and maximal participation of undergraduate and graduate students at the annual meeting of the American Fisheries Society. Monetary support is provided to qualifying students via a travel award of \$200 to \$400 to help defer the cost of meeting travel, registration, and accommodations. The 2010 awards were presented to four students for the annual American Fisheries Society meeting held September 12-16, 2010 in Pittsburgh, Pennsylvania.

The 2010 award winners were all students from N.C. State University. Each student received a cash award of \$400 from the Chapter's Ichthus Fund account, which was established specifically to foster student involvement. The winners were Zach Feiner and

Dana Sackett, advised by Drs. Derek Aday and Jim Rice, and Michael Fisk and Dan Weaver, both advised by Dr. Tom Kwak.



The 2010 N.C. AFS Student Travel Award winners pictured at the meeting in Pittsburgh. Shown from left to right are Dan Weaver, AFS President Wayne Hubert, Dana Sackett, Zach Feiner, and Michael Fisk.

These students represented the Chapter admirably at the Pittsburgh meeting and expressed their sincere gratitude to the Chapter for helping to make their attendance and participation possible.

Submitted by Greg Cope and John Crutchfield

Environmental Concerns Committee

Despite a lack of tropical weather systems this year, the western region of the state has not been without its share of flooding and stream damage. This included a small trout stream in northwestern Yancey County that experienced extreme scour largely where rock eroded from old dredge piles/berms along the banks and subsequently aggraded in the channels (Note: Stream dredging and piling of dredged material on the banks is a traditional practice for maintaining streams in the mountains). As evident in the photograph, banks lacking riparian trees and shrubs experience the brunt of the damage whereas areas with even sparse cover fared considerably better.



2010 flood damage in northwestern Yancey County

The issue of riparian vegetation and working along trout streams, or more specifically the “trout buffer rule”, recently received more attention in court. In 2009, the NC Appeals Court determined that the rule, which under the Sediment and Erosion Control Act requires the maintenance of undisturbed, vegetated buffers between land disturbing activities and trout classified waters, was errantly applied by NCDENR, Division of Land Resources to the Mountain Air golf course development in Yancey County (see December 2009 NCAFS newsletter). The N.C. Supreme Court overturned that ruling this year (see decision at <http://www.aoc.state.nc.us/www/public/sc/opinions/2010/pdf/525A09-1.pdf>). It remains to be seen whether working along mountain trout streams will return to the *status quo* or with regulatory changes.

Shifting from west to east, some major work has begun that should prove beneficial to anadromous fisheries in North Carolina. The U.S. Army Corps of Engineers is now filling the scour pool below Lock and Dam #1 to shore-up the dam and to provide a foundation for an arch-shaped rapids structure to improve fish passage (see <http://www.saw.usace.army.mil/News/News.asp?id=10>). If successful, the structure should reopen several miles of historic spawning habitat in the Cape Fear River for American shad, striped bass, and sturgeons.



Scour hole filling below Cape Fear River Lock and Dam #1

Submitted by Dave McHenry, Environmental Concerns Committee Chair

NCSU Student Subunit Report

The NCSU Student Subunit of NC AFS (aka, Student Fisheries Society, SFS) has come out of the gates running, or should we say swimming, in the new school year. It was great to see many old and new faces at our first monthly meeting in September. We gave an overview of the many opportunities that SFS provides to enhance our fisheries education experience and prepare us for a career in fisheries science. Dr. John Boreman, an adjunct NCSU professor and AFS vice-president, informed us about the parent society and encouraged the SFS membership to get involved at the state and national level. Barbara Doll gave a fascinating talk on the cumulative restoration of Rocky Branch on the NCSU campus. She is a water quality specialist with NC Sea Grant and NCSU and has been at the forefront of this extensive project. SFS has adopted Rocky Branch from Gorman St. to Pullen Rd., with our next clean-up on Saturday, October 16th.

In an effort to minimize the use of disposable cups at our meetings, we designed and ordered new SFS travel mugs. The mug is very sleek and environmentally friendly, and we have already sold a large number since they are a true bargain at only \$5. Not only do these mugs keep our daily coffee warm, but they advertise our pride in SFS! Contact us to purchase one and join all the cool people who already own one.

We'd like to congratulate Michael Fisk, Michael Waine, and Daniel Weaver. This trio successfully defended their Master's degrees over the summer.



*Will Wood helps children handle a corn snake at the NCSU CALS tailgate.
Photo credit: Joshua Raabe*

SFS members have partaken in a few outreach activities in the recent past. First, Kyle Rachels and Julie Harris assisted Dr. Jim Rice with judging 4-H science presentations. The children always amaze us with their hard work and presentation skills, especially at such a young age. Rumor has it Dr. Rice already offered one young student a graduate position! We teamed up with the Leopold Wildlife Club at the annual College of Agriculture and Life Sciences (CALs) tailgate before the first football game. We displayed our tri-folds to show a glimpse of what we do, and spoke with alumni and prospective students. Our booth was quite the attraction this year, in large part due to three corn snakes that people of all ages enjoyed handling. Thanks to Will Wood for bringing those to the event.

NCSU and SFS had a large presence, 16 in total, at the AFS annual meeting held in Pittsburgh, Pennsylvania from September 12-16. Student presentations were given by Elissa Buttermore, Zach Feiner, Sarah Friedl, Michael Fisk, Joshua Raabe, Dan Weaver, and Ben Wallace. Dana Sackett kept very busy as a volunteer. We were quite honored and excited when our very own Ben Wallace (advised by Dr. Tom Kwak)

received the Best Student Paper award from AFS for his presentation titled *Production dynamics for management of trout in low-productivity streams*. Additional honors included Zach Feiner, Michael Fisk, Dana Sackett, and Dan Weaver receiving travel awards from NC AFS. Elissa Buttermore and Joshua Raabe received the Skinner Award from AFS for travel to the meeting. We sincerely appreciate the continued support provided by both NC AFS and AFS to attend meetings. These meetings are invaluable as we hone presentation skills, receive feedback on our research, learn from other presentations, and build our professional networks.



*The NCSU and SFS crew at the 2010 AFS annual meeting in Pittsburgh, PA.
Photo credit: Dr. Tom Kwak*



Post-doc Julie Harris crosses the finish line in first place among all women (left), while Dr. Joe Hightower placed second in his age group at the 2010 AFS Spawning Run (middle on right).

Along with presentations, there was a lot of other activity at the AFS meeting. Dr. Tom Kwak had the honor of escorting Dr. Wayne Hubert as he became the new AFS president. Post-doc Julie Harris took first place among all women, regardless of age, in the annual Spawning Run. Dr. Joe Hightower placed second in his age group at the race. Is it mere coincidence that they study anadromous spawning runs? We had a great time reconnecting and meeting new people at the North Carolina and other socials. The Grand Social was held at the Pittsburgh Zoo and Aquarium, and was a real treat.

All in all, it was an enjoyable and worthwhile meeting. Congratulations for all of the different honors and accomplishments, and thank you again to all who support us.

This semester we started a fisheries discussion group that is open to all, but is geared towards students developing critical thinking and communication skills. We are meeting twice a month to discuss journal articles. It also will be an opportunity for students to receive feedback on research ideas and practice presentations. We think it will be a solid addition to our already strong fisheries education at NCSU.

Our next meeting will be on Wednesday, October 13th, starting at 7 pm in David Clark Labs room 102. There will be food and drinks (from SFS travel mugs, of course) beforehand. In addition to outlining recent and upcoming activities, we will hear from Mike Waine regarding hydroacoustic work he has been conducting to assess potential risks of proposed off-shore wind farms. At our November meeting, Dr. Damian Shea will provide us with first-hand knowledge about the Gulf of Mexico oil spill. Both should be outstanding presentations that lead to good discussion, so plan on attending. As always, all are welcome.

To keep up to date with SFS, please visit our website <http://clubs.ncsu.edu/sfs/> and also join our list serve. In addition, do not hesitate to contact Josh (jkraabe@ncsu.edu) or Mike (mwwaine@ncsu.edu) if you would like more information about SFS and our activities or with any questions, ideas or comments. We are looking forward to a great semester!

Submitted by Josh Raabe and Mike Waine, Student Subunit Co-Presidents

North Carolina Division of Water Quality News

Survey for the State Threatened Sharphead Darter and State Endangered Stonecat in Support of the Cane River Outstanding Resource Water Reclassification (Yancey County)

The Cane River, a tributary to the Nolichucky River in Yancey County, was nominated in 2008 as Outstanding Resource Waters (ORW) by the NC Division of Water Quality. However, before the recommendation could be acted upon, a prolonged sewage spill in the spring and summer of 2008 from the Town of Burnsville's wastewater treatment plant resulted in a widespread fish and mussel kill downstream and a decline in benthic macroinvertebrate ratings at two downstream sites from Excellent to Fair and from Excellent to Good-Fair. Since then, it was decided that a survey of two state listed fish species, Sharphead Darter, State Threatened and Stonecat, State Endangered, found in the lower Cane River before the spill should be conducted before proceeding further with the ORW reclassification. The Sharphead Darter and the extremely rare Stonecat are confined to the lower reaches of the Cane River near Ramseytown (S. Fraley, pers. com.; Rohde and Arndt 1994; Rohde et al. 1998). Additional listed species (as Special Concern or Significantly Rare) documented from or suspected to reside in the middle and lower Cane River were also to be noted if encountered. This survey, from Ramseytown to just upstream from the river's confluence with the Nolichucky River, was conducted on May 11, 2010 with assistance from the NC Wildlife Resources Commission, the NC Natural Heritage Program, and the Division's Asheville Regional Office. At each of four sites a backpack electrofisher and seine were used to sample wadeable and favored habitats of each species such as riffles, runs, chutes, and

shoreline areas. Total sampling efforts for that day resulted in 11 seine hauls and shocking 65 riffle reaches, 35 run reaches, and along the shorelines.



Twenty seven species were collected, including six listed species and 10 intolerant species. The six listed species were: 1) Ohio Lamprey, proposed Special Concern, 19 adult specimens; 2) Blotched Chub, Significantly Rare, 6 adult specimens; 3) Highland Shiner, Significantly Rare, 55 juvenile and adult specimens; 4) Mimic Shiner, proposed Special Concern, 3 adult specimens; 5) Sharphead Darter, State Threatened, 118 juvenile and adult specimens; and 6) Olive Darter, Special Concern, 1 adult specimen. Listed species not found were: 1) Stonecat, an increasingly extremely rare fish in the Cane River; last collected in 2007; its absence was not unexpected; 2) Striped Shiner, Special Concern, more commonly found in tributaries to the Cane River such as Price, Bald, and Possumtrot creeks; its absence from the lower mainstem of the river was not unexpected; and 3) River Carpsucker, Special Concern, inhabiting deep, nonwadeable pools that are accessible only by electrofishing boat; its absence was not unexpected. The data from our study suggested that the fish community in the lower Cane River has recovered from any adverse impacts that may have occurred resulting from the 2008 sewage spill. A more extensive benthic macroinvertebrate study of the entire Cane River watershed will be conducted this Fall. If Excellent bioclassifications are met, then portions of or all of the pertinent segments of the Cane River and its tributaries from its headwaters to the Nolichucky River may qualify for reclassification to ORW. The presence of viable populations of listed fish species is one ORW criteria that has been met for the lower Cane River.

References

Rohde, F. C. and R. G. Arndt. 1994. Distribution and abundance of the Sharphead Darter, *Etheostoma acuticeps* (Percidae), in North Carolina. Association of Southeastern Biologists Bulletin. 41:153-159.

Rohde, F. C., Moser, M. L., and R. G. Arndt. 1998. Distribution and status of selected fishes in North Carolina, with a new state record. *Brimleyana*. 25:43-68.

Spotlight on Students and Young Professionals

Ben Ricks, North Carolina Wildlife Resources Commission Biologist – Roanoke River striped bass should now be on the lookout for an old familiar foe. Instead of yielding a rod and reel, this time Ben Ricks will be manning a dip net on an electrofishing boat while he serves in his new role as District 1 Assistant Fisheries Biologist for the NC Wildlife Resources Commission. Ben is a native of Roanoke Rapids, and grew up fishing the Roanoke River for striped bass, hickory shad and any other fish he could entice to bite. Ben's new job duties with the Commission will include surveying striped bass, hickory shad and American shad on the Roanoke River as well as managing resident sport fish in the coastal rivers around Albemarle Sound.



Ben Ricks, District 1 Assistant Fisheries Biologist

Upon graduating from Roanoke Rapids High School in 1998, Ben attended NC State University and earned his B.S. degree in Science Education with minors in Coaching Education and Biological Sciences in 2003. Sometime during his college experience, Ben realized a career in fisheries science would be more rewarding than his previous plan of teaching high school science and coaching sports. He gained experience in the fisheries field while at NC State by completing an undergraduate research project that evaluated a fish ladder on a blackwater creek with Dr. Joe Hightower and by working with Wayne Starnes in the Ichthyology Lab at the NC Museum of Natural Sciences. After graduating from NC State, Ben enrolled in the graduate program at Auburn University and earned his M.S. degree in Fisheries Management in 2003. His thesis research focused on effects of tournament fishing on dispersal, mortality and population characteristics of black bass in Lake Martin, Alabama.

Ben comes to the Commission after serving four years with the Alabama Division of Wildlife and Freshwater Fisheries where he was the District V Fisheries Biologist and was responsible for managing freshwater game fish populations in southern Alabama rivers and reservoirs. In addition to traditional fisheries management responsibilities, Ben also served as Alabama's lead biologist for invasive island apple snails, which were recently discovered in the Mobile area. Ben worked with public and private partners to develop and employ a control program for the snails. After conducting numerous television and newspaper interviews, Ben became quite the apple snail celebrity in the Mobile.

In his spare time, Ben enjoys fishing, hunting and attending NC State football games. He lives with his black lab, Dudley, in Elizabeth City. Welcome back, Ben, the stripers are waiting!

News from Around North Carolina

NC AFS 2011 Annual Meeting Announcement, Submitted by Mike Abney, President Elect

The 2011 NC Chapter of the American Fisheries Society annual meeting will be held at the Drury Inn & Suites-Northlake on the north side of Charlotte beginning with a Monday (February 21) evening welcoming social, and lasting to Wednesday, February 23. Tuesday will begin with a continuing education workshop in the morning followed by a technical session after lunch and an evening social with the student raffle. We will continue presentations Wednesday morning and finish up with the annual business meeting.

Lodging Reservations – Room rates are \$79.99 a night plus tax, single or double occupancy. Reservation information will be provided in the fall and winter newsletters. For details on the hotel go to:
<https://wwwc.druryhotels.com/PropertyOverview.aspx?Property=0138> and follow links for the Charlotte - Northlake location.

For our specific group website and reservations go to:
<http://www.druryhotels.com/Reservations.aspx?groupno=2090126>

Note that our departure date is listed as the 24th due to “un fixable” scheduling software. Our meeting will actually finish up around lunch on the 23rd.

Second Call for Papers – Students and professionals are highly encouraged to contribute oral presentations for the annual meeting. Topics may include completed projects, works in progress, and case histories. All presentations will be scheduled for 20 minutes, including a 5-minute period for questions. Please send all abstracts electronically to Jeff DeBerardinis at jeff.deberardinis@ncdenr.gov by January 21, 2011. Abstracts should include presentation title, author names, and addresses (including phone and e-mail if available). Please limit the text to no more than 250 words. It is assumed that the first author listed will be the presenter unless otherwise noted. If you are a student presenter, please make note of that on the abstract. Abstracts will be listed in the meeting program in the order that they are received. For additional information feel free to contact Jeff by e-mail or by telephone (919-743-8473). Stay tuned to the annual meeting link on the Chapter website for updates!

***Recent Awards for NCAFS Chapter Members,
Submitted by Christian Waters, NCWRC***

Fred Harris honored at American Fisheries Society Meeting in Pittsburgh

Fred Harris received the AFS's 2010 Meritorious Service Award. First presented in 1986, this award is presented annually to an AFS member for unswerving loyalty, dedication, and meritorious service to the AFS over a long period of time, and for exceptional commitment to the programs, ideals, objectives, and long-term goals of the AFS. Fred was honored for his involvement and leadership in AFS that has spanned nearly four, highly productive decades in fisheries in capacities ranging from a management biologist to a fisheries research coordinator to an agency director. He also provided substantial involvement and leadership in nearly every major issue and/or success story that has come before the AFS in recent time.

Fred was also inducted into the Fisheries Management Hall of Excellence. The AFS Fisheries Management Section established the Hall of Excellence in 1992 to recognize fisheries management professionals who have made outstanding contributions to the advancement of fisheries management, to provide a site where the contributions of those honored can be displayed and viewed by the public and other fisheries professionals, to emphasize the accomplishment, dedication, and principles of those honored, and to describe the fisheries management profession. The Hall is located at the AK-SAR-BEN Aquarium in Gretna, Nebraska where each inductee has a plaque on display with their likeness and highlights of their careers and contributions to the fisheries management profession.

Doug Besler – Trout Unlimited 2010 Professional Conservationist of the Year

Doug Besler received the 2010 Professional Conservationist of the Year award from Trout Unlimited at its annual business meeting held in Waterville Valley, New Hampshire on September 17. He was recognized for his dedication to science-based fisheries research and management, professional service and collaborative conservation. Trout Unlimited acknowledged Doug's efforts to protect native brook trout genetics, specifically the Southern Appalachian strain, including the identification and genetic typing of all known brook trout populations in North Carolina. Doug has gained the respect of Trout Unlimited members in North Carolina through his willingness to participate at council meetings and to speak at chapter meetings.

Kevin Dockendorf – NC Wildlife Resources Commission Division of Inland Fisheries' 2009 Outstanding Biologist of the Year

Kevin Dockendorf was recently selected as the NC Wildlife Resources Commission Division of Inland Fisheries' 2009 Outstanding Biologist of the Year based on his significant contributions to the Division's fisheries program as the District 1 Fishery Biologist. Kevin developed very specialized microscopy and field sampling techniques that allow the Commission to effectively evaluate its Roanoke River American shad restoration project. He also led the coastal region in applying and teaching GIS technology, and he has worked tirelessly coordinating with NC Division of Marine Fisheries in improving the accuracy of ageing American shad. In addition, Kevin summarized data from 3,987 NC Angler Recognition Program (NCARP) certificates since the program's inception in 1997 and worked to develop five new NCARP

certificates and a new NCARP application form. Kevin helped create a partnership with the Eagle Claw Corporation to fund a Roanoke River striped bass outreach project for 2009. Eagle Claw donated 5,000 barbless circle hooks and paid for 5,000 striped bass conservation cards which were distributed to anglers by creel clerks, enforcement officers, and Commission and NC Division of Marine Fisheries biologists.

Chris Goudreau – NC Wildlife Federation Water Conservationist of the Year

Chris Goudreau was presented the Water Conservationist of the Year award at the NC Wildlife Federation’s Annual Governor’s Awards Banquet held September 18 in Raleigh. The award is part of the 2009 Governor’s Conservation Achievement Awards program sponsored by NC Wildlife Federation and National Wildlife Federation to highlight those individuals and organizations that have exemplified conservation activism across the state. Chris has served as the NC Wildlife Resources Commission’s Hydropower/Special Projects Coordinator since 1998. He was a critical player in the five-year effort to renegotiate the hydropower licensing agreements along the Catawba River. His leadership in stakeholder collaboration resulted in major improvements to wildlife habitat in the region.

John E. Skinner Travel Award Recipients, Submitted by Joe Hightower, NCSU

Two NCSU students received Skinner travel awards at the 2010 American Fisheries Society meeting in Pittsburgh. The John E. Skinner Memorial Fund was established to provide monetary travel awards for deserving graduate students or exceptional

undergraduate students to attend the AFS Annual Meeting. NCSU doctoral student Josh Raabe received a Skinner award and presented a talk entitled “*Evaluating benefits to American shad of habitat restored by dam removals*”. MS student Ellisa Buttermore received a Skinner award and presented a talk entitled “*Recreational and subsistence stream fisheries of Puerto Rico: Are there contaminant concerns?*”. The students were recognized in the Education Section meeting and in the AFS Business Meeting.



Skinner winners Josh Raabe and Elissa Buttermore, with AFS President Wayne Hubert, after being recognized at the AFS Business meeting. Photo credit: Dr. Tom Kwak.

Chris Horton becomes the Regional Director of the Congressional Sportsmen Foundation, Submitted by Kevin Dockendorf, NCWRC

Chris Horton is joining the Congressional Sportsmen's Foundation as a Regional Director for the National Assembly of Sportsmen's Caucuses starting in September. Chris' previous position was the Conservation Director at Bass Anglers Sportsmen's Society (B.A.S.S.) and prior to that position was a research biologist with the Arkansas Game and Fish Commission.

News release announcing his new position:

<http://fishpaa.com/2010/07/horton-to-join-congressional-sportsmens-foundation/>

Website for the Congressional Sportsmen Foundation:

<http://www.sportsmenslink.org/About-Us>

Kent Nelson Retires from NC Wildlife Resources Commission, Submitted by Christian Waters, NCWRC



Long-time fisheries scientist Kent Nelson retired from the North Carolina Wildlife Resources Commission on August 1. Throughout Kent's career he demonstrated his dedication to science-based fisheries management while playing a pivotal role in the advancement of our understanding of freshwater and anadromous fishery resource issues in North Carolina. Kent's leadership during final hydropower relicensing negotiations was instrumental in securing critical funding for major fish conservation projects in the Roanoke River watershed. The fruits of that labor continue to benefit the Roanoke River striped bass fishery and North Carolina anglers.

Kent was the Division's Fisheries Program Manager when he retired and he held key positions in the Commission throughout his career, including: Coastal Region

Supervisor, Coastal Research Coordinator, District Fisheries Biologist and Habitat Conservation Biologist. Kent patiently mentored and positively influenced many staff biologists and managers while enhancing the quality and delivery of the Commission's fisheries programs.

Beyond his distinguished 32-year career with the Commission, Kent volunteered his time, talents and energy to further the goals and initiatives of the American Fisheries Society (AFS). Kent has been an AFS member since 1975 and has served in several capacities with AFS including: North Carolina AFS Chapter President (2007-2008), Southern Division AFS (SDAFS) Warmwater Streams Committee, Chair of the SDAFS Striped Bass Committee and General Chair of the 2003 SDAFS Spring Meeting.

Kent's colorful humor and common-sense approach to dealing with difficult issues are enviable character traits that we will truly miss. If you wish to contact Kent directly to offer your congratulations or just want to reminisce about old times, his home contact information is:

Kent Nelson
2353 Kay Road
Greenville, NC 27858
252-752-5425
nelsonk3@suddenlink.net

A retirement celebration for Kent is planned for **Friday, October 29, 2010**, at Lake Wheeler Park near Raleigh, North Carolina. Please join us in thanking Kent for his long and valued service to the citizens of North Carolina. Please contact Christian Waters at (919) 707-0223 or Christian.waters@ncwildlife.org for additional details about this retirement celebration.

***North Carolina's Imperiled Fish Fauna,
Submitted by Bryn H. Tracy on behalf of the NCWRC's Scientific Council of Fishes***

As mentioned in the Chapter's June 2010 newsletter, 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). 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 if changes in imperilment for any species are warranted. The Council is comprised of Fred Harris, Chair, Dave Coughlan, Steve Fraley, Ryan Heise, Gabriela Hogue, Tom Kwak, Wilson Laney, Sarah McRae, Gerald Pottern, Angie Rodgers, Fritz Rohde, Wayne Starnes, Bryn Tracy, Scott Van Horn, and Gene Vaughan. To communicate our findings with the NC AFS membership, this is the first of many articles on the species that the Council believes have become more imperiled since the last listing in 2006.

Ohio Lamprey, *Ichthyomyzon bdellium* (Jordan)
Current Status: Not Listed, Proposed Status: Special Concern



Description: Lampreys are eel shaped fishes lacking scales, jaws, and paired fins. They have a funnel-shaped mouth, seven gill apertures on each side of the body, a single median nostril, and a cartilaginous skeleton. The Ohio Lamprey has a continuous or shallowly notched dorsal fin. Adults have 53-62 trunk myomeres, usually 56-58; inner lateral teeth bicuspid with the transverse lingual lamina strongly bilobed in anterodorsal view; and the color is uniformly dark gray to olivaceous above, the ventral surface pale, often flushed with yellow. Adults range from approximately 125 mm to 300 mm, total length.

Range: As the common name implies, the Ohio Lamprey is found throughout the Ohio River system, including the Allegheny, Wabash, and upper Tennessee River drainages (Rohde and Lanteigne-Courchene 1980). To the west in Tennessee, the species is found in the Cumberland and Tennessee River drainages and is fairly common in rivers of east Tennessee (Etnier and Starnes 1993). To the north in Virginia, the species is found in the Holston and the Clinch-Powell River systems (Jenkins and Burkhead 1993). Listed as probably occurring in North Carolina (Menhinick *et al.* 1974), the Ohio Lamprey was unknown from North Carolina until May 1994 when four adults, 1 male and 3 females, were collected from the mouth of Spring Creek near the Town of Hot Springs in Madison County (Rohde *et al.* 1998; North Carolina State Museum [NCSM] Catalogue No. 26291). A year later in late April 1995, 6 specimens were collected from this same locality on Spring Creek and an additional 2 specimens were collected one river kilometer upstream on the creek (Rohde *et al.* 1998). Since then, the species has been collected in 1997 from Pigeonroost Creek, a tributary to the lower North Toe River, in Mitchell County (NCSM 44183), in 2006-2008 from the French Broad River at and downstream of the Town of Hot Springs (NCSM 45785, 46145, and 50198), in 2007 and 2009 from Spring Creek at the Town of Hot Springs (NCSM 52382, 55212, and 55214), in 2007 from Big Laurel Creek in Madison County (NCSM 52383), and in 2007 from the South Toe River in Yancey County (NCSM 52478).

Ammocoetes have been collected recently from several localities in the Nolichucky River system in NC that may be Ohio Lamprey (S. Fraley, pers. com.). Anecdotal evidence and photographs from anglers, including one adult specimen collected from the Nolichucky River at Poplar (Mitchell County), suggest that the species has become fairly common throughout the reach from the South Toe River to the Tennessee state line (Jacob Rash, NCWRC, pers. com.). Many specimens of large sucker species. (i.e., *Moxostoma* and *Ictiobus*), and other large fishes collected in 2007 and 2008 at two localities near Hot Springs and one locality just below Redmon Dam (Madison County) on the lower French Broad River had wounds and scars consistent with lamprey predation (S. Fraley, pers. com.). Anecdotal reports from anglers also indicate that Ohio Lamprey may be common to abundant in the French Broad River from Redmon Dam to

the Tennessee state line. Adult specimens were collected in the lower Cane River in Yancey County in May 2010.

Habitat: Ammocoetes prefer slow areas of creeks and small rivers with soft substrates and high detritus content; adults occupy the main channels of medium- to large-sized rivers and the adults may ascend tributaries to spawn (Rohde and Lanteigne-Courchene 1980; Jenkins and Burkhead 1993).

Life History and Ecology: A parasitic species as an adult; hosts include Paddlefish, Common Carp, River Chub, Smallmouth Buffalo, Black Buffalo, redhorse suckers, Northern Hog Sucker, Channel Catfish, Blue Catfish, Stonecat, Rainbow Trout, Brown Trout, Smallmouth Bass, Largemouth Bass, and Wounded Darter (Jenkins and Burkhead 1993; S. Fraley, pers. com.). The ammocoetes are filter feeders upon detritus, phytoplankton, and microzooplankton. The lifespan is approximately four years as an ammocoete and two years as an adult with spawning occurring during the second spring and early summer of adult life (Rohde and Lanteigne-Courchene 1980).

Rationale for Designation and Recommendations: The Ohio Lamprey is another example of a peripheral species whose distribution in North Carolina is limited, but is more abundant in neighboring states. In North Carolina, the Ohio Lamprey is known from vouchered specimens primarily from the French Broad River and Spring Creek near the Town of Hot Springs in Madison County and from two widely separated locations in the Nolichucky River system. The Spring Creek watershed was recently afforded supplemental water quality classification by the Division of Water Quality as Outstanding Resource Waters.

The Ohio Lamprey's occurrence in North Carolina has only been documented during the past 15 years. Whether it has recently colonized the lower French Broad and the Nolichucky River systems due to improving water quality, larval habitat suitability, or adult host availability is unknown. The species is present and at least locally common to abundant in the French Broad River from the state line upstream to Redmon Dam and in the Nolichucky River system upstream at least to the South Toe River. A State Special Concern status is recommended. Field survey efforts should concentrate on appropriate habitat in Spring Creek, the lower French Broad River, and in the Nolichucky River system to ascertain the present status of this species.

Literature Cited

- Jenkins, R. E. and N. M. Burkhead. 1993. Freshwater fishes of Virginia. American Fisheries Society, Bethesda, MD. 1080 pp.
- Etnier, D. A. and W. C. Starnes. The fishes of Tennessee. The University of Tennessee Press. Knoxville, TN. 681 pp.
- Menhinick, E. F., Burton, T. M., and J. R. Bailey. 1974. An annotated checklist of the freshwater fishes of North Carolina. Journal of the Elisha Mitchell Scientific Society. 90:24-50.
- Rohde, F. C. and J. Lanteigne-Courchene. 1980. *Ichthyomyzon bdellium* (Jordan), Ohio Lamprey. Page 15. 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.
- Rohde, F. C., Moser, M. L., and R. G. Arndt. 1998. Distribution and status of selected fishes in North Carolina with a new state record. *Brimleyana* 25: 43-68.

Meetings of Interest

64th Annual Conference of the Southeastern Association of Fish and Wildlife Agencies (SEAFWA) – Oct. 10-14, 2010, Biloxi, Mississippi.
<http://www.seafwa2010.org/>.

30th International Meeting of the North American Lake Management Society– November 3-5, 2010, Oklahoma City, OK. <http://www.nalms.org/nalmsnew/>

2010 Southeastern Fishes Council – November 11-12, 2010, Athens, GA.
<http://ichthyology.usm.edu/sfc/meetings/2010meeting.php>

2010 NCSU Student Fisheries Society– First Wednesday of each month, Raleigh, NC.
<http://clubs.ncsu.edu/sfs/>

2011 19th Annual Southern Division AFS Spring Meeting – January 13-16, 2011, Tampa, FL. <http://www.sdafs.org/meetings/2011/default.htm>

2011 American Society of Limnology and Oceanography (ASLO) Aquatic Sciences Meeting– February 13-18, 2011, San Juan, Puerto Rico USA

2011 North Carolina AFS Chapter Meeting – February 21-23, 2011, Charlotte, NC.

2011 Tidewater AFS Chapter Meeting – March 10-12, 2011 Virginia Institute of Marine Sciences.
http://www.vims.edu/research/departments/fisheries/tidewater_afs_2011/index.php

2011 American Society of Ichthyologists and Herpetologists (ASIH) – July 6-11, 2011, Minneapolis, MN. <http://www.asih.org/annualmeetings>

141st Annual Meeting of the American Fisheries Society– September 4-8, 2011, Seattle, WA.
<http://www.wabc-afs.org/team-2011/>

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

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

Employment Opportunities

American Fisheries Society Jobs Bulletin <http://www.fisheries.org/afs/jobpage.php>

American Institute of Biological Sciences <http://www.aibs.org/classifieds/index.html>

North Carolina State Job Vacancies <http://www.osp.state.nc.us/jobs/>

Texas A&M job board: <http://wfsc.tamu.edu/jobboard/>

University of Michigan with multiple job board links:
<http://www.snre.umich.edu/node/6989>

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 <http://lists.fisheries.org/listinfo.cgi/ncafs-fisheries.org> . You can also follow current discussions on the SDAFS blog at <http://www.sdafs.org/blogs/>.