



INSIDE THIS ISSUE:

[President's Message](#)

[Minutes of April 2001 EXCOM Meeting](#)
(Word Doc)

[2002 Annual NCAFS Meeting](#)

[NCAFS Bylaws](#)

[NCAFS Poster for the 2002 SDFS Mid-Year Meeting](#)

[NCSU Student Subunit Report](#)

[Environmental Concerns Committee](#)

[Return to NC Chapter Home Page](#)

[Education Committee](#)

[News from around North Carolina](#)

[New NCAFS Members](#)

[Meetings of Interest](#)

[Employment Opportunities](#)

[Valuable Links - Courtesy of AFS](#)

We would appreciate your comments on this electronic version of the NC Chapter Newsletter.

Please send all responses to [Joe Hightower \(jhightower@ncsu.edu\)](mailto:jhightower@ncsu.edu)

President's Message

During the past two months, I've been doing some thinking (yes, I am occasionally capable of such a thing) about mentoring and outreach, two of the topics identified in my annual plan of work for the Chapter. One perfect example that covers both of these topics involved the Chapter's assistance with sponsoring a Russian biologist this spring. Although several chapter members were involved with this cooperative effort with the NC Chapter of The Wildlife Society, immediate Past President John Crutchfield assumed the principal role representing the NC Chapter of the American Fisheries Society. This project was a resounding success and I encourage the Chapter to continue seeking ways to remain involved with this program.

But, as I thought about what the Chapter could do, or for that matter, what I could do personally to serve as a mentor for youths, I kept coming back to the Youth Partner's Program at Durham's Museum of Life and Science. Remember the kids that did an excellent job of presenting at last year's annual meeting?

Well, Chapter member Chad Hallyburton serves as the Youth Programs Manger at the Museum of Life and Science and he mentors about 150 volunteers aged 12-18 years. What a concept! What better way is there to spark interest in fisheries biology than to take a bunch of motivated middle and high students and funnel all their energy on specific fisheries issues? How can we at AFS get involved? I don't think we need to reinvent the wheel here. Maybe we should look at Chad's program to see how it works or maybe we should simply give him a call and see what we can do to help? I can't think of anything more rewarding than passing on the skills that one has developed over the course of a career and watching someone take those tools and use them to make our environment just a little bit better. Contact Chad Hallyburton if you desire more information about the Youth Partners Program or if you want to see how you can help. He can be reached by phone at (919) 220-5429 ext. 353 or email him at chadh@ncmls.org.

Another mentoring opportunity is through an exciting new initiative developed by the AFS--the Hutton Junior Fisheries Biology Program. This new and innovative educational program is designed to develop minority high school student interest in the fisheries profession. Although the program focuses on minorities, non-minority students may also participate. The Hutton Junior Fisheries Biology Program provides students with a professional mentor and a summer-long, hands-on experience in fisheries science in either a marine or freshwater setting. A scholarship is provided to students accepted into the program. If you would like your name added to the mailing list for The Hutton Program for summer 2002, please send your name and address to The Hutton Program, c/o Jan Lubeck, American Fisheries Society, 5410 Grosvenor Lane, Suite 110, Bethesda, MD 20814-2199.

Regarding outreach and expanding our professional scope to include resource disciplines outside the fisheries field, I recently met with the North Carolina Wildlife Federation to discuss the possibility of sponsoring a "Habitat Summit". This summit would bring all the resource agencies, private industry and environmental groups together to discuss habitat issues. As we discussed the mechanics of such an endeavor, I realized that this was an excellent opportunity for the chapter to work with the Wildlife Federation, The Wildlife Society and all the other environmental organizations in the state. Over the next few months, think about what role our Chapter should have to make such an event successful.

If you have a few moments this summer, reflect on these two topics and identify ways that the Chapter can be more effective in its mentoring and outreach roles. As always, please don't hesitate to contact me by phone at (919) 733-3633 x 280 or send me an email message to curryrl@mail.wildlife.state.nc.us if you have ideas or issues you want to discuss.

*Have a fun and safe summer.
Bob Curry*

2002 Annual NCAFS Meeting

The 2002 annual meeting of North Carolina Chapter of the American Fisheries Society will be held on February 5 and 6 at Duke Power's McGuire Office Complex in Huntersville, North Carolina. The program will include oral presentations on any fishery-related topic. Students are

encouraged to submit presentations. Presentations may include completed projects or works in progress. Presenters should plan for a 20-minute program that includes a question/answer period. There will be awards for "Best Paper" and "Best Student Paper". Submission deadline is January 4, 2002. In addition, it is likely that continuing education programs will be offered before and after the meeting.

Abstracts for presentations should be submitted electronically to Shari Bryant at bryants5@earthlink.net or on a 3.5" diskette in either Microsoft Word or WordPerfect format. Presenters are requested to provide their name, affiliation, telephone number, e-mail address and a brief biographical sketch for a 20-30 second introduction. Send submissions to Shari Bryant, NC Chapter AFS, 2002 Program Chair, P.O. Box 129, Sedalia, NC 27342-0129. Phone (336) 449-7625.

We expect to have a meeting registration fee not to exceed \$50. We are currently working on reserving a block of rooms at a local hotel. Look for further meeting details including registration information in early September on the NC Chapter web site.

NCAFS Bylaws

The Bylaws changes were approved by the AFS Governing Board during its mid-year meeting in Bethesda, Maryland on March 24, 2001. A final copy was mailed to AFS for their files and a copy was sent to Joe Hightower for posting on the web site.

NCAFS Poster for the 2002 SDFS Mid-Year Meeting

A poster outlining the history of the North Carolina Chapter is being developed. The poster will be displayed at the 2002 Southern Division AFS mid-year meeting in Little Rock, Arkansas on February 20-24, 2002. The theme of the poster will be "From the Mountains to the Coast" and will attempt to display the diversity of habitats and fish species found in North Carolina. The draft of the poster includes a background graphic that resembles a stream meandering through the landscape. For each year of the Chapter's existence various species of fish will be used as bullets to highlight important activities. Fish species will include those found in mountain, piedmont and coastal habitats. A brief overview the Chapter's history and list of past presidents will be included as well as photos of mountain, piedmont and coastal habitats. We hope to have the poster completed by the Chapter's annual meeting on February 5-6, 2002 at the Duke Power's McGuire Office Complex in Huntersville, North Carolina. *Submitted by Shari Bryant*

[Back to top](#)

NCSU Student Subunit Report

The student subunit has been participating in local fisheries issues this spring by sending volunteers to sample the fish population of Yates Mill Pond near NCSU campus in Raleigh. Yates Mill Pond was drained after Hurricane Fran destroyed the dam in 1996 and has recently been refilled and established as a County Park. On April 21, 2001 student and faculty volunteers spent the day sampling fish from the pond in order to collect information as the pond is repopulated naturally. We hope to repeat this effort in the fall and every year after to generate more data that can be used to manage the Pond's fish population more effectively.

In addition, the student subunit awarded its annual undergraduate summer fellowship this year to Sara Powell. Sara is a senior in the Fisheries and Wildlife program at NCSU and she plans on using the \$150 award to attend the F&W department's summer camp program. Congratulations to Sara on a job well done.



We would like to recognize the efforts of Brian Burke in updating and reorganizing the Student Subunit web page. Brian has definitely demonstrated his web skill and has produced a fantastic website for our group. The Subunit's web page is always being updated with new information and images of the recent events and a tour of fisheries research in North Carolina currently being conducted by faculty and students at NC State. The web page can be linked from the Chapter home page or directly at http://www.ncsu.edu/stud_orgs/sfs/.

If you have any questions or comments for the student Subunit, please contact the current president, Rich Fulford. (Email: rfulfor@unity.ncsu.edu)

Environmental Concerns Committee

Committee members developed a mission statement that was submitted to EXCOM and approved.

The mission of the North Carolina Chapter of the American Fisheries Society, Environmental Concerns Committee is to promote the conservation and responsible management of aquatic species and their habitat, to identify actions that may harm or benefit an aquatic resource, to consider an advocacy position when deemed necessary, and to provide a forum for the exchange of ideas, information, and concerns through committee meetings, the NCAFS web page, and electronic, telephone, and paper correspondence among members.

The environmental concerns committee met on 14 May 2001. We compiled the issues that have been suggested. Three issues were selected from the list based on priority and timeliness of the issue. The other issues will remain as a running list for future consideration. We have set a time line for providing a draft of a policy statement to the EXCOM. The goal is to have the draft for the first and possibly the second "issue" to the EXCOM by the next meeting (9/7/01).

Additionally, we will examine the possibility of collaborating with other societies where ever possible, such as the Wildlife Society, Freshwater Mollusk Society, Tidewater Chapter, and

Coastal Federation. Committee member Chris Taylor has agreed to design and maintain a website for the committee, linked through the NCAFS website.

Our goal is to address all three issues, however, time constraints and busy schedules may alter this goal in the future. The three issues that we selected in order of priority are:

1. In-stream sand/gravel mining
2. Beach renourishment
3. Sedimentation

Please contact Danielle if you would like to get involved penderdr@mail.wildlife.state.nc.us.

Submitted by Danielle Pender, Environmental Concerns Committee Chair

Education Committee

I am still working on continuing education courses for the 2002 Chapter Meeting. Kim Sparks of the Research Triangle Institute has agreed to lead a short course on GIS uses in fisheries. I will be working with Kim in the following months to determine specific course topics and objectives. Kim and I have tentatively agreed that the course should be hands-on and allow for actual participation in computer based exercises. I have not yet secured a lecturer for the statistics short course, but will be doing so in the coming weeks. I will also be working with Shari Bryant to put the Chapter history in poster form over the next few months.

If you have other ideas for courses, please contact me at E-mail: dorseylg@vnet.net *Submitted by Lawrence Dorsey, Education Committee Chair*

[Back to top](#)

News from around North Carolina

AFS News from Rich Noble and Tom Kwak -



Jeremy McCargo (left), former undergraduate vice-president of the NC State AFS subunit, was elected into Phi Beta Kappa this spring. In addition to his academic accomplishments, Jeremy worked in the NC State fish age/growth lab, served as a volunteer teaching assistant, and assisted with the general activities of the NC Coop Fish and Wildlife Unit as fisheries tech. Jeremy graduated with highest honors in May, and is off to work on his M.S. at the GA Coop Fish and Wildlife Unit at University of Georgia. Josh Arnott (right) successfully completed undergraduate research to compare efficiency of two non-lethal, stomach-content extracting techniques for large



catfish. He conducted field work on the Pee Dee River, associated with the cooperative effort to survey for robust redhorse, then later completed lab analyses and report preparation on campus. Josh graduated in May and is now working as a full-time research assistant with NC State M.S. student Rob Aguilar on his red drum research on the coast. *Congratulations to Jeremy, Josh, and all the recent graduates for their present and future successes!*



Bob Barwick, NC State M.S. Student in Fisheries and Wildlife, was awarded the Nat Greene Scholarship from the Nat Greene Fly Fishers in Greensboro. Bob was one of three student recipients of the award, which is offered to facilitate study in a discipline that prepares the student for a career in fisheries enhancement, aquatic habitat restoration, or aquatic biology. Bob's thesis research is to evaluate the effects of habitat-enhanced piers and woody debris on fishes of Piedmont Carolina reservoirs. *Congratulations, Bob!*

AFS News forwarded by Tom Kwak - OMEGA-3 GOOD FOR YOUR EYES: Omega-3 fatty acids, found naturally in high quantities in different types of fish, are useful in the prevention of heart attacks and strokes, in reducing the incidence of the formation of certain types of cancerous tumors, in reducing the chance of suffering post natal depression, in decreasing the likelihood of experiencing mild to severe depression, and now in lowering the risk of age-related macular (retinal) degeneration, reported Fish Information and Services (FIS) News Network North America on 16 May 2001. Researchers from the Harvard School of Public Health have found a link between canned tuna consumption and reduced macular degeneration. They found that of more than 70,000 men and women studied, those who ate canned tuna more than once a week had a 40 percent lower risk of macular degeneration than those who ate it less than once a month. While not conclusive, their study, recently published in the February 2001 issue of American Journal of Clinical Nutrition, "Prospective study of dietary fat and the risk of age-related macular degeneration," is the most recent addition to the long list of health benefits scientists believe are provided by the omega-3s found in fish such as tuna, salmon, and sardines. "It's too early to say that fish protects vision, but given the growing evidence that it helps prevent heart attacks and strokes, it makes sense to shoot for several servings a week", recommends the Center for Science in the Public Interest (CSPI) in their Nutrition Action Healthletter, May 2001, that highlights the study. To view the studies abstract, go to: <http://www.ajcn.org> and browse the February 2001 recent issues archive.

AFS News from Fred Harris - The online membership directory is up and running. Members can edit their own information if parts are incorrect. Some search capabilities are present and additional search enhancements will be added. Other than search capability a big advantage of an online directory is that it always contains current information. Free print directories are available this year for those who want a copy.

AFS will host the 4th World Fisheries Congress in 2004 in Vancouver BC. A Steering Committee is being organized and will have its initial meeting in Phoenix at the AFS annual meeting.

This year 18 Hutton scholarships were awarded to high school students that will allow them to work a summer with a fisheries professional. Maybe next year we could have one or more Hutton scholars in NC.

AFS and The Wildlife Society have made a joint proposal to take over management of the Fish and Wildlife Reference Service currently managed by the Fish and Wildlife Service. The Fish & Wildlife Reference Service is a great source for gray literature papers such as federal aid reports. We should know soon if our bid is accepted.

The 2003 meeting in Quebec City should be a good one. The meeting facilities are outstanding and Quebec is an interesting place to visit. The theme of the meeting will be along the line of Worldwide Declines in Fish Populations. Anyone thinking ahead about putting together a symposium should contact Program Chair Martin Castonguay by using the online directory to get his mailing address, email address or phone number. >

AFS Continuing Education News from Hannelore Quigley - The AFS Continuing Education Classes are being given on Sunday, August 19th, 2001 from 8 AM to 5PM at the Crowne Plaza Pheonix during the AFS 131st Annual Meeting. Don't miss this opportunity to attend! Please note the River Morphology class is 1.5 days and is on Sat. Aug. 18th. Registration is available through the annual meeting registration form in FISHERIES magazine, or on the web at <http://www.fisheries.org/annual2001/ce.htm>

Carolina Power & Light News from John Crutchfield - I wanted to update folks on the results of the robust redhorse sampling on the Pee Dee River during the week of April 30 to May 3, 2001. We had 10 boats representing CP&L, N.C. Wildlife Resources Commission, S.C. Department of Natural Resources, U.S. Fish & Wildlife Service, USGS Cooperative Research Unit--NC State, NC Museum of Natural Science, Duke Power Company, and Georgia Power Company. Approximately 25 people participated in the sampling effort. I would like to personally thank all participants who helped with the survey. The study was done in a very professional, well-coordinated, and safe manner.



We were able to collect only 1 robust redhorse which was a running ripe female on a shallow shoal (about 1 meter in depth) approximately 1 mile above the Mill Creek confluence with the Pee Dee River (about 12 miles downstream of the Blewett Hydroelectric Plant). This 2001 capture was near the capture of the 1985 specimen. Fish length was 692 mm total length and weight was 5,600 grams (appeared to be a large, older fish). A CP&L electrofishing boat captured the fish with Wayne Starnes of the N.C. Museum of Natural Science getting the honors for dipnetting the fish. The female was PIT tagged and floy tagged, tissue taken for genetic analyses, meristic measurements taken, photographed, and released back into the river. Water temperature was 19.2 C at the time of capture. Scales were taken and will be jointly read by CP&L and Bob Jenkins. The area of capture was shocked again to look for attendant spawning males but none were captured. The species was originally described from the Yadkin portion of the river by Edward Drinker Cope, a noted naturalist, in 1869.

This cooperative sampling effort also received press coverage by the Winston-Salem Journal.

Russian Fisheries Biologist Visits North Carolina— The North Carolina AFS Chapter (NCAFS) recently teamed up with the North Carolina Chapter of The Wildlife Society (NCTWS) to sponsor the visit of a Russian fisheries biologist, Vladimir “Vlad” Khokhriakov from the Smolensk Lakelands National Park. The program, initiated by the NCTWS in 1996, helps foster information exchange and understanding of scientific and environmental education methods utilized by biologists in the two countries.

Vlad Khokhriakov’s visit in April 2001 marked the first trip by a Russian fisheries biologist to North Carolina under this exchange program, and the North Carolina AFS Chapter helped co-host the visit. Vlad’s job responsibilities include law enforcement and fisheries management of the park’s 35 glacially formed lakes. These lakes range in size from 1 to 304 hectares.

Vlad received his undergraduate degree from Caliningrad State Technical University in Moscow in 1994, and he is currently working on his doctorate degree at the Russian Research University for Freshwater Fisheries. His doctoral research involves an extensive assessment of the fisheries and water quality of the park’s lakes, and formulation of management strategies for each lake to maintain fishery population integrity in future years. Prior to Vlad’s research, no comprehensive assessment had been conducted of the park’s aquatic resources. Sampling techniques include gill and hoop netting to assess fish population structure and collection of creel data to assess angler catch and harvest rates. The NCTWS has provided a Hache field kit for Vlad to use in lake water quality assessments. Additional equipment was purchased for Vlad’s research with funds provided by the NCAFS Chapter in 2001.

During his visit to North Carolina, Vlad accompanied biologists on several sampling trips throughout the piedmont and coastal plains regions of the state. These sampling trips included electrofishing and netting assessments of both small and large impoundment fisheries and anadromous fish research on the Neuse, and fish and mussel surveys on the Tar River. Vlad also had the opportunity to visit a state fish hatchery to observe fish culture practices and toured state and federal parks to evaluate natural resource management in the U.S. Hosts also provided Vlad some time for recreational fishing opportunities. Vlad was impressed by the breadth of fisheries research and monitoring activities within our country, the amount of law enforcement effort on our rivers and lakes, the quality of the field and laboratory equipment used by biologists, the accessibility of biological data via the Internet, and the teamwork of biologists in conducting research and monitoring activities. Overall, the visit was very informative and provided international goodwill with our professional colleague from Russia.



Members of the North Carolina Chapters of the AFS and Wildlife Society greet Vlad Khokhriakov at a reception held at the Butner Depot during April 2001. Vlad was welcomed and presented an honorary AFS cap by Dr. Rich Noble and John Crutchfield, NCAFS members. From left to right: Tom Kwak (NCAFS), Pete Bromley (NCTWS), Bill Collart (NCAFS), Carl Betsill (NCAFS), Vlad Khokhriakov, and Rich Noble (NCAFS).

Russian biologist, Vlad Khokhriakov (far right, on bow of boat) participates in electrofishing sampling on Harris Lake, North Carolina.

Research News forwarded by Joe Hightower and Dave Hewitt - Old Technology Providing New Information. Fishwheels, floating barges equipped with rotating, fish-catching baskets, were first used on the Roanoke and Pee Dee rivers in the mid 1800s to harvest migrating shad and herring. Locals that remember the contraptions refer to them as "fishing machines." Fishwheels have been and still are used in the Pacific Northwest as well, both for harvest and research on various species of Pacific salmon. In research applications, fishwheels provide a means of collecting anadromous fish to document their abundance as well as for use in tagging

and captive breeding programs.



Fishwheel currently in operation on the Roanoke River

Starting in the early spring of 2000, we began using a "modernized" fishwheel to examine the timing of migration and relative abundance of anadromous species in the Roanoke River. As far as we know, this is the first time that this old technology has been used for research purposes on the East Coast. Fish are captured in the fishwheel baskets as they swim upstream and are guided into flow-through live wells set in the platform. The size and design of the live wells allows large numbers of fish to be held in excellent condition. The fishwheel collects fish 24 hours a day, turned by the natural flow of the river, and the live wells are checked once daily. All fish captured are then measured, weighed, and released.

The anadromous species targeted in the Roanoke River are striped bass *Morone saxatilis*, hickory shad *Alosa mediocris*, blueback herring *Alosa aestivalis*, alewives *Alosa pseudoharengus*, and American shad *Alosa sapidissima*. The fishwheel also collects small numbers of catadromous American eel *Anguilla rostrata* and the semianadromous white perch *Morone americana*. To date, no sturgeon have been collected, presumably because of their extremely low abundance in the Roanoke River.

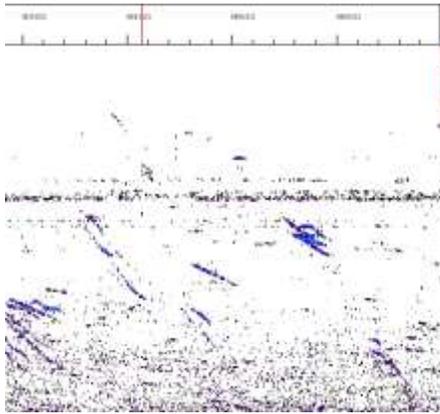
The 2000 season yielded catches that were lower than expected, with a total anadromous catch of only 615 fish. However, the results provided valuable information that has helped make the fishwheel more effective this year. As of 31 May 2001, we had collected 4,929 anadromous fish, with the largest catches of blueback herring and striped bass. We do not know to what extent the greatly increased catches in 2001 reflect increased abundance, as opposed to differences in river conditions. Next year's results should shed more light on that question.

The migrations of the various species take place from late February through the middle of June. Hickory shad catches were thought to be low in 2000 because the fishwheel was not operating continuously until March 30. However, in 2001, the fishwheel has operated since early February so the low catch of hickory shad this year is unexplained. Our catch of American shad has been consistently low. Other surveys also indicate that their abundance is quite low. The North Carolina Wildlife Resources Commission, U. S. Fish and Wildlife Service, and others have begun a



A large striped bass captured in the fishwheel during the 2001 season

restoration program for American shad.



Tracks of upstream migrating fish detected at the hydroacoustics monitoring station.

During 2001, we worked with Don Degan of Aquacoustics to set up a fixed hydroacoustics monitoring station just downstream of the fishwheel site. The transducer was attached to a frame on the river bottom, and was aimed toward the opposite bank, perpendicular to the current. Fish moving upstream or downstream that passed through the beam sent back a series of echos, as illustrated in the following screen shot, taken during the height of the hickory shad run (left). The top of the image is closest to the shore (and transducer) and the bottom of the image is about 20 m out, near the center of the river channel. Most of the fish tracks in this image are moving upstream but at an angle to the flow. Information from the hydroacoustics will tell us where migrating fish are moving within the channel and water column, so that we can better interpret the fishwheel catches. Additional information about the fishwheel is available on the following web site:

<http://www4.ncsu.edu/unity/users/j/jhncsu/public/FishwheelProject.html>

AFS News forwarded by Joe Hightower - Some very nice fish images are available through the U.S. Fish and Wildlife Service web site, including 68 done by our own Duane Raver, retired editor of Wildlife in North Carolina. You can locate them by starting at: <http://images.fws.gov/> and selecting "Raver, Duane" from the list of keywords. The only restriction on use is as follows: "All images are for public use but please credit the photographer and the U.S. Fish and Wildlife Service. Example: USFWS/ John Doe"

SEAFWA News forwarded by various members - Each year, SEAFWA publishes a journal proceedings of papers presented at their annual meeting. The journal manuscripts must undergo peer review (three reviewers per paper) to determine if they are acceptable for publication and suggest revision for improvement. I am looking for peer reviewers for the manuscripts submitted. Any volunteers?

This is also a great opportunity for your graduate students and/or your fishery biologists to get their foot in the door as a journal referee. This will look good on their resume, gets their name exposed as a scientist, and most importantly gives them a chance to contribute to the quality of scientific literature. Please let me know if you can spare some time to help SEAFWA by reviewing a manuscript, or will like to give your graduate students and/or your fish staff the opportunity to learn the peer-review process under your direct supervision. Thanks!

John Galvez, Gloucester Office of Fishery Assistance, U.S. FISH & WILDLIFE SERVICE, 6669 Short Lane, Gloucester, VA 23061, Phone:(804) 693-7118, Fax: (804) 693-5025, E-mail: John_Galvez@fws.gov

Also, Please pass this along to any interested students . . Did you forget to submit your poster abstract for SEAFWA?? If you did, but would still like to present a poster at the conference, hurry up and send in an abstract for the poster. We have a really good turnout this year but late submissions will probably still be accepted. Just put together an abstract and send it in!! You could also promote your Student Chapter or School with a poster if you'd like. Remember, there

will be best student poster awards this year. Send your abstract to John Galvez at the address listed above.

[Back to top](#)

New NCAFS Members

Three new members were added to our Chapter rolls since March. Please join me in welcoming Monica Dozier from Morehead City and Jim Espey from Raleigh. And a hearty re-welcome to Ron Small from Greensboro. Ron was featured in our Spotlight on Students and Young Professionals in September 2000.

Meetings of Interest

Fourth International Symposium on Sturgeon - July 8-13, 2001, Oshkosh, WI.

<http://www.sturgeonsymposium.org/>

131st Annual AFS Meeting - Aug. 19-23, 2001, Phoenix, AZ.

<http://www.fisheries.org/annual2001/>

Wetlands Engineering and River Restoration Conference 2001 - Aug. 27-31, 2001, Reno, NV.

<http://www.asce.org/conferences/wetlands2001/home.html>

55th Annual SEAFWA Conference - Oct. 13-17, 2001, Louisville, KY.

<http://www.kfwis.state.ky.us/afs/kyafs.htm>

Fourth Annual North Carolina Stream Restoration Conference - Oct. 16-19, 2001, Raleigh, NC.

The theme of this year's meeting will be Stream Repair and Restoration: A Focus on the Urban Environment. <http://www5.bae.ncsu.edu/programs/extension/wqg/sri/>

2002 NCAFS Annual Meeting - Feb. 5-6, 2002, Huntersville, NC. Stay tuned to this website for more details.

2002 SDAFS Mid-Year Meeting - Feb. 20-24, 2002, Little Rock, AR.

<http://www.sdafs.org/meetings/02sdafs/2002home.htm>

If you are aware of meeting information that would be beneficial to the membership of the NCAFS, please send it to the newsletter editor for inclusion in the next newsletter. E-mail:

djcoughl@duke-energy.com

Employment Opportunities

Graduate Research Assistantships (MS and PhD) and Research Aide/Technician. Auburn University. Responsibilities: Graduate students and technicians will be involved with a new project evaluating the ecology and dynamics of estuarine freshwater piscivores, particularly largemouth bass. This project will involve extensive field sampling, sample processing, data analysis, and computer simulations. Qualifications: B.S. degree in fisheries, biology, or related field with competitive GPA and GRE scores for potential students. Ph.D. applicants also should have a M.S. degree in a relevant field. Research experience is preferred. Salary: Student stipends: \$13,400- \$14,000. Salary for research technician: \$17,500- \$20,000. Closing Date: Until filled. Starting date is negotiable. For Further Information: see <http://www.auburn.edu/~devridr/position.html>

Fishery related jobs can be found on the AFS web site at: <http://www.fisheries.org/jobs.html> This site also offers links to job postings on non-AFS web sites.

If you have a fishery-related job opening and would like to post it in the next NCAFS Newsletter, please send your announcement to the newsletter editor. E-mail: djcoughl@duke-energy.com

Valuable Links - Courtesy of AFS

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/>

Additional links can be found courtesy of Dr. Mike Allen and the Southern Division, AFS. <http://www.sdafs.org/links/msallen1.htm>

[Back to top](#)

[Return to NC AFS Home Page](#)