



NEWSLETTER

MARCH 2005

INSIDE THIS ISSUE

[President's Message](#)
[Secretary-Treasurer's Report](#)
[Nominations Committee](#)
[NCSU Student Subunit Report](#)
[2005 Chapter Awards Presentations](#)
[Environmental Concerns Committee](#)

[News from around North Carolina](#)
[Spotlight on Students and Young Professionals](#)
[Meetings of Interest](#)
[Employment Opportunities](#)
[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 – Duane Harrell

A New Year New Opportunities for Involvement

Well it's a new year and I must admit that time has passed quickly since our annual meeting and the passing of the President's gavel to me. First, let me say that I am honored to be serving as your Chapter President. I realize what a challenge I will face this year maintaining the excellent level of leadership Mallory set as Chapter President. Serving as President-Elect last year was truly a learning experience for me, and Mallory's guidance and mentorship were invaluable. Hopefully, some of his fine leadership qualities have rubbed off on me! Thanks, Mallory!

I feel very fortunate to be serving on the ExCom with such an outstanding slate of officers. As I've already mentioned, our Past-President, Mallory Martin, did an outstanding job of leading our Chapter this past year and will be an invaluable resource for the ExCom and me in the coming year. President-Elect, Lawrence Dorsey, moves from the leadership of our Education Committee to the key role of Chair of the Program/Arrangements Committee for our 2006 annual meeting. Lawrence brings strong leadership skills to that committee. Brian McRae continues in his second term as our Secretary-Treasurer, for which I am extremely grateful. Brian has done an outstanding job in this very demanding role. Although not members of the ExCom, Co-Presidents Jenny Vander Pluym and Warren Mitchell will be leading the Student Subunit and providing valuable input to the ExCom. I look forward to working with Jenny, Warren, and the Student Subunit, as their energy and enthusiasm are inspirational. Last, but certainly not least, I look forward to working with the various Committee Chairs and members during the coming year, and I sincerely appreciate their leadership and contributions this past year. Shortly, I'll be contacting current committee chairs concerning committee leadership and membership and soliciting input on any potential changes.

One of my most notable realizations over the 14 months I have served on the Chapter ExCom is what a great group of people we have in our Chapter. I know that may sound somewhat trite in a Chapter President's inaugural message, but I say it with all sincerity. Now, that's not to insinuate that I previously had a different opinion, but rather to acknowledge that only through actual service to an organization do you have the opportunity to truly experience and appreciate the individual and collective talents and contributions of its membership.

I think our 2005 joint annual meeting with the NC Wildlife Society is a great example of the cumulative result of individual contributions. If you have ever been involved with the planning of an annual meeting, whether at the chapter, division, or national level, you know how much work and coordination it takes for a successful meeting. From the ExCom's initial consideration of a meeting time and location to the final gavel to adjourn the annual business meeting, it's a collective effort. Whether your involvement with the 2005 annual meeting dealt with the planning, logistics, technical program, registration, judging papers, raffle or you were simply an attendee, your participation was essential to the success of our meeting.

I guess what I am trying to convey is that regardless of your level of involvement, your involvement is important. There is no such thing as an insignificant contribution. I would like to strongly encourage you to consider how you might become more involved with our Chapter. Your involvement has a dual benefit. Your ideas and perspective help us avoid complacency and ensure the diversity we need to continue to be a progressive and active chapter. In return, the interaction with other members and organizations and the experience you gain along the way are invaluable in your personal and professional development. Our success as a chapter is contingent upon the participation of our membership at all levels. Accordingly, I'd like to issue a personal challenge to each of you to seriously consider your current involvement with the Chapter and ask yourself how you can become more involved. There are ample opportunities for you to become more involved. I can assure you that your Chapter officers and Committee Chairs will welcome your participation and will take advantage of the skills and talents you have to offer. We're like the used car salesman; no reasonable offer will be refused!

Again, let me say that I am honored to serve as your Chapter President. I look forward to an interesting and productive year, and I welcome your input and suggestions. Together, we can make 2005 another great year of accomplishments for our Chapter!

Respectfully submitted,

Duane Harrell

Secretary-Treasurer's Report

[Minutes of the January 2005 EXCOM Meeting](#)

[Minutes of the 2005 Annual Business Meeting](#)

Submitted by Brian McRae, Secretary-Treasurer

Nominations Committee

Thanks are extended to candidates Mark Hale and Lawrence Dorsey for their willingness to serve. In a close ballot, Lawrence Dorsey of the NCWRC was selected as the new President Elect.

Submitted by Chad Thomas, Nominations Committee Chair

NCSU Student Subunit Report

Hello all! The annual meeting of the North Carolina chapter of AFS was a resounding success. The Subunit had a strong showing with three student presenters: Lori Davias, Warren Mitchell, and Jenny Vander Pluym; one post-doc presenter: Mike Holliman; and one faculty presenter: Tom Kwak.

The raffle was a huge success!! We were raked in \$1090, which is a net profit of \$750!! The success of the raffle is due to the hard work of many student members of SFS: Warren Mitchell, Lori Davias, Ed Malindzak, Jessica Brewster, Julie Harris, Eugene Won, Jenny Vander Pluym, and Summer Burdick.

We would like to thank everyone who participated in the raffle!! These funds will help get us on the right track for a great year. We would also like to recognize our sponsors: Get outdoors Raleigh, Orvis Raleigh, AFS, VWR, Cabelas, West Marine, Ken Pollock, Jim Rice, and Jeff Buckel.

The event wrapped-up with the business meeting. Longtime SFS member and advocate, Joe Hightower received an award and recognition for bringing the Newsletter into the modern-age. He was praised for putting the Newsletter into an electronic form as well as revolutionizing AFS voting by putting it on the web page. SFS co-president, Jenny Vander Pluym, was awarded the Rich Noble Best Student Paper Award that comes with up to \$500 travel money for the national AFS meeting. All in all it was a great meeting! Stay tuned for more SFS news to come...

Please check out the sub-unit web page at http://www.ncsu.edu/stud_orgs/sfs/ to learn more about our group and upcoming activities. The sub-unit list serve is the best way to stay up to date on fisheries related happenings at NCSU. Directions on how to subscribe are available at the web site.

Contact Jenny Vander Pluym (jlvander@ncsu.edu) or Warren Mitchell (wamitche@unity.ncsu.edu) if you have any questions about Sub-unit events.

Submitted by Jenny Vander Pluym and Warren Mitchell, Student Subunit Co-Presidents

2005 Chapter Awards Presentations

Awards presentations are one of the highlights of our annual Chapter meeting. This year we presented one Distinguished Service Award as well as awards for the best student and professional presentations. Thanks to timely efforts by the many members who assisted in judging papers we were able to determine the winners in both categories in time to present the awards at the business meeting on February 9th.

The **2005 Richard L. Noble Best Student Paper Award** was won by **Jenny Vander Pluym** for her presentation titled **Impacts of Bridges and Culverts on Streamfish Movement and Community Structure**.



Rich Noble and Jim Rice, Awards Committee Chair, present the 2005 Richard L. Noble Best Student Paper Award to Jenny Vander Pluym.

Jenny's paper was coauthored by Dr. Dave Eggleston, her M.S. advisor at NC State University. In addition to her award plaque Jenny will receive a monetary award of up to \$500 from the Chapter's Ichthus fund for travel to present her paper at the 2005 parent society meeting in Anchorage.

The **2005 W. Don Baker Memorial Best Professional Paper Award** was won by **Doug Besler** for his presentation entitled **Evaluation of Stocking Fingerling Walleye in Lake James, North Carolina**. Congratulations to both our winners!



Doug Besler receives the 2005 W. Don Baker Memorial Best Paper Award from President Mallory Martin.

The **Distinguished Service Award** recognizes Chapter members who have distinguished themselves by service to the Chapter, the American Fisheries Society, or the fisheries profession. This year the Chapter presented its Distinguished Service Award to **Chad Hallyburton** in recognition of his outstanding dedication and efforts to involve young people in relevant, hands-on research in fisheries and aquatic ecology.

As Director of Youth Programs at the NC Museum of Life and Science, Chad ran the Youth Partners Program from 1999 until 2004, working with over 150 youth volunteers ages 12-18. During that time, he developed the Natural Resources Action Team (NRAT) which gave high school and middle school students the opportunity to conduct, analyze, and ultimately report on findings from research projects that they conducted under his direction.

Chad led these teams to report their findings at NCAFS meetings on an annual basis. These young students have always given polished and professional presentations of their work, reflecting Chad's influence and leadership, and his individual dedication to developing the next generation of leaders in our profession.



The Youth Partners team displays Chad Hallyburton's 2005 Distinguished Service Award after making another scientific presentation at the annual meeting.

Unfortunately, Chad was unable to attend the meeting due to teaching duties in his new position. However, when he heard he was our recipient this year he said "I am very surprised but very honored to receive this award. Your willingness to recognize my efforts to involve young students in aquatic science research demonstrates the desire of NCAFS to work for diversity and a bright future for the fisheries profession. I want to recognize those

who have done the REAL work over the last 5 years; the Youth Partner volunteers from the Museum of Life and Science. They are a talented and unique group of motivated young people who deserve all of our praise and admiration."

True enough, Chad, but your colleagues know that much of that would not have been possible without your dedicated efforts. Thank you!

Submitted by Jim Rice, Awards Committee Chair

Environmental Concerns Committee

The ECC link on the chapter website now has several new or updated items. Thanks Jerry. Correspondence from the ECC regarding the US Forest Service's proposed off-highway vehicle policy and water quality classifications in North Carolina are included with descriptions. The cover letters and mailing lists for the invasive/non-native species and sedimentation resolutions are also available. And, a running list of issues for possible action by the ECC is included under the upcoming issues and suggestions link.

We intend to keep the website updated with current information about the ECC's activities. Therefore, as with ideas about priority issues that affect fishery resources in North Carolina, we welcome and encourage any suggestions on ways to improve the ECC website and its usefulness to Chapter members. Please contact Dave McHenry at E-mail: mchenryd@brinet.com or use the comment form on the ECC web page.

Submitted by David McHenry, Environmental Concerns Committee Chair

News from around North Carolina

AFS Parent Society News from Bob Curry, NCWRC - Al Zale, Donna Parrish, and Trent Sutton are working to develop the Third Edition to *Fisheries Techniques*. As the first part of that process, they are soliciting potential author teams for the 20 chapters to be included in this text. *Fisheries Techniques* is the best selling book in the history of the American Fisheries Society, and serves as a valuable instructional and reference guide for both students and professionals. Preference will be given to author teams that demonstrate geographic, demographic, disciplinary, and experiential (i.e., both established and recent

professionals) diversity. Despite this preference, the editorial team will entertain applications from individuals as well, who may then be combined with other consenting authors to form diverse teams. Interested chapter author teams or individual authors must address the following in their electronic application:

1. Chapter of interest.
2. What is your purpose for volunteering to write a chapter for the third edition of *Fisheries Techniques*?
3. Why are you suited to develop this particular chapter?
4. What is your vision for this chapter?
5. Provide relevant documentation of professional background.

Please provide the electronic application materials to Al Zale (<mailto:zale@montana.edu>) no later than 31 March 2005.

Skinner Memorial Fund News from Gus Rassam, AFS Executive Director – The John E. Skinner Memorial Fund was established in memory of John Skinner, former Chapter and Western Division American Fisheries Society President. The fund provides monetary travel awards for deserving graduate students or exceptional undergraduate students to attend the American Fisheries Society (AFS) annual meeting. The 2005 meeting will be held in Anchorage, Alaska from September 11-15. Any student who is active in fisheries or related aquatic disciplines is eligible to apply. Awardees are chosen by a committee of the AFS Education Section. Selection is based on academic qualifications, professional service, and reasons for attending the meeting. Travel support not to exceed \$600 per award will be made available to successful applicants. Award winners will also receive a one year paid membership to the American Fisheries Society. Applications are available via the AFS web site http://www.fisheries.org/html/Professional_Development/Awards/awards_society_2005.shtml and must be received by May 6, 2005.

Aquaculture News from Gus Rassam, AFS Executive Director – Does the fish you're eating have a secret history? Aquaculture is the fastest growing food sector in the world right now, so there's a good chance that your shrimp cocktail or salmon fillet came from a pond in Thailand or a netpen in Chile instead of the open ocean. This

isn't always bad - there are many fish farms operating in healthy, sustainable ways - but sometimes there are reasons to be seriously concerned. Problems with diseases, parasites & antibiotic residues - not to mention endangering wild fish stocks that live in the open ocean - are just a few of the potential hazards of farming some kinds of fish. **FARMING THE SEAS** will air on PBS in Selected Markets in April 2005 (Please Check Local Listings for Exact Date & Time).

SEAFWA News from Vince Travnichek, SEAFWA Fisheries Program Chair – The first call for papers has been issued for the fisheries session of the 59th SEAFWA Conference. The Fisheries session will include 1) Oral presentations of peer-reviewed and peer-edited manuscripts, techniques, and case studies; 2) Oral presentation of unpublished studies (abstract-only; limited to space available on the program), and 3) Posters – including an evening reception with the authors. Written manuscripts and comprehensive abstracts for oral presentations will be reviewed and if accepted, will be published as peer-reviewed papers and comprehensive abstracts in the *Proceedings of the Southeastern Association of Fish and Wildlife Agencies*. Manuscripts must comply with the *SEAFWA Guidelines for Authors*, found at <http://www.sdafs.org/seafwa/authors.htm> or by contacting Dr. John Galvez, Associate Editor: John_Galvez@fws.gov.

C.W. Watson Award Nomination News from Ben Jacobo, – Nominations are being sought for the 2005 Clarence W. Watson Award. This annual award will be presented at the Southeastern Association of Fish and Wildlife Agencies. Meeting is in St. Louis, Missouri in October 2005. The Clarence W. Watson Award is the most prestigious award given in the Southeast and is presented to the career individual who, in the opinion of the Award Committee, has made the greatest contribution to wildlife or fish conservation during the previous year or years. Consideration includes research, administration, law enforcement, I&E, wildlife management, fish management, teachers, and students. Preference is given to nominees in the Southeast. The award is a mounted bronze plaque presented jointly by the Southern Division of the American Fisheries Society, the Southeastern Section of the Wildlife Society, and the Southeastern Association of Fish and Wildlife Agencies. Nominations should be sent to: Ben D. Jacobo, 5004 Mailbu Drive, Knoxville, TN, 37918, phone 865-687-6034 or email eajaco@aol.com, as

soon as possible, but **not later than August 16, 2005**.

Larval marine fish ID course news forwarded by Tom Kwak, NCSU – Announcing a course on the Early Life History of Marine Fishes. This is a graduate-level course for students with an interest in ichthyology, systematics, fish ecology, fisheries science, and biological oceanography. It is presumed that students will have some experience and background in those areas. Prerequisites include an undergraduate degree in a biological discipline and permission of the instructors. Instructors: Drs. John Olney (Virginia Institute of Marine Science) and Edward Houde (University of Maryland). Laboratories and lectures to be held at the new Marine Science Center of the University of New England (Biddeford, Maine), 1-17 August 2005. For more information, please see the course web site: <http://www.vims.edu/adv/657/>.

2005 Course schedule from Dave Rosgen, Wildland Hydrology - Wildland Hydrology is excited to announce our 2005 course schedule. If you are interested in participating in any of these courses, please log onto <http://www.wildlandhydrology.com/index.htm> for the complete course schedule, course descriptions and our registration form - you should check it out ASAP as the classes fill quickly. PLEASE NOTE THAT WE HAVE TWO NEW CLASSES. The long awaited "River Restoration Design Implementation" course, a follow up to our Restoration & Natural Channel Design class for Restoration Designers and their Contractors and the "Fluvial Geomorphology for Engineers" class, which fills our level 1 prerequisites, but is designed specifically for Engineers.

Research equipment in need of a new home, news forwarded by Keith Ashley, NCWRC - Mark Westendorf of CZR, Inc. in Wilmington has some equipment, some new, some used, that he is looking to sell. He has a used radio tracking receiver and antenna (asking \$1,500 OBO) and 5 radio tags (asking \$50-75 ea). He also has some new sturgeon nets (100 ft long, 20 ft deep and 12.5 inch mesh) that he's asking \$150 for (new) or \$100 (used). If you think you can use any of this equipment, please contact Mark directly at (910)392-9253 or by email at: CZRWILM@aol.com. Also, if you can't use this equipment but know of someone who can, please forward this information to them.

Spotlight on Students and Young Professionals

Jenny Vander Pluym, MS Student, NCSU - Newly elected co-president of the NCAFS Student Fisheries Subunit, Jenny Vander Pluym, hales from St. Louis, MO where she was born, raised, and indoctrinated as a Cardinals fan. She decided to experience true winter and headed up to the University of Wisconsin, Madison to major in Zoology and Biological Conservation while defrosting her eyelashes. As an undergraduate, Jenny also spent a year in Madrid, Spain, as part of a studies abroad program in Spanish. After receiving her undergraduate degree, Jenny took her knowledge of frozen marine creatures and applied it to living creatures at the Newfound Harbor Marine Institute, Big Pine Key, FL. She embarked on a 4.5-year career in Outdoor Education, which not only took her to places like the Florida Keys, but to the San Gabriel and San Bernardino Mountains, and Catalina Island. This work also introduced her to her husband—Warren Mitchell.



Jenny fishing in the Everglades during her and Warren's Honeymoon.

After finding enlightenment through working with children, Jenny decided on a career switch from science education to ecological research. She obtained a scientific diver certification, worked as a dive master, conducted turtle and water quality research for a consulting firm, and worked in fisheries with the FL Fish and Wildlife Conservation Commission. Because of her keen interest in the ocean and commercial fisheries, Jenny worked as a fisheries observer in the Hawaiian tuna fishery, as well as numerous Alaskan fisheries in the Bering Sea.

All of these experiences led Jenny to realize the research career she really wanted would require more education. Therefore, she began working towards her M.S. degree at North Carolina State University under the direction of Dr. David

Eggleston in September of 2003. Her work concentrates on the impacts of bridges and culverts on stream fish movement and community structure in NC.

Warren Mitchell, MS Student, NCSU - Warren Mitchell, newly elected co-president of the NCAFS Student Fisheries Society, was born in Palm Beach Gardens, FL, lived in Lexington, KY until age 14, then moved back to Palm Beach County for high school and college. He attended Florida Institute of Technology in Melbourne, FL and not only majored in Biological Oceanography but rowed varsity crew for a year and played 4 years of varsity soccer. A summer job at the Florida Marine Research Institute and experience in commercial fishing led Warren to the lucrative (ha!) field of fisheries biology. He also worked as a science instructor at Seacamp Inc, Big Pine Key, FL, and there met his eventual wife (and SFS Co-President), Jenny Vander Pluym.

After graduating, Warren returned to FMRI and worked on migration of common snook. The analyses were based on over 19,000 tagged individuals, and included a variety of GIS approaches. Warren's other notable work experience was four years as a NOAA Fisheries certified groundfish and pelagic fisheries observer. This involved 14 vessels and 300+ sea days in the Bering Sea, Gulf of Mexico, Grand Banks, and north Bahamian Shelf.



Warren Mitchell holding a hogchoker from the Roanoke River.

Warren began his MS degree program in January 2004, in the Fisheries and Wildlife Program at NC State University. The goal of his research is to estimate the size of anadromous fish runs in the Roanoke River. He is using hydroacoustic methods as well as more conventional gears like gill netting.

Warren - welcome to NC, where the seas are much less threatening than in the Bering Sea!

Submitted by Joe Hightower, NCSU

Meetings of Interest

8th International Conference on Artificial Reefs and Artificial Habitats – April 10-14, 2005, Biloxi, MS.

<http://www.lsu.edu/faculty/jhcowan/CARAH.htm>

2005 Southeast Conference of the North American Lake Management Society – April 13-15, 2005, Asheville, NC.

<http://www.nalms.org/symposia/seconference/index.htm>.

18th Annual National Conference of the North American Lake Management Society – April 26-29, 2005, Chicago, IL.

<http://www.nalms.org/symposia/chicago/index.htm>.

East Coast Trout Management and Culture Workshop IV – June 6-8, 2005, Lock Haven State University, PA.

http://www.sdafs.org/trout/ECTMCW_IV/firstcall.htm.

18th International Symposium on Biotelemetry – Sept. 4-9, 2005, Knoxville, TN.

<http://www.outreach.utk.edu/conferences/ISOBcallforpapers.pdf>.

135th Annual Meeting of the American Fisheries Society – Sept. 11-15, 2005, Anchorage, AK.

<http://www.wdafs.org/Anchorage2005/index.htm>

59th Annual Southeastern Association of Fish and Wildlife Agencies Conference – Oct. 16-19, 2005, St. Louis, MO. <http://mdc.mo.gov/seafwa/>.

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. djcoughl@duke-energy.com

Employment Opportunities

Wildlife/Fish Tech I (2 positions), NCWRC, Granville and Wake Counties, NC - Successful candidates will assist biologists with nongame fish, mussel, and crayfish surveys. The candidate chosen for the Granville Co. duty station will work

within the Yadkin-Pee Dee, Lumber, Cape Fear, and White River basins. The candidate chosen for the Wake Co. duty station will work within the Roanoke, Neuse, Tar-Pamlico, Chowan, and Pasquotank River basins. See http://www.ncwildlife.org/fs_index_commission.htm for employment opportunities and vacancy announcements. Salary: \$10.28-15.47/hr DOE. Closing Date: April 12, 2005. A state application for employment (Form PD-107) is required.

Fisheries Biologist (2 positions), Wyoming Game and Fish Department (Casper) – The state of Wyoming is seeking two fishery biologists, one with a reservoir background and a second with a stream and river background. APPLICATIONS: For more information or to apply online go to <http://statejobs.state.wy.us/JobSearchDetail.aspx?ID=8078> or submit a State of Wyoming Employment Application to the Human Resource Division, Emerson Building, 2001 Capitol Avenue, Cheyenne, WY 82002-0060, Phone: (307)777-7188, Fax: (307)777-6562, along with transcripts of any relevant course work.

Summer Field Assistants (2) for a Juvenile Striped Bass Seine Survey, Virginia Institute of Marine Science (VIMS), College of William and Mary, Gloucester Point, Virginia - Field Assistants (2) needed for summer work with the VIMS Juvenile Striped Bass Seine Survey based in Gloucester Point, Virginia. These positions involve assistance with field operations and data management—one Field Assistant is needed from June-August and one from July-September. Seines are deployed throughout the summer in the James, York and Rappahannock river systems, as well as twice monthly at Eastern Shore and Virginia Beach locations. Successful applicants will help deploy seine (pulling net in waist-deep water); identify, measure and count fishes; and enter and check data. This work involves extensive hours outside onboard 18-foot vessels with outboard motors. Field work is performed rain or shine, and field days can run 8-12 hours. Hourly wage will be based on experience. Field Assistants will be hired as 90-day temporary employees. See our website for further information on the survey: <http://www.fisheries.vims.edu/trawlseine/sbmain.htm>. Please send cover letter and resumes to Amanda Hewitt (ahewitt@vims.edu) or Julia Ellis (julia@vims.edu). References may be requested.

North Pacific Groundfish Observers, Alaskan Observers, Inc. – Biologists hired by Alaskan Observers, Inc. attend a three week training class in either Seattle, Washington, or Anchorage, Alaska. Observers gather management data for the Government, living and working aboard U.S.-flagged commercial fishing vessels operating in the Bering Sea, North Pacific, and Gulf of Alaska. Many of the biologists who go on to work in the West Coast Groundfish Observer Program (or who work on projects like the Kodiak Observer Program) gain their initial observer experience working as North Pacific Groundfish Observers. Compensation ranges from \$3900.00 per month to \$5850.00 per month, depending on experience, and includes room, board, and travel to and from job site. Paid training courses are generally held in early and late December, February, May, June, and July, but this schedule is subject to change depending on the events in the fishery in a given year. Please contact Alaskan Observers, Inc. for more details and the application process. Alaskan Observers, Inc., 130 Nickerson, #206, Seattle, WA 98109, Phone: 800-483-7310, Fax: 206-283-6519, e-mail: aoistaff@alaskanobservers.com

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. 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>