

Georgia Chapter— American Fisheries Society



❖❖❖ The Bycatch — Fall 2007

Edited by: Shannon Albeke, UGA Fisheries

We are on the web:

<http://www.uga.edu/ugafish/ga-afs/home.htm>

Fun Factoids:

- Total off-stream water withdrawal from Georgia's rivers, streams, and aquifers is estimated to be about 6.5 billion gallons of water per day.
- It could take Lake Lanier [3 years to reach normal levels](#) after the drought ends.
- Georgia has [no natural lakes](#).

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Southeast Aquatic Resources Partnership (SARP) Receives National Recognition

The Southeast Aquatic Resources Partnership was recently recognized by the National Fish Habitat Board as one of the first four official Fish Habitat Partnerships charged with implementing the National Fish Habitat Action Plan. The Partnership (SARP) includes fish and wildlife agencies from 14 States of the Southern Division AFS (Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, Missouri, North Carolina, Oklahoma, South Carolina, Tennessee, Texas and Virginia); the Gulf and Atlantic States Marine Fisheries Commissions; the Gulf of Mexico and South Atlantic Fishery Management Councils; the U.S. Fish and Wildlife Service; and NOAA Fisheries. These entities have signed a Memorandum of Understanding pledging to work together for the conservation and management of aquatic resources and habitats in the Southeast. SARP involves many other non-governmental organizations, private industry and Federal agency partners. WRD Fisheries Management Section, through an agreement with the

Partnership, maintains and supports the SARP Coordinator position as part of its headquarters staff.

Continue on page 2.



Lake Oconee island shoreline, showing severe erosion from wind, wave, and current. WRD, Georgia Power, and lake anglers and residents were concerned with the loss of these natural shoreline areas through erosion.

2008 Annual Meeting: The Time is Now!!

Plan now to attend the 2008 Annual Meeting of the Georgia Chapter American Fisheries Society, held January 29-31, 2008 at The Lodge on Lake Oconee, located on Lake Oconee Parkway (Highway 44) a few miles north of Eatonton, Georgia. For driving directions and more information about the facility, visit their web site at: www.thelodgeonlakeoconee.com

"Watershed Management" will be the theme for the 2008 meeting. This has

proven to be a particularly relevant theme in light of the many water management related issues in the media and on the public's mind because of the drought. The Chapter hopes to initiate interaction with others who work in watershed management outside of the traditional fisheries management fields at this meeting. Community and watershed conservation groups, fishing clubs, water authorities, regulatory agencies, and many others can affect fisheries conservation and

Continue on page 3.

SARP from page 1:

SARP has numerous projects relating to aquatic habitat conservation in the Southeast. The Southeast Aquatic Habitat Plan, an effort that will help guide strategic investments in aquatic habitat conservation across the region, is nearing completion. A GIS referenced database of characteristics that impact aquatic habitats – everything from land use to water quality – is being developed for the seven-state Tennessee-Cumberland river basin, and funding was recently awarded from the Doris Duke Foundation and the National Fish and Wildlife Foundation to expand this effort to the Red and Sabine river basins (AR, LA, OK, TX) in 2008.

SARP, through the National Fish Habitat Initiative and other means, also helps fund and facilitate on-the-ground (or in-the-water) habitat conservation projects. Several projects have been funded in Georgia, including gravel bar – spawning habitat restoration in the Oconee and Ogeechee Rivers, stream habitat enhancement in Cabin Creek on the Chattahoochee River National Recreation Area, and a littoral zone shoreline habitat enhancement project at Lake Oconee that is currently under way. So far more than 600 linear feet of shoreline has been armored with 342 tons of rip rap at one island in the lake. Two more islands on Richland Creek are currently being armored to control erosion caused by waves from boats and wind. Over 1800 linear feet of island shoreline will ultimately be protected after project completion in January 2008. Additional fishery enhancements will include the placement of structure along the shoreline such as sunken cedar trees and spawning gravel as well as wood duck boxes, bird nesting platforms, and native vegetative plantings. WRD, Georgia Power Company, National Fish and Wildlife

Foundation, the US Forest Service, Reynolds Plantation, the Lake Oconee Anglers Club, Boy Scouts, and SARP have all contributed to make this project a successful demonstration of aquatic habitat conservation that can be accomplished through partnership efforts.

-- Submitted by Scott Robinson and Ramon Martin



WRD Region 3 Fisheries Supervisor Ramon Martin shows the island after placement of rip rap to protect against erosion. Additional fish and wildlife habitat enhancements are being added after shoreline stabilization with rip rap.

2007 Annual Meeting Update



(Left to right) Patrick Ely, Paul Schuler, and Eileen Roy were recognized for excellent student presentations at the 2007 Georgia and South Carolina AFS Chapter meeting.

The Georgia Chapter had a successful annual meeting at Tybee Island, GA in January 2007, in conjunction with the South Carolina Chapter of AFS and the South Carolina Fishery Workers Association. More than 100 members from the two state chapters attended the meeting. A special session on treatment of aquatic weeds and other nuisance species was very well-attended, and allowed members to gain continuing education credits for Pesticide Applicators licensing requirements. Les Ager and Bubba Mauldin were each presented with Career Achievement awards in recognition of their outstanding contributions to the Chapter and the fisheries profession over careers that spanned more than thirty years in Georgia. David

Higginbotham was presented with a Distinguished Service award in recognition of his excellent service to the Chapter over the past several years.

Eileen Roy was awarded the Best Student Paper award for her presentation: "Population structure assessment of the black sea bass, *Centropristis striata*, in the Western Atlantic coast and the Gulf of Mexico using mitochondrial DNA."

Paul Schueller and Patrick Ely were also recognized for excellent student presentations. Thanks to everyone from the Georgia and South Carolina Chapters that made this joint meeting a great success.

-- Submitted by Scott Robinson Chapter President

Southern Instream Flow Network: The Fact Sheet

The Southern Instream Flow Network (SIFN) is being created by the partners of SARP to develop, coordinate, and support efforts of state-level teams working on instream flow policies and protection, and to leverage experience and resources among the 15 Southeastern Association of Fish and Wildlife Agencies (SEAFWA) states: AL, AR, FL, GA, KY, LA, MO, MS, NC, OK, SC, TN, TX, VA, WV. This network will become a tool to maximize positive impacts of instream flow policies on the region's aquatic habitats.

The objectives of the SIFN over the next three years include the following:

- ~ Bring state teams together to initiate and develop working relationships
- ~ Educate participants on the scientific basis of instream flow policy
- ~ Share instream flow policy-related tools & resources specific to state needs
- ~ Communicate among states to support and build on past experiences
- ~ Provide training for use of assessment tools to determine environmental impacts to hydrologic regimes and develop instream flow standards
- ~ Produce guidance documents for development of effective instream flow protection policy and supporting programs

Working with partners is key to the successful development and implementation of protective instream flow policies. SARP has identified development and implementation of appropriate instream flow policies as a priority strategy in the Southeast Aquatic Habitat Plan. SARP has joined with other organizations that have also identified protection of instream flows as a priority conservation strategy for southern aquatic habitats. These initially include the Instream Flow Council (www.instreamflowcouncil.org), The Nature Conservancy (www.nature.org), American Fisheries Society (www.fisheries.org), and Southern Company (www.southernco.com). Additional partners will be welcomed to the SIFN steering committee and state teams in the future.

For more information about the SIFN and work in your state, contact Scott Robinson, the SIFN Coordinator, at 770-361-5639 or at scott_robinson@dnr.state.ga.us.

-- submitted by Scott Robinson

2008 Annual Meeting from page 1:

management efforts. Part of our job as fisheries professionals is to be sure others who impact fish and fish habitat understand fisheries conservation issues and can make informed decisions based on accurate information. The AFS Chapter meeting gives us a great opportunity for that interaction. Take the time to attend this year's meeting, and invite someone who has not attended an AFS meeting before. If you know someone working on water or watershed management issues that affect fisheries, encourage them to attend and make a presentation as well. Meeting information and registration forms can be found at the Chapter web site at www.uga.edu/ugafish/ga-afs. Please pre-register to help us plan a great meeting and save Chapter funds.

If you would like to make a presentation at this year's meeting, send your name, contact information, and title and abstract (if available) of your presentation to Steven Patrick at stevep@uga.edu or you can call Steven at 706/754-2318 with any questions. Please send abstracts and/or titles ASAP, but no later than January 7.

Contact Scott Robinson (scott_robinson@dnr.state.ga.us) or Joel Fleming (joel_fleming@dnr.state.ga.us) if you have questions about the meeting or need more information.

The [Pre-registration form](#) can be found at the end of this newsletter.

-- submitted by Scott Robinson



"Working with partners is key to the successful development and implementation of protective instream flow policies."

Student Subunit of AFS: University of Georgia

The UGA Fisheries Society, a student subunit of the Georgia Chapter, has had a busy fall semester. We attracted new members to the chapter with an outdoor welcome social, and our membership is now composed of students, staff and faculty from the Warnell School of Forestry and Natural Resources, the Odum School of Ecology and the School of Environmental Design. We are also reaching out to community members and currently have a few who attend meetings regularly.

The months of September and October were consumed by the planning and execution of our annual



Society members Mike Homer and Becky Fauver assist with Rivers Alive.

fundraiser, the Fish Fry! Over 150 people ate catfish and hushpuppies, bought raffle tickets, and enjoyed a great night. The club raised over \$2000 to support our activities. Donations from vendors, including artwork, sculptures, fishing and outdoor gear, guided fishing trips, and gift certificates, supplemented the raffle and door prizes. Once again, the fish fry was a great success.

Thanks to these funds and our active volunteers, we

have been involved in many exciting activities. We have hosted exciting speakers, including Warnell's new Fisher-

ies faculty member, Dr. Robert Bringolf. We have also been involved in the community, helping clean up the Oconee River as part of Rivers Alive, teaching kids to fish at GADNR's annual Outdoor Adventure Day and representing our club at numerous on-campus events. Unfortunately, even *our* activities have been affected by the drought. Because of record lows in stream flows, our trip down the Broad River and a local river cleanup were both cancelled. We look forward to continuing with these activities once levels return to normal.

We look to continue this momentum in the Spring of 2008 and will work even harder in the community. We are training club members to teach environmental education programs to local school children as part of Project WET. Additionally, we will assist with the annual United Way Crappie tournament at Sandy Creek Park in Athens, GA. Dr. Wayne Hubert is our keynote speaker this year. He is scheduled to give a joint UGA Fisheries and Warnell School of Forestry and Natural Resources seminar. Finally, we will also be continuing our biweekly scientific paper discussions among UGA-AFS's members. With traveling to the GA-AFS meeting and the SD-AFS meeting, it promises to be a busy semester!



A young fisherman revels in his catch at Kids Fishing Day, near Thomson, GA.

— By Julie Wilson

Thoughts from the President: Kevin McAbee

When the 2007-08 UGA Fisheries Society officers began planning for our upcoming service, we agreed to set high standards for expanding the activities of the chapter. In order to have a clear direction for these changes, we consulted the American Fisheries Society constitution. We discovered three objectives to which we could aspire: promoting Conservation, Research, and Education.

As the year has progressed, this decision has improved the focus of our society. While the society has always participated in activities that incorporate these goals, they have not always been explicitly linked back to the AFS mission. Often, our chapter has concentrated on research because we are dominated by students. However, this year we made a conscious effort to give attention to conservation and education. Noticing that an educational outreach program was missing from our activities, we realized that our society needed to become more involved in the local community. To accomplish this, more than 15 members became trained in Project WET, a program designed to educate school children about aquatic resources.

But this message isn't designed to talk about our society's activities. Instead, I want to ask every AFS member reading this

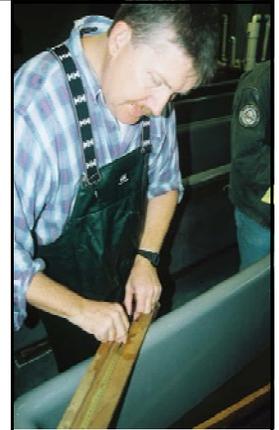
to perform a self analysis of your own fisheries goals and increase your activity in those areas that you are currently weak.

Can you, as a fisheries professional, contribute more to education of the local community? Can you assist in conservation of these resources, by setting examples for others? Can you advance research by sharing data? Simple acts can make a big difference. In this time of increased water awareness, citizens are more open to hearing about aquatic issues. Take this time to educate those around you. Use this opportunity to tell others to conserve all year. Remind people that aquatic organisms are more stressed by the drought than we are.

Most of you reading this are entrenched in one aspect of the three goals. You may be an outreach specialist, scientific researcher, or conservation planner. But beyond these descriptions, you are an educated member of the greater community. Give back to this community in the best ways you can: by advancing conservation, research, **AND** education about aquatic resources.

UGA's "Team Sturgeon"

Over the past 6 years, graduate students of the University of Georgia (UGA) Warnell School of Forestry and Natural Resources have been studying several of Georgia's threatened or endangered sturgeons. Under the direction of Dr. Douglas Peterson and guidance of Research Coordinator David Higginbotham, sturgeon research focuses on population dynamics, critical habitats, and life history of these rare and primitive fishes. From 2004 to 2007, Justin Bezold worked with the Georgia Department of Natural Resources (GADNR) to evaluate the reintroduction of potamodromous lake sturgeon *Acipenser fulvescens* in the Coosa River System. By the 1970s lake sturgeon were extirpated from the system, likely a result of poor water quality and land-use practices. Recent changes in regional land-use patterns and the implementation of the Clean Water Act in 1972 have resulted in substantial water quality improvements in the Coosa System. Because of these changes, the GADNR began stocking hatchery-reared lake sturgeon in 2002 with the goal of establishing a self-sustaining population. Bezold's research has shown that sturgeon from each stocking event recruited to the juvenile lake sturgeon population. Typically lake sturgeon spawn late in life, after 12 – 18 years of age; therefore, GADNR stocked lake sturgeon will not mature for approximately 7 – 13 years. For this reason, additional studies should focus on future reproductive success of the older cohorts as maturity approaches.



David "The Legend" Higginbotham measures a juvenile lake sturgeon.

In coastal GA, M.S. student Paul Schueller is studying population dynamics of anadromous Atlantic sturgeon *A. oxyrinchus* in the Altamaha River. Throughout the 19th century Atlantic sturgeon were intensively harvested for their flesh and roe. By the 1980s, sturgeon fishing pressures shifted south as northern stocks declined in abundance. In Georgia, a commercial fishery for Atlantic sturgeon existed until 1995. Schueller began to examine population dynamics of Atlantic sturgeon nearly a decade after fishery closure. Preliminary results show that approximately 200 – 300 adult sturgeon enter the river in spring to begin spawning migrations. This number is larger than expected based on population abundance declines associated with fishing pressure. Current data suggest the population may be rebounding, but Schueller's future studies will focus on juvenile abundance as evidence of successful recruitment. Recruitment rates may help determine population viability and the feasibility of reopening the fishery.



Graduate student Paul "The Brains" Schueller (right) and technician Sam "The Muscles" Truesdell with a 260-lb female Atlantic sturgeon netted on the Altamaha River. This glorious fish was captured as part of an ongoing 5-year study directed by UGA fisheries professor, Dr. Douglas Peterson.

Just north of the Altamaha, M.S. student Daniel Farrae is beginning a new study on population dynamics of amphidromous shortnose sturgeon *A. brevirostrum* in the Ogeechee River. Shortnose sturgeon are sympatric with Atlantic sturgeon in many East Coast rivers. As such, shortnose were often targeted by Atlantic sturgeon commercial fishermen as a source of meat and caviar. The shortnose sturgeon has been federally protected since 1967 after its initial listing under the Endangered Species Act. Today, many populations remain threatened by incidental bycatch mortality, habitat degradation, and construction of dams that restrict access to spawning habitat. Farrae's initial findings suggest that the Ogeechee River population continues to be one of the most endangered sturgeon stocks in North America. Although initial data suggest the population may be recruitment limited, causal mechanisms are unknown. In future years, Farrae will try to identify spawning sites and potential recruitment limitations.

With a total of four native sturgeons, Georgia could be considered "A Sturgeon State" with extant populations of shortnose, Atlantic, and lake sturgeon, and an extirpated population of Gulf sturgeon *A. o. desotoi*. While cooperative research efforts between the GADNR and UGA have shed light on recent trends in Georgia's sturgeon populations, many questions about sturgeon biology and population dynamics remain. While Dr. Peterson and his graduate students have learned much about native sturgeon, additional research is needed to determine how best to protect and restore populations throughout the State.

— By Daniel Farrae



Justin "The Asset" Bezold does his best to match the gape size of a black crappie.

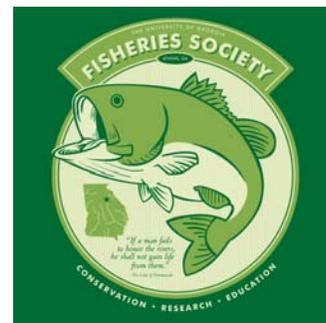
Catfish Sacrificed to Support UGA Fisheries

The UGA-AFS subunit successfully hosted the annual fall fish fry on October 12, 2007, which was held at Flinchum's Phoenix at Whitehall Forest (owned by the Warnell School of Forestry and Natural Resources). Over 160 members of the Athens community enjoyed fresh fried catfish, hand-made hushpuppies, French fries, baked beans, and homemade desserts. A nostalgic slide show of past and present UGA-AFS events entertained the crowd while they filled their bellies and perused the raffle and door prizes. Raffle prizes and other items were donated by Bass Pro Shops, Shakespeare's, Helter Skeleton Inc, Broad River Outpost, Ducks Unlimited, Zoom Bait, Wal-mart, Terrapin Brewing Company, Coca-Cola, Carino's Italian Grill, Trout Unlimited, Capt Tim Barrett, Capt Spud Woodward, Forestry Suppliers Inc, Blue Heron Glass Art, Ben Meadows, QDMA, Columbia, Patagonia, Lanie Barlow, Wing and Fly Adventures, Classic City Cleaners, Steve and Janis Ellis, Barbaritos, Allen Patillo, Xtreme Glove, Kinnucans, Barbara Trotter, Jeff Hepinstall and GA-AFS! This fundraising event helped generate nearly \$2000, which will be used to host seminar speakers, provide refreshments at meetings and events, and support active club members in outreach activities and workshops. UGA-AFS would like to extend a generous thank you to all who helped with the event, as well as those that attended and opened their pocketbooks.

— By Alison Price

Check out UGA Fisheries at:

<http://www.uga.edu/ugafish/>



UGA Students Get WET and Wild

Sixteen Members of the UGA Fisheries Society spent their Saturday alternately rolling down a hill as raindrops, spending a million dollars to develop a streamside property, comparing symptoms to identify water-borne diseases, plumbing a mock municipal water system, and as members of a stream invertebrate community reacting to contaminants, all part of Project WET training.

The mission of Project WET is to reach children, parents, educators, and communities of the world with water education. The goal of Project WET is to facilitate and promote the awareness, appreciation, knowledge, and stewardship of water resources through the development and dissemination of classroom-ready teaching aids and through the establishment of state and internationally sponsored Project WET programs. As part of the train-

ing, UGA Fisheries Society members received an orientation to the course materials for both Project WET and a supplemental volume, The Urban Watershed, which deals with water issues in Atlanta before participating in or leading six of the activities.

This training will allow the UGA Fisheries society to more effectively present fisheries and water-quality topics to school children and the Project WET and Urban Watershed materials will facilitate outreach activities.



Project WET participants mimic macroinvertebrates attempting to avoid a contaminant source. This activity is appropriate for students of 4th grade or higher.

Both contain extensive indices that categorize the various lesson plans according to the topics covered, targeted ages, activities included, and time required, allowing our members to easily select an appropriate program for any group requesting a presentation. Also, the Fisheries Society has started a library to store the supplies for individual Project WET modules, which now includes the materials for the four topics from the training workshop, which are also laminated for durability. Members can now quickly set up an outreach activity from the materials on hand or print and laminate new items from a CD of other modules knowing that they can easily be used again.

To learn more about Project WET, please visit : <http://www.projectwet.org/>

— By Duncan Elkins

Graduate Assistantships

M.S. or Ph D Graduate Research Assistantship – Conservation Aquaculture—University of Georgia:

Responsibilities: Develop graduate thesis research (M.S. or Ph D) in designing new methods for conservation aquaculture of endangered sturgeons. Current research focuses on variables affecting growth, maturation, and reproductive physiology. Students interested in aquaculture or conservation of endangered fishes are particularly encouraged to apply.

Qualifications: B.S. in biology, zoology, fisheries, or related field with a minimum GPA of 3.2 and GRE scores of 1100 (math and verbal).

Salary: Full stipend and tuition.

Starting Date: Jan-April 2008 (negotiable)

Closing Date: Jan 31, 2008

Contact: Please send copies résumé, copy of transcripts, GRE scores, and contact information of three references to:

Dr. Douglas L. Peterson,
Warnell School of Forestry & Natural Resources
University of Georgia
Athens GA, 30602
Email Applications are encouraged: dpeterson@warnell.uga.edu

M.S. or Ph D Graduate Research Assistantships—Fish Ecology, Population Dynamics—University of Georgia:

Responsibilities: Develop graduate thesis (M.S.) or dissertation (PhD) research in association with ongoing studies of the population dynamics and life history of shortnose sturgeon in the Altamaha River. Current research focuses on population dynamics and seasonal habitat use.

Qualifications: B.S. in biology, zoology, fisheries, or related field with a minimum GPA of 3.0 and GRE scores of 1100 (math and verbal). PhD applicants should also possess an M.S. in one of the above areas.

Salary: Full stipend and tuition.

Starting Date: Jan-April, 2008 (negotiable)

Closing Date: Jan 15, 2008

Contact: Please email or send hard copies of résumé, transcripts (unofficial), copy of GRE scores, and contact information of three references to:

Dr. Douglas L. Peterson
Warnell School of Forestry & Natural Resources
University of Georgia
Athens, GA, 30602
dpeterson@warnell.uga.edu

For more information: <http://www.forestry.uga.edu/warnell/research/fisheries.html>

Job Openings

Position Title: (2) Field Research Technicians

Location: Coastal Rivers, GA

Responsibilities: Successful candidate will be part of a sturgeon research team stationed in Coastal Georgia. Routine duties will include gill netting, biotelemetry, collection of basic water quality data, and gear maintenance.

Qualifications: Interest in fish biology, endangered species conservation, aquatic ecology. No prior experience necessary but strong candidates will have experience with standard fisheries sampling techniques, boat operation/safety, and mechanical repair.

Salary: Starting salary at \$8-9 hourly. Housing and field travel provided.

Closing date: Until filled.

Contact: Applicants may apply by sending letter of application, brief resume, and contact info for 3 references) to:

Dr. Douglas L. Peterson

Warnell School of Forestry and Natural Resources

Athens, GA 30602-2152

Email applications are also acceptable: dpeterson@warnell.uga.edu



Pre-Registration Form

*Georgia Chapter of the American
Fisheries Society*
*2008 Annual Meeting at:
The Lodge on Lake Oconee
Hwy 44 Eatonton, Georgia
January 29-31, 2008*

- Pre-Registration Instructions:
- 1) Please fill out one pre-registration form per meeting attendee
 - 2) Pre-Registration Deadline: **January 7**
 - 3) Mail completed form(s) and payment (check, **NO** cash) to:

Joel Fleming
CRD-GA DNR
One Conservation Way, Suite 300
Brunswick, GA 31520-8687
Fax (912) 262-3143

Name: _____

Affiliation: _____

E-mail Address: _____

Payment Schedule:

Regular Registration (\$40) _____; includes social, meetings, breaks, and banquet
(saves \$5 over registration at the door)

Limited Registration (\$30) _____; includes social, meetings, breaks, (**NO banquet**)

Student Registration (\$25) _____; includes social, meetings, breaks, and banquet
(saves \$5 over registration at the door)

Retired Members (\$30) _____; includes social, meetings, breaks, and banquet
(saves \$5 over registration at the door)

Single-day Registration (\$10) _____; includes only the meetings and breaks

GA-AFS Dues (\$5) _____; included in your National Dues if you are a member

Extra Banquet **Only** (\$15)** _____; banquet only (for spouse, friends, family etc.)

** incl. in Regular Registration above

Total Due: _____; Make check payable to: GA-AFS

1) Will you be attending the Student/Professional Mixer on January 29th? _____

2) Will you be staying at the motel during the meeting? _____

(Note: **You** will still need to make your own reservations at the motel)

(Please fill out one form per attendee)