



Tennessee Chapter American Fisheries Society Newsletter

President – Brad Ray
President-elect – Mike Bramlett

Treasurer/Secretary–Jason Henegar
Past President – Jim Habera

Winter 2011 – 2012

President's Message

I want to start by congratulating every Tennessee Chapter Member for their dedication and service to the Tennessee Chapter, the Southern Division, and the American Fisheries Society. Your hard work was recognized at the 2011 Annual American Fisheries Society Meeting in Seattle, Washington by being awarded the Distinguished Service Award. The Distinguished Service Award "recognizes outstanding contributions of time and energy for special projects or activities by AFS members." The Chapter was recognized for our work with the 2009 Annual Meeting, the 2007 Southern Division Meeting, and the 2013 Southern Division Meeting. Each of you are deserving of this honor. In my short time as a member of this chapter I have been impressed with the motivation and the involvement of the chapter members and I feel privileged to be serving as president of this chapter. Keep up the good work.

I would also like to let you know what the executive committee has been working on this past year. From the revenue generated from the 2009 Annual AFS meeting we have created a budget that you voted on during the 2011 Chapter Meeting. This budget will help us continue the chapter's strong history of financial support to meetings, students, and other activities. This year we have donated \$500 to the 2012 Southern Division meeting in Biloxi, MS and are close to finalizing an investment account that will provide an annual student award. We have also begun updating the procedures manual to help the chapter run more smoothly. This will also come with a Bylaws revision that will need to be voted on by the chapter membership. These revisions should be ready for the 2012 Chapter Meeting in Fall Creek Falls.

Speaking of the 2012 meeting at Fall Creek Falls, President-Elect Mike Bramlett has been hard at work putting together another great meeting, so plan on attending March 13-14th. I wish to follow Past-President Jim Habera's advice and encourage all members to

present some of their work. As with last year I encourage you to pre-register for the meeting to avoid a back log at the registration table. Visit the website (www.tn-afs.org/events/events.html) for details about the meeting.

Lastly, I wish to again reiterate my gratitude for allowing me to serve as your president. Our continued success depends on our willingness to volunteer our time. Therefore, I wish to encourage members to help maintain the momentum by stepping up and serving as an officer or committee chair. In particular think about nominating yourself or an interested colleague as President-Elect or Secretary/Treasurer for 2012. Along those lines take a few minutes and nominate deserving colleagues for the chapter awards (Outstanding Fisheries Scientist, Lifetime Achievement Award, Service Award, or Friend of Fisheries Award). It has been a couple of years since any of these recognitions have been awarded and it is obvious that our chapter has deserving members. So please take the time and nominate a colleague.

I look forward to seeing you all at Fall Creek Falls in March.

- Brad Ray, President.

Annual Meeting

Mark your calendars and plan to attend the **2012 annual meeting of the Tennessee Chapter AFS on March 13th and 14th at Fall Creek Falls State Park in Pikeville, TN.**

(<http://www.state.tn.us/environment/parks/FallCreekFalls/>)

The program will consist of technical sessions with a business meeting and social/banquet on the night of the 13th. The meeting will begin about noon (Central Time) on the 13th and adjourn by noon on the 14th. A block of 45 rooms has been reserved at the group rate of \$68/ per night (plus tax) for one or two adults per room. **You must make your reservations (800-250-8610) by January 27, 2012 to get the meeting rate. Rooms will**

be released to the general public after January 27. Be sure to mention that you will be part of the TN Chapter AFS group. Check the Chapter's website (<http://www.tn-afs.org/>) for more details and updates.

Program:

Presentations, including posters, on all aquatic resource topics will be considered. Each speaker will have 15 minutes to present, and 5 minutes for questions. Send abstracts (250 words maximum) to Mike Bramlett mike.bramlett@tn.gov by **January 29, 2012**. If you are a student and you would like to have your presentation judged for Best Student Paper, indicate so in your email. Equipment to display PowerPoint presentations will be provided.

Registration:

Send the registration form (last page of this newsletter) and check to our Treasurer, Jason Henegar by February 28, 2012.

- - Mike Bramlett, Chapter President-elect

Nominations and Awards

The Tennessee Chapter of the American Fisheries Society Nomination and Awards Committee is soliciting nominations for the following awards:

- 1) Lifetime Achievement Award
- 2) Outstanding Fisheries Scientist
- 3) Service Award
- 4) Friends of Fisheries Award

Criteria for the first three awards are:

Lifetime Achievement Award - Nominees should either be retired or within five years of retirement and have had a long history of significant contributions

Outstanding Fisheries Scientist – To be bestowed on biologists in their early to mid career for making significant contributions over several years or in the past year.

Service Award – To be bestowed on individuals that served as a Chapter officer for more than five years or served the Chapter as chair of a long-standing Chapter committee for more than five years.

Please submit all nominations to Hayden Mattingly (HMattingly@tntech.edu) by January 20, 2012.

Also:

The Tennessee Chapter of the American Fisheries

Society Nominations and Awards Committee is soliciting nominations for the following Chapter officer positions:

- 1) President Elect
- 2) Secretary/Treasurer

Please submit nominations to Hayden Mattingly (HMattingly@tntech.edu) by January 20, 2012.

TWRA Fisheries Division

Division staff are working with the Fisheries Program of the USFWS and other stakeholders (i.e. Association of Fish and Wildlife Agencies, American Sportfishing Association, and Trout Unlimited) to secure funding for Dale Hollow and Erwin National Fish Hatcheries. In short, proposed budget cuts will reduce stocking of rainbow trout in TVA waters by 38% in the first year. The next year, cuts will increase to around 70%. Cuts are not as drastic at US Army Corps projects because they are providing 80% funding for their projects. TVA has not agreed to make a similar commitment at its projects. All parties are looking for solutions that would fund the USFWS to provide fish for federal water development projects operated by the Corps of Engineers and TVA.

The Division and numerous biologists across the state have spent considerable time this year acting on requirements of a new law that pertains to commercial fishing. We have developed a plan to evaluate new waters for commercial paddlefish roe harvest. This study will gather data on contaminants; evaluate the roe fishery potential, and measure risk of sportfish bycatch at Cordell Hull, Old Hickory, Norris, Watts Bar and Melton Hill reservoirs.

Work on producing a new “Anglers Guide to Tennessee Fish, including aquatic nuisance species” is complete and should be at the printers as you read this. Copies will be available from all TWRA offices and on the agency's website (www.tnwildlife.org).

The first year of the lake sturgeon tracking project within Cheatham Reservoir has been a success. The project started with the release (in January 2011) of 34 lake sturgeon from the boat ramp near the Shelby Bottoms Nature Center in Nashville, and tracking has been ongoing during the past year. As of November, 2011 nine fish remain in the reservoir. Approximately thirty-four more acoustic telemetry tagged lake sturgeon will be released in January 2012 with monthly tracking to follow.

The Tennessee Lake Sturgeon Working Group consisting of TWRA, the US Fish and Wildlife Service, Tennessee Valley Authority, [Tennessee Aquarium Conservation Institute](#), Tennessee Technological University, and the University of Tennessee continues

the effort to restore lake sturgeon to Tennessee waters. Since 2000, the working group has reintroduced over 110,000 lake sturgeon into the Holston, French Broad, Tennessee, and Cumberland rivers.

A recent trotline sampling effort on Watts Barr and Fort Loudoun reservoirs yielded 26 lake sturgeon ranging in size from 22.75 inches up to 5.75 ft. A couple of individuals collected are believed to be from the first stocking effort in 2000.

The division has issued 189 angler certificates for the reported catch and release of lake sturgeon.

TWRA Region I Fisheries

We continued maintenance of deep water fish attractors established lakewide and established additional shallow water fish attractors in September and October. That program is very popular with the anglers. We have recorded GPS coordinates for our deep water fish attractors and the Kentucky Reservoir fish attractor map is available at

http://www.state.tn.us/twra/fish/Reservoir/TWRA_maps/kylake.pdf. We have also initiated a cypress tree planting project for Kentucky Reservoir – we are growing the trees to larger sizes and planting them on mud flats.

We also surveyed reservoirs of Region I and identified the species and distribution of aquatic vegetation. In general, aquatic vegetation growth has been much reduced since 2008 due primarily to high spring water levels. *Hydrilla* sp distribution in Pickwick Reservoir has declined in 2009 – 2011. Bottom tows in 2010 showed much of the *Hydrilla* did not top-out and the high water conditions in Spring 2010 resulted in low densities. During the surveys in 2011, *Hydrilla* sp was even less abundant and tow drags showed very low densities. The same conditions existed on Kentucky Reservoir

The silver carp populations continued to increase on the Mississippi River and sampling can be very dangerous. As reported last year, silver carp have been collected in all Mississippi River tributaries, below the spillway at Reelfoot Lake and below Cheatham Dam. However, silver carp have not been collected below Pickwick Dam, although commercial fishers have collected bighead carp in the Big Sandy area and silver carp have been documented as far south as Horse Creek. We also recently received a report from an angler in the Paris Landing area that silver carp were jumping in his wake and a commercial fisher had harvested over 1,000 pounds of silver carp. The Agency is currently working with commercial fishers and private industry to determine commercial sale of Asian carp to China or to local markets.

The stream crew completed assigned surveys (sampled 30 streams and small rivers).

Trap netting surveys for crappie were completed and recruitment was below average in Kentucky Reservoir, but good in Barkley Reservoir. Spring largemouth bass electrofishing samples were good and bass fishing should be good on Kentucky, Barkley, and Pickwick Reservoirs the next few years. Although the low water levels at Reelfoot Lake continued to make sampling difficult we were able to conduct fall trap-netting and electrofishing surveys.

Sauger populations continue to decline below Pickwick Dam which is known as the sauger capital of the world. We initiated a sauger stocking program this year and will attempt to stock sauger in that area to boost the population. Sauger seems to produce decent year classes but those fish are not recruiting to harvestable sizes and harvest rates remain below historical levels.

The Agency has been directed to develop a Commercial Fisheries Advisory Committee (CFAC) and work with that group to develop strategies in paddlefish management and explore the possibility of opening new waters for paddlefish harvest. Those meetings have shown some progress and we are currently developing a protocol for sampling new waters in areas east of west Tennessee. We are concerned about the paddlefish population and impacts of the increased demand for caviar on Tennessee populations. Sturgeon sampling is also planned for the Mississippi River.

Keep in touch and see you at the Chapter meeting.

--Tim Broadbent, Fisheries Biologist

2011 Tennessee Southeastern Fishes Council Report

Barrens Topminnows

During a February visit to Dale Hollow National Fish Hatchery, representatives from the Tellico State Fish Hatchery (TSFH) including Jim Herring (USFS); Bo Reynolds and Rusty Humbert (USDA Forest Service Cherokee National Forest); Rob Theurer (Tellico State Fish Hatchery); and Gary Williams (retired TVA Fisheries Biologist) ascertained more information about the closed recirculation systems being used to grow-out Barrens topminnows. TSFH wants to increase growth of native southern brook trout by rearing the young in closed recirculation systems with increased water temperatures. Brook trout are now being reared in flow through systems with no control over rearing water temperature, resulting in slow growth which may translate into lower survival rates when the small fish are returned to the wild. Discussion focused on how to adapt the technology being used at Dale Hollow NFH for use in the multi-agency, brook trout propagation/grow-out program at Tellico SFH. Two Heath Vertical Incubator stacks were transferred to the U.S. Forest Service for use

in incubating brook trout eggs taken in the wild. Hatchery personnel are planning to assist with spawning, egg incubation, and rearing if our expertise is required.

Late May, hatchery personnel assisted Brad Bingham (Cookeville ES Field Office) with stocking 868 Barrens topminnows (Elk River Population) at Faris Farm (393 fish) and Merkle Farm (475 fish) in Franklin County, TN. These were 2009 year class fish transferred, as juveniles, to the hatchery from the Tennessee Aquarium and Conservation Fisheries, Inc. (CFI) for grow-out and subsequent stocking.

Early June, CFI transferred 500 juvenile Barrens topminnows (2010 year class/Elk River population) to the hatchery for grow-out and subsequent distribution into the wild. -- *Andy Currie (Dale Hollow NFH/USFWS)*

Pigeon River Recovery

Pigeon River Recovery Project (2011): Spring 2011 fieldwork was hampered by high flows in nearly every watershed. Under less than ideal flow conditions in TN, biologists managed to work the French Broad River at Campbell Island thanks to TVA creating a window of minimal generation at Douglas Dam on 19 May. Combined crews from TDEC, TVA, Little River Watershed Association and UT collected 137 mountain madtoms, 22 bluebreast darters and 472 common river snails (*Pleurocera*, *Leptoxis* spp.). Mountain madtoms were released at Tannery Island, while the bluebreast darters and common river snails were released at the mouth of Cosby Creek (PRM 13.7). Snail darter lengths were recorded for TVA. This summer we evaluated 2 new collection sites for northern studfish, blackstripe topminnow, and the strippetail darter at Walden Creek and the Little Pigeon River at the old mill dam (LPRM 2.5). Walden Creek has good potential for both northern studfish and strippetail darters. Only 2 northern studfish were observed at the Little Pigeon site. New potential release sites are on hold while preliminary data is collected for a new research project. Dr. Todd Crail of the University of Toledo plans to begin research in the French Broad watershed looking at the dynamics of benthic fish communities; initial data were collected in May by UT-Knoxville and the University of Toledo. There are also plans to evaluate the effects of fish introduction on an aquatic community before and after introduction of a new species. August was a very dry month, which provided low flows and the opportunity to collect on the Nolichucky River. We collected 63 river chubs (augmentation), 39 bluebreast darters, 1765 (*Leptoxis*, *Pleurocera* spp.) common river snails. All were released at the mouth of Cosby Creek.

Monitoring efforts began in July with our annual IBI surveys conducted by TVA, TDEC, TWRA and UT-Knoxville. Denton's IBI score matched last year's score at 56 (good/excellent). Common river snail numbers have continued to increase since 2010. Data showed an increase in specialized insectivores (specifically silver

shiners), a continued decrease in omnivores and stonerollers but an increase in individuals with disease or anomalies. Tannery Island IBI sampling located re-introduced fish species, including strippetail and gilt darters, mountain madtoms and many common river snails (*Pleurocera* spp., *Leptoxis* spp.). The IBI score at Tannery Island dipped from 54 (good/excellent) to a 48 (good) due to a decrease in piscivores and an increase in individuals with disease or anomalies. Not reflected in the score was a decrease in the percent of tolerant species, a decrease in omnivores and stonerollers and an increase in the catch rate by more than 50%. A snorkel survey was conducted in August on the lower Pigeon River, below Newport, to observe if water temperature would have an effect on the number of gilt darters observed. Last year's survey occurred in October when the water temperature was 61°F. This year's effort was conducted at low flow and at a river temperature of 76°F. A few sites were too shallow to snorkel; however, some gilts were observed in good habitat and a quick survey of a new site found a healthy male gilt. The original survey of the lower Pigeon was conducted in May 2005; therefore, our next attempt will be planned for the spring of 2012. Find the Pigeon River Recovery Project at: <http://fwf.ag.utk.edu/Sites/Pigeon/Webpages/> --*Joyce Coombs (UTK)*

Conservation Fisheries, Inc.

Conservation Fisheries, Inc. continues to propagate, stock, and monitor smoky and yellowfin madtoms, Citico darters, and spotfin chubs in Tellico River, with reproduction and good numbers noted there for all four species again in 2011. Monitoring of Citico Creek and Little Tennessee River source populations detected a significant population range expansion of Citico darters to 3 sites above the dam after only 1 stocking event. No other significant population changes were detected. TTU students continue to study the Elk River boulder darter population's distribution, abundance, habitat associations, etc. Efforts to propagate and restore Emory River spotfin chubs and Elk River boulder darters to Shoal Creek continue, with observations of both species above Iron City via snorkel surveys. This fall, stockings of both species via canoe will occur at numerous sites. Hopefully, monitoring will be extended into Alabama this year. Hatchery spawning and rearing included the following additional species/populations in 2011: redline darter, greenside darter (both to serve as imperiled mussel hosts), blackside dace, marbled darter, blotchside logperch, Barrens topminnow, wounded darter, ashy darter, Copper Creek and Powell River yellowfin madtoms, spring pygmy sunfish, rush darter, Kentucky arrow darter, Cumberland darter, upper Allegheny R (PA) gilt darters, and diamond darters (though none of the huge-gaped toothy larvae of the latter survived past yolk-sack absorption). Twelve diamond darters were collected from the Elk River, WV, in September to be utilized as broodstock for 2012 captive propagation. For the second year, surveys in the Conasauga River detected good numbers of Conasauga logperch at two sites, for a total 16 adults. The 9 Conasauga logperch

collected in 2009 & 2010 spawned in 2011 and produced over 700+ juveniles! Preliminary genetic analysis of the broodstock and the offspring indicated that two of the adults were females, and all males contributed offspring, though in different proportions. The effective population size of the offspring was 5, nearly identical to that expected based on the number of males and females in the broodstock. Discussions of possible sites and numbers for augmentation are in progress. The project was undertaken primarily to develop propagation protocols and study possible mate selection with tagged and genetically typed fish (with TNACI & USFWS Warm Springs FTC). And finally, on 20 September, a snorkel survey in the Little River, Blount County, TN turned up 6 marbled darters ~500 yards below a reintroduction area not stocked since 2006 (and no marmorinnum observed there since that year). Clearly, wild reproduction and dispersal has been underway undetected for years! This represents a new upstream range record for the species in Little River, above high impact tributaries to the river (the distribution expansion goal of the project). Also observed and collected during the effort was a lone ashy darter, the first taken in several years from the river. CFI has been funded to survey and propagate this population for possible augmentation and reintroduction efforts. CFI's website provides additional information, along with photos and video (www.conservationfisheries.org), PLUS there's a lot's of stuff on the FaceBook page (<http://www.facebook.com/pages/Conservation-Fisheries/377299094501>). – Missy Petty & Pat Rakes (CFI)

Etnier Collection, UT

Preliminary data entry into the University of Tennessee David Etnier Ichthyological Research Collection database has been completed. Currently, the collection manager's attention concerning the database has shifted toward error detection and the georeferencing of each lot. Only 2000 lots originally had associated latitude and longitude coordinates upon data entry completion. Currently, we have entered ~19,500 georeferenced lots out of our total holdings of ~36,800 lots. It would be very much appreciated if researchers that have deposited specimens into the Etnier collection and have coordinates for these collections, could pass along this information to the collections manager: Jennifer Joice, jparris@utk.edu, 865.974.1948

Watershed Minor, UT

The University of Tennessee is in the process of instituting a Watershed Science undergraduate minor. As part of this effort, there will be a Knoxville-wide Watershed Symposium: on November 14, 2011, Monday from 12 noon – 5:00 PM (presentations/panel 1 PM to 4 PM). Location: University Center Ballroom, University of Tennessee, Knoxville, TN. –Darrin Hulsey (UTK)

-- Pat Rakes, Conservation Fisheries Inc.

Enercon Services

Fred Heitman has taken a new job as Senior Aquatic Ecologist with ENERCON SERVICES. ENERCON is a consulting company that provides engineering and permitting assistance to a wide variety of clients in the energy sector. He will be leading biological investigations for the siting of energy facilities throughout the USA. While he will be based in Oklahoma City, he will be working from his office in Knoxville. His new work email is fheitman@enercon.com.

-- Fred Heitman, Enercon Services

Thanks to all who submitted material for this newsletter.

--Richard Strange, Editor

TENNESSEE CHAPTER OF THE AMERICAN FISHERIES SOCIETY

Registration Form for Annual Meeting and Directory Information

Please take the time to pre-register for the 2012 TNAFS Annual Meeting

Please fill out and send to Jason Henegar, TWRA, P.O. Box 40747, Nashville, TN 37204. You may also scan or email the form to Jason at jason.henegar@tn.gov or fax to Jason at (615) 781-6667. (You may either enclose the registration fee with your registration form or pay upon arrival. If you are not attending the 2012 Annual Meeting, please complete this form for directory information and/or to pay TN chapter dues and mail to Jason). Please pre-register before February 28th in order to be entered into a special drawing.

PLEASE COMPLETE IN FULL

NAME:

OFFICE ADDRESS:

HOME ADDRESS:

COUNTY OF RESIDENCE:

TELEPHONE OFFICE:

HOME:

FAX:

EMAIL:

AFS MEMBERSHIP (CIRCLE ALL APPROPRIATE): PARENT SOCIETY STATE CHAPTER

I DO or **I DO NOT** (CIRCLE ONE) want my home address listed in the TN AFS Membership Directory, which will be posted on the TN AFS Website.

I WILL or **I WILL NOT** (CIRCLE ONE) be attending the 2012 meeting at Fall Creek Falls State Park.

REGISTRATION: \$40 (includes banquet on March 13th)
\$20 (w/o banquet)
\$10 (students w/o banquet)

TN CHAPTER DUES: (\$10.00) (Pay now if chapter dues were not paid with parent society dues)

TOTAL PAID: _____