

# Southern Division American Fisheries Society Trout Committee

## 2005 Meeting Minutes

East Coast Trout Management & Culture Workshop, Lock Haven , PA  
June 6-8, 2005

A condensed Southern Division American Fisheries Society Trout Committee (*SD AFS TC*) meeting was held Monday morning (6/6/05) in conjunction with the 2005 East Coast Trout Management and Culture Workshop (ECTMCW). There was a quorum of 14 members in attendance which included: Doug Besler (NC-Chair), Darrel Bowman (AR), Mike Shingleton (WV), Alan Heft (MD), Mark Hudy (USFS), Dan Rankin (SC), Larry Mohn (VA), Frank Fiss (TN), Lee Keefer (GA), Mike Kruse (MO), Mallory Martin (NC), Jim Habera (TN), Tom Oldham (WV), and Matt Kulp (GRSM-Vice-Chair/Treasurer). Others in attendance included Jack VanDeventer (WA), Melissa Jones (AR) and Bill Couch (GA).

The meeting was called to order by the Doug Besler (Chair) at 9:05am.

### **Meeting Minutes**

A motion to accept the 2004 meeting minutes was made by Frank Fiss and seconded by Lee Keefer. No further discussion followed. The motion passed unanimously.

There was a brief discussion about the informal *SD AFS TC* meeting that the Virginia Beach Meeting earlier this spring. Doug Besler announced the *SD AFS TC* Procedures were officially approved and adopted by the SD AFS Executive Committee (EXCOM) during the meeting.

### **Treasurers Report**

Matt Kulp (Treasurer) reported the *SD AFS TC* current account balance is \$4,939.94, prior to the proceeds from the ECTMCW. A motion to accept the treasurer's report was made by Mike Kruse and seconded by Frank Fiss. The motion passed unanimously.

### **Old Business**

*Eastern Brook Trout Initiative (EBTI)* – discussion led by Doug Besler

- a draft management plan will be sent out to Fish Chiefs this fall
- there will be a meeting of all participants in late November or December
- there are ongoing media production and press releases in progress to begin generating interest in the initiative and EBTI plans
- Mark Hudy briefly discussed a recent study produced for the EBTI whereby he evaluated 10,000+ watersheds throughout the Appalachians and looked at the current status, imminent threats, and other population characteristics of each area. Mark will present a talk at the meeting on the study.

An updated roster of the current *SD AFS TC* members was passed around the room. Updated copies of the 2005-2006 roster will be made available to all members via email along with the 2005 meeting minutes.

*SD AFS TC Archives* – There was considerable discussion on the whereabouts of the *TC* archives (i.e. who's got “the box”, do we need a new “box”). At the 2004 *TC* meeting, John Boaze indicated he “had correspondence dating to the 1960's and agreed to serve as historian and archive his meeting notes”. John was not present at the 2005 meeting so [Matt Kulp agreed to follow-up with John and find out the status of the archives \(box\).](#)

*Brook Trout Position Paper* – report by Jim Habera

Jim reported that the page proofs were received and returned for print in June 2005. The printed article should be in an upcoming issue of *Fisheries*. Page charges will be about \$800 and reprints would cost roughly \$100. Larry Mohn indicated Hannibal Bolton (USFWS) authorized \$2,500 for the printing of the ECTMCW proceedings, of which only about half was used. [Larry indicated he would approach Hannibal to use the remaining USFWS funds to pay for printing of the Brook Trout position paper as well as the \\$100 for 100 reprints for committee members.](#) (*Note: Following the meeting, Jim found out PDF's of the Fisheries Brook Trout Position Paper will be available, so there will be no need to have reprints printed.*)

Mike Kruse noted all the hard work both Jim Habera and Steve Moore put into drafting and editing the position paper and offered his thanks on behalf of the *TC* for all their hard work. Hearty applause and thanks followed by all! Thanks a lot guys.

*MICROFISH 3.0 for Windows upgrade* – led by Jack van Deventer

Jack gave us an update on the new Windows version of Microfish 3.0 and indicated the first product should be ready in July 2005. The new windows version will be free and downloadable from the Microfish website. There will be further development after that for a version 4.0 in January 2006 (coded into Excel) and a version 5.0 that will calculate multiple sites, include GIS capabilities, web-based data storage, and other features. Versions 4.0 and 5.0 will include individual site licenses. Jack reviewed the diverse and highly talented group of software engineers assisting on the project as well as solicited feedback from the group.

Following Jack's presentation, discussion followed regarding compensation for all of Jack's time and effort on the project. Jack indicated for legal and software copyright reasons, his lawyers advised him to offer the software on a site license basis down the road versus an upfront development cost. There was concern raised about the amount of time and money spent by Jack and how the *TC* could ever compensate Jack and his team for all their time and effort. Also, discussion followed regarding what role the *TC* has in current and future development efforts. By consensus, the *TC* agreed that our role was to assist Jack (through our Microfish committee) get Microfish 3.0 for Windows off the ground and running. After that, future development of Microfish 4.0 and 5.0 would be up to Jack.

[As a sign of good faith for all the work of Jack and his team, the TC agreed to help Jack make various committee contacts at next springs SD AFS meeting in San Antonio, TX.](#) Using these contacts, Jack could get further input for Microfish 4.0 and 5.0 development

by incorporating various warm water streams, reservoir, and other fish sampling analysis techniques. The goal is to make a comprehensive analysis tool that is useful and attractive to many biologists within an agency, not just those conducting depletion surveys. A motion was made by Larry Mohn to pay for Jack's travel (air/accommodations) to the spring 2006 SD AFS meeting and seconded by Darrell Bowman. Following the spring 2006 meeting and successfully plugging Jack into the various committee contacts at the meeting, it was agreed that the commitment on the part of the TC with regards to Microfish 3.0 would be fulfilled and complete. The motion passed unanimously.

*SD AFS Trout Committee Website* – led by Doug Besler (on behalf of Dr. Ray Morgan) The SD AFS website is currently accessed via “SDAFS.org”. The artwork for the TC website has been donated by a colleague. [Dr. Ray Morgan is asking all states to forward URL's to him for link's to the website. Ray would like member info as well and an idea of what info to leave off.](#)

*Reservoir Symposium* – led by Darrell Bowman and Mike Kruse The current chair of the reservoir committee (Mike Allen) would like to include tailwaters in the next reservoir symposium. There was significant interest among several TC members to participate in such a symposium regarding tailwaters and two-story impoundments. Darrell and/or Mike K. will contact Mike Allen about setting up such a session.

#### *Clove Oil Update*

There has been no letter sent by the SD AFS TC regarding clove oil registration to date. The new clove oil product on the market (*Aquiesce*) currently has a 21-day holding time, but work is ongoing to get it registered for a 0-day holding period. Jim Bolicker (USFWS) is the current contact for the effort. Those on the committee who have used *Aquiesce* indicate it work very well and has better recovery time, effectiveness, and much higher potency than MS-222 or current eugenol mixes (95% eugenol/ethanol). [The TC needs to contact Jim Bolicker to determine if letters of support are needed from each state. Doug Besler will make the contact.](#)

#### *Election of Officers*

Mike Shingleton was nominated as Trout Committee chair-elect for 2005-2006. Doug Besler made the motion and Mike Kruse seconded. The motion passed unanimously. Darrell Bowman was nominated to be treasurer of the Trout Committee 2005-2008. Lee Keifer made the motion and Mike Shingleton seconded. The motion passed unanimously.

#### *2006 SD AFS Trout Committee Meeting*

Next year's TC meeting will be in Arkansas hosted by Darrell Bowman. Darrell's preliminary plans are to have the meeting at Gasten's on the White River with a tentative meeting date of April 2006.

Jim Habera also compiled a list of the latest *SD AFS TC* meetings back through 1992. We thought it appropriate to include the list for our members. Thanks a lot Jim!

### **Chronology of recent SD AFS Trout Committee annual meetings:**

2005 – Lock Haven University, Lock Haven, PA (East Coast IV)  
2004 – Roan Mountain State Park, Roan Mountain, TN  
2003 – Unicoi State Park near Helen, GA  
2002 – Lake Cumberland State Park, KY  
2001 – Held in West Virginia (Greenbriar?)  
2000 – Frostburg State University, Frostburg, MD (East Coast III)  
1999 – Chattanooga, TN (Southern Division AFS Midyear meeting)  
1998 – Fayetteville, AR (11<sup>th</sup> Annual Trout Stream Habitat Improvement Workshop)  
1997 – Hungry Mother State Park near Marion, VA  
1996 – Clemson, SC  
1995 – Penn State University, State College, PA (East Coast II)  
1994 – Montauk State Park (trout park) near Salem, MO  
1993 – Chattanooga, TN (Southern Division AFS Midyear meeting)  
1992 – Penn State University, State College, PA (East Coast I)

### **Roundtable Discussion**

#### **TN – Jim Habera**

- A statewide trout management plan is being developed for Tennessee. A draft of this plan is currently under review by agency personnel and will be made available later this year for public review and comment.
- Another set of wild rainbow trout otoliths will be collected in 2005 from the same set of populations sampled in 2004. Preliminary analyses of the 2004 data identified age-5 and age-6 fish.
- The only regulation change being considered is a one- or two-month extension of the catch-and-release season on one of TN's two delayed harvest streams (Paint Creek). The current catch-and-release season extends from October 1 through the end of February and the extension might involve adding one month to each end of the
- Some additional work was completed on TN's wild trout map during the past year, but it remains incomplete.
- The general management strategy for the South Holston tailwater appears to be working well. The catch rate for the March 2005 survey averaged over 250 trout ( $\geq 7''$ ) per hour. Some stations approached 400 trout/hr. This was the highest mean catch rate obtained for any TN tailwater monitoring sample. The mean catch rate for trout in the 16''-22'' slot limit (established in 2000) also increased from 6.5 trout/hr in 2001 to 25 trout/hr in 2005. Brown trout reproduce well in this tailwater and stocking was discontinued in 2004 with the objective of creating self-sustaining (wild) fishery for this species.

## **NC – Doug Besler**

### *Brook Trout Genetics*

The NCWRC is completing a two-year brook trout genetic analysis study, contracted with Western Carolina University, in June 2005. The end of this study represents the completion of genetic typing of known brook trout populations in North Carolina. During the past 15 years, a total of 445 known brook trout streams were sampled in NC. Brook trout populations, however, were found in only 368 (83%) of those streams. The results of the genetic tests show that 36% of wild brook trout populations in NC are purely Southern Appalachian strain (SABKT), 10% are purely northern strain, and 54% are mixed genetically. A vast majority (91%) of SABKT populations were found in Mississippi slope drainages suggesting, anecdotally, that SABKT might not be native to Atlantic slope drainages.

### *Trout Distribution*

The NCWRC will increase sampling efforts to determine the distribution of trout in North Carolina, particularly on private property. The primary focus of this sampling will be to discover additional populations of brook trout. When discovered, tissue samples from brook trout will be collected and stored in an ultra-cold freezer located at the Marion State Fish Hatchery. Once enough samples are accumulated, a university will be contracted for genetic analysis. The secondary goal of the sampling is to continue mapping the distribution of wild trout in North Carolina.

### *Electrofishing Efficiency*

The NCWRC will conduct a short-term study in the summer of 2005 to examine the efficiency of backpack electrofishing for trout population estimation in NC. Some recent studies conducted in the western United States indicated that multiple-pass backpack electrofishing sampling might not be accurately representing true population abundance (Peterson et al. 2004). The objective is to replicate the Peterson et al. study using existing NCWRC backpack electrofishing gear at locations historically sampled by the NCWRC.

Peterson, J. T., R. F. Thurow, and J. W. Guzevich. 2004. An evaluation of multipass electrofishing for estimating the abundance of stream-dwelling salmonids. *Transactions of the American Fisheries Society* 133:462-475.

### *AFS Hutton Junior Fisheries Biology Program*

The NCWRC is hosting two Hutton scholars during the summer of 2005. Both students will be spending their summer involved in a variety of activities ranging from fish culture and stocking, trout distribution sampling, brook trout genetics sampling, IBI work, to multi-pass backpack electrofishing sampling.

## **GRSM – Matt Kulp**

- Recently published article on 70 year history of fishing regulations in GRSM (NAJFM May 2005)
  - Numerous interesting presentations at angling groups when demonstrating inefficiency of regulations over time in soft, unproductive streams

- Final year of three year brook trout fishing study
  - to date, no significant impacts observed in total density, legal fish density, number of fish >legal size, etc. in treatment streams
  - angler satisfaction >84%
  - 82% of anglers fishing catch and release, even when harvesting legal size fish - most anglers interested in opportunity to fish for wild brook trout
- Preparing for third antimycin project in GRSM as well as one with SC DNR (Dan Rankin) and USFS in SC, and a third project on springs in middle TN with USFWS, all in 2005
  - working on publication documenting minimal impacts to stream invertebrates following treatment with antimycin
  - no loss of species diversity following treatment
  - <50% reduction in invertebrate density, however, all species were at or above pretreatment densities within four months of treatment
- Park preparing and Environmental Impact Statement regarding the possibility of building a 28 mile North Shore Road along the northern shore of Fontana reservoir from Bryson City to Fontana Dam – one of the last wilderness areas of the Park

### **MO – Mike Kruse**

The Missouri trout program continues to be guided by the goals and objectives of "A Plan for Missouri Trout Fishing."

#### *Regulations*

Effective March 1, 2005, the statewide limit on trout was reduced from 5 to 4 and a statewide minimum length limit of 15 inches on brown trout caught from streams was enacted. In addition, all Department-managed trout streams outside of trout parks now are managed as either Blue Ribbon, Red Ribbon or White Ribbon waters. Blue Ribbon areas have an 18-inch minimum length limit on all trout, a daily limit of 1 trout and fishing is restricted to artificial lures and flies only. Red Ribbon waters have a 15-inch limit on all trout, a daily limit of 2 trout and may or may not have gear restrictions. White Ribbon waters have no length limit on rainbow trout, a 15-inch limit on brown trout, a daily limit of 4 trout in the aggregate and no gear restrictions.

#### *Program expansions*

A new White Ribbon Trout Area on 2.7 miles of Hickory Creek near the town of Neosho was established earlier in 2005. In addition, a winter catch-and-release season will be implemented from November 1 through the last day of February on this stretch of stream. A new winter trout area at McKay Park Lake was established in Jefferson City. This is a "delayed harvest" fishery with catch and release trout fishing restricted to artificials and flies only from November 1 through January 31 and statewide regulations thereafter.

#### *Hatchery Renovations*

The Conservation Commission of Missouri approved funding for fiscal years 2005 through 2009 for improvements to Department of Conservation coldwater hatcheries.

Improvements include dissolved oxygen systems, improvements to water supplies, raceway construction and renovation, predation protection, wastewater treatment improvements, hatchery building improvements and enhancement to visitor centers.

### *Hellbenders and Trout*

Discussions continue regarding whether there is a relationship between trout and the decline in populations of eastern and Ozark hellbenders in Missouri. With the Ozark hellbender likely to become a federally-listed species, these discussions have become particularly significant. Until more definitive information becomes available, there will be no geographic expansion of trout stocking in coldwater streams in Missouri. Also, the Missouri Department of Conservation and the Fish and Wildlife Service have agreed to work through the Ozark Hellbender Working Group to support research on Ozark hellbenders. Finally, the Department has made its coldwater hatchery facilities available for use as Ozark hellbender research/culture facilities.

### **GA – Lee Keefer**

- States “big fish” program of mixing larger individuals (12” fish) in with traditional stock size trout (9”) has been highly successful and requested elsewhere
- The four delayed harvest streams have maintained high satisfaction ratings
- Found that landowners feeding trout downstream of a state trophy trout area apparently have attracted otters away from the state waters, greatly reducing predation problems on the trophy area. This reduction in otter predation has allowed the state operated trophy fishery to rebound significantly.
- Results of the most recent brook trout genetics samples have been obtained from Auburn University. Results doubled the number of SABT populations in GA.

### **TN – Frank Fiss**

- TN continues to expand urban trout stocking program with one problem – hatcheries are maxed out to keep up with demand
  - need \$12 million dollars to come up to speed with hatchery system
- Copies of SARP tailwater report handed out to members who would like copy
- TN trout plan will be completed and available this year

### **VA – Larry Mohn**

- Just beginning brook trout genetics work through VA Tech
- In the process of shutting down and updating a major hatchery
- Changed regulations by extending delayed harvest on one stream

### **SC – Dan Rankin**

- SC has five streams approved through an EA for treatment with antimycin
  - King Creek will be completed this fall in conjunction with USFS (Jeannie Riley and NPS (Steve Moore & Matt Kulp)
- Conducting BVET in streams including dropping tree’s in streams to improve habitat

- Involved with a “Partners for Trout” habitat project/partnership, which involves retrofitting dams to mitigate thermal pollution or Rosgen type stream habitat mitigation. This is a partnership with SCDNR, NRCS, Foothills RCD Council, USFWS, Trout Unlimited, and others.
- Recently used Fishpro to evaluate hatchery operation renovations at Walhalla State Fish Hatchery. Fishpro recommended continuous water quality monitoring, which will cost about \$10,000 per year, but will negate the need for solids settling and disposal systems. A solids settling system would have cost over \$300,000 and would have reduced fertility and the phenomenal wild brown trout population in East Fork of Chattooga River downstream of the hatchery.
- Recently co-authored an article in NAJFM on the two-story fishery at Lake Jocassee along with Hugh Barwick, past TC member. The study used temperature sensing radio transmitters to study summer habitat preferences of trophy trout.
- \*Note-Dan is willing to host another TC spring meeting in coming years (possibly after Arkansas). One possible site is Devils Fork State Park on Lake Jocassee.

#### **VA – Mark Hudv**

- Recently completed study produced for the EBTI whereby he evaluated 10,000+ watersheds throughout the Appalachians and looked at the current status, imminent threats, and other population characteristics of each area. Mark will present a talk at the meeting on the study.
- Discussed modeling study predicting brook trout year class strength based upon February/October flow regimes. Mark will present a talk at the meeting on the study.

#### **MD – Alan Heft**

- Discussed impacts of ORV trail work along brook trout stream.
- Beginning mercury study in brook trout throughout highland bogs

#### **WV – Mike Shingleton**

- Expanded season out to October in two delayed harvest streams due to *outcry* against catch-and-release
  - associated with dispute over who owns streambed and rights of anglers to wade in streams
- Unique situation in WV whereby a man dug a trench to a springhead for water supply – state has an injunction on man’s operation
- License increase goes into effect this year including COLA increases
- WV endowment for fishery operations currently stands at \$30million dollars

#### **AR – Darrell Bowman**

- Currently minimum flows on the White River are in court
- Two of the best tailwaters in AR now listed as “imperiled waters” due to watershed problems
- State DEQ now investigating large brown algae bloom that has caused major public outcry due to boat fouling and interruption of fly fishing

- species of algae unknown but may be genus known as *Dittamo* – if so, negative impacts possible
- Finishing renovating hatcheries with \$4 million renovation
  - improvement will increase production by 100%

### **KY – Dave Dreves**

#### *Changes to Trout Program in 2005*

Two streams and one reservoir were added to the trout program for 2005, Clear Creek in Bell County and Paint Creek in Johnson County, and Martin County Reservoir (22 acres).

Special regulations for trout were implemented on a 3.6 mi. stretch of Paint Creek below Paint Creek Lake (Johnson Co.). There is now a 16 in. minimum size limit with a 1 fish daily creel limit and artificial lures only. The regulations apply year round. Both rainbow and brown trout will be stocked once each spring, but the special regs section is part of the Paintsville Lake tailwater that receives 16,000 rainbow trout per year.

### **Research**

#### *Cumberland Tailwater*

We are continuing our evaluation of the brown trout fishery in the tailwater by marking this year's stocking of 8 in. with an adipose fin clip. We are also continuing research to evaluate the effects of the new regulations for rainbow trout on the tailwater. We have seen dramatic declines in electrofishing catch rates of both brown and rainbow trout over the last two years (off about 50% from 2002). These have been extremely wet years here in Kentucky, the major factor leading to poor DO and elevated river temperatures each of the last two years in late summer/early fall. We are unsure at this point if trout have moved further downstream out of areas that we routinely sample or the populations have actually declined that dramatically. Beginning in July 2005, we will initiate an 18-month biotelemetry study (encompassing two critical periods) to observe how trout respond to changing water quality and flow conditions in the tailwater. We have contracted with Dr. Sherry Harrel of Eastern Kentucky University to conduct the study. Sonic telemetry will be employed to implant 30 rainbows and 30 browns in the 15-20 in size range, as regulations on the tailwater protect this size class from harvest for both species. Dr. Harrel's graduate student will track fish weekly during the critical periods and monthly otherwise. Over the last decade our typical study area is the upper 37 miles of the 75 miles of trout water, where the vast majority of the fishing pressure occurs. Our plan is to have the graduate student track fish in the upper section and then monitor fish movements downstream out of the upper area by deploying 3 submersible logging type receivers spaced out over the lower 38 miles. If there should be a good percentage of fish move out of the upper section then manual tracking will be shifted accordingly.

### **Future Changes to Trout Program**

The KDFWR has hired an urban fisheries biologist whose responsibilities will be to increase urban fishing opportunities and evaluate methods. Big Bone Creek in Boone County will be added to the Seasonal Catch and Release Trout Streams program in 2006.

This is a warm water stream near urban northern Kentucky (Greater Cincinnati) that can only support a trout fishery during the coolest months of the year. The KDFWR will also begin stocking 5 urban lakes with trout, four in Louisville and one in northern Kentucky.

Clear Creek (Bell County) will also be added to the Seasonal Catch and Release Trout Streams program in 2006.

Special regulations will be implemented on a 3.3 mile section of Chimney Top Creek in the Red River Gorge area of Daniel Boone National Forest (Wolfe County). The new regulation will be a 16 in. minimum size limit with a 1 fish daily creel limit and artificial lures only.

### **Trout Unlimited – Kim Ryals**

Attached to this document is the current outreach plan for the EBT Joint Venture. It is part of the multi-state grant which intends to jump-start the Venture. It is being entirely subcontracted to TU. I'm the Chair of the Outreach Committee for EBTJV, and as such, am on the Steering Committee for the project. This is under review by the USFWS, but we hope to have the go ahead on it shortly.

### ***Meeting Action Items – member responsible***

1. Send out copies of 2005-2006 roster to all TC members – [Matt Kulp](#)
2. Follow-up with John Boaze on status of SD AFS TC archives – [Matt Kulp](#)
3. Approach Hannibal Bolton (USFWS) to use the remaining USFWS funds to pay for printing of the Brook Trout position – [Larry Mohn](#)
4. Setup contacts for Jack van Deventer with various committee's for spring 2006 SD AFS meeting – [Frank Fiss](#), [Doug Besler](#), [Larry Mohn](#), [Darrell Bowman](#)
5. Forward state website link's and member info to Ray Morgan for inclusion into the SD AFS TC website – [ALL MEMBERS](#)
6. Contact Jim Bolicker (USFWS) to determine if letter of support are needed from each state for registration of Aquiesce with 0-day holding period – [Doug Besler](#)