Minutes of the AFS Southern Division Trout Committee Meeting
May 18-19, 2001
Canaan Valley State Park, West Virginia

The 2001 meeting of the American Fisheries Society, Southern Division Trout Committee Meeting was held May 18-19, 2001 at Canaan Valley State Park in West Virginia. Chairman Jarrad Kosa opened the meeting at 9:00 a.m. on May 18. A quorum of 9 persons was present.

Old Business

Lee Keefer distributed the treasurer's report indicating total committee funds of $5,680.11 distributed between two accounts. Expenses for the year totaled $2,075, most of which was "seed money" for the 12th International Trout Stream Habitat Improvement Workshop. Income of $678.72 was received from the Third East Coast Trout Management and Culture Workshop. John Stark will also be sending additional funds that remain from the 11th International Trout Stream Habitat Improvement Workshop which the committee sponsored in 1998.

Lee Keefer remarked that he still had numerous copies of the proceedings of the Brown Trout Biology and Management Workshop that needed to be distributed. After a brief discussion it was decided to mail the remaining copies to the libraries of colleges and universities with fisheries programs.

Minutes from the 2000 meeting were distributed and discussed. A correction was noted on page two, reflecting that Mike Kruse had been elected secretary/treasurer by acclamation.

Lee Keefer recalled the discussion at last year's meeting regarding the southern brook trout management guidelines that the committee had proposed to develop. Jim Habera had agreed to serve as chairman of a sub-committee to draft such a document. Much discussion ensued regarding the need for the document, a venue for publication (white paper, *Fisheries*, Southeastern Proceedings, etc.) and potential content. Larry Mohn suggested the sub-committee might start with a one or two day "mini symposium" to get the process started.

New Business

There was much discussion regarding the length of terms and need for the different committee leadership positions. Eventually, Larry Mohn motioned that the treasurer's position be lengthened to three years and that the secretary position be eliminated. Furthermore, he suggested that the duties of the secretary (recording minutes of the meeting) be made part of the chair-elect's duties. Frank Fiss seconded the motion which carried by voice vote.

Larry Mohn nominated Matt Kulp for Treasurer, Lee Keefer seconded the nomination, and he was elected by voice vote. The committee recommended that the committee's funds be transferred to a money market account at a bank in a convenient location for Matt.

Pat Flebbe requested that the committee's electronic mail listserve chair be elevated to an official

committee leadership position, to help formalize the listserve's relationship with the committee. All agreed that this was acceptable.

New officers for the coming year are:

Listserve Chair:	Pat Flebbe
Treasurer:	Matt Kulp
Chair-Elect:	Mike Kruse
Chair:	Lee Keefer

Jarrad described a recent letter he'd received from Mike Meador, Southern Division AFS President, expressing concern that technical committees are not communicating well with state directors and that this is reducing support for attendance at technical committee meetings. He recommended mailing minutes and recent accomplishments to all Southern Division state agency directors. After discussion on this topic, the Trout Committee agreed to mail copies of the minutes and recent accomplishments to all state fish chiefs in Southern Division states that support trout fisheries.

Next year's committee meeting will be held in Kentucky, around the second week of May, possibly at Lake Cumberland State Park.

Roundtable Discussion

Jarrod Kosa of the **Federal Energy Regulatory Commission** reported on current hydropower re-licensing efforts on projects that affect coldwater fisheries in tailwaters. Among the projects being considered are the Santee-Cooper system, Georgia's Chattahoochee River, and several projects in North Carolina. FERC currently has a website (www.ferc.gov) where information about dam re-licensing at individual projects, license conditions and operating modifications are listed. Pursuant to section 603 of the Energy Act of 2000, FERC has delivered a report to congress describing how dam re-licensing efforts might be streamlined. The report has been criticized by those who claim the changes would compromise efforts to protect aquatic life associated with FERC-licensed projects.

Lee Keefer reported the following **Georgia** trout management highlights:

> A Trout Management Plan for Georgia has been completed, and a draft has been submitted for final approval.
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> The delayed harvest program has increased to three streams, Smith Creek, Amicalola Creek, and a 4-mile section of the Chattahoochee River tailrace (previously a put-grow-and take fishery stocked with fingerlings). This program has been very popular with anglers. A total of about 62,000 trout annually are dedicated to this program. Work is currently underway with South Carolina to open a delayed harvest section of the Chattooga River by the fall of 2002.
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> A large portion of the trout fingerling needs are now being produced "in-house" at the

Summerville Hatchery. These fish were formerly supplied by the federal hatchery system, prior to the closing of several USF&WS hatcheries in the southeast.

Standardized sampling of trout streams resumed in 2000 and will continue on an annual basis. Impacts to streams as a result of a three-year drought appeared to be minimal so far.

Drought impacts to Georgia trout hatcheries have been substantial, requiring significant changes in stocking schedules to reduce loading during critical periods.

Trout stocking for predator control in several mountain reservoirs has successfully established significant sport fisheries, and "lake trout" fishing has become quite popular with anglers.

The controversy over Wilderness designations on Forest Service lands has died down somewhat, since the "Roadless" issue has taken center stage. The potential threats to fisheries management activities by both issues remain significant. The proponents of the wilderness and roadless designations appear to be remarkably inflexible and indifferent to the needs of wildlife and fisheries programs. Helicopter stockings of brown trout fingerlings would be impacted as would habitat work.

The "Trout Streams of Georgia" map was recently completed, depicting the location of all 4,000 miles of the state's trout streams. The map also shows whether streams are open to fishing seasonally or year-round, streams with special fishing regulations, stocking locations, nearby roads, camping areas, public lands and major non-trout waters. General information about Georgia's trout resource, management efforts and fishing tips are also included.

Frank Fiss reported on trout management efforts in **Tennessee**:

Jim Habera is continuing annual sampling of 15 wild trout streams, but these efforts may be reduced soon.

Monitoring continues on the brook trout restoration effort on Hampton Creek, where rainbow trout were removed with electrofishing prior to restocking with brook trout.

Dry, warm, weather is expected to create adverse conditions for trout in the Hiwassee River this summer, where an evaluation of the stocking of brown versus rainbow trout fingerlings is also being conducted.

Brook trout are being stocked in the Watauga River tailwater. Since the river is not connected to any wild trout habitat, these fish are not expected to affect any native brook trout populations.

A five year study of the Clinch River fishery has been completed and the results have been presented to the public to determine what kind of fishery management changes

would be acceptable. Public access to the Clinch river is being reduced through leasing of access through streamside property.

The Corps of Engineers has initiated studies to try to implement aquatic habitat improvements in their tailwaters. Improvements in dissolved oxygen in the Cherokee tailwater have enhanced trout growth rates.

Tennessee has initiated two new delayed harvest areas on two National Forest streams: the Tellico River and Paint Creek.

An attitude survey is being mailed to anglers who were interviewed in tailwater trout fishery surveys.

Agency management efforts have been hampered by a 32% budget cut last year. Trout permits are required to fish for trout in Tennessee, but revenue is not earmarked for trout management.

Tennessee struggles (as do many states) with how to determine the availability of public access on stocked trout streams. A map showing the location of all stocked trout streams in Tennessee was recently completed.

Mike Shingleton and **Tom Oldham** reported on recent events in the management of trout in **West Virginia:**

No new areas were proposed for special regulations this year.

Recent "anti-degradation" legislation has created a need to list wild brook trout streams in a separate category from other trout streams. Industry is expected to resist the legislation and will likely try to delete streams from the listing during the current one-year review period.

In West Virginia, the Wildlife Resources Division treats acid rain-damaged streams, while the Department of Natural Resources treats streams damaged by acid mine drainage. WRD is now treating 25 streams totaling 124 miles with limestone sand at a cost of approximately $40,000 per year. Other limestone treatment techniques (limestone drums, dosers) are also still in use. All limestone used in mitigation efforts comes from a single quarry, which produces stone that is 98% dissolvable calcium. Of the total 400-600 miles of acid rain-impacted streams, about 200 miles are being treated. The agency would like to treat another 150 miles of streams. Much of the liming costs are covered by interest from an endowment funded from the sale of lifetime fishing licenses.

West Virginia produces a 48-page booklet with maps showing the location of all stocked trout streams as well as information about trout management efforts, a description of the formula to determine stocking density and other information about trout and trout fishing. The booklet is sold for a small fee.

Mike Kruse reported on the status of several trout management issues in **Missouri**:

The Ozark region is suffering from the third year of below normal rainfall. On May 16, USGS gauges on 5 trout streams reported flows of 24-69% of the long term median. Some gauges are reporting record low flows for the 50-70 year period of record. Trout populations and hatchery operations have suffered as a result.

A new management program for Little Piney Creek was initiated March 1, 2001. A new, 9.9-mile Wild Trout Management Area was established and the existing Trout Management Area (put-and-take), was expanded to 3.7 miles and shifted to more marginal habitat downstream. Annual stockings of 2,100 catchable rainbow trout are planned for the new TMA. A new access area was established to separate the two reaches.

A Licensed Trout Fishing Area Permit has been established to regulate the operation of private trout fishing businesses. Department biologists inspect each proposed area to insure that the operation will not negatively affect existing public trout fisheries or any endangered species or their habitat and to verify that there is coldwater habitat suitable for trout. Accurate stocking and harvest records must be kept and all trout must be from disease-free sources. A $100 fee is charged to operate a private trout fishing area, but guests or customers may fish without additional permits.

A cooperative habitat improvement project with 9 landowners on Mill Creek has been completed. Habitat has been enhanced on about 4.5 miles of stream using bank stabilization techniques and placement of boulders with the stream channel.

Evaluations of test flows below Table Rock Lake and other impoundments on the White River system are planned. These flows are designed to test the effects of various minimum flows that have been proposed for each dam. Effects on power generation, small boat navigation and access by wading anglers at each flow are planned.

The Missouri Trout Map, describing the location of all publicly-managed trout waters, was first published in 1999. It is now in its second printing with preparations beginning for a third printing.

Jeff Ross gave us an update on trout management in **Kentucky**:

Four delayed harvest streams have been established with catch and release periods of October 1 through April 30. Each stream receives one stocking at the beginning of the catch and release period, and is stocked again on a put-and-take basis after April 30. Sampling indicates that stocked fish are surviving throughout the catch and release period, but are removed soon after stocking during the harvest period. Harsh winter conditions apparently resulted in the loss of fish from some areas this past year.

Efforts to restore an acid rain impacted brook trout stream have been complicated by Wilderness Area designation that limits access for restoration.

A statewide 12-inch limit on brown trout has been enacted. The statewide creel limit of 8 trout may be changed to inlcude no more than 5 rainbow trout and 3 brown trout. Brown trout populations in the Cumberland River have improved since the implementation of a 20-inch minimum length limit in 1997. Brown trout were caught at a rate of 36 per hour of electrofishing in 1996 and at a rate of 105 per hour in 2000. Water quality has improved with the addition of aeration baffles and turbine pulsing below Wolf Creek Dam. Increasing the depth of the hatchery intake below Wolf Creek Dam is expected to lower water temperatures and increase hatchery production by 10%.

Kentucky's trout fishing opportunities have been summarized in a tri-fold brochure that describes each trout stream, the kind of management approach used on it, and the number of trout and species of trout stocked. Additional information about the Kentucky trout program, Fort Campbell and Fort Knox trout fishing opportunities and licenses and regulations is also included.

Larry Mohn and **Stephen Reeser** described recent events in the management of **Virginia**'s trout resources:

There are now 10 delayed harvest streams in Virginia. All the streams being managed with this approach are too low or too warm to sustain trout fisheries in the summer. They are stocked three times during the catch and release season, and fishing is restricted to single-point artificial lures.

Of the landowners along the Jackson River tailwater, 65-70% support public fishing. As an excellent population of wild brown and rainbow trout has developed, landowner relations have eased. There are now more and larger trout in the Jackson River than during the period when fish were stocked.

Liming of the St. Mary's River to mitigate the effects of acid rain has resulted in a tremendous improvement in the native brook trout fishery, with the largest population size in 25 years of sampling.

Trout Unlimited members have been utilized as volunteer creel clerks in a study of angler use and characteristics on wild trout streams. So far, the system is working well.

In an effort to satisfy anglers who liked Virginia's old "opening day" (prior to the adoption of a year-round trout season), a system of "Heritage Days" has been established whereby trout stocking in a few selected locations is announced ahead of the stocking date.

Virginia publishes an annual trout guide, which is normally the January issue of the statewide magazine *Virginia Wildlife*, a monthly publication of the Virginia Department of Game and Inland Fisheries. It includes maps showing the locations of trout streams, and detailed information on many aspects of the Virginia trout program.

Jim Borawa sent along the following summary of **North Carolina** trout management

highlights:

1. Put-and-take trout stocking creel surveys - Completing analysis of creels conducted on 12 streams over 3 years to evaluate characteristics of angler trips on traditional put-and-take trout streams.

2. Delayed Harvest Catch-and-Release season expansion - Completing analysis of creels conducted on 4 trout streams managed under delayed harvest regulations. Main objective was to determine the increase in fishing effort related to an expansion of the Catch-and-Release season from 3 months (March-May) to 9 months (October-May). Preliminary statistics indicate that fishing pressure during the original March-May period tripled between 1992 (600 hours/km) and 1997 (2,000 hours/km). In addition, the fishing pressure between October and February was about 50% of the March-May period (1,000 hours/km). In spite of this increase in pressure (and a drop in catch rates), anglers rated their fishing trips as good or better in 1996 than in 1992.

3. Trout fishing maps - We are currently updating our trout fishing maps and hope to have them posted to our agency web page later this year.

4. Brook trout genetics - We are planning to type an additional 50 populations this summer. This will put us at about 200 populations typed in North Carolina. Current count shows us at about 360 known populations.

5. Long-term trout monitoring - Completing a summary report on streams monitored between 1989 and 1996 to examine annual variability in trout density, standing crop, length-frequency distribution and condition.

6. Evaluating brown trout fingerling put-grow-and-take potential of tailwater below Lake James. This facility will be going under FERC relicensing and we are examining options for management consideration in that tailwater. Preliminary findings indicate fingerling stockings are contributing heavily to the population and growth appears good. We will be looking at spawning activity and doing a cursory food habits examination this year.

New initiatives being planned in new 5-year Federal Aid documents:

1. Fishery resource inventory and classification - This initiative is aimed at classifying (in the broadest sense) coldwater, coolwater, and warmwater resources in the mountain region of North Carolina. Objective is to create a biologically-based reference dataset to be used for fishery management strategies, water quality classifications, mitigation for development activities (404 permit activities, etc.), and stream restoration activities.

2. Trout angler opinion survey - A first ever initiative for NC to determine angler perceptions of our trout program - what do they like, dislike, what do they want to

see more of, and to get their opinion on new ideas/suggestions for trout management.

3. Economic survey of delayed harvest trout waters - As you can tell from the information above, many of our delayed harvest streams are getting tremendous pressure, much of this from nonresident anglers (Nantahala River had 48% of anglers from out-of-state in 1996-97). In an effort to determine the economic impact of this program we will be completing a survey of these waters in within the next few years.

Saturday May 19

Charles Gauvin, the President and Chief Executive Officer of **Trout Unlimited** described efforts to educate anglers, the public and politicians about acid rain and to TU's involvement in volunteer water quality monitoring in acid sensitive watersheds. A discussion ensued about what each state is doing to monitor the effects of acid rain on its trout streams. West Virginia has a network of 40 sites with long term data on water quality. Georgia monitors precipitation, but because there is no biological evidence of stream acidification, no water quality sampling network has been established. However, Georgia streams are poorly buffered and appear vulnerable to acidification. Acid rain impacts and stream monitoring are occurring in the Great Smoky Mountains National Park. Further discussion involved the best way to address the issue of acid rain, how much evidence of damage is needed, and whether or not successful acid mitigation efforts effectively reduce the appearance of significant damage due to acid rain. The concensus seemed to be that continued monitoring is necessary to document the scope of the problem, and that mitigation is needed to protect and restore affected salmonid resources. Both of these efforts, combined with cooperation with other groups addressing acid rain's terrestrial effects, will hopefully raise public awareness enough to cause necessary regulatory changes to happen.

Other Trout Unlimited issues were also briefly described including efforts to address stream degradation due to channelization, particularly in New York's Catskill Mountains. After massive flooding in 1996, and the subsequent influx of FEMA money, as much as 12% of the tributary mileage of the Delaware River watershed was channelized. Further discussion included topics of regional interest including sediment impacts (Georgia), stream acquisition (Missouri), urban/suburban development impacts (Missouri, Virginia, Georgia) and the management of southern Appalachian brook trout.

Field Trip

After the discussion with Charles Gauvin, the group toured the Blackwater River limestone treatment facility. The site consists of a series of perforated steel drums, filled with limestone gravel, that are turned by water diverted from the river. The rotating gravel is gradually abraded and dissolved into the receiving stream to neutralize acid conditions. The facility also includes an experimental lime "doser" which automatically adds fine lime powder to river water. These facilities help raise the pH of the Blackwater River before an acidified tributary, Beaver Creek,

enters about a half mile downstream.