



AFA NEWS

Newsletter of the Alabama Fisheries Association

August, 2004

FROM THE PRESIDENT

Claude Reeves



We had an excellent meeting in Gulf Shores last February (2004). There was a lot of effort exerted by the moderators, speakers, officers and others who participated in helping with that meeting and the fine program. I want to personally thank everyone adding to the success of the 2004 meeting. We had some really good papers presented by the speakers. I have enjoyed serving as an officer of AFA and have learned a lot from all of the professionals I have had the privilege of working with concerning the AFA matters and meetings. Thanks again to everyone helping to make the 2004 meeting a success.

Jeff Slipke is program chairman (AFA President-elect) this year and is already working hard to ensure that we have another fine program in 2005. The meeting place selected is the Hilton Garden Inn in Orange Beach. Jeff will be calling

on some of you to help with the program as moderators to help acquire speakers and quality presentations for the January 2005 meeting. Please provide him with the courtesy and support that you did in 2004, if you are asked to help with the 2005 program.

The program chairman's job requires a great deal of work and participation by AFA Members, but of course brings satisfaction with the success of having a good meeting. I ask for your help in supporting Jeff, participating in AFA Meetings, committees and in helping to accomplish AFA objectives and organizational goals.

I have always enjoyed attending the annual AFA meeting, renewing acquaintances and gathering as much information about the current fisheries related challenges and changes. I think all of us take away a lot professionally from the meeting back to our workplaces, and certainly the interaction of our AFA membership increases our knowledge base and aids us in performing our duties in our fisheries related fields. It is important that we are good stewards of spending our precious funds that we have available and can justify our attendance at professional meetings. This should be the case with the upcoming 2005 AFA Meeting in Orange Beach. Please plan on reserving enough of your travel allocation and being present at the 2005 AFA

ABOUT THE AFA

The Alabama Fisheries Association (AFA) is an organization of professionals dedicated to the development, conservation, management, and wise utilization of commercial and recreational fisheries in Alabama. The AFA promotes all branches of fishery science and related technology, with emphasis on the exchange and dissemination of knowledge about fish and other aquatic life. Annual membership fees are \$5.00; three-year memberships are \$15.00. Members are encouraged to purchase three-year memberships. This helps our financial stability and you will avoid any increases in dues that may occur during that time. Dues may be sent to Dave Cline, AFA Treasurer, Alabama Cooperative Extension System, 203 Swingle Hall, Auburn, AL 36849-5628.

AFA web page – for information about AFA (and recent newsletters) point your web browser to:
<http://www.alabamafisheriesassociation.org/>

Meeting. We are attempting to keep costs of the meeting within budgets and not have to increase fees. We will look forward to seeing you in Orange Beach in January 2005.

In the meantime if you have any suggestions or comments on how to improve AFA meetings or activities, make me or one of the other officers aware of your thoughts.

FROM THE TREASURER
David Cline



Greetings all. I trust that everyone is having an outstanding summer season. Just so you all know the Association is in good financial standing. We have a total of \$23,853.70 in the bank. These funds are divided between three accounts as shown below. Our balance improved by \$689.90 from this time last year. The reduction in the CD balance was the result of providing two scholarships. We generated enough funds through the raffle to cover one scholarship but needed to dip into the CD to fund the second scholarship. The board has decided to make it a policy to give only one \$500 scholarship in the future to avoid reducing our scholarship account funds.

	<u>Aug 2003</u>	<u>Aug 2004</u>
Scholarship CD	\$14,144.00	\$13,993.84
Checking	\$2,437.00	\$6,166.86
Money Market	\$6,682.00	\$3,693.00
Total	\$23,163.80	\$23,853.70

In addition, if anyone has news or information for our web page please let me know.

FROM THE EDITOR
Rob Angus



Thanks to all of you who contributed this time. If you were not contacted about submitting something for this newsletter and would like to receive a “call for articles” (via e-mail) for the next newsletter, please notify me at the Biology Department, UAB, Birmingham, AL 35294-1170 or 205-934-4799 or raangus@uab.edu.

Got e-mail? If you received this newsletter by U.S. mail, it means we don’t have a current e-mail address for you. To provide us with your e-mail address, please send me a brief message via e-mail. You will then be placed on our e-mail mailing list and will receive calls for articles, other occasional announcements, etc. When the next newsletter comes out, you will be sent an e-mail message with a URL so you can read it online. Members with internet access are not sent hard copies of the newsletter unless they request one. This has reduced our newsletter production and mailing costs substantially.

AFA SCHOLARSHIP

The AFA offers an annual scholarship (\$500) to a deserving graduate student who is currently enrolled in an Alabama university and has an approved research proposal related to fisheries science. The scholarship award can be used in any way to support the recipient’s graduate education. The scholarship fund received an excellent initial boost from the Alabama Power Foundation which provided a generous gift of \$10,000.

AFA scholarship (continued)

The **application deadline is 1 November** and the application procedure can be found on the AFA web page:

www.alabamafisheriesassociation.org.

For additional information, contact David Bayne (334) 844-9321 dbayne@acesag.auburn.edu.

STEERING COMMITTEE

The 2004-2005 AFA Steering Committee consists of: Claude Reeves, President (Alabama Cooperative Extension Service), Jeff Slipke, President Elect (SE Pond Mgmt.), Randell Goodman, Past President (Auburn), Rob Andress, Secretary (Auburn), Dave Cline, Treasurer (Auburn), Rob Angus, Newsletter Editor (UAB), Kevin Chalk (AL Power), Bernie Kuhajda (U. of AL), Norman Latona (SE Pond Mgt.), Stuart McGregor (Geo. Survey of AL), Doug Powell (AL Power), Wendy Seesock (Auburn), Barry Smith (American Sport Fish), Stan Cook (ADCNR), Steve Rider (ADCNR), and Jim Howard (AL BASS Fed.). We are grateful to these folks for their willingness to help steer our organization in the right direction.

2005 AFA ANNUAL MEETING

The annual AFA meeting will again be held on Alabama's beautiful gulf coast. However, since the Gulf Shores State Park will be shutting down in October, we will be changing venues and dates slightly.

The meeting will be held at the **Hilton Garden Inn, Orange Beach, Alabama January 24-26, 2005.**

The room rate will be \$54.95/night for a single king-size bed, and \$64.95/night for two queen beds (pool view). Of course there is an additional 11% lodging tax. These room rates are a bit higher than we were used to with the GSSP, but the accommodations promise to be somewhat less "rustic." Reservations must be made no later than January 7, 2005 to receive these rates. There are a limited number of rooms blocked for our meeting, so make your reservations early. The phone number for reservations is **877-782-9444**.

You can identify yourself as part of our group by using the group code **ALF**.

The program will follow the usual format with talks commencing at 1:00PM on Monday the 24th, a reception that evening, talks Tuesday and a banquet that evening. The meeting will conclude with talks Wednesday morning followed by the final business meeting.

CALL FOR PAPERS

Jeff Slipke



The program chairman for this year's meeting is our president-elect, Jeff Slipke (SE Pond Mgmt.) 205-664-5596 jslipke@sepond.com. Each speaker will be allotted 20 minutes (15 minute presentation and 5 minutes for questions). Therefore, we will be able to schedule approximately 37 presentations. Since the number of presentations will be limited, presenters are encouraged to consider poster presentations. Awards will be present for best presentation, best student presentation, and best poster. Session topics and their moderators are as follows:

Reservoirs – Mike Maceina

Dept. of Fisheries

203 Swingle Hall

Auburn University, AL 36849-5419

(334) 844-9319

maceimj@auburn.edu

Meeting topics (continued)

Aquatic Education - Doug Powell

Alabama Power Co.
P.O. Box 2461 GSC #8
Birmingham, AL 35291
(205) 664-6189

dhpowell@southernco.com

Aquaculture/Mariculture – Allen Davis

Dept. of Fisheries
203 Swingle Hall
Auburn University, AL 36849-5419
(334) 844-9312

ddavis@acesag.auburn.edu

Watershed/Riverine – Scott Mettee

Alabama Geological Survey
P.O. Box 869999
Tuscaloosa, AL 35486-6999
(205) 247-3627

smettee@gsa.state.al.us

Marine/Coastal – Steve Szedlmayer

AUMERC
8300 State Hwy 104
Fairhope, AL 36532
(334) 990-4858

sszedlma@acesag.auburn.edu

Contributed/Invited Papers – Damon

Abernethy
ADWFF – District 4
1820C Glynwood Drive
Prattville, AL 36066
(334) 358-0035

dabernethy@dcnr.state.al.us

If you would like to make a presentation, please fill in the form on the last page of this newsletter and send it to the appropriate session moderator, or simply e-mail the appropriate information. You are advised to get your form in soon (before the end of October) so you won't find that the session has already been filled. The meeting schedule will be included in the winter newsletter.

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT Aquatic Assessment Unit (AAU)

Reservoir Water Quality Monitoring (RWQM) Program

Monthly mainstem reservoir and tributary embayment sampling was initiated during April 2004 for the following projects: *Water Quality Assessment of Southeast Alabama Rivers, Reservoirs, and Tributary embayments*; *Water Quality Assessment of Alabama Reservoirs for Nutrient Criteria and Total Maximum Daily Load Development*; and, *Nutrient Criteria Compliance Monitoring of Alabama Reservoirs*. A total of 80 stations are monitored for these projects each month with vertical profiles of *in situ* variables conducted at meter intervals and composite samples collected for nutrient and chlorophyll a analyses. Monthly monitoring is to be conducted through the end of the algal growing season in October.

The FY2005 Section 319 NPS grant application *Surface Water Quality Assessment of Rivers, Reservoirs, and Tributary Embayments of the Alabama, Coosa and Tallapoosa River Basins* was completed during July 2004.

The draft report for the *Tributary Embayment Water Quality Assessment of the Tennessee River Basin* was initiated in January 2004. Completion of the final report is scheduled for December 2004.

For further information on the RWQM Program contact Gina LoGiudice at (334) 260-2783 or glogiudice@adem.state.al.us

Fish Tissue Monitoring Program

Fish tissue sampling was completed with 463 fish collected from 45 locations October-December. Forty-one locations were FTMP sampling sites with 401 fish collected. One site on the Alabama River was sampled as part of a site assessment conducted by ADEM/Land Division with 12 fish collected. Three sites were sampled as part of the EPA National Fish Tissue Study with 50 fish collected.

All FTMP data entry and QA/QC was completed during the spring. Data packets consisting of complete data spreadsheets, exceedance spreadsheet, quick reference spreadsheet (of FDA exceedance locations), and maps of sampling locations were provided to program cooperators. A press release for the ADEM was provided to ADEM/Public Affairs for review and release.

Staff visited ADCNR Marine Resources Division for training in methods of aging marine fishes.

For further information on the Fish Tissue Monitoring Program contact Michael Len at (334) 260-2787 or milen@adem.state.al.us

Point / Nonpoint Source Assessment Programs

Seventy-three Tennessee basin NPS screening stations in 30 sub-watersheds were selected for sampling by FOD personnel. Sampling, to include water quality samples, a macroinvertebrate assessment, and a fish community survey on selected stations, began in May 2003, but due to heavy precipitation, was delayed for three weeks. Sampling was reinitiated in June 2003, with water quality and macroinvertebrate assessments conducted at all stations.

Fifty-four fish community surveys were completed. All fish have been identified. A visit to Auburn University was made to identify the three and to confirm the identity of twenty-eight fishes which were added to the reference collection. All new species collections have been entered in the master taxa database along with their trophic status, habitat preference, distribution, and tolerance to adverse environmental conditions. Streams are currently being scored.

In addition, two NPS intensive surveys were conducted in the Tennessee basin, the Sand Mountain area, and the Big Nance Creek sub-watershed. These were conducted in an effort to demonstrate an improvement in water quality of streams that have had best management practices implemented in their sub-watersheds. Twenty-one stations in five sub-watersheds were sampled during April, June, August and October 2003 and included water quality samples, a macro-

invertebrate assessment, and on most a fish community survey. All intensive water quality sampling events, macroinvertebrate collections, and fish community surveys have been completed. All data has been entered and QA'd.

Funding: The FY2005 CWA §319 NPS grant application *Rotational River Basin Approach: Surface Water Quality Screening Assessment of the Coosa, Tallapoosa, and Alabama River Basin* was completed during July 2004.

Reporting: The final 2002 NPS Basin wide Screening Assessment of the Black Warrior and Cahaba River Report is currently in peer review.

The 2001 Escatawpa, Tombigbee, and Mobile NPS Screening Assessment report is finished and available.

For further information on this project contact Lisa Huff at (334) 260-2752 or ESH@adem.state.al.us

Alabama Monitoring and Assessment Program (ALAMAP)

The 2004 ALAMAP sampling was initiated during August 2004. A total of 60 stream stations will be sampled by the Montgomery, Birmingham, Decatur, and Mobile Field Offices of Field Operations/ADEM. Ortho-phosphorus was added in 2002 to assist Water Division in establishing nutrient criteria for streams.

For more information on this project contact Lee Davis at MLD@adem.state.al.us or 334-260-2755.

Ambient Monitoring

Staff in Mobile and Montgomery conducted sampling at 41 Ambient Monitoring Stations during the 3rd Quarter of FY04. Water samples for both chemical analyses and field parameter measurements were collected. Received chemical analytical results and all field parameter data have been entered into the Montgomery Ambient Monitoring Database. QA/QC of data continues. Efforts continue to merge all Ambient Monitoring data into the Master database on the file server.

For more information on this project contact Keith Gilliland at wkg@adem.state.al.us or 334-260-2746.

**AUBURN UNIVERSITY
Department of Fisheries and Allied
Aquacultures**



**David Bayne Is Named 2004 Alabama Wildlife
Federation Water Conservationist Of The
Year**

For more than three decades Dr. David Bayne has conducted research, taught students and helped the citizens of Alabama manage and protect ponds, streams, rivers and lakes. He is a proven and respected leader in the field of limnology and aquatic ecology, not only in Alabama, but throughout the United States and internationally. His research on aquatic ecosystems is highly respected and has been instrumental in helping government agencies in Alabama and neighboring states identify new and better ways to improve water quality and aquatic habitats.

Through his many years of service to Alabama as a faculty member at Auburn University, Dr. Bayne has strived to teach students the fundamentals of aquatic science and broaden their understanding about the importance of conservation and water management to the future of this state. Indeed, many of his graduate students form the core of water regulation and water management agencies throughout Alabama and throughout the Southeast.

Dr. Bayne currently serves as a technical expert on the Alabama Department of Environmental Management Lakes and Reservoirs Nutrient Task Force. He has played a vital role in their ongoing

efforts to develop numeric criteria for 41 lakes and reservoirs throughout Alabama. His extensive expertise and research has provided key supporting evidence needed to support the numeric criteria established for several lakes.

His three decades of research have not only contributed to a greater understanding of the detrimental effects of pollutants on Alabama's freshwater treasures, but have paved the way to more enlightened management to watersheds and water bodies state-wide. All Alabamians will benefit from the conservation and maintenance of cleaner waters for generations to come.



**Bill Deutsch's Game Helps Kids Learn Water
Quality**

Dr. Bill Deutsch, who has built Alabama Water Watch (AWW) into an internationally recognized and oft-emulated community-based water-quality monitoring program, has developed an environmental classroom game called Macro Mania that's sitting atop the "What's Hot for 2004" list of middle-school science education products.

Dr. Deutsch and representatives of LaMotte, the Maryland-based company that produces AWW's water analysis kits and is manufacturing and marketing Macro Mania, unveiled the game in April at the National Science Teachers Association convention in Atlanta.

The LaMotte Company bills the product as an exciting classroom adventure that teaches kids the connection between aquatic macro-invertebrates and water quality.

Macro Mania is a scaled-down version of BIO-ASSESS[®], an advanced card game Dr. Deutsch

invented and copyrighted in 1993 as a tool to train AWW volunteers in identifying aquatic bugs and their ecologies and using that information to assess water quality. In the years since, AWW, which produces BIO-ASSESS in-house, has sold an average 20 BIO-ASSESS games a year to organizations and some schools nationwide. But the hefty price tag of \$250 has been too steep for the vast majority of schoolteachers. With Macro Mania, LaMotte simplified BIO-ASSESS, adapted it to make it playable in one class period and lowered the price to \$39.

In its Macro Mania marketing campaign, LaMotte bills the product, not as a “game,” but as an “exciting classroom adventure.” The game comes with everything included, from the teaching manual to a classroom poster to the all-important decks of aquatic critter ID cards. What’s more, it’s easy to teach (“No macroinvertebrate experience necessary!”), it correlates to National Science Content Standards, and it can be easily adapted for use in mathematics, public speaking and art classes.

Impact of Aquathol K Applications on Largemouth Bass in Lake Seminole, Georgia

Mike Maceina and colleagues examined the effects of Aquathol K applied prior to largemouth bass spawning to reduce the exotic submersed macrophyte hydrilla and promote establishment of native submersed plants on largemouth bass population metrics. Density and biomass of adult (>250 mm) largemouth bass were determined between 2000 and 2003 using a catch-depletion technique in a cove that had been periodically treated with herbicides. Also, catch-per-effort for both number and weight were compared in 2002-2003 between a treated and untreated hydrilla infested cove.

In the cove where catch-depletions were conducted, herbicide applications reduced hydrilla between 2000-2003 and abundance of native plants increased. Coincident with these changes, largemouth bass density and biomass increased 50 to 120%. Over time, the size of fish captured increased in this cove, but temporal changes in relative weight were not evident.

In another cove treated with herbicides, native plant abundance was maintained, but did not increase, hydrilla was the dominant plant, and catch-per-effort for number and weight was about twice as great than in an untreated cove (100% hydrilla coverage).

No differences in size distributions or relative weight were observed between the treated and untreated coves. The application of Aquathol K to coves 2 to 3 months prior to largemouth bass spawning and periodic treatments after spawning was associated with either neutral or positive impacts on population metrics and also resulted in maintenance or an increase in native submersed plants.

In an additional project that started in November 2003, a total of 30 adult largemouth bass were implanted with radio tags in two hydrilla-infested coves. These fish were tracked with telemetry gear for one month, then Aquathol K was applied to each cove to control hydrilla and fish were relocated over a three-month period. In one long and narrow 100 acre cove that was totally infested with hydrilla, hydrilla in half of one side of the cove was eliminated after treatment to determine largemouth bass habitat preference. Largemouth bass did not migrate from the treated cove and specific treatment areas, and distributions in relation to hydrilla presence or absence appeared random.

In another circular 80 acre cove that had about 50% coverage of hydrilla, Aquathol K completely eliminated all hydrilla. Fish remained in the treatment cove and inhabited the same locations with and without the presence of hydrilla. In this cove, water depths were greater, greater habitat diversity was available and fish tended to move more on a daily basis than the long and narrow 100 acre cove. Additional data are being collected and this project will terminate in April 2004.

Auburn & UAB

Ron Phelps (Auburn Fisheries) and Steve Watts (UAB Biology) will be working on improving the biofiltration capability of the recirculating systems at the Claude Petite Research Center in Gulf Shores. Algae buildup in the biofilters can

sometimes decrease the efficiency of nutrient transfer. They will place sea urchins in the tanks to help graze the excess algae, and hope to improve the efficiency of the salt water systems.

MIDSOUTH AQUATIC PLANT MANAGEMENT SOCIETY

The 23rd Annual Meeting of the MidSouth Aquatic Plant Management Society will be held October 4-6, 2004 at the Radisson Admiral Semmes Hotel in Mobile, Alabama. The meeting program will offer exemplary presentations of water resource management topics that will be certain to peak the interest of all attendees. For more information, ask Bob Gunkel (Editor) for a copy of the newsletter. 601-634-3722 gunkelr@wes.army.mil.

GEOLOGICAL SURVEY OF ALABAMA

GSA biologists have been involved in several ongoing and new projects this year. A survey of imperiled fishes in the Elk River has expanded the ranges of several species including the blotched chub, silvery shiner, stargazing minnow, and boulder darter. Another survey of imperiled species in coastal rivers produced the first Gulf sturgeon record from the Perdido River system and expanded the ranges of several fish species in the Mobile-Tensaw River Delta including a series of blackmouth shiners from Bay Minette Creek.

Tracking studies have documented upstream paddlefish movement through the Millers Ferry lock chamber and downstream movement as far south as the Tensaw River. Preliminary tracking data indicate paddlefish feed at a speed of about 1 mph.

Work is continuing on the Terrapin Creek bioassessment project, IBI fish studies in north Alabama streams for TVA, Buttahatchee River and Bear Creek sediment analysis projects, and the Millers Ferry attraction flow study.

GSA biologists have published several papers this year including works by Tom Shepard and others (Locust Fork Bioassessment Study), Stuart McGregor and others (several mussel papers), and Scott Mettee and others (Status survey of Alabama shad and skipjack herring; Biology of a

spawning population of *Cycleptus meridionalis* in the Alabama River). Tom, Stuart, Pat, and Scott also authored species accounts in the new four-volume work on Imperiled Wildlife of Alabama.

DIVISION OF WILDLIFE AND FRESHWATER FISHERIES

Mr. Maurice Jackson, formerly Hatchery Manager at Marion State Fish Hatchery, accepted a new position as Aquatic Education Biologist in Tuscaloosa (District III). Maurice's new responsibilities will involve outreach activities such as community fishing, aquatic education duties, boat shows and fairs, Conservation Expo events, Youth Dove hunts, and similar duties.



CALL FOR PAPERS

**Alabama Fisheries Association
Annual Meeting
January 24 - 26, 2005
Gulf Shores, AL**

Name: _____ Phone: _____

Address: _____

Title of Paper: _____

Brief Summary: _____

Please submit your title to the appropriate session moderator (see pages 3 and 4) as soon as possible, but no later than the end of October. Titles and abstracts should be sent to Rob Andress, ALCFWRU, 103 Swingle Hall, Auburn, AL 36849 by Dec. 1 for inclusion in the program.

