

**21st Annual Meeting
February 16 – 18, 2004
Gulf State Park Resort Hotel
Gulf Shores, Alabama**

Monday, February 16, 2004

10:00 am – 1:00 pm Registration

1:00 Welcome and Opening Remarks by Randell Goodman, AFA President and
Claude Reeves, Program Chair and President-Elect

**SESSION 1 – CONTRIBUTED PAPERS
Moderator: Bernie Kuhajda, University of Alabama**

- 1:15 Mussel monitoring in the headwaters of the Paint Rock River. James C. Godwin,
Alabama Natural Heritage Program, Huntingdon College
- 1:30 Status of fish communities in a rapidly developing watershed: the Upper Cahaba
River. Robert Angus*, Ken Marion, and Jaideep Honavar, Biology Department,
University of Alabama at Birmingham
- 1:45 Assessing persistence of a rare darter species, *Etheostoma boschungii*, using
population viability analysis models. Wendi W. Hartup* and Carol E. Johnston,
Auburn University, Department of Fisheries and Allied Aquacultures
- 2:00 State Wildlife Grants and the Alabama Comprehensive Wildlife Conservation
Plan: New funding for fish and wildlife conservation. Jim McHugh, Alabama
Department of Conservation and Natural Resources, Division of Wildlife and
Freshwater Fisheries
- 2:15 Potential egg predation by crayfish (*Cambarus latimanus*) on pygmy sculpin
(*Cottus paulus*) in Coldwater Spring, Alabama. Amelia C. Knight and Carol E.
Johnston, Department of Biological Sciences and Department of Fisheries,
Auburn University
- 2:30 Discovery of the blackmouth shiner, *Notropis melanostomus*, in Alabama. James
D. Williams, U.S. Geological Survey, and Bernard R. Kuhajda*, Department of
Biological Sciences, University of Alabama
- * Poster Presentation. Snap Shots of Land Use Changes in the Turkey Creek
Watershed; Implications on Three Imperiled Darters. Daniel Drennen, U.S. Fish
and Wildlife Service
- 2:45 Break

SESSION 2 – AQUACULTURE

Moderator: Bill Daniels, Auburn University

- 3:00 An Overview of Red Snapper (*Lutjanus campechnaus*) Reproduction at the Claude Peteet Mariculture Center. Amy Ferry*, David Maus and Ronald P. Phelps, Department of Fisheries and Allied Aquacultures, Auburn University
- 3:15 The Effects of Injecting Free Amino Acids in Maternal Brood Stock Red Snapper, *Lutjanus campechanus*, as Measured in Fertilized Eggs and Yolk-sac Larvae. Ryan P. Hastey, Laban C. Lindley, Ronald P. Phelps, Department of Fisheries and Allied Aquacultures and Keith A. Cummins, Department of Animal Sciences, Auburn University
- 3:30 Enrichment of Copepod Nauplii with Free Amino Acids for First-feeding Larval Red Snapper, *Lutjanus campechanus*. Laban C. Lindley*, Ryan P. Hastey, Ronald P. Phelps, Department of Fisheries and Allied Aquacultures, Auburn University, and Keith Cummins, Department of Animal Sciences, Auburn University
- 3:45 Culture of Protozoans and Dinoflagellates as Possible First Foods for Red Snapper Larvae. Daniel Rodriguez- Guerrero*, Herbert Enrique Quintero Fonseca, and Ronald P. Phelps, Department of Fisheries and Allied Aquacultures, Auburn University
- 4:00 Effects of Dietary Protein and Lipids on Growth and Body Composition of Juvenile Red Snapper *Lutjanus campechanus*. Christian L. Miller*, D. Allen Davis, and R. P. Phelps, Department of Fisheries and Allied Aquacultures, Auburn University
- 4:15 Evaluation of Feed Management Strategies for *Litopenaeus vannamei* Under Pond Production Conditions. Oscar Zelaya *, D. A. Davis, David B. Rouse, Department of Fisheries and Allied Aquacultures, Auburn University
- 6:00 AFA Social

Tuesday, February 17, 2004

SESSION 3 – RESERVOIRS

Moderator: Doug Powell, Alabama Power Company

- 8:00 Variations in Age and Growth of Freshwater Drum (*Aplodinotus grunniens*) in Alabama Rivers and Reservoirs. Andrew L. Rypel, Justin B. Mitchell and David R. Bayne, Department of Fisheries and Allied Aquacultures, Auburn University
- 8:15 Factors Influencing the Bioaccumulation of Polychlorinated Biphenyls (PCBs) in Six Game Fish Species from Logan Martin Reservoir, Alabama. Justin B. Mitchell, Andrew L. Rypel, and David R. Bayne, Department of Fisheries and Allied Aquacultures, Auburn University
- 8:30 BASS and the BASS Federation Role in Natural Resource Conservation. Chris Horton, BASS
- 8:45 The Influence of River Connectivity on Backwater Fish Communities in Demopolis Reservoir, Alabama. Jeffrey W. Slipke and Michael J. Maceina, Department of Fisheries, Auburn University

- 9:00 The Potential Impact of Water Reallocation on Retention and Chlorophyll *a* in Weiss Lake, Alabama. Michael J. Maceina and David R. Bayne, Department of Fisheries, Auburn University

SESSION 4 – FISH HEALTH

Moderator: Jeff Terhune, Auburn University

- 9:15 Influence of Angling and Fish Confinement on Prevalence of Largemouth Bass Virus. Benjamin H. Beck, J.M. Grizzle, S.D. McClenahan, Department of Fisheries and Allied Aquacultures, Auburn University and Harold L. Schramm, Department of Wildlife and Fisheries, Mississippi State University
- 9:30 Identification and Genetic Characterization of *Flavobacterium columnare* Isolates. Cova Arias, Department of Fisheries and Allied Aquacultures, Auburn University and Craig Shoemaker, T. Welker, P. Klesius, Aquatic Animal Health Research Unit, ARS/USDA
- 9:45 An Overview of Recent Advances in Vaccination of Cultured Fishes. Kenneth E. Nusbaum and R.C. Bird, Department of Pathobiology, College of Veterinary Medicine, Auburn University, and Bruce F. Smith, Scott Ritchey Research Center, College of Veterinary Medicine, Auburn University
- 10:00 Influence of Adrenaline and Fecal Coliforms on *Brachydanio rerio* Development. DeLisa L. Gillon and Brian S. Burnes, Department of Biology, Judson College
- 10:15 Break

SESSION 5 – AQUATIC EDUCATION

Moderator: Hugh Hammer, Gadsden State Community College

- 10:30 The Aquatic Biology and Aquaculture Technician Program at Gadsden State Community College. Hugh S. Hammer, Gadsden State Community College
- 10:45 The Dauphin Island Sea Lab and the Natural Resources of Mobile Bay. John Dindo, Dauphin Island Sea Lab
- 11:00 High School Aquaculture Programs: A Success Story. PJ Waters, Auburn University Marine Extension and Research Center
- 11:15 Design and Implementation of a Scaled Down Version of the University of the Virgin Islands Commercial Aquaponics System as an Aquascience High School Program. Kristie Howell, Hale County Technology Center
- 11:30 An Introduction to Best Practices in Fishing and Aquatic Resources Stewardship Education. Doug Darr, Alabama Wildlife and Freshwater Fisheries
- 11:45 Strengthening Aquatic Science Programs in Secondary Schools and Community Colleges. Hugh S. Hammer, Gadsden State Community College
- 12:00-1:20 Lunch

SESSION 6 – WATERSHED/RIVERINE TOPICS

**Moderator: Stuart McGregor,
Geological Survey of Alabama**

- 1:25 Community-based Conservation Programs in the Paint Rock River Watershed. Doug Fears and Paul Freeman, The Nature Conservancy
- 1:45 Measurement of Sedimentation Rates and Determination of Sediment Loading for Selected Streams in Alabama and Mississippi. Marlon R. Cook, Geological Survey of Alabama
- 2:00 Corps Rivers & Lakes in the Mobile District (AL, GA, MS & FL), Natural Resource Management, Recreation Areas, Fishing Enhancements, Future Challenges. Steve Logan, U.S. Army Corps of Engineers
- 2:15 Biological monitoring in the Cahaba River revisited.....yet again. Patrick E. O’Neil and Thomas E. Shepard, Geological Survey of Alabama
- 2:30 Long-term Changes in a Fish Assemblage in the Conecuh River, Escambia County near Brewton, Alabama. Karen J. Popp, Department of Fisheries and Allied Aquacultures, Auburn University
- 2:45 Response of Fish Communities to Cropland Density and Natural Environmental Setting in the Eastern Highland Rim Ecoregion of the Lower Tennessee River Basin, Alabama and Tennessee, 1999. Jeff R. Powell, U.S. Fish and Wildlife Service
- 3:00 Break

SESSION 7 – MARINE / COASTAL TOPICS

**Moderator: PJ Waters,
Auburn University Marine Extension and Research Center**

- 3:15 Survival, Movement, and Residency of Hatchery-reared Red Snapper *Lutjanus campechanus*, on Artificial Reefs in the Northern Gulf of Mexico. Hruskoci A. M., and S. T. Szedlmayer, Department of Fisheries and Allied Aquacultures, Auburn University
- 3:30 Long-term residency and Diel Movements of Red Snapper *Lutjanus campechanus*, on Artificial Reefs in the Northern Gulf of Mexico. Schroepfer R., and S. T. Szedlmayer, Department of Fisheries and Allied Aquacultures, Auburn University
- 3:45 A Comparison of the Fish Communities Between Artificial Reefs With and Without Attached Food Resources. Sutterer R. A., and S. T. Szedlmayer, Department of Fisheries and Allied Aquacultures, Auburn University
- 4:00 Juvenile Red Snapper Essential Fish Habitat in the North Central Gulf of Mexico. D.C. Newton and W.F. Patterson, III, Department of Marine Sciences, University of South Alabama, C.A. Wilson, J.H. Cowan, Jr., and S.J. Bentley, School of the Coast and Environment, Louisiana State University, and J. Jackson, Florida Marine Research Institute

- 4:15 Seasonal Comparison of Standardized Fish Samples from the Mobile Delta. David Armstrong and Joe Zolczynski, Alabama Wildlife and Freshwater Fisheries
- 4:30 Gulf Sturgeon Investigations in Alabama and Florida. Frank M. Parauka, U.S. Fish and Wildlife Service
- 4:45 Stock Discrimination Between Atlantic and Gulf of Mexico King Mackerel, *Scomberomorus cavalla*, With Otolith Shape Analysis. T.R. Clardy, W.F. Patterson, III, Department of Marine Sciences, University of South Alabama, D.A. DeVries, and C. Palmer National Marine Fisheries Service, Southeast Fisheries Science Center
- 5:00 Largemouth Bass in the Mobile-Tensaw Delta: Population Characteristics Across a Salinity Gradient. Alicia J. Norris, Dennis R. DeVries, and Russell A. Wright, Department of Fisheries and Allied Aquacultures, Auburn University
- 6:00 Banquet

Wednesday February 18, 2004

SESSION 8 – AQUATIC PLANTS

**Moderator: Joe Jernigan,
Alabama Wildlife and Freshwater Fisheries**

- 8:00 Aquatic Adjuvants and Their Impact on Efficacy. L. Marshall, Ph.D. and R. Lowe, Trans America Product Technology, Inc.
- 8:20 History of aquatic weed problems at Walter F. George Lake, Tom Morrison, Park Manager, Walter F. George Lake
- 8:40 Population Characteristics of Largemouth Bass Associated with Changes in Abundance of Submersed Aquatic Vegetation in Lake Seminole, Georgia. Steve M. Sammons and Michael J. Maceina, Department of Fisheries, Auburn University
- 9:00 Hyperspectral Remote Sensing of Native and Invasive Wetland Plant Species in Northern Mobile Bay. Tami M. Wells*, Mark S. Peterson, The University of Southern Mississippi, Gulf Coast Research Laboratory, Gregory A. Carter, Gulf Coast Geospatial Center, and Joseph B. Jernigan, Alabama Wildlife and Freshwater Fisheries
- 9:30 Annual Business Meeting
- 10:30 Adjourn