



THE 2023
ANNUAL MEETING
of the
South Carolina Chapter–American Fisheries
Society (SCAFS)

Hickory Knob State Park
1591 Resort Drive, McCormick, SC 29835

Wednesday – Friday, March 1 – 3, 2023



2023 Annual Meeting of the
South Carolina Chapter – American Fisheries Society

**2023 Annual Meeting of the
South Carolina Chapter – American Fisheries Society
Hickory Knob State Park, McCormick, S.C.**



Program—at-a-Glance

Wednesday, March 1, 2023

Time Activity Location

12:00 – 1:20	Registration, Lodging Assignment, and AV Loading,	Convention Center
1:20 – 1:30	Conference Welcoming Opening Remarks,	Convention Center
1:30 – 2:30	Oral Presentations: Session 1,	Convention Center
2:30 – 3:10	Break and continued AV Loading,	Convention Center
3:10 – 4:30	Oral Presentations: Session 2,	Convention Center
4:40 – 5:30	SCAFS Business Meeting,	Convention Center
6:00 – 7:00	Dinner, Dining Hall,	Great Room Lodge
6:30 – 8:00	Poster Session,	Great Room Lodge
7:00 – 11:00	Networking,	Great Room Lodge/Convention Center/Firepit/Amphitheater

Thursday, March 2, 2023

Time Activity Location

8:00 – 9:00	Registration, AV Loading, and Breakfast,	Convention Center
9:00 – 10:20	Oral Presentations: Session 3,	Convention Center
10:20 – 10:40	Break and continued AV Loading,	Convention Center
10:40 – 12:00	Oral Presentations: Session 4,	Convention Center
12:00 – 1:00	Lunch, Dining Hall,	Great Room Lodge
1:20 – 2:40	Oral Presentations: Session 5,	Convention Center
2:40 – 3:00	Break,	Convention Center
3:00 – 4:40	Oral Presentations: Session 6,	Convention Center
5:00 – 5:45	Open Invitation Yoga Session with David Hood	
6:00 – 11:00	Grand Social, Dinner –	Convention Center/Firepit/Amphitheater

Friday, March 3, 2023

Time Activity Location

8:00 – 9:00	Breakfast, Dining Hall,	Great Room Lodge
9:00	Check Out of Lodging,	Barn – Bring your room key.
9:00 – 12:00	Workshop: “Close but no Cigar....Minnow; Fisheries without the Fish”,	Barn
12:00 – 12:20	Conference Closing Remark,	Barn



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Program Schedule

Wednesday, March 1, 2023

12:00 – 1:20 Registration, Lodging Assignment and AV Loading, Convention Center

1:20 – 1:30 Conference Welcoming Opening Remarks

Session 1 – Professional Presentations, Moderator: Marcel Reichert

1:30 – 1:50 Rachel Moore, SCDNR (Jim Stoeckel, Ian Butts, Tim Bruce, Ben Beck, Carol Johnston)
*Thermal Tolerance and Heat Stress in Pygmy Sculpin eggs (*Cottus paulus*)*

1:50 – 2:10 Julie Vecchio, SCDNR (Ernst Peebles)
Combining archival and ephemeral data to infer lifetime-scale ontogenetic movements in a reef fish

2:10 – 2:30 Preston Chrisman, SCDNR (Charles Cichra, Dan Rankin)
Sportfish Population Characteristics Following Mechanical Largemouth Bass Removal in Two Small Public Fishing Impoundments in South Carolina

2:30 – 3:10 Break and continued AV Loading

Session 2 – Professional Presentations, Moderator: Mark Scott

3:10 – 3:30 Lauren Faulk, SCDNR (Gary Sundin, Graham Wagner, Greg Rothman, Peter Kingsley-Smith)
Mapping and Removing Derelict Crab Traps to Assess the Impacts of Ghost-fishing in South Carolina Estuaries

3:30 – 3:50 Bruce Pfirrmann, Baruch Marine Lab, University of South Carolina (Matthew Kimball, Dennis Allen, Ginger Ogburn-Matthes, Paul Kenny)
Fast Times at High Tide: Nekton Use of Flooded Salt Marsh

() denotes Co-author(s)



3:50 – 4:10 **Kevin Spanik, SCDNR** (Tracey Smart)
Habitat Associations and Effects of Survey Expansion on Abundance Indices for 2 Deepwater Fishes

4:10 – 4:30 **Phil Carson, SCDNR** (Matt Catalano, Steve Sammons)
Subsampling trail camera images and comparing angler effort estimation methods on Alabama rivers

4:40 – 5:30 **SCAFS Business Meeting**

6:00 – 7:00 **Dinner, Dining Hall, Great Room Lodge**

6:30 – 8:00 **Poster Session, Great Room Lodge**

Poster Presenters:

1. **Leah DiMaggio, College of Charleston** (Virginia Shervette)
*Lane snapper *Lutjanus synagris*: documenting age, growth, and reproductive biology in the U.S. Caribbean*
2. **Cat Wells, College of Charleston SCDNR** (Walter Bublely)
*Characterizing the habitat utilization of red snapper (*Lutjanus campechanus*) in the Southeast, US*
3. **Gabrielle Tutelo, College of Charleston SCDNR** (Tracey Smart)
Diet Composition of Juvenile Snapper-Grouper Species along the Southeast U.S. Atlantic Coast
4. **Virginia Shervette, USCA Fish Con Lab**
Updates on our favorite feline-piscine invader from the Mississippi River basin: flathead catfish in South Carolina
5. **Anna Quintrell, College of Charleston**
Characterization of Microbiome in Coastal Shark Species
6. **Jesús Rivera Hernández, USCA Fish Con Lab**
Age estimation validation via bomb radiocarbon for red hind, coney, and graysby
7. **Olivia Poelmann, Clemson University**
Molecular identification of freshwater mussel glochidia from naturally parasitized fish in a small stream community

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8. William Barnes, Clemson University

Different methods for estimating swimming speed yield similar results for two stream fishes

7:00 – 11:00 Networking, Great Room Lodge/Convention Center/Firepit/Amphitheater

Thursday, March 2, 2023

8:00 – 9:00 Registration, AV Loading, and Breakfast, Convention Center

Session 3 – Professional Presentations, Moderator: Chris McDonough

9:00 – 9:20 Claire Benson, SCDNR

Microplastics in estuarine finfish in ACE Basin

9:20 – 9:40 Mark Scott, SCDNR (Lorianne Riggan, Tom Daniel, Kevin Kubach)

Incorporating Biological Indicators into the Stream Quantification Tool for South Carolina

9:40 – 10:00 Kevin Kubach, SCDNR (Mark Scott, Andrew Gelder, Megan Limehouse, Phil Carson, Rachel Moore)

Development of a fish-based biotic index for South Carolina streams

10:00 – 10:20 Wiley Sinkus, SCDNR (Walter Bubley, Tracey Smart)

Development of a Snapper-Grouper Juvenile Survey in the U.S. South Atlantic

10:20 – 10:40 Break and continued AV Loading

Session 4 – Student Presentations, Presentation Moderator: Walter Bubley

10:40 – 11:00 Tyler Zumwalt, Clemson University (Brandon Peoples, Troy Farmer, Henry Hershey, Mark Scott, Daniel Farrae, Tanya Darden)

Invasion Potential of Alabama Bass into Tributaries of South Carolina

11:00 – 11:20 Liam Batchelder, University of South Carolina (Joshua Stone, Bruce Pfirrmann, Matthew Kimball, Robert Dunn)

Phenology of white shrimp nursery habitat use in the North Inlet estuary

11:20 – 11:40 Lily Thompson, Clemson University

Explaining local drivers of non-native fish richness with regional variation

11:40 – 12:00 Brandon Reding, SCDNR/CofC (Walter Bubley)

Investigating the effects of sample size on natural mortality estimates using maximum age

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12:00 – 1:00 Lunch, Dining Hall, Great Room Lodge

Session 5 – Student Presentations, Moderator: Keilin Gamboa Salazar

1:20 – 1:40 Luke Troha, SCDNR, GPMB at CofC (Joseph Ballenger)
Estimating Selectivity of Red Drum Using 40+ Years of Tag-Recapture Data

1:40 – 2:00 William Annis, Clemson University (Lily Thompson, Luke Bower, Troy Farmer, Steve Midway, Brandon Peoples)
Homogenization and differentiation of stream fish diversity in 3 dimensions of diversity

2:00 – 2:20 Elizabeth Bullard, SCDNR/CofC (Joseph Ballenger)
Drivers of estuarine finfish community structure differences in South Carolina estuaries

2:20 – 2:40 Ridge Sliger, Clemson University
Integrating Species-Specific Fish Swimming Ability into a Stream-Crossing Assessment Framework

2:40 – 3:00 Break

Session 6 – Professional Presentations, Moderator: Kevin Kolmos

3:00 – 3:20 Brock Renkas, SCDNR (Joseph Ballenger, Maggie Jamison, Jonathan Tucker)
A comparison of aging methods for American eel otoliths

3:20 – 3:40 Jake Morgenstern, SCDNR
Assemblage and diversity of fish species occupying tidal pools and creeks in the May River estuary, SC

3:40 – 4:00 James Kilfoil, SCDNR
*Humans may facilitate foraging opportunities for juvenile brown bears (*Ursus arctos*) on sockeye salmon (*Oncorhynchus nerka*)*

4:00 – 4:20 Joseph Mruzek, Clemson University
Role of flow, environment and anthropogenic factors on fish biodiversity

4:20 – 4:40 Walter Buble, SCDNR
*Quantifying sex-specific life history of a commercially exploited wreckfish (*Polyprion americanus*) population in the northwest Atlantic Ocean*

5:00 – 5:45 Open Invitation Yoga Session with David Hood – bring your yoga mats!

6:00 – 11:00 Grand Social, Dinner



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Friday, March 3, 2023

8:00 – 9:00 Breakfast, Dining Hall, Great Room Lodge

9:00 Check Out of Lodging, Bring your room key to the Barn

9:00 Workshop – “Close but no Cigar....Minnow; Fisheries without the Fish”, Barn

Each of the three guest workshop speakers will have between 30 and 40 minutes to present followed by a 20-minute discussion period and a small break in between each speaker.

1. Morgan Hart - Alligator Project Leader - Statewide Projects – SCDNR, WFF

Morgan is a former fisheries biologist that now oversees the Alligator Project for DNR’s wildlife section. She has a hand in all things alligator related for the State. She works on hunting and nuisance permits, captive permits, statewide surveys, movement and mark recapture studies, and technical reporting. Her favorite media mention was an article in Garden and Gun magazine about putting tiny top hats on alligators. <https://gardenandgun.com/articles/why-are-these-alligators-wearing-top-hats/>

Presentation Title: *Alligators in South Carolina* - Alligators are a top-level predator in South Carolina. They are an economically and ecologically important species and are the most sought hunting tag in the State. At the same time, they are categorized as a non-game species and are considered a nuisance animal by many. They are a unique and difficult species to survey and manage and I will explain their biology and behavior how we approach the state management of this local modern dinosaur.

2. Ben Stone - BIG & CVA Program Coordinator – SCDNR, MRD

Ben Stone has a bachelor’s degree in Marine Biology and a master’s in Environmental Studies from the College of Charleston. He began his career at SCDNR as a graduate student working with shellfish management, then later a wildlife biologist with shellfish research. Most recently he was a compliance project manager for marinas, mariculture, and monitoring of special projects for SCDHEC's Office of Ocean and Coastal Resource Management up until mid-February when he returned to SCDNR to serve in his current role.

Presentation Title: *The BIG, CVA, DJ And How They Impact South Carolina's Natural Resources* - A brief introduction of how the BIG, CVA, and DJ work to protect South Carolina's natural resources while still allowing for a balance of public uses.

3. Hope Mizzell – SC State Climatologist – SCDNR, LWC

Intrigued by her grandmother’s daily ritual of documenting the weather Hope’s fascination with weather and climate began at the early age of 8. She completed her undergraduate (1993),



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Masters (1999) and Ph.D. (2008) focused on climatology from the Department of Geography at the University of South Carolina. She started her career in 1992 as a climatologist for the Southeast Regional Climate Center, before advancing to Assistant State Climatologist for the South Carolina State Climate Office in 1995 and to South Carolina State Climatologist in 2003. Hope also serves as a supervisor for the SC Flood Mitigation Program.

Presentation Title: Floods, Droughts, Hurricanes, Oh My - Hope's presentation will provide an overview of South Carolina's weather and climate including the diverse range of extreme weather. She will explain the atmospheric mechanisms behind South Carolina's usually delightful, but sometimes frightful days. You will learn about the responsibilities of the SC State Climate Office and how their team can assist you with data, tools, forecasts, and resources.

12:00 – 12:20 Conference Closing Remark, Barn



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