



LITTLE ROCK • 2020

2020 SDAFS Meeting Workshops

All workshops at the Marriott except 10. Catfish Aging II (at the Witt Stevens AGFC Nature Center, 602 President Clinton Ave). All workshops are Friday, February 21.

Room	Morning (8:00am - 12:00pm)	Afternoon (1:00pm - 5:00pm)
Petit Jean	11. Population Modeling (sponsored by Catfish 2020)	
Lafayette	12. Creel Surveys: Designing Complex Solutions to Simple Questions (sponsored by Catfish 2020)	
Peck	15. GIS Techniques in Natural Resources Management	
Grampas	3. VEMCO Systems Acoustic Telemetry Workshop	7. Improving Science Communication
	8. HAACP Training (cancelled)	
Ouachita	13. Introduction to R	14. Intermediate R and data visualization
Harris Brake	4. Leading at All Levels of AFS	2. Getting Hired – What Students Need to Know (2:00pm - 5:00pm)
Hoffman	9. Catfish Aging I (sponsored by Catfish 2020)	6. Effective Peer Review for AFS Journals
Chicot	5. Nature, Wildlife and Landscape Photography	16. Using Remote Cameras in Fisheries Management
Manning	1. Reservoir Fisheries Habitat Restoration Best Management Practices	
Neosho	17. Fish Kill Investigation: Methodology Workshop	
Stevens Nature Center		10. Catfish Aging II (sponsored by Catfish 2020, Off-site)

1. Reservoir Fisheries Habitat Restoration Best Management Practices

8:00 AM – 5:00 PM, Manning

Description: The Reservoir Fisheries Habitat Partnership (RFHP) completed a Reservoir Fish Habitat Management manual in 2017 that is hosted on our website <http://www.friendsofreservoirs.com/science/best-management-practices-manual/>. We have heard from numerous fisheries management professionals about the need to provide training in reservoir habitat restoration Best Management Practices. This workshop will be organized around that manual and will cover: permitting, woody/artificial structure, nuisance/invasive aquatic vegetation control, native aquatic vegetation restoration, sedimentation control, nutrient control, shoreline stabilization and funding. The workshop will be cosponsored by the RFHP and the SDAFS Reservoir Committee.

Cost: \$50

Maximum attendance: 50

Workshop requirements: None

Lead presenter: Jeff Boxrucker

Email: jboxrucker@sbcglobal.net

Phone: 405-659-1797

2. Getting Hired – What Students Need to Know

2:00 -5:00 PM, Harris Brake

Description: This workshop will cover what students need to know to enter the job market. Topics covered include interviewing skills, cover letters and resumes, how to get into graduate school, and what federal and state employers are looking for in new hires. Target audience is graduate students, undergraduate students, young professionals.

Cost: FREE

Maximum attendance: 30

Workshop requirements: bring a resume or CV for review

Lead presenter: Patricia Mazik, USGS, WV Cooperative Fish & Wildlife Research Unit

Email: pmazik@wvu.edu

Phone: 304-293-4943

3. VEMCO Systems Acoustic Telemetry Workshop

8:00 AM – 12:00 PM, Grampas

Description: During this workshop, we will explore various subjects pertinent to experienced and new telemetry researchers. We believe that scientists who use our technology should have an up to date

understanding of the technology as it relates to best practices in the field, study design, data management and analysis. You are never too experienced to learn! We will also show you what's new in the world of fish tracking. We have several innovative products that we believe will open new research doors and enhance your telemetry data experiences.

Tentative agenda includes but is not limited to:

- Acoustic Telemetry Technology Overview
- Designing a Successful Telemetry Study
- System Performance Assessment
- Data Management
- Fine-Scale Positioning
- What's New?

As always, we welcome your suggestions for any additional topics you would like to see covered in the workshop.

Cost: FREE

Maximum attendance: 30

Workshop requirements: None

Lead presenter: Nancy Edwards

Email: nancy.edwards@innovasea.com

Phone: 902-450-1700 x279

4. Leading at All Levels of AFS

8:00 AM – 12:00 PM, Harris Brake

Description: This workshop is designed for new and emerging leaders in the AFS. It addresses the need for new and emerging leaders to better understand how AFS functions, the roles of unit leaders in the AFS, and how to be an effective leader in an all-volunteer organization like the AFS. Topics addressed will include leadership principles in work places and volunteer organizations; strategic direction of the AFS; development of work plans; roles and responsibilities of AFS officers, Governing Board, and staff; recruitment and retention of volunteers; how to run an effective meeting. All topics will be addressed through a combination of lecture and discussion.

Cost: FREE

Maximum attendance: 50

Workshop requirements: None

Lead presenter: Steve McMullin, Douglas Austen, Scott Bonar, Brian Murphy

Email: mcmullintraining@gmail.com

Phone: 540-818-1670

5. Nature, Wildlife and Landscape Photography: Tips and Techniques

8:00 AM – 12:00 PM, Chicot

Description: This workshop will focus on tips and techniques that will enable you to take Nature, Wildlife and Landscape photographs that can relate to your studies in the field. We will also discuss how these photographs can be used for Social Media, Public Presentations, Brochures, Annual Statements and Grant Requests.

David Hares II will go over the components and technical aspects for taking better photographs through lecture, examples and participant interaction during the workshop.

The lecture portion will be an interactive exploration of our National Parks and many of the places in between. We will discuss the uniqueness of different parks, photography techniques, and various stories that occurred to get these photographs. In addition, we will discuss photographic tips and tricks to capture photographs. So far, these adventures have taken him over 80,000 miles to capture the beauty and uniqueness of our country's treasures.

We will discuss some of the techniques as well as camera settings required to get these wildlife and landscape photographs. We will discuss “mutual respect” of wildlife and how to safely interact with wildlife without disturbing the animals. Additional topics will include: “To Edit or not to Edit”, Drones, Documentary Photos, Fish images in Natural Habitat, Cell Phones.

During the workshop, we will also have a participant’s photo review: The goal is to discuss participants work in a group setting to understand how some of the discussed techniques apply to participants photos and provide suggestions for improvement. Participants are encouraged to submit 2-3 of their best photographs, and 1 photograph they wish could be better. Photographs will need to be submitted ahead of time and not all photographs submitted will be discussed during the workshop. Details for how to submit your photographs will be given closer to the conference.

Cost: \$45 – Professional, \$30 – student

Maximum attendance: 50

Workshop requirements: None, camera equipment optional

Lead presenter: David Hares

Email: info@haresphotography.com

Phone: 972-393-5484

6. Effective Peer Review for AFS Journals

1:00 – 5:00 PM, Hoffman

Description: The objective of this course is to provide attendees with a solid foundation for providing critical, yet constructive peer reviews of manuscripts submitted to AFS and other fisheries journal programs. The course will provide an overview of the publication process from start to finish, the roles and responsibilities of the editorial and review teams at all levels, and best practices for evaluating manuscripts and providing comments. Topics will be addressed through lectures, open discussion, and hands-on evaluation of sample manuscripts.

Cost: FREE

Maximum attendance: 30

Workshop requirements: None

Lead Presenter: Steve Midway, Brandon Peoples, Dan Daugherty

Email: smidway@lsu.edu, peoples@clemsun.edu, Dan.Daugherty@tpwd.texas.gov

Phone: 225-578-6458

7. Improving Science Communication

1:00 – 5:00 PM, Grampas

Description: Exchange of scientific information is an important reason for attending professional society meetings. Communication of science is a skill that improves with practice. However, repetition of bad habits makes one's communication skills worsen. PowerPoint can be an effective tool for enhancing a message but is too often used as a crutch that inhibits effective communication. This workshop will identify common presenter mistakes, including poor planning, unclear messaging, misuses of PowerPoint, and poor execution of typical scientific oral and poster presentations. This workshop will outline useful practices for development and delivery of compelling presentations. The goal is for participants to improve the likelihood that audiences will receive, remember, and use their findings.

Cost: FREE

Maximum attendance: 30

Workshop requirements: If possible, bring a laptop and a PowerPoint presentation (or poster) you have or intend to present at a scientific meeting

Lead Presenter: Phil Bettoli and Steve Lochmann

Email: PBettoli@tntech.edu, lochmanns@uapb.edu

Phone: 870-575-8165

8. HAACP Training (cancelled)

9. Catfish Aging I (sponsored by Catfish 2020)

8:00 AM – 12:00 PM, Hoffman

Description: The workshop will provide background information on current age estimation techniques for catfishes including the use of otoliths and spines. Content will include both information about the process of age estimation and the use of catfish age data including the validity of otolith and spine derived age data. In addition to presentations, time will be allotted for an open discussion to answer questions and allow participants to share their experiences.

Cost: \$50

Maximum attendance: 50

Workshop requirements: Interest in catfish age estimation

Lead Presenter: John Tibbs, Dave Buckmeier, Robert Colombo

Email: John.Tibbs@tpwd.texas.gov David.Buckmeier@tpwd.texas.gov recolombo@eiu.edu

Phone:

10. Catfish Aging II (sponsored by Catfish 2020, Off-site)

1:00 – 5:00 PM, Witt Stevens Nature Center, 602 President Clinton Ave.

Description: This workshop will build on Catfish Aging I and is intended for those participants that are actively trying to estimate the ages of catfishes using otoliths and spines. Catfish Aging II will provide hands-on demonstrations of preparation techniques and annulus interpretation. Participants will be able to participate in removal, preparation, and aging of both otoliths and spines. Attendance is limited to allow participants to ask specific questions and advice regarding the techniques demonstrated.

Cost: \$50

Maximum attendance: 15

Workshop requirements: must have attended Catfish Aging 1 in the morning and have an immediate need to estimate the ages of catfish using otoliths and/or spines

Lead Presenter: John Tibbs, Dave Buckmeier, Robert Colombo

Email: John.Tibbs@tpwd.texas.gov David.Buckmeier@tpwd.texas.gov recolombo@eiu.edu

Phone:

11. Population Modeling (sponsored by Catfish 2020)

8:00 AM – 5:00 PM, Petit Jean

Description: The objective of this course is to provide managers the tools to explore and predict how various regulation options can improve and sustain their catfish fisheries. Further, this tool will help managers understand how sensitive various outputs are to their assumptions and inputs. We will develop models to explore the potential for growth and recruitment overfishing in catfish fisheries. We will provide the basics of population modeling with no modeling background required. This class and model will provide the foundation for more complex models, where appropriate data elements exist.

We will build and use an age-structured model in Excel. The model will be parameterized using some typical growth, maturity, and mortality rates from catfish populations. We will then use the model, plus the vital rates, to explore how various regulations would be expected to affect the population (e.g., angler catch, occurrence of trophy fish, potential for overfishing, etc.). Within this class we will discuss a variety of topics associated with the collection of growth and mortality data, use of creels to estimate exploitation, as well as strengths and weaknesses of this model construct.

Participants will be encouraged to build these models themselves in Excel for use outside the classroom with their own data once back at home. Users should be comfortable with Excel, Excel functions, and the basics of fish population dynamics.

Cost: \$75

Maximum attendance: 25

Workshop requirements: Participants should bring a laptop with Microsoft Office installed.

Lead Presenter: Micheal S Allen and Warren Schlechte

Email: msal@ufl.edu Warren.Schlechte@tpwd.texas.gov *Phone:* (352) 325-6077

12. Creel Surveys: Designing Complex Solutions to Simple Questions (sponsored by Catfish 2020)

8:00 AM – 5:00 PM, Lafayette

Description: The workshop will provide a lights-on, participant-driven, introduction to the complexities and challenges of conducting onsite angler assessments and novel analyses. We will lay the groundwork for developing more in-depth design and analysis of angler-fish interactions. This workshop will also provide a forum for participants to discuss difficulties and solutions facing the study of catfish anglers.

Cost: \$75

Maximum attendance: 12-24

Workshop requirements: active and fully engaged participation

Lead Presenter: Mark Kaemingk, Kevin Pope, Chris Chizinski, Keith Hurley

Email: mkaemingk2@unl.edu

Phone: 402-472-7574

Requests from organizers: Our “wish list” for the workshop: We would prefer a room with good ergonomic chairs that is “U” shaped with a computer/projector and that would allow for good discussion. A whiteboard would be great but a giant post-it easel chart would suffice too. Also, it would be great if we could have beverages available throughout the day and high-quality snacks for two breaks (morning and afternoon).

13. Introduction to R

8:00 AM – 12:00 PM, Ouachita

Description: This workshop will provide a basic introduction to using R and RStudio. It is intended for students and professionals who are interested in beginning to use R for summarizing and analyzing data. We will describe selected examples and associated code in detail. Topics will include an overview of R object types, general approaches to working with data frames, use of built-in functions, and selected R packages. Content will be presented through mini lectures and demonstration of examples. Coding exercises may include use of queries, sub-setting data, conditional statements, logical tests, simple statistical analyses, or plotting data in base R. Participants will have opportunities to practice skills and ask questions.

Cost: \$25 for members, free for students

Maximum attendance: 50

Workshop requirements: Each participant should bring a laptop with R and RStudio already installed. [note to organizers: We will need 2 projectors and 2 screens; several power strips for participants’ laptops]

Lead Presenters: Henry Hershey, Brian Irwin

Email: hjh0027@auburn.edu, irwin@uga.edu

Phone: 706-542-0790

14. Intermediate R and data visualization

1:00 – 5:00 PM, Ouachita

Description: This workshop will provide opportunities to work with data, conduct selected analyses, and construct publication-quality graphics using R and RStudio. It is intended for students and professionals who are interested in visualizing data and implementing analyses in a freely available, flexible coding platform. We will describe associated code in detail; however, having some working knowledge of R (such as the morning session) and basic fisheries concepts would be beneficial. Plotting exercises may include histograms, boxplots, scatterplots, and line plots. We intend to provide a brief overview of making graphs using ggplot2 as well as practice examples.

Cost: \$25 for members, free for students

Maximum attendance: 50

Workshop requirements: Each participant should bring a laptop with R and RStudio already installed. [note to organizers: We will need 2 projectors and 2 screens; several power strips for participants’ laptops]

Lead Presenters: Brian Irwin, Henry Hershey

Email: irwin@uga.edu, hjh0027@auburn.edu

Phone: 706-542-0790

15. GIS Techniques in Natural Resources Management

8:00 AM – 5:00 PM, Peck

Description: This course will provide an overview of beginning GIS skills for fisheries biologists using ArcGIS, including use of existing data, creating your own data, and review of fundamental concepts for GIS.

Cost: Student member \$125, Student non-member or young professional \$150, Member \$175, Non-member \$250

Maximum attendance: 25

Workshop requirements: a laptop with ArcGIS 10.5 (or newer) installed. We will order student licenses for everyone and provide those at least a couple weeks prior to the course so they can install the software (or have their IT person do it).

Lead Presenter: Joanna Whittier Kayla Key Michael Moore

Email: whittierj@missouri.edu knkey42@students.tntech.edu

michaelmoore@mail.missouri.edu

Phone:

16. Using Remote Cameras in Fisheries Management

1:00 – 5:00 PM, Chicot

Description: Remote cameras, often called trail cameras or camera traps, have been used for many years in wildlife management but are beginning to be used more frequently in fisheries management applications. This workshop will begin with presentations of completed studies using remote cameras by workshop organizers. Lessons learned from these studies about the benefits and drawbacks of using remote cameras will be discussed. The second portion of the workshop will be a discussion of the latest camera models and associated hardware by Rich Howell of Trailcampro, a leading vendor of remote camera products. Products will be on display for participants during this portion of the workshop. Finally, we will introduce participants to Timelapse2, a free software program that is useful for processing and enumerating remote camera images in a timely and effective manner. Time will be built in at all stages for interaction among participants.

Cost: \$25 for professionals; free for students.

Maximum attendance: 20

Workshop requirements: Workshop requirements: Participants should bring a laptop computer. Prior to the workshop, please download TimeLapse2 which can be found at

<http://saul.cpsc.ucalgary.ca/timelapse/pmwiki.php?n=Main.Download2>

Lead Presenter: Lawrence Dorsey
Email: Lawrence.Dorsey@ncwildlife.org
Phone: (704) 984-0600

17. Fish Kill Investigation: Methodology Workshop

8:00 AM – 5:00 PM, Neosho

Description: The Pollution Committee of the SDAFS is offering a workshop on fish and freshwater mussel kill investigation and valuation. Fish kills are characterized by the sudden death of large numbers of aquatic organisms in a clearly distinct and defined area. Fish kills are often very visible events which can attract the attention of the local media and can cause concern among members of the public. The public often regards dead fish as evidence of a pollution event and a threat to human health. This leads to the expectation that government officials should and will investigate fish kills. A fish kill investigation begins with the initial reporting or discovery of the fish kill and proceeds through the on-site investigation and subsequent enforcement of the case. This workshop will provide both classroom and field training on the fish and mussel kill methodology described in the AFS special publication 35 titled, *Investigation and Monetary Values of Fish and Freshwater Mollusk Kills*.

Cost: Student \$25, Member \$50, Non-member \$75

Maximum attendance: 80

Workshop requirements: All who are interested in the workshop may attend but if the maximum attendance is reached, preference will be given to those who actually conduct fish kill and/or mussel kill investigations as part of their job duties.

Lead Presenter: Greg Conley Curtiss Tackett

Email: greg@lonestarhazmat.com *Phone:* 903-574-1101