

American Fisheries Society 2016 Annual Meeting



SEE YOU IN KANSAS CITY!

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Welcome to Kansas City!

I'm going to Kansas City, Kansas City, here I come!

The Missouri Chapter of the American Fisheries Society welcomes you to enjoy Midwestern hospitality as AFS meets for its 146th Annual Meeting in Kansas City from August 21–25, 2016, at the Sheraton Crown Center. The conference theme is “Fisheries Conservation and Management: Making Connections and Building Partnerships,” and the program features 32 symposia, almost 800 presentations, and over 100 posters. We are also excited about our plenary speakers who will highlight the importance of communication, and not just in regard to meetings such as this or in journal publications, but rather with the public via television and magazines (as well as the various social media that are now available, but some of us are afraid to use).

While some folks in Missouri may call KC that “Little Cowtown to the West,” it has lots to offer. Kansas City is known as the “City of Fountains,” with over 200 registered fountains in the city and only second to Rome in number. It is also home to the 2015 World Series Champion Kansas City Royals, but if you want to catch a game, you better arrive early on either Saturday or Sunday because they are out of town during the week. If you are into art and history, KC is the place for you. Visit the Nelson-Atkins Museum of Art, Kemper Museum of Contemporary Art, Negro Leagues Baseball Museum, Liberty Memorial and World War I Museum, or if you’re a river rat, maybe the steamboat *Arabia* is for you.

While Kansas City is known for a lot of things, it is probably best known for its world famous barbecue. While I encourage you to visit one of the over 100 barbecue joints in the metro area while in KC, you’ll at least want to join us Wednesday evening at the old train depot (Union Station) for our Grand Social featuring some of this world famous barbecue and Boulevard Beer. You won’t be disappointed!

There will be ample opportunities at various venues to make connections, build partnerships, and interact with fisheries professionals from around the world. See you in Kansas City!

Vince Travnichek
General Meeting Chair

Contacts

General Meeting Chair

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For more information, contact General Meeting Chair
Vince Travnichek (Vince.Travnichek@mdc.mo.gov)

Hal Schramm, Jr., Mississippi State University and Mississippi Cooperative Fish and Wildlife Research Unit

We Only Manage What Has Value: Establishing Value for Fisheries Resources

Hal Schramm is leader of the Mississippi Cooperative Fish and Wildlife Research Unit and professor in the Department of Wildlife, Fisheries, and Aquaculture at Mississippi State University. The Mississippi River provides a diverse and abundant fishery resource, but the contemporary conservation and management of this resource is really a tale of three rivers that differ geomorphically, hydrologically, and, most importantly, socio-economically. Schramm will use the Mississippi River as an example of conservation and management driven by value and extend this axiom to other fisheries resources. He will discuss some fisheries management successes and remaining challenges, describe the essentiality of partnerships for establishing value, and explore future options for expanding partnerships.



Danielle Brigida, U.S. Fish and Wildlife Service

Using Social Media and Technology to Inspire and Educate

Social media allows us to share experiences, connect with others, and discuss the very important topics (or cat videos). It's up to us to find a way to engage respectfully and distribute meaning through our interactions. I'll talk about techniques for meaningfully engaging in social media so that we educate and inspire those interested in our topic. I'll also discuss how we can use social media, content strategy, and connectivity to build meaningful relationships.



Zeb Hogan, College of Science, University of Nevada, Reno

Using Science and Storytelling to Create a Global Voice for Freshwater Fish Conservation

Zeb Hogan is an assistant professor at the University of Nevada, Reno, a National Geographic Society Fellow, and a United Nations Convention on Migratory Species Scientific Councilor for Fish. He also hosts the National Geographic television series, "Monster Fish." His research includes contributions to understanding the migratory patterns and population status of vulnerable fish species, designation of the giant Mekong catfish as Critically Endangered on the IUCN Red List, and awareness-raising through international media and local communications about the plight of endangered fish species and their habitats. He will discuss his work with the National Geographic Society and other partners to merge conservation science with outreach and action.



Preliminary Schedule of Major Events

Saturday - August 20

8:00 AM-5:00 PM

Continuing Education Workshops including Age & Growth with R, Bayesian Stats I, Beginner/Intermediate GIS, Electro-fishing I and II, Use of Side Scan Sonar

12:00 PM-5:00 PM

Registration

Sunday - August 21

8:00 AM-5:00 PM

Continuing Education Workshops including Bayesian Stats II, Conflict Resolution, Bioenergetics, Fisheries Information Network System, Leadership at All Levels

8:00 AM-6:30 PM

Registration

1:00 PM-5:00 PM

AFS Section, AFS Division, and Affiliated Meetings

4:00 PM-6:00 PM

Poster Session Set-up

6:00 PM-9:30 PM

Welcome to Kansas City Social at Hallmark Pavilion

Monday - August 22

8:00 AM-5:00 PM

Registration

8:00 AM-10:00 AM

Poster Session Set-up

8:30 AM-9:30 AM

Plenary Session 1 – Hal Schramm - We Only Manage What Has Value: Establishing Value for Fisheries Resources

10:00 AM-5:00 PM

Symposia and Contributed Paper Sessions

10:00 AM-8:30 PM

Tradeshow

1:00 PM-5:00 PM

Wild Jobs Café and Student Mentoring Events

1:00 PM-5:00 PM

AFS Section, AFS Division, and Affiliated Meetings

6:00 PM-8:30 PM

Tradeshow and Poster Networking Event at Sheraton Hotel

Tuesday - August 23

8:00 AM-5:00 PM

Registration

8:30 AM-9:30 AM

Plenary Session 2

Danielle Brigida - Using Social Media and Technology to Inspire and Educate

9:00 AM-6:00 PM

Tradeshow

10:00 AM-5:00 PM

Wild Jobs Café and Student Mentoring Events

10:00 AM-5:00 PM

Symposia and Contributed Paper Sessions

1:00 PM-5:00 PM

AFS Section, AFS Division, and Affiliated Meetings

6:00 PM-9:00 PM

Cowboy and Cowgirl Up at PBR Sky in the KC Power and Light District for the Student Social and Networking Event

Wednesday - August 24

7:00 AM-9:00 AM

Spawning Run and Carcass Crawl at Berkley Riverfront Park

8:00 AM-5:00 PM

Registration

8:30 AM-9:30 AM

Plenary Session 3 – Zeb Hogan - Using Science and Storytelling to Create a Global Voice for Freshwater Fish Conservation

9:00 AM-2:00 PM

Tradeshow

10:00 AM-3:00 PM

Wild Jobs Café and Student Mentoring Events

10:00 AM-5:00 PM

Symposia and Contributed Paper Sessions

1:00 PM-3:00 PM

AFS Section, AFS Division, and Affiliated Meetings

4:00 PM-5:30 PM

AFS Business Meeting

6:00 PM-10:00 PM

Grand Networking Event at Union Station

Thursday - August 25

8:00 AM-12:00 PM

Registration

8:30 AM-5:00 PM

Symposia and Contributed Paper Sessions

Actions to Increase the Engagement of Underrepresented Minorities in Fisheries and Aquatic Sciences

Organizers: Ambrose Jearld Jr., Christine Moffitt, Steve Lochmann, and Gwen White

An Examination into Influencing the Future of Angling Participation to Sustain Conservation Support

Organizers: Tom Lang, J. Wesley Neal, Kevin Hunt, John Taylor, Ken Kurzawski, and Rebecca Krogman
Sponsors: AFS Socioeconomics Section, Fisheries Management Section, and Fisheries Administration Section

Angling for Dinosaurs: Status and Future Study of the Ecology, Conservation and Management of Ancient Fishes

Organizers: Sarah Huck, Solomon David, and Jeffrey Stein

Applications of Methods and Techniques and Collaborations in Managing and Conserving Large River Basin Fishery Resources and Environment

Moderators: Duane Chapman, Quinton Phelps, Michael Eggleton, Daqing Chen, and Zhongjie Li
Chair: Yushun Chen
Organizers: Yushun Chen, Duane Chapman, Quinton Phelps, Micheal Eggleton, Daqing Chen, and Zhongjie Li
Sponsors: AFS Fisheries Management Section, Water Quality Section, International Fisheries Section, China Society of Fisheries, The Nature Conservancy, and World Wildlife Fund

Best Student Papers and Posters Symposium

Organizers: Mark Fincel, Amanda Rosenberger, and Dan Shoup

Blue Catfish: Lessons from a Large Riverine Opportunistic Catfish

Moderators: Joseph Schmitt and Martha Mather
Organizer: Donald Orth

Cooperative Fisheries Research in Marine and Freshwater Systems: From Policy to Practice

Moderators: Richard McBride, Nick Trippel, Quinton Phelps, and Dave Herzog
Chairs: Angela Collins, Richard McBride, and Nick Trippel
Organizers: Angela Collins, Richard McBride, Nick Trippel, Quinton Phelps, and Dave Herzog

Coupled Interactions between Natural and Human Systems – on the Interplay between Aquatic Ecosystem Health, Human Behavior and Decision-Making, and Aquatic Invasive Species

Chairs: Hongyan Zhang Victoria Campbell-Arvai, Doran Mason, and Edward Rutherford
Organizers: Hongyan Zhang Victoria Campbell-Arvai, Doran Mason, and Edward Rutherford

Documented and Documenting the Effects of Climate Change on Inland Fish and Fisheries

Organizers: Craig Paukert, Abigail Lynch, Michelle Staudinger, and Joanna Whittier

Ecological Flow Science and Policy: Protecting Stream Systems Today; Preparing for Tomorrow

Organizers: Jason Persinger and Emily Tracy-Smith

Effects of Diploid Grass Carp and State Grass Carp Stocking Policies on Aquatic Ecosystems

Moderators: Greg Conover and Ron Brooks
Chair: G. Conover
Organizer: G. Conover
Sponsor: Mississippi Interstate Cooperative Resource Association

Effects of Drought on Aquatic Resources, Fisheries Management, and Mitigation Strategies

Chairs: Stephan Magnelia and Kevin Mayes
Organizers: Stephan Magnelia, Kevin Mayes, Tom Lang, Ryan Roberts, Matthew Altenritter, Lindsay Campbell, and Karin Limburg
Sponsors: AFS Estuaries Section, Fish Habitat Section, and Water Quality Section

Fish Research and Conservation in the “Scapes”: Needs, Progress, Challenges, and Opportunities

Organizers: Sean Hitchman and Martha Mather

Fisheries Management from the Great Lakes to the Gulf: Sea Grant’s Role in Research, Outreach and Building Partnerships along the Mississippi River

Chair: Jayson Beugly
Organizers: Laura Kammin, Matthew Bethel, Abigail Archer, and C. Eliana Brown
Sponsor: AFS Estuaries Section

Fisheries Science in 140 Characters: The Role of Social Media in Our Science

Moderators: Sean Lucey, Abigail Lynch, Patrick Cooney, and Brandon Peoples
Chair: Sean Lucey
Organizers: Sean Lucey, Abigail Lynch, Patrick Cooney, and Brandon Peoples
Sponsors: AIFRB and the Fisheries Blog

Global Importance and Threats to Floodplain Fisheries: Potential Mitigation Measures to Reconnect Floodplains, Including Synergistic Benefits of Working with other Water Resource Sectors

Organizers: Quinton Phelps and Ian Cowx

Symposia

Hatchery Fish Biologist... A Career for the Future

Moderators: Steve Lochmann, Mike Barnes, and Carl Kittel
Chairs: Steve Lochmann, Mike Barnes, and Carl Kittel
Organizers: Steve Lochmann, Mike Barnes, and Carl Kittel
Sponsor: AFS Fish Culture Section

Inland Drivers of Coastal Hypoxia

Organizers: Gwen White, Thomas Bigford, Mary Fabrizio, Karin Limburg, and Benjamin Walther
Sponsors: AFS Marine Fisheries Section, Estuaries Section, and Fish Habitat Section

Interactions between Hydrology and Nonnative Aquatic Species

Moderators: Duane Chapman and Scott Bonar
Chairs: Duane Chapman and Scott Bonar
Organizers: Duane Chapman and Scott Bonar
Sponsor: AFS Introduced Fishes Section

Management Strategy Evaluation, Decision Analysis, and Ensemble Modeling: Tools for Addressing Assessment and Management Uncertainty

Moderator: Teresa A'mar
Chair: Richard Methot Jr.
Organizers: Richard Methot Jr. and Teresa A'mar
Sponsor: AFS Marine Fisheries Section

Managing Centrarchid Fisheries in Rivers and Streams

Chairs: Michael Siepker and Jeffrey Quinn
Organizer: Michael Siepker
Sponsors: Southeast Aquatic Resources Partnership, Black Bass Committee of Southern Division AFS, Centrarchid Technical Committee of North Central Division AFS

Managing Riverscapes: Conservation Tools to Assess and Improve Stream Fisheries

Chair: David Schumann
Organizer: Katie Bertrand

Pop-Up Satellite Tagging - Challenges and Solutions

Moderator: T. F. Sheehan
Organizers: M. D. Renkawitz and T. F. Sheehan
Sponsors: Reservoir Fisheries Habitat Partnership and AFS Fish Habitat Section

Preparing Fisheries Professionals with Depth and Breadth (T-Shaped Professionals)

Moderator: Erin Jarvie and Heather Triezenberg
Chair: Heather Triezenberg
Organizers: Erin Jarvie and Heather Triezenberg
Sponsor: AFS Socioeconomics Section

Protecting Fish at Cooling Water Intakes: New Rules and Science-based Solutions

Chairs: Daniel Giza and Jon Black
Organizers: Terry Cheek, Ronald Heun, Chuck Coutant, William Dey, and Douglas Dixon
Sponsor: AFS Bioengineering Section

Release and Discard Mortality Estimation: Lessons from Freshwater and Saltwater Environments

Moderators: Lee Benaka, Noelle Yochum, David Rudders, and Derek Orner
Organizers: Lee Benaka, Noelle Yochum, David Rudders, and Derek Orner

Reservoir Fisheries Habitat Restoration: Innovative Techniques to Restore Habitat in our Nation's Impoundments

Moderator: Jeff Boxrucker
Organizers: Jeff Boxrucker and Tom Lang
Sponsors: Reservoir Fisheries Habitat Partnership and AFS Fish Habitat Section

Stephen Weithman: His Life Honored Through the Student Award

Organizers: Tom Lang, Heather Triezenberg, and Vince Travnicek
Sponsors: AFS Socioeconomics Section and Missouri Chapter

Theory and Application of Behavioral Guidance Technologies to Deter Invasive and Native Fish

Moderators: Daniel Zielinski and Peter Sorensen
Chair: Peter Sorensen
Organizers: Daniel Zielinski and Peter Sorensen
Sponsor: Mississippi River Basin Aquatic Nuisance Species Task Force

Translating Essential Fish Habitat (EFH) Science into Fishery Management Decisions

Organizers: Lauren Latchford, Anthony Marshak, Christopher Meaney, Terra Lederhouse, and Kirsten Larsen
Sponsors: NOAA Fisheries Office of Habitat Conservation and NOAA Fisheries Office of Science and Technology

Understanding Pallid Sturgeon Population Dynamics and Stressors in the Missouri and Mississippi Rivers

Moderators: Nathan Gosch and Tim Welker
Chairs: Nathan Gosch and Tim Welker
Organizers: Nathan Gosch and Tim Welker

What Data are Needed to Ensure Freshwater Mollusk Conservation into the Future?

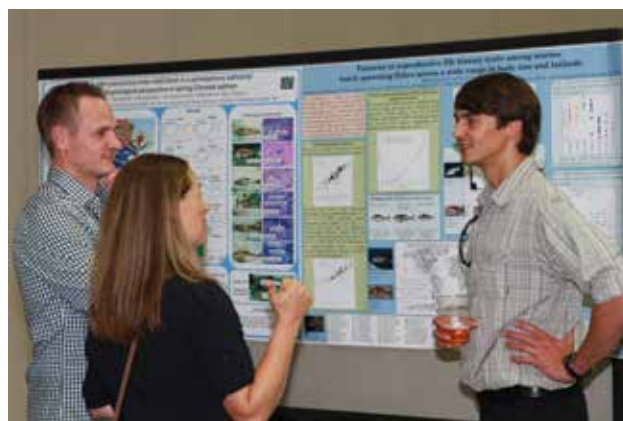
Moderator: Wesley Daniel
Chair: Wesley Daniel
Organizers: Wesley Daniel, Arthur Cooper, and Dana Infante

salmonids, paddlefish, lobster, sturgeon, lamprey, and blue crab as well as lower trophic level organisms including phytoplankton and zooplankton. Some research topics include freshwater and marine fisheries management and population dynamics, river restoration, technological advances, statistical approaches, trophic and nutrient dynamics, genetics, and culture. There will be plenty of interesting presentations for everyone!

Approximately 100 posters will be presented covering a wide-range of topics including:

- Application of analytical approaches
- Bivalve conservation and ecology
- Climate impacts on fish and fisheries
- Commercial fisheries
- Cooperative fisheries research in marine and freshwater systems
- Endangered species ecology
- Fish behavior
- Management of sportfish and non-game species
- Fish conservation and ecology
- Fish culture
- Fish nutrition and diet
- Fish growth, aging, and condition
- Freshwater fisheries management
- Genetics of fish and fisheries
- Habitat ecology and quality
- Habitat restoration
- Invasive species control
- Influence of lotic flow regimes on growth, recruitment, and survival

- Marine fish population dynamics
- Techniques in fisheries science
- Parasites and disease
- Programs and policy
- Urban stream ecology
- Water quality and streamflow



Hotel and Convention Center

Your conference experience at the Sheraton Kansas City Crown Center promises to be a memorable one. Just minutes from the heart of downtown Kansas City, the Sheraton Crown Center is connected to both Union Station and Crown Center via “the Link,” a convenient above-ground, climate-controlled walkway. Explore over 60 locally-owned unique shops and restaurants, all available within the complex.

Located 25 minutes from Kansas City International Airport, the Sheraton is accessible via Interstate Freeway I-29/US-71 South from exit 195 (22nd Street toward The Paseo), exit 2M (towards US-71) via I-70 east, and exit 2Q (for Locust Street towards Truman Road) via I-70 west.

Online booking is now open. The block of rooms reserved at the discounted nightly rates will expire on July 27, 2016.

Sheraton Kansas City Hotel at Crown Center · 2345 McGee St., Kansas City, MO 64108 · (816) 841-1000

SPECIAL AFS Blue Van to Hotel

[groups.supershuttle.com/
americanfisheriessociety.html](http://groups.supershuttle.com/americanfisheriessociety.html)

Or call the reservation center at 1.800. BLUEVAN(258.3826) and give the agent the discount code X7G2D.

When you arrive at KCI (MCI), collect your luggage and then step up to the SuperShuttle office located just across from baggage claim in each terminal. You may also check in on your smart devices using the Blue Van app if you like.





Volunteers Needed

- Moderators for Contributed Paper Sessions
- Student Volunteers (earn US \$10/hour)

MO Division of Tourism

Student Activities

Students play a vital role in the American Fisheries Society, representing future professionals responsible for conservation of our aquatic resources around the world. Students are encouraged to participate in these events to get the most out of their AFS 2016 Annual Meeting experience.

Best Student Paper and Poster Symposium

The Best Student Paper Symposium will be held Monday afternoon, August 22, 2016, and Tuesday morning, August 23, 2016. The Best Poster Symposium will be held on Monday, August 22, 2016, in the evening. Award recipients will be announced at the AFS Business Meeting on Tuesday, August 23, 2016.

Wild Jobs Café

Students are invited to join mentors on Tuesday afternoon for a speed mentoring session prior to the Student Social Event Tuesday evening. Mentors from all walks of the fisheries profession will be on hand for face-to-face interaction, answering questions, and relaying advice on what it takes to land that first job. Throughout the conference, students can also peruse current job opportunities available and get familiar with the qualifications needed for jobs at all levels in the fisheries field.

Student Networking Event – Cowboy Up

The AFS 2016 Student Social will be at PBR Big Sky from 6:00 - 9:00 p.m. on Tuesday, August 23, 2016. Located in the Kansas City Power & Light District, with more than 50 unique and captivating shops, restaurants, bars, and entertainment venues, PBR Big Sky is Missouri's favorite "Cowboy Bar." Join students from across the nation while enjoying music, drinks, and KC-BBQ; or cowboy up, try your hand at the "toughest sport on dirt" and see if you can stay on the in-house mechanical bull for a full 8 seconds.

Volunteers Needed

Volunteers are needed to assist during presentations, posters, events, and much more. A minimum of one 4-hour commitment is required. Eligible student volunteers will be paid \$10.00 per hour to help defray their meeting costs. Sign up to be a volunteer when you register for the conference. Contact Greg Pitchford at greg.pitchford@mdc.mo.gov to volunteer.



Networking Events



Welcome to Kansas City

This welcoming event will be held at the Hallmark Pavilion in Crown Center Plaza. Catch up with old friends and meet new ones in this outdoor courtyard in the heart of downtown Kansas City. Dinner and drinks will be available from 6:30 - 9:00 p.m. on Sunday, August 21. Be sure to try some of Missouri's unique carp entrees in addition to traditional evening fare.



Trade Show and Poster Networking Event

See what is new and exciting in the world of fisheries. Exhibitors will be present on Monday night in the Crown Center expo hall. Also, over 100 posters will be on display providing an indication of what the next generation of fisheries professionals are exploring. Drinks and appetizers will be served from 6:00 - 8:30 p.m. Monday evening.

The Grand Networking Event at Union Station

Just a short walk from the Sheraton hotel in the enclosed breezeway is the historic Union Station of Kansas City. On Wednesday from 6:00 -10:00 p.m. you will be served the best barbecue Kansas City has to offer. Jack Stack BBQ is catering a full course dinner buffet in addition to a selection of assorted beverages.



Spawning Run (5K)



Wednesday, August 24, 7:00 a.m. – 9:00 a.m.

Join us for the 2016 Spawning Run and Carcass Crawl to be held along the banks of the Missouri River in Kansas City's Berkley Riverfront Park. Beginning at 7:00 a.m., participants are invited to dash along the riverside in this 5-km fun run. For those who are a bit less ambitious, the Carcass Crawl allows for a leisurely walk along the same course. Visit our website, 2016.fisheries.org/spawning-run for the event description as well as more detailed information. Refreshments will be provided after the race.

Sign up for the Spawning Run and Carcass Crawl when you register for the Annual Meeting to guarantee a t-shirt. Participants will be accepted at the registration booth until 4:00 p.m. on Monday, August 22, 2016.



Silent Auction

Fundraising is an important part of the Annual Meeting. Most importantly, it provides funds to the John E. Skinner Memorial Fund, which provides monetary travel awards for students to attend AFS Annual Meetings. This year's auction will be a silent auction with items up for bid that range from equipment that can be used in the field to trips that take you into the areas that inspire us in our work. Please join us in this activity that supports the next generation of fisheries researchers and managers.

Attractions



Along every boulevard and around every corner, there's something to do that's unique to Kansas City. With a thriving creative arts scene, eclectic mix of entertainment, and die-hard sports — it's safe to say there's something for everyone. Find your way in KC by doing it all... or, at least trying to.

Unique attractions throughout KC beckon locals and visitors alike to find the city's hidden gems. Explore the nationally recognized World War I Museum. Let curiosity guide you at Union Station. Walk in the steps of America's 33rd President in Independence. Be inspired at the Nelson-Atkins Museum of Art.

In operation since 1857 and open seven days a week, the City Market is the largest farmers' market in the region with an annual attendance of nearly 600,000 and bursting with more than 140 farmer stalls filled with a wide variety of fresh produce, meats, baked goods, flowers, specialty foods, and other items from all over the world. The City Market is home to a unique collection of gift shops, authentic restaurants, and the Arabia Steamboat Museum, which houses the largest collection of pre-Civil War artifacts in the world, recovered from a Missouri River steamboat which sank in 1856.

If you're a live music fan, the Crossroads KC @ Grinders in the Crossroads Arts District features a diverse array of musical groups, from rock to reggae and bluegrass to hip hop. When you come to the Crossroads, you'll find lots of free parking, colorful art, delicious dining options, and the beautiful skylines of downtown and Crown Center all under starry skies.

You can experience Major League action at Kauffman Stadium, home of the 2015 World Series Champion Kansas City Royals. "The K" opened April 10, 1973 and is recognized throughout baseball as one of the game's most beautiful ball-parks.

The City of Fountains is practically overflowing with adventure. Whether it's the scent of smoldering BBQ luring you to a plate of ribs, the sweet echo of jazz welcoming an evening of entertainment, or the spray of fountains inviting you to kick off your shoes and make a splash, you'll sense inspiration in the air—and find it along every boulevard. Consider this just a sneak peek of all you'll see, hear, feel and taste when you discover KC. Learn more about the wonders and attractions of Kansas City at www.visitkc.com.







CONTINUING EDUCATION PROGRAM

Sheraton Crown Center, Kansas City

Saturday, August 20–Sunday, August 21, 2016

Register online at 2016.fisheries.org by June 24, 2016 to avoid class cancellations due to low enrollment.

Age and Growth Analysis with R

Saturday, August 20, 8:00 a.m. – 5:00 p.m.

This is a one-day course for fisheries professionals interested in expanding their R skills to include analysis of age and growth data. Through a sequence of demonstrations and hands-on application exercises, participants will use R to construct appropriate metrics and graphics for comparing precision (APE, CV) and bias (age agreement table, tests of symmetry, and age-bias plots) between two sets of estimated ages, construct and apply an age-length key to estimate ages of individual fish from their lengths, summarize mean length-at-age with a von Bertalanffy growth model, and statistically compare von Bertalanffy growth model parameters between two or more groups of fish. Participants should be familiar with the fundamentals of R, including basic applications.

Student member: \$125
Student non-member: \$150
Young professional member: \$150
Member: \$175
Non-member: \$250

Bayesian I: Introduction to Bayesian Inference Using Gibbs Sampling (BUGS) for Fish Biologists

Saturday, August 20, 8:00 a.m. – 5:00 p.m.

There has been a large increase in the use of Bayesian methods to analyze ecological and fisheries data over the last decade. This increase is in part due to availability of Markov chain Monte Carlo methods in a variety of free software packages. Advantages of Bayesian methods include a formal approach to incorporating previous information into the analysis and parameter estimation of complex problems. This course will meet a growing need among fisheries biologists and researchers to apply Bayesian statistical methods to analyze fisheries data. A brief overview of Bayesian statistics will be provided, but the course will focus on practical application of the BUGS language for Bayesian inference using basic fisheries sampling data.

Student member: \$125
Student non-member: \$125
Young professional member: \$150
Member: \$175
Non-member: \$250

AFS members registering for both the Bayesian I and Bayesian II course will receive a discounted price that will cover the registration of both courses.

Student Member: \$200
Young Professional Member: \$250
Member: \$300

Beginning/Intermediate GIS for Fisheries Scientists

Saturday, August 20, 8:00 a.m. – 5:00 p.m.

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

Student member: \$125
Student non-member: \$150
Young professional member: \$150
Member: \$175
Non-member: \$250

Electrofishing I: Power-Based Standardization in Electrofishing

Saturday, August 20, 8:00 a.m. – 12:00 p.m.

This half-day course will be presented in three 70-minute sessions with two intervening 15-minute breaks. Basic electrical principles, including power transfer, will be covered in the Session 1; elements of power-based standardization in Session 2; and development of standardized power procedures in Session 3. The course will give participants an overview of the proper approach to the standardization of electrofishing, regardless of method (e.g., boat, backpack).

Student member: \$75
Student non-member: \$100
Young professional member: \$100
Member: \$125
Non-member: \$200

AFS members registering in both the Electrofishing I and Electrofishing II workshop will receive a discounted price that will cover the registration of both courses.

Student member: \$125
Young professional member: \$150
Member: \$175

NEW! Electrofishing II: Electrofishing Equipment Operations and Troubleshooting

Saturday, August 20, 1:00 p.m. – 5:00 p.m.

This NEW course will be co-instructed by two electrofishing experts that have taught electrofishing courses worldwide and will cover topics relevant to fisheries biologists/scientists wanting to learn more about how to evaluate and troubleshoot common electrofishing equipment.

Student member: \$75
Student non-member: \$100
Young professional member: \$100
Member: \$125
Non-member: \$200

AFS members registering in both the Electrofishing I and Electrofishing II workshop will receive a discounted price that will cover the registration of both courses.

Student member: \$125
Young professional member: \$150
Member: \$175

NEW! Imaging Technologies in Fisheries I: Side Scan Sonar in Management and Research

Saturday, August 20, 8:00 a.m. – 12:00 p.m.

Commercially available sonar imaging technology is rapidly advancing and quickly becoming of interest in various fisheries research applications. This course will provide an overview of the current sonar technology with topics including availability of sonar imaging technology (e.g., Humminbird, Lowrance, Garmin, etc.), tips-and-tricks for its use, applications to fisheries management, and the general use and advancement of sonar imaging overall.

Student member: \$75
Student non-member: \$100
Young professional member: \$100
Member: \$125
Non-member: \$200

NEW! Fisheries Information Network System (FINS) Application and Analysis Tools

Sunday, August 21, 1:00 p.m. – 5:00 p.m.

FINS was developed by the Missouri Department of Conservation and is a centralized, web-based application used for data entry, analysis, and reporting tools used to record/analyze fish frequency, age, and growth plus standardize the format for data collection and ease the entry and storage of said data. FINS is currently being used in two other states and is being made available for use by other interested states/agencies as well. This course will provide an overview of the application and use of this web-based data storage solution.

Student member: \$75
Student non-member: \$100
Young professional member: \$100
Member: \$125
Non-member: \$200

Bayesian II: Intermediate Bayesian Inference Using Gibbs Sampling (BUGS) for Fish Biologists

Sunday, August 21, 8:00 a.m. – 5:00 p.m.

There has been a large increase in the use of Bayesian methods to analyze ecological and fisheries data over the last decade. This increase is in part due to availability of Markov chain Monte Carlo methods in a variety of free software packages. Advantages of Bayesian methods include a formal approach to incorporating previous information into the analysis and parameter estimation of complex problems. By focusing on the practical application of BUGS language for the intermediate topics covered, this course will meet a growing need among fisheries biologists and researchers to apply Bayesian methods to the analysis of fisheries data.

Student member: \$125
Student non-member: \$125
Young professional member: \$150
Member: \$175
Non-member: \$250

AFS members registering for both the Bayesian I and Bayesian II course will receive a discounted price that will cover the registration of both courses.

Student member: \$200
Young professional member: \$250
Member: \$300

Human Dimensions and Conflict Resolution in Fisheries

Sunday, August 21, 8:00 a.m. – 12:00 p.m.

Conflict resolution skills are required at all levels of the fisheries profession and fisheries management and research increasingly relies on human dimensions data to be successful. This course will cover communication analytics, conflict resolution, and future trends in human dimensions related to fisheries. These topics will be related to examples of applied human dimensions as they have been used in projects related to commercial bait fish, float line fishing, and a Wall-eye initiative. Overall this course will provide an overview of the critical human dimensions and conflict resolution considerations that play an important role in successful fisheries management and research.

Student member: \$75
Student non-member: \$100
Young professional member: \$100
Member: \$125
Non-member: \$200

Bioenergetics

Sunday, August 21, 8:00 a.m. – 5:00 p.m.

Bioenergetics models are widely used as a tool in fisheries management and research. Although Fish Bioenergetics 3.0 (Hanson et al. 1997) remains a popular software package, it is now over 18 years old and is incompatible with many new operating systems. Moreover, since Fish Bioenergetics 3.0 was released, the number of published fish bioenergetics models has increased from 33 to 115 models. This workshop will introduce Fish Bioenergetics 4.0, an R-based platform that consists of a graphical user interface application (Shiny by RStudio). Instructors will provide an overview of bioenergetics concepts and applications, and introduce attendees to the new modeling platform. Example exercises and group projects will be covered to aid in navigating the software and to answer basic and applied questions in fish ecology.

Student member: \$125
Student non-member: \$125
Young professional member: \$150
Member: \$175
Non-member: \$250

Leadership at All Levels in AFS (FREE)

Sunday, August 21, 8:00 a.m. – 12:00 p.m.

This workshop is designed for new and emerging leaders in AFS. It addresses the need for new and emerging leaders to better understand how AFS functions, the roles of Unit leaders in AFS, and how to be an effective leader in an all-volunteer organization such as AFS.

Scientific Publishing & Communication (FREE)

Sunday, August 21, 1:00 p.m. – 5:00 p.m.

Communication skills are demanded of every project, for every discipline, and at all steps of your research: whether you seek funding, wish to persuade your peers about your latest results, or translate your findings to a diverse audience. This workshop will present techniques and tips about speaking, writing, and outreach. Topics include (1) writing for scientists, (2) designing an effective oral presentation, (3) using storytelling techniques, and (4) mastering social media for science communication. This course is geared toward early career professionals and includes interactive exercises and panel discussions.



AFS 2016 Kansas City BOOTH RESERVATION

August 21- 25, 2016

*Please complete this application in its entirety.
Please print or type all information.*

Company Name _____
Address _____
City _____ State _____ Zip _____
Phone _____ Fax _____
Company Contact _____ Email _____

***Please email your Company's description, (Approximately 75 words) as you would like it to appear in the meeting program guide** Please also include your address, phone and web-address and forward to sjohnston@fisheries.org prior to June 1, 2016. Due to printing deadlines, descriptions received after this date will not appear in the program guide.

BOOTH FEES

- AFS member firm*: \$1,300.00 per 10 x 10 booth
- AFS nonmember firm: \$1,450.00 per 10 x 10 booth
- Crafters \$450.00 per 10 x 10 booth

*** To qualify for member rate, the exhibiting company must hold a sustaining, official, or associate membership with AFS. Please include your verifiable membership number: # _____.**

Number of Booths Total Cost

We would like to be located near

We would rather not be located near

AFS reserves the right to assign an alternative choice based on availability.

We agree to abide by the AFS 2016 Annual Meeting Booth Reservation Terms

Signature _____

PAYMENT

Please send reservation request with payment, payable to **American Fisheries Society**. Cancellations received on or after April 15, 2016 and prior to July 1, 2016 will be assessed a cancellation fee equal to 50% of the total exhibit space rental fee. Cancellations received after July 1, 2016 will be assessed a cancellation fee equal to 100% of the total exhibit space rental fee.

CHECK:

Amount enclosed: \$ _____

CREDIT CARD (Circle One): Visa Amex MasterCard

Name as it appears on card

Card Number

Exp. Date

3-digit Security Code

Signature

RETURN COMPLETED FORM WITH PAYMENT TO

American Fisheries Society, 5410 Grosvenor Lane, Suite 110, Bethesda, MD 20814, Attn: Shawn Johnston
Questions about the Trade Show or Advertising? Please contact Shawn Johnston, AFS Trade Show Coordinator,
301-897-8616 x 230 sjohnston@fisheries.org Fax 301-897-8096

