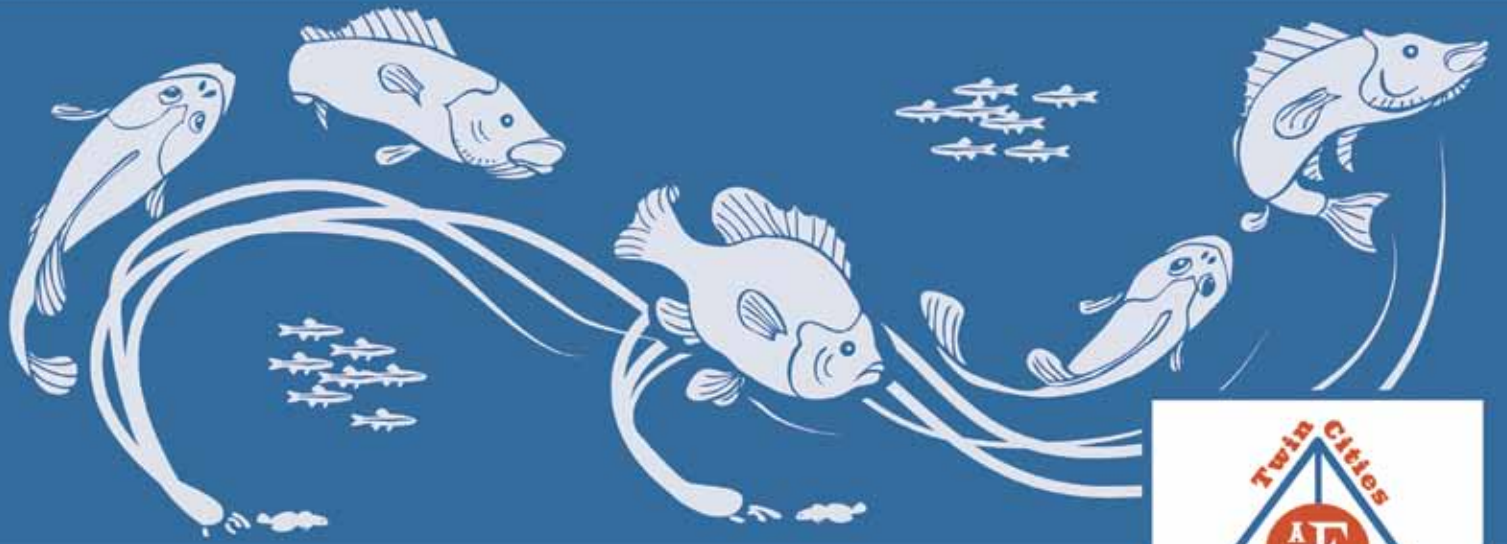


Fisheries Networks: Building Ecological, Social, and Professional Relationships



American Fisheries Society 142nd Annual Meeting

Minneapolis - St. Paul, MN afs2012.org August 19 - 23, 2012



Thank You to our Generous Sponsors!

One of our biggest challenges in preparing for the 2012 AFS meeting has been fundraising. Quite simply, conferences are expensive to host. Successful fundraising helps us lower conference registration costs, which encourages more people to attend.

The AFS 2012 Committee is very thankful that the following companies, agencies, and individuals have decided to partner with us to host this wonderful opportunity to reconnect with old friends, make new friends, strengthen professional relationships, and share ideas. We couldn't do it without their generous support!

Muskie Level

Great Lakes Fishery Commission
US Fish and Wildlife Service

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NOAA

Walleye Level

Bureau of Land Management

Lake Sturgeon Level

Advanced Telemetry Systems
Great Lakes Science Center
USGS

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Walleye Chop Beer
Wirtz Beverage Minnesota

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Photo: Nattapol Pornsalnuwa

Cover: Dan Anderson

Welcome to the Twin Cities!

On behalf of the AFS 2012 Conference Team, we are delighted to extend a warm welcome to the Twin Cities and the 142nd Annual Meeting of the American Fisheries Society. Join us in expanding our ecological, social, and professional relationships centered around our common interest in Fisheries and Aquatic Sciences.

AFS President Bill Fisher, AFS Executive Director Gus Rassam, and AFS staff, along with local Committee Chairs and Committee Members have been diligently planning for over a year to bring you what we hope is a memorable and positive AFS and Twin Cities experience. We are excited to be rolling out some new conference innovations this year. We will be testing the use of electronic posters and exploring methods for virtual meetings, with some of our conference being available for colleagues who cannot attend. You can also plan and organize your conference experience on your wireless smart device, including reviewing abstracts and even taking notes during a presentation. This exciting technology has the capacity to make costly program books obsolete.

We have a full agenda planned with over 46 symposia, top-notch Plenary speakers, poster presentations, and an excellent trade show. Along with these activities, don't forget to reconnect with old friends, make new friends, strengthen professional relationships, and share ideas. Additionally, the evening socials will show off some of the best that Minnesota has to offer.

August is a great time to be here! We hope that you will have some free time to explore the Twin Cities and outstate Minnesota. This is truly the land of 10,000 lakes where fishing and aquatic activities are second to none. Of course, we can't forget the great camping, hiking, parks, biking, sightseeing, and a lot more. Please visit the conference web site (afs2012.org) for additional information for planning an extended visit to Minnesota.

Enjoy the meeting. Enjoy the Twin Cities. We're looking forward to seeing you!

Below: Ann Schneider, Brian Borkholder, and Don Pereira



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AFS 2012 Fisheries Articles

Jennifer Cochran-Biederman, Andrew Carlson,
and Bruce Vondracek

Plenary Session

Bill Fisher, AFS President presents the following Plenary Guests:



Ecological Networks – From Who Did It to Future Food Webs

DR. VILLY CHRISTENSEN

Dr. Christensen will draw lessons from experience with food web modeling, including one how humans have impacted the oceans. He will demonstrate some new approaches for science communication to the public. His current research is focused on one question: will there be seafood and healthy oceans for future generations? The work is conducted through the Nereus – Predicting the Future Ocean Program, which is a cooperative initiative of the Nippon Foundation and the University of British Columbia with a funding envelope of \$13 million. The Nereus Program develops global models to evaluate the impact of fisheries and climate change on marine populations. The work involves participation in global initiatives that evaluate future scenarios for the world oceans. Further, Dr. Christensen is the lead developer of the Ecopath with Ecosim approach and software, which is used extensively throughout the world for ecosystem-based management of marine areas, and he will

build his talk on more than 20 years of experience with ecological networks. Dr. Christensen is Professor at the UBC Fisheries Centre and Director of the Nippon Foundation – UBC Nereus Program.



Expanding the Reach of Fisheries Science and Management through Strategic Social Networking

DR. BARBARA A. KNUTH

Dr. Knuth will address the importance of understanding social networks and how to cultivate them to improve fisheries management capacity and foster positive relationships among stakeholders, managers, and scientists. Dr. Knuth is Vice Provost and Dean of the Graduate School at Cornell University and Professor of Natural Resource Policy. Her research focuses on the human dimensions of fisheries and wildlife management and policy. She is known particularly for her work on risk perception, communication, and management associated with chemical contaminants in fish. She has served on National Academy of Sciences and Institute of Medicine committees, including those focused on improving the collection, management, and use of marine fisheries data and recreational fisheries survey methods, and on dioxins in the food supply. She currently serves on the Ocean Studies Board of the National Research Council and on the NRC Committee on the Effects of the Deep-

water Horizon Oil Spill on Ecosystem Services in the Gulf of Mexico. She has served on numerous scientific panels and advisory boards, including the international Board of Technical Experts of the Great Lakes Fishery Commission, and the Great Lakes Science Advisory Board of the International Joint Commission. She is a Past-President of the American Fisheries Society, and served as Vice President of the Executive Board of the World Council of Fisheries Societies.



Fisheries Sustainability: The Science and Art of Coupling Human and Natural Systems

WILLIAM W. TAYLOR

Dr. Taylor is a University Distinguished Professor in Global Fisheries Systems in the Department of Fisheries and Wildlife at Michigan State University and a member of MSU's Center for Systems Integration and Sustainability. He is an internationally recognized expert in Great Lakes fisheries ecology, population dynamics, governance, and management. Throughout his career, Taylor has been active in the American Fisheries Society, serving as president of the society, the Michigan Chapter, and the North Central Division. Currently, he holds a U.S. Presidential appointment as a U.S. Commissioner (alternate) for the Great Lakes Fishery Commission. In addition, he has held a gubernatorial appointment to Michigan's Aquatic Nuisance Species Coordinating Council, and a U.S. Secretary of Interior appointment to the Sport Fishing and Boating Partnership Council, which he chaired

for eight years. He also is the associate director of the Michigan Sea Grant College Program. Taylor has received numerous awards and published more than 120 articles in the scientific literature and has co-edited five books, including the first edition of Great Lakes Fishery Policy and Management. Taylor has a keen interest in environmental policy and management from a local to global perspective.

Award Presentations During Plenary

AFS Award of Excellence

President's Fishery Conservation Award

William E. Ricker Resource Conservation Award

Carl R. Sullivan Fishery Conservation Award

Meritorious Service Award

Emmiline Moore Prize

Understanding the Ecological and Social Constraints to Achieving Sustainable Fisheries Resource Policy and Management

Organizers: Bruce Vondracek, U.S. Geological Survey, Minnesota Cooperative Fish & Wildlife Research Unit; Jesse Trushenski, Southern Illinois University Carbondale, Jim Bowker, U.S. Fish and Wildlife Service; Diane Elliott, U. S. Geological Survey; Andy Goodwin, UAPB Aquaculture/ Fisheries Center; Carrie Simon, Natural Resource Management Human Dimensions Research Unit, Cornell University; and Melissa Wuellner, South Dakota State University

Valuing Alternative Views in Fisheries Management

Organizers: Nancy A. Auer, Michigan Technological University and Marty Holtgren, Little River Band of Ottawa Indians

Wildlife and Sport Fish Restoration 75th Anniversary

Organizers: Ron Essig, U.S. Fish and Wildlife Service; Robert Curry, North Carolina Wildlife Resources Commission; Brian Bohnsack, U.S. Fish and Wildlife Service; and Doug Nygren, Kansas Dept of Wildlife, Parks and Tourism

Stakeholder Involvement in Fisheries Science: New Approaches and New Partnerships

Organizers: Jeffrey S. Schaeffer, and Edward F. Roseman, U.S. Geological Survey Great Lakes Science Center

Fishery Information Networks As Agents of Change

Organizers: Peter Lawson, National Marine Fisheries Service, Hatfield Marine Science Center; Gil Sylvia, Oregon State University; and Terry Smith, National Sea Grant Office, National Marine Fisheries Service

Science Communication: Information Delivery and the New Face of the 21st Century

Organizers: Jeremiah Osborne-Gowey, Feather River Consulting and Elden Hawkes Jr, NIFA Institute for Bioenergy, USDA

The New Food Web: Emerging Methods for Bringing Together Social and Ecological Networks

Organizers: Joel Hoffman, US Environmental Protection Agency; Joseph Luczkovich, East Carolina University; Mark R. Vinson, US Geological Survey, Lake Superior Biological Station; and Jeffrey C. Johnson, East Carolina University

Development of Sustainable Fisheries Resources Internationally: Useful Tools in Simulations, Modeling, and Planning

Organizers: Madhu Thapliyal, RCU Government PG College, Uttarkashi, Uttarakhand, India

Fisheries Data Dissemination – Building Better Networks

Organizers: Jeff Kopaska, Iowa Dept of Natural Resources

Free Data: Opportunities in Open-Access Network Databases to Advance Spatiotemporal Scales of Inquiry in Fisheries Science

Organizers: Ryan M. Utz, National Ecological Observatory Network and Ryan A. McManamay, Oak Ridge National Laboratory

Comparing and Contrasting Fisheries Research and Management Paradigms across Marine and Freshwater Ecosystems

Organizers: Edward F. Roseman, U.S. Geological Survey, Great Lakes Science Center; Jeffrey S. Schaeffer, US Geological Survey, Great Lakes Science Center; Douglas S. Vaughan, National Marine Fisheries Service; and Steven X. Cadrin, University of Massachusetts, Dartmouth

Calibration, Validation and Other Recent Progress on the AFS Standard Methods for Sampling Freshwater Fish

Organizers: Scott A. Bonar, U.S. Geological Survey, Arizona Cooperative Fish & Wildlife Research Unit; Nigel Lester, Harkness Laboratory of Fisheries Research, Ontario Ministry of Natural Resources; and Norman Mercado Silva, Arizona Cooperative Fish & Wildlife Research Unit, University of Arizona

The Role of Molecular Genetics in Fisheries Management in the Great Lakes Region

Organizers: Wendylee Stott, Michigan State University/U.S. Geological Survey Great Lakes Science Center; Kim Scribner, Michigan State University; Chris Wilson, Ministry of Natural Resources and Trent University; and Brian L. Sloss, U.S. Geological Survey Wisconsin Cooperative Fishery Research Unit, University of Wisconsin–Stevens Point

Fish Habitat Condition Assessment in the Midwest and Great Plains

Organizers: Maureen Gallagher, U.S. Fish & Wildlife Service

Biology and Control of Invasive Fishes: Lessons Across Species and Regions

Organizers: Peter W. Sorensen and Przemyslaw G. Bajer, Department of Fisheries, Wildlife and Conservation Biology, University of Minnesota

The Interdependence of Fish Populations and Their Food Webs in Temporally Varying Environments

Organizers: Brian J. Shuter, University of Toronto and Nigel P. Lester, Ontario Ministry of Natural Resources, Trent University

Making Native Fish and Their Habitat Relevant: Contemporary Challenges and Creative Solutions to Generate Broad Public Interest

Organizers: Katrina Mueller, U.S. Fish and Wildlife Service

Teaming up Atlantic and Pacific Salmonid Biologists to Enhance Recovery of Endangered Salmon in North America

Organizers: William R. Ardren, U.S. Fish and Wildlife Service and John F. Kocik, National Marine Fisheries Service

Science and Management Community Aquatic Habitat Connectivity Discussion

Organizers: Dale Burkett, John M. Dettmers, and Gary Isbell, Great Lakes Fishery Commission; Brian Anderson, Illinois Natural History Survey; and Patrick J. Doran, The Nature Conservancy

Fish Habitat and the American Reinvestment and Recovery Act of 2009

Organizers: Lee Benaka, National Oceanic and Atmospheric Administration and Abigail Franklin, Cape Cod Conservation District

New Perspectives in Fish Habitat: Remote Sensing, Modeling, and Scaling

Organizers: John A. Sweka, U.S. Fish and Wildlife Service; Joe Margraf, University of Alaska Fairbanks; Kyle J. Hartman, West Virginia University; and Amanda E. Rosenberger, University of Alaska Fairbanks

Moving Beyond Distribution and Abundance in Quantifying Fish Habitat Selection

Organizers: Karl M. Polivka, U.S. Forest Service and Amanda E. Rosenberger, University of Alaska Fairbanks

The National Fish Habitat Partnership – Building Relationships to Enhance Conservation of Aquatic Ecosystems

Organizers: Thomas R. Busiahn, U.S. Fish and Wildlife Service; Emily Greene, Atlantic States Marine Fish Commission; Douglas Stang, New York Department of Environment Conservation; and Gary Whelan, Michigan Department of Natural Resources, Fisheries Division

The NOAA Habitat Blueprint: Improving Fisheries, Marine Life, and Coastal Communities Through Habitat Conservation

Organizers: Helen McMillan, Karen Abrams, and Terra Lederhouse, NOAA, Fisheries Office of Habitat Conservation

Connectivity in Coastal and Estuarine Ecosystems: Patterns, Processes and Consequences

Organizers: Thomas J. Miller, University of Maryland; Howard M. Townsend, NOAA, National Marine Fish Service, Chesapeake Bay Office; and Robert J. Gamble, National Marine Fish Service

Upper Mississippi River Restoration: Combining Habitat Rehabilitation, Monitoring, and Research to Enhance Fish Communities

Organizers: David Potter, U.S. Army Corps of Engineers and Barry Johnson U. S. Geological Survey, Upper Midwest Environmental Sciences Center

Linking Land Use and Water Quality: Fisheries Management Beyond the Aquatic Zone

Organizers: Karen Terry, University of Minnesota Extension, Water Resources

Making the Connection: Land, Water, and Sustainable Fisheries

Organizers: Andrew Turner, University of Maryland Eastern Shore and Derek Orner, NOAA, National Marine Fisheries Service

Effects of Climate and Land Use Changes on Fish and Fish Habitat in Streams and Lakes: Special Emphasis on Strategies for Fisheries Management and Conservation

Organizers: Damon Krueger; Yin-Phan Tsang; and Dana M. Infante, Michigan State University

Climate and Fisheries: Responses of a Socio-Ecological System to Global Change

Organizers: Malin L. Pinsky and James Watson, Princeton University

Geomorphic-Based Design Responses to Natural Disasters

Organizers: Roy Schiff, Milone & MacBroom

Missouri and Mississippi River Flooding 2011: Impacts of Historic Flows on Big River Systems

Organizers: Wells Adams Jr., South Dakota Game, Fish & Parks; Gerald E. Mestl, Nebraska Game & Parks Commission; R. Scott Gangl, North Dakota Game and Fish Department; and Quinton Phelps, Missouri Department of Conservation

The Future of Fishing: Leisure, Sport and Conservation

Organizers: Jeremy Bruskotter, Ohio State University; Susan A. Schroeder, Minnesota Cooperative Fish and Wildlife Research Unit, University of Minnesota; and David C. Fulton, U.S. Geological Survey, Minnesota Cooperative Fish and Wildlife Research Unit

Effects of Anthropogenic Chemicals on Chemosensation and Behavior in Fish: Organismal, Ecological, and Regulatory Implications

Organizers: Joseph Meyer, ARCADIS U.S., Inc and Greg Pyle, Lakehead University

Innovations in Thermal Research and Ecological Effects of Thermal Discharges

Organizers: Douglas Bradley, LimnoTech, Inc.

Collaboration Through Fisheries Networks: Restoration of Sturgeon and Paddlefish Populations

Organizers: Stephania K. Bolden, NOAA, Fisheries Southeast Regional Office and Dwayne A. Fox, Delaware State University

Diel Vertical Migration: Scaling Down From Populations to Individuals

Organizers: Jason D. Stockwell, University of Vermont; Thomas R. Hrabik, University of Minnesota, Duluth; and Olaf Jensen, Rutgers University

Understanding Complex Linkages Between Fish and Fisheries in a Changing Ocean

Organizers: Andrew Pershing, University of Maine; Dan Holland, NOAA Northwest Fisheries Science Center; and Sigrid Lehuta, Gulf of Maine Research Institute

Lake Trout East and West: What Can We Learn by Comparing Lake Trout Restoration in the Eastern USA to Lake Trout Suppression in the Western USA?

Organizers: Michael J. Hansen, University of Wisconsin-Stevens Point and Robert E. Gresswell, U.S. Geological Survey

Role of Forage Species in Ecosystem Approaches to Management

Organizers: Steve Meyers, Derek Orner, and Joseph Smith, National Marine Fisheries Service

Great Lakes Fish Communities: Tales, Lessons, and Futures

Organizers: Owen T. Gorman, U.S. Geological Survey, Lake Superior Biological Station and David J. Jude, University of Michigan

Advances in Telemetry in the Great Lakes and Beyond

Organizers: Thomas Binder, Carleton University; Chris Holbrook, U.S. Geological Survey; and Charles C. Krueger, Great Lakes Fishery Commission

Standardization in Hydroacoustic Assessments: Fundamental or Folly?

Organizers: David M. Warner, Daniel L. Yule, and Patrick M. Kocovsky, U.S. Geological Survey, Great Lakes Science Center

Constructing Fish Passage Projects

Organizers: Mike Garelo, HDR Fisheries Design Center

Symposia

Double-Crested Cormorants and Fisheries Management: Policy, Perceptions, and Research

Organizers:

Tom Heinrich and Doug Schultz, Minnesota Department of Natural Resources and Steve Windels, Voyageurs National Park

Best Student Paper

Organizers:

Melissa Wuellner, South Dakota State University and Shannon Fisher, Minnesota State University Mankato

Sponsor:

AFS Education Section

Contributed Oral Paper Sessions

Economics
Human Dimensions
Genetics
Contaminants, Toxicology, and Fish Health
Management: Regulations and Fishing Effects
Management: Monitoring and Sampling Methods
Habitat & Water Quality
Communities and Ecosystems
Physiology
Statistics and Modeling
Dams and Fish Passage
Asian Carp
Trout and Salmon
Spawning and Recruitment
Ecology and Population Dynamics

Trade Show and Poster Session

As always, you do not want to miss the Trade Show and Poster Social on Monday night from 6 to 8:30 pm! Arrive early so that you have enough time to talk with the authors as you explore the 175 posters that represent outstanding scientific research on a plethora of topics. We have again lined up a most impressive list of national and professional exhibitors to help further your scientific objectives. We are also quite proud to have a variety of local and regional artisans whose beautiful fish-related works of art will be available for purchase! And of course an amazing selection of light fare and beverages will be provided, both to help you maintain your energy level as well as help you further your networking connections. **Please go to afs2012.org/trade-show for more information**

TRADE SHOW EXHIBITORS

Advanced Telemetry Systems Inc. (ATS)
AFS 2012 Annual Meeting – St. Paul
AFS 2012 Annual Meeting – Little Rock
73rd Midwest Fish and Wildlife Conference
Alpha Mach Inc.
American Fisheries Society Publications
American Institute of Fishery Research Biologists
Blue Leaf Environmental
BioSonics Inc.
Bio-West, Inc.
Contour Innovations LLC
Electric Edge Systems
Engbretson Underwater Photography
Floy Tag & Mfg. Inc.
Freshwaters Illustrated
Frigid Units
Great Lakes Fishery Commission
Halltech Aquatic Research Inc.
HDR
HTI – Hydroacoustic Technology Inc.
Hydrolox
Lotek Wireless Inc.
Marel Seattle Inc.
Marine Stewardship Council (MSC)
Midwest Lake Management
Midwest Lake Electrofishing Systems
Miller Net
Myriax
National Fish Habitat Partnership
National Park Service
NOAA National Marine Fisheries Service
Northwest Marine Technology, Inc.
Olfish/OLRAC
Onset Computer Corporation
Orchard Street Studio West
Pennington Split-Bamboo Fly Rods

Prentiss LLC
Smith Root Inc.
Sonotronics
Sound Metrics Corp
Springer
Star-Oddi
Streamside Technology
Taylor & Francis
U.S.D.A. Forest Service
U.S.D.A. Forest Service, Superior National Forest
U.S.D.I Fish and Wildlife Service
US Geological Survey, USGS
USDI BLM
Vemco Division, Amirix Systems Inc.
West Fork Environmental
Worthington Products, Inc.

POSTER SESSION TOPICS

Native Fishes and Fish Conservation
Physiology
Population Dynamics
Statistics and Modeling
Recreational Fisheries Management and Policy
Commercial Fisheries Management and Policy
Habitat and Water Quality
Human Dimensions
Species-Specific: catfish, shad, salmon, sturgeon,
black bass, northern pike, salmonids, carp, round goby, Atlantic tarpon, croaker,
walleye, American eel
Fish Ecology
Genetics
Contaminants, Toxicology, and Fish Health
Fish Culture
Communities and Ecosystems
Bioengineering
Education and Outreach

Hotel Accommodations



The Crowne Plaza – Saint Paul Riverfront

The Crowne Plaza – Saint Paul Riverfront is located in the heart of the Twin Cities, perched upon a bluff overlooking the Mississippi River. The hotel is located just 5 blocks from the RiverCentre, the conference location, and will host several AFS functions, including the Sunday night social. The indoor Skyway connects the Crowne Plaza with the RiverCentre as well as many other downtown attractions. To reserve your room, use the Accommodations web link at afs2012.org

Parking is available across the street from the RiverCentre, complete with a skyway connection.

Child care for ages 6 months to 12 years can be arranged during the meeting through Saint Paul KinderCare:

St Paul KinderCare, Renita Moss, Center Director
325 Cedar Street Suite 150, Saint Paul

Phone: (651) 221-0924
Open: 6:30 AM to 6:00 PM, M-F

Travel Around the Twin Cities

Airport transport. The Minneapolis-Saint Paul airport (MSP) is located only 7.5 miles away from downtown St. Paul. Hop in a cab or take the Super Shuttle for door to door services 24 hours a day, seven days a week. Direct buses on Metro Transit also bring you to the Crowne Plaza. For more airport information and transportation options, visit www.msppairport.com

Getting around during the meeting.

Bus or light rail: Metro Transit has dependable buses and light rails on regular schedules: metrotransit.org

Taxi: Local services include Yellow Cab Co., Airport Link Taxi Co., ITN Taxi Service, and Green and White.

By bike: Bike racks on buses and trains are free. Try the public bike sharing system: niceridemn.org

On foot: The Skyway, local parks, and river walks all make exploring easy under your own power.

Being Green Will be Easy for AFS 2012

The 2012 AFS Committee is dedicated to bringing you a “green” meeting that helps to reduce our energy and resource use footprint. RiverCentre and the Crowne Plaza Hotel both support green initiatives including using biodegradable or reusable service ware, going paperless, filtering city water for bottling, providing recycling bins, and composting food waste. RiverCentre has rooftop solar panels and both locations acquire energy partially derived from renewable resources. Both AFS and our venues are committed to locally produced/locally owned food and beverages.

The 2012 AFS Committee is dedicated to reducing our energy and resource use footprint. Some of the “green” offerings are as follows.

- The Program Guide can be downloaded so you can opt-out of the printed version. Select when you register.
- Meeting t-shirts are made in the USA from 100% renewable resources or recycled products.
- Mass transit options to student housing.
- Social events were planned within walking distance or with bus transportation.

For more information about AFS 2012 green initiatives, visit www.afs2012.org and “friend” the American Fisheries Society 2012 Facebook page.



Photo: Meet Minneapolis

Relax and Network at AFS Socials

Welcome to the Twin Cities Social: Let the Networking Begin!

Sunday August 19th | 7:00 to 10:00 pm | Crowne Plaza Hotel | Great River Ballroom & Garden Court East

Start the meeting off right by attending the Opening Social as you enjoy breathtaking views of the upper Mississippi! Ample food and beverages combined with plenty of mingling and sitting areas will help you catch up with old friends, make new ones, and begin a productive week of networking. Let your mind escape from your “job” and ease yourself into this opportunity to spend entire days focused on the fish, conservation, and restoration issues that brought you to a career in fisheries.

Trade Show and Poster Social

Monday August 20th | 6:00 to 8:30 pm | RiverCentre Exhibition Hall

Nicollet Island Grand Social

Wednesday August 22nd | 6:00 to 11:55 pm |

Nicollet Island Pavilion, Minneapolis

A Taste of Minnesota: the Famous and Infamous!

Nicollet Island, the largest island on the Mississippi River, is a bucolic wooded wonderland hidden in the heart of Minneapolis. On the south end of the island sits the historic Nicollet Island Pavilion where attendees will enjoy spectacular views of downtown and the Stone Arch Bridge. Enjoy the sophisticated music of Ira Adelman’s “Optimum Trajectory Jazz Quintet” from a vantage point overlooking the upper St. Anthony Falls.

Since you are in the Land of Ten Thousand Lakes you will be treated to a truly special Minnesota feast of the famous walleye and lake herring, complimented with a “Beer Extravaganza” featuring a dozen of our outstanding Midwestern microbreweries (also famous!). Then, in a nod to our wonderful Seattle hosts, we have brought back award-winning sustainable sushi chef Bun Lai. We are taking advantage of Bun’s remarkable talents to have him show us just how tasty the most recent scourge of the Mississippi River – the infamous jumping silver carp – can be.

So, come enjoy an island evening where you can learn about the unique geologic features and how this scenic stretch of river has been changed over time, discover why we northern folks love walleye fishing, and contemplate how best to confront yet another exotic species (while testing how “good” these Asian carp really are). And bring your money, because the annual live auction (with proceeds funding future student travel) will be held after dinner! Segway Personal Transports will be available for short cruises around the island or to ride across the Stone Arch Bridge. Buses will begin loading guests at 5 pm at the Crowne Plaza Hotel for the short ride over to St. Paul’s twin.

Good-Bye Twin Cities; Hello Little Rock Social

Thursday August 23rd | 6:00 pm to 9:00 pm | Padelford River Boats | Harriet Island

As our capstone to Twin Cities 2012, stay the final evening and step back in time as we cruise along the Mississippi in true riverboat fashion. A short and scenic 10 minute walk across the Wabasha Bridge from the hotel will bring you to Harriet Island, where you will set out on a 2-hour cruise through the wooded banks of the Mississippi River Gorge (the only true gorge on the Mississippi River). Relax with old friends, converse with new friends, or finalize plans for those new collaborative studies discussed previously. Complimentary heavy appetizers will be provided. This evening will be the ideal setting to build momentum towards next year’s meeting, located just a few days’ journey downstream in the river town of Little Rock, Arkansas, along the foothills of the Ouachita Mountains.



Photo: Minneapolis Parks and Recreation



Padelford River Boats. Photo: Visit Saint Paul

Kid's Fishing Event

Sunday August 19th | 1:00 to 4:00 pm | Thompson Park Activity Center

Come out for a relaxing day on the lake and join the Minnesota Department of Natural Resources at the Kid's Fishing Event at Thompson Park just a few miles south of the RiverCentre. Fishing in the Neighborhood (FiN) will be hosting the event along with the U.S Fish and Wildlife Service, MinnAqua (MN DNR) and members of the Aquatic Resources Education Association. The event is free and focused on kids' fishing and providing them with information about aquatic habitats. You and your children are welcome to attend a fun day of fishing and learning activities. No prior angling experience or fishing gear are needed. Children attending the event will receive a bag of fishing education materials and fun giveaways. Register and find more information at www.afs2012.org



Photo: MN DNR

AFS Spawning Run 5k

Wednesday August 22nd | 7:00 am | Harriet Island

Come and enjoy a scenic 5-kilometer run along the beautiful Mississippi River in Harriet Island Regional Park in St. Paul. The park is within easy walking distance of the Crowne Plaza. Just tie up your running shoes and head over to the park! Online pre-registrants must check in upon arrival at the Registration Booth. Last-minute registrants will be able to register at the Registration Booth until 5:00 pm on Monday, August 20. The top 3 finishers in both the male and female categories will receive valuable prizes (or at least an extra beer ticket!).

Please pre-register online and order your t-shirt:
afs2012.org Payment due with registration fees.

Spawning Run Contacts:

Heather Baird | 218-330-1408 | hmb_4@q.com

Scott Mackenthun | mack0247@umn.edu

Jacquelyn Bacigalupi | 763-913-0610 | jacquelynbacigalupi@hotmail.com



Photo: Visit Saint Paul

John Skinner Memorial Auction Sunday – Wednesday

The Minnesota Chapter of AFS will be holding a raffle and silent auction Wednesday night at the Nicollet Island Pavilion. Proceeds will go towards funding student travel, registration, and lodging at future AFS functions (via John Skinner Memorial Funds as well as funds for AFS Minnesota Chapter student activities). Raffle tickets will be available Sunday through Wednesday at the raffle booth located in the Trade Show Room. The silent auction starts Sunday and will close at 9pm during the Grand Social. Raffle prizes include fishing equipment, custom rods and reels, a Mathews bow, gifts from Minnesota, framed artwork and photography, and much, much more! Please note that shipping and transportation of raffle and auction items will be the responsibility of the winner.



Student Accommodations, Events, and Volunteer Opportunities

Calling all fishery sciences and aquatic ecology students! Plan to attend this year's national AFS meeting and enjoy student-specific events! In addition to all the great events, talks, and posters at this year's conference, there will be a number of activities specifically for undergraduate and graduate students. These include a student colloquium, career fair, and social.

Low-cost housing is available to students at Concordia University from Sunday, August 19th through Thursday August 23rd on a first-come, first-served basis. Cost is \$51.45/night for single or double occupancy. Visit afs2012.org/students/low-cost-housing-for-students to reserve by June 1, after which the rooms will be available to non-students. Travel to and from the conference is a 15-minute ride on the #21 Metro Transit bus route with one-way trips costing \$1.75 (non-rush hour) or \$2.25 (rush hour). See: metrotransit.org/Schedules/WebSchedules.aspx?route=21.



Photo: Brian Borkholder

A two-part **Student Colloquium** will take place on Monday, Aug. 20 between 2 and 4 pm. During the first hour, we will have a panel of professional fishery scientists and aquatic ecologists from a range of backgrounds and employers to discuss the skills students need to enter the job market. Come learn what skills are needed to be successful in the various sectors of fisheries management and science. The second hour will be an informal gathering of students and mentors, with plenty of food and drinks to go around. Talk in person with our panel speakers and other mentors in a casual setting to get a leg up on a career in fisheries.

Tuesday evening we will have a **Career Fair and Student Social!** The career fair will be from 4 to 6 pm at the RiverCentre. Representatives from academic, state, federal, and non-government institutions will be present to discuss employment opportunities with students.

Make sure to bring your resume, and to have plenty of questions for employers. The student social begins immediately following the career fair at 6 pm. Make the short walk from the conference center to our venue at the Eagle Street Grille. Students will enjoy a free meal and a variety of drinks offered by our hosts. Stick around later in the evening for fish trivia and an opportunity to win prizes!

Questions? Contact student activities committee co-chairs Marcus Beck (mbafs2012@gmail.com) or Kyle Zimmer (kzafs2012@gmail.com).

Volunteers Needed

Volunteers are needed to assist during presentations, posters, events, and much more. A minimum of one 4-hour commitment is required. Student volunteers will be paid \$10.00 per hour to help defray their meeting costs. Visit our sign-up sheet at www.afs2012.org. If you have questions, contact our volunteer coordinator, Linda Erickson-Eastwood (leaafs2012@gmail.com).



Photo: Explore Minnesota

Enjoy the Twin Cities and Beyond

Family Fun: Child Friendly Venues that All can Enjoy

Rice Park. Located between the Crowne Plaza Hotel and RiverCentre. Visit the Peanuts as kid-sized sculpture.

The Minnesota Children's Museum. Walk to the Museum in downtown St. Paul. Ideal for children between 6 months and 10 years old. Create art and play on the roof in the ArtPark.

Nickelodeon Universe at the Mall of America. Three expansive floors of retail space and the nation's biggest indoor amusement park. The entire family will enjoy over 30 rides spread across seven acres. After, you can shop, see a movie or satisfy your taste buds in one of the many restaurants.

Como Town Amusement Park. An outdoor amusement park that lets you take advantage of the beautiful Minnesota summer. Located adjacent to Como Park Zoo, this attraction is ideal for young kids and features more than 18 rides.

Water Park of America. While it's best to experience the land of 10,000 lakes outside, if the weather turns for the worse, you can always entertain the family in one of America's largest indoor waterparks. Great fun for all ages!



Rice Park. Photo: Visit Saint Paul

Discover and Learn: Museums, Zoos, and More



Science Museum of Minnesota
Photo: Visit Saint Paul

The Science Museum of Minnesota. Just a short walk from the RiverCentre, the Science Museum of Minnesota has impressive collections, facilities, a public science education center, and an Imax Omnitheater.

Mississippi River Visitors Center. Located within walking distance of the RiverCentre. Free programming on the diverse culture, biology, and history of the mighty Mississippi River. Get all the information you need about hiking, biking, and canoeing from staff park rangers and volunteers. Or rent out free fishing equipment!

Como Park Zoo and Conservatory. This destination offers something for the entire family. It features a zoo, conservatory, 18-hole golf course, concert pavilion, paddleboats, amusement park, and pool.

Minnesota Zoo. The zoological park spreads across 500 acres of beautiful wooded landscape. You'll find a tropical forest and aviary, a marine center, boreal forest, tundra, and a family farm – boasting more than 400 species.

Sea Life Aquarium at the Mall of America. If you can't squeeze in some fishing during your visit, then be sure to plan a trip here. You'll find aquatic organisms native to the Amazon, tropical coral reefs, and to Minnesota!

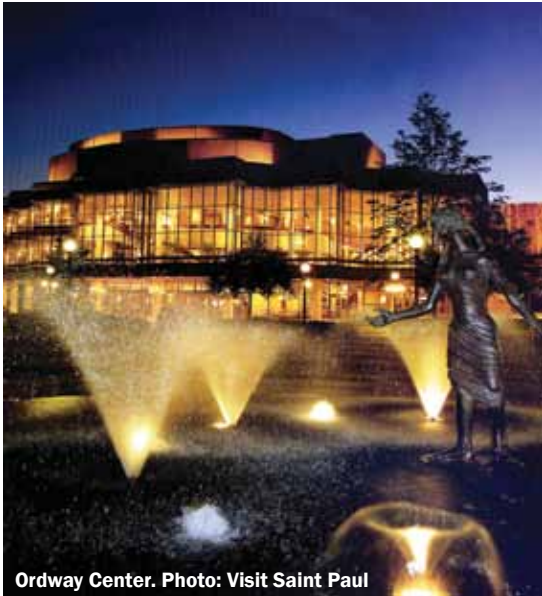
The Bell Museum of Natural History. The impressive collections focus on Minnesota's past and include exhibits dedicated to biodiversity in landscapes, ecosystems, plants, and wildlife. Also find interactive simulations and beautiful art inspired by nature.

The Minnesota Landscape Arboretum. Only a short drive from RiverCentre, the Arboretum is an urban treasure, featuring over 1,000 acres of gardens, model landscapes, woodlands, wetlands, and prairies. There are more than 12 miles of trails and garden paths to explore – or tour by vehicle along the "Three-Mile Drive."

The Minnesota Valley National Wildlife Refuge. Less than 10 miles from downtown Minneapolis and tucked away near the MSP Airport is an outdoor gem and one of only a handful of urban national wildlife refuges in the nation, a place where coyotes, bald eagles, badgers, and beavers live next door to three million people.

The Minnesota History Center. People of all ages will enjoy the eclectic exhibits from prehistoric mummies to more contemporary collections featuring objects of art and design. There's something for everyone to enjoy.

Explore the Arts Scene: Paintings, Performances and More



Ordway Center. Photo: Visit Saint Paul

The Walker Arts Center and the Minnesota Sculpture Garden. Whether you find yourself inspired – or confused – by contemporary art, the Center is a globally recognized and must-see venue of modern art. Featuring well-known works by artists like Roy Lichtenstein and Pablo Picasso, along with those of emerging artists. A perfect place to enjoy a summer day with a relaxing stroll through the Minnesota Sculpture Garden.

Minneapolis Institute for the Arts. The Minneapolis Institute for the Arts features exhibits that range from prehistoric times to the post-modern era. This expansive, world-renowned museum in Minneapolis features something for everyone to appreciate.

The Weisman Art Museum. An eclectic collection that includes almost every media and style that you could imagine. In addition to housing the University of Minnesota's extensive collection of 20th-century American art, its permanent collection offers ceramics, photography, and paintings.

The Guthrie Theater. A well-recognized regional theater with architectural distinction. During the AFS meeting, nightly performance is The Sunshine

Boys. Public tours during the day offer the restaurant, lounge, and breathtaking views of St. Anthony Falls and the Minneapolis skyline. For tickets, contact the box office.

The Ordway Center for the Performing Arts. Catch a touring Broadway show or relax during a concert by the St. Paul Chamber Orchestra at this historic, elegant venue in the heart of downtown St. Paul. As the AFS meeting draws closer, be sure to check out their calendar of events for performances that will take place during the conference.

Enjoy the Outdoors: Exciting Sporting Events and Area Parks

If you're interested in summertime sporting events, you'll find a number of opportunities. The St. Paul Saints are a popular minor league baseball team that takes on the Rockland Boulders for three nights (August 20-22) during the meeting. The team plays at Midway Stadium. Visit www.saintsbasedball.com/tickets/individual for information.

Canterbury Park, located 30 minutes south of downtown Minneapolis in Shakopee, offers premier horseracing and a top-notch casino, and exceptional lodging. Visit www.canterburypark.com for more information.

The Twin Cities area offers many city and regional parks where you can stroll or ride by the water or even swim. Lake Calhoun and Hidden Falls are just two examples. More information can be found using the "visitors" link at: www.ci.minneapolis.mn.us and the "summer activities" link at www.ci.stpaul.mn.us



Photo: Meet Minneapolis



Fish the Twin Cities or Extend Your Visit to Outstate Minnesota

Minnesota, the Land of 10,000 Lakes, could also be called the Fishing Capital of the World. The state offers a plethora of angling opportunities for novices and experts alike. Bring your own fishing gear, or rent it free of charge from the National Park Service's Mississippi River Visitor Center. Whether you're after walleye, trout, northern pike, muskellunge, bass, crappie, sunfish, catfish, or sturgeon, Minnesota has a fishing destination for you. Our thanks to Explore Minnesota for information on fishing destinations: www.exploreminnesota.com



Minneapolis-St. Paul Area

If you're staying in the Twin Cities, you're within casting distance of good fishing—perhaps literally. Big smallmouth, walleyes, and catfish swim in the Mississippi River in the middle of downtown Minneapolis and St. Paul. And in the chain of lakes in south Minneapolis, you can catch muskies, walleyes, and largemouth bass over five pounds.

Extend your range just a few miles and you're within reach of some of the best fishing in the state. Lake Minnetonka and Lake Waconia, both west of Minneapolis, have long had the reputation as great bass lakes, and now they have muskies, too. Just down the road, on the western fringes of the metropolitan area, a small Carver County lake recently produced the state's record largemouth bass of nearly nine pounds.

About 30 Twin Cities area lakes are stocked with pure-strain muskies or hybrid tiger muskies. Among the best are White Bear, Bald Eagle, and Independence. Many metro lakes have walleyes, northern pike, bass, and panfish. Among the most popular are the lakes of Chisago County, at the northeast edge of the metro area, including Green, Chisago, North Center, and South Lindstrom lakes.

Minnesota has made special efforts to give city anglers opportunities to go fishing, even if they don't have a boat, or a car. The Fishing in the Neighborhood (FiN) Program stocks fish, installs fishing piers, puts on fishing clinics, and identifies dozens of metro-area

lakes and rivers that provide good fishing in a safe setting suitable for families.

Many FiN facilities are reachable by bus and are wheelchair-accessible. Learn more about the program and metro-area fishing opportunities on the state Department of Natural Resources website: www.dnr.state.mn.us

Casting Your Line in the Northwest

The pine and hardwood forests of northwest Minnesota harbor a wide variety of lakes, from the state's largest waters to small gems tucked into the woods. This is also the land where the Mississippi River begins its journey as a wilderness stream, and where the Red River travels north along the western border of the state. This range of waters lures anglers to this northwest territory.

Big Waters

Minnesota's famous "walleye factories" are known to serious anglers across the nation. Lake of the Woods, Leech, Winnibigoshish, and Upper Red—these are giant lakes with windswept reefs and shorelines, perfect breeding grounds for the state fish. These big lakes also hold big northern pike, some over 20 pounds. Anglers take to the big water in deep-V boats, jigging the flats and drop-offs, or trolling the reefs with crankbaits. Commercial launches, popular on Leech and Lake of the Woods, are an easy and economical way to get out on these big waters. There's also excellent fishing on Lake of the Woods among the sheltered islands off of the Northwest Angle, the northernmost point of Minnesota.

Leech Lake is famed for its notorious muskie "rampage," a few midsummer days when muskies hit anything in the water. Cass Lake has also been a top producer of big muskies.

Lake Winnibigoshish is a large reservoir with 140 miles of mostly undeveloped shoreline. Called "Winnie" by its biggest fans, the lake holds walleye, northerns, muskies and perch. Adjoining Winnie is Cut Foot Sioux Lake, and nearby are Bowstring and Ball Club lakes.

North Woods Lakes

The big lakes may have the fame, but hundreds of smaller lakes rank among the favorites of those who fish them. They hold almost every kind of game fish Minnesota offers: walleyes, largemouth and smallmouth bass, pike, muskies, and panfish. Among these are Detroit Lake and Lake Bemidji near their namesake towns. These are among some lakes that have become muskie hotspots through carefully managed stocking programs. But the region's popular lakes are favored for their variety and the options they offer anglers. Near Detroit Lakes are Cormorant, Melissa and Pelican lakes; Plantagenet and Blackduck lakes are near Bemidji. Not far from Park Rapids are Big Sand and Fish Hook lakes. All make good fishing destinations, but there are plenty of others too numerous to name.

River Fishing

Northern Minnesota also has some red-hot rivers. Float the Mississippi in a johnboat or canoe and catch everything from muskies to top-notch smallmouth bass. It arcs through the north woods linking several large reservoirs. The Red River along the state's western border flows north through a rural landscape to Canada, and holds channel cats averaging well over 10 pounds. It's the northernmost catfish population in the state. The Red Lake River also features a variety of fish.

While You're Here

There's more here than just big lakes and big fish. A must-see highlight of this area is the headwaters of the Mississippi River, at Itasca State Park between Park Rapids and Bemidji. If you enjoy gaming, there are several Ojibwe-owned casinos in this area. Hundreds of small lakeside resorts and campgrounds cater to those who come to fish their waters, with beaches and pools for the kids to enjoy.

Northeast Angling

This corner of Minnesota has been dubbed the "Arrowhead" for its distinctive shape, formed by the Canadian border on one side and the craggy shore of Lake Superior on the other. In between is a wild land with deep forests of pine and birch nestling thousands of lakes, where wolves still howl and loons call out across the water.

Wilderness Waters

The Boundary Waters Canoe Area Wilderness holds more than a thousand lakes linked by overland trails. Most lakes are paddle-only; motors are permitted on only a few. Travel by canoe to secluded campsites and fish for trophy walleye and northern pike. The top-water smallmouth fishing in these lakes is some of the finest in the nation. In early spring, the deepest lakes provide light-tackle fishing for lake trout. Major gateways to this canoe country are Ely and the Gunflint Trail, a scenic byway that begins in Grand Marais.

Also along the state's northern border is Voyageurs National Park, just east of International Falls. Voyageurs has beautiful rocky lakes, thick forest, and great fishing. Travel is largely by motorboat; rent one from an area resort, or book a comfortable houseboat. Rainy, Kabetogama, Namakan, and Crane lakes serve up walleyes, northerns, smallmouth bass, and big crappies. Just west, anglers fish the Rainy River for walleyes.

Lake Country

Along the Iron Range, from Grand Rapids to Babbitt, abandoned mine pits have filled with water, forming lakes such as Lake Orebe-Gone, now holding trout and big pike. There are many natural lakes in this area as well, and some are designated trout lakes.

Long, narrow Birch Lake near Babbitt has great fishing for a variety of species and is a favorite for houseboat rental. Rambling Lake Vermilion has an island for every day of the year and a budding reputation as the place to go for big muskies, but the catch includes perch, walleye and bluegills. In the north woods between the Iron Range and Voyageurs, Pelican Lake near Orr has vast shallow structure for great fishing.

The forests around Grand Rapids are studded with lakes. North of town, the Edge of the Wilderness Scenic Byway winds among scores of lakes in the Chippewa National Forest, including Trout Lake and Lake Wabana. Here is a place to fish walleyes, pike, and bass in solitude. Just southwest of Grand Rapids is popular Pokegama Lake.

Lake Superior

The Arrowhead borders the largest freshwater lake in the world. Lake Superior's cold, clear waters hold native lake trout, and stocked steelhead, chinook and coho salmon. The big lake is too open and windswept for many boats, but charter fishing trips are available from Duluth and other towns along the North Shore.

Stream & River Fishing

Stream fishing is also popular along the North Shore. In the thundering wilderness rivers that tumble into Lake Superior, anglers



Photo: Explore Minnesota

wade in to cast for resident trout, or drift-fish for spawning steelhead during their spring run. The St. Louis River near Duluth is a favorite for its walleye and smallmouth bass. The St. Croix, a National Scenic River, is a great route to canoe and fish for smallmouth bass, northern pike, and walleyes.

While You're Here

Among the top attractions in this area are the many waterfalls and Split Rock Lighthouse along the North Shore, and the International Wolf Center and North American Bear Center in Ely. The Commercial Fishing Museum in Tofte and the Great Lakes Aquarium in Duluth might be of special interest to anglers. Several of the state's top golf courses are in this region.

Central Waters

This is lake country, where the hardwoods of the south meet the pine forests of the north, and where the rural countryside holds hundreds of lakes populated with a variety of fish. With so much to do off the water, as well, it's a great family vacation destination.

Legendary Lakes

Located in the heart of the state, the Brainerd Lakes area has been a fishing destination for travelers for more than a century and is home to fishing legends Babe Winkelman and Al Lindner, and *In-Fisherman* magazine. Tall tales say the giant lumberjack Paul Bunyan walked these woods, and the lakes here are the puddles that filled his footprints. Among the bounty of good fishing lakes are Gull, Pelican, Whitefish, North Long, and Round. An unusual fishery has developed in the abandoned iron-ore mines of the Cuyuna Iron Range near Crosby, just to the northwest of Brainerd. Many of these deep open pits have filled with water and are now stocked with trout; some also harbor monster pike and smallmouth bass.



Photo: Explore Minnesota

Southern Fishing

Savvy anglers know that the countryside of southern Minnesota holds well-kept secrets—some surprisingly good fishing lakes and rivers, as well as scenic trout streams. These waters can make for a quick and easy fishing getaway.

Southern Lakes

Many of the large lakes in the rolling farmland and valleys of the south are regularly stocked with walleyes. Most also have northern pike, largemouth bass, and panfish. Some offer up dandy channel cats. And nearly every lake and pond down here has bullheads, perhaps the most popular fish in the region. Catching them is easy – you just need a pole, line, hook, and worm.

Numerous lakes are splashed around the rural landscape between Mankato and Faribault. Several are popular fishing waters, and there are a handful of resorts in the area that cater to anglers. Among the fishing lakes to try here are: Tetonka near Waterville; Madison and Washington east of Mankato; Mazaska, Shields and Roberds near Faribault.

Some of the best and most popular of the prairie lakes farther south include Benton and Shaokotan west of Marshall, Okabena at Worthington, Lake Hanska south of New Ulm, and Budd, Sisseton, and Hall near Fairmont. Farther east is Albert Lea Lake, at its namesake town.

Minnesota & Mississippi Rivers

As good as the fishing is in southern Minnesota's lakes, the biggest fish in the region come from the rivers and streams. The Minnesota River and major tributaries hold some monstrous flathead catfish. Drop a live minnow into a logjam on an outside river bend some evening, and you may soon find yourself wrestling a flathead over 30 pounds. Other game fish on the river include walleyes, saugers, and channel cats. Try for walleyes at Big Stone Lake, at the headwaters of the Minnesota River near Ortonville.

In the southeast, the Mississippi River, nestled between steep wooded bluffs, provides the main action. Its fishing is as impressive as the scenery, with walleyes, saugers, smallmouth bass and catfish. One of the most popular fishing holes is Lake Pepin, the widest part of the river. White bass are also common in the lake, and when schools smash baitfish at the surface, fishing can be furious. The tangled backwaters hold a few big northern pike and good panfish.

Trout Streams

The spring-fed streams that riffle through the bluff country in the far southeastern corner of the state offer Minnesota's best trout fishing. Brown trout of two pounds and larger live in large streams such as the Whitewater and upper reaches of the Root, as well as clear tributaries so small you can leap across. The streams wind through valleys of hardwood forest. Fly-fishermen love these streams for their beautiful surroundings, plentiful trout, and frequent aquatic insect hatches.

While You're Here

Visitors have a wide choice of campgrounds or hotels, some country resorts, and several historic inns and B&Bs. Favorite activities in this area include antique shopping, visiting historic sites and biking the region's scenic, paved trails. Among the area's many attractions are the new National Eagle Center in Wabasha, along the Mississippi River; historic Schell's Brewery in New Ulm; and the Mystery Cave tour in a state park near Preston.

East of Brainerd is huge Mille Lacs Lake, the second largest lake within Minnesota and a popular fishing destination. Known for its large walleye population, the lake also holds northern pike, perch, smallmouth bass, muskies and other species. Fishing launches make it easy to get out on this big lake, carrying 6-50 anglers and providing bait, tackle and advice on half- or full-day trips.

In the Aitkin-McGregor area north of Mille Lacs, several smaller lakes, including Big Sandy, Round, and Minnewawa, are popular spots for walleyes, pike, largemouth, and panfish. Cedar is known for muskies.

Central Lakes

The Central Lakes area in the rural countryside south of St. Cloud serves up some good fishing, too. Popular lakes are Rice, Koronis, Clearwater, Cedar, Sylvia, and Pleasant, with a few resorts in the Paynesville area. There is another large cluster of lakes in the countryside around Willmar, including Big Kandiyohi south of town. One of the best is Green Lake near Spicer. A clear lake amid glacial hills, Green provides fishing for walleyes, northern pike, bass, and panfish that would compare favorably with most northern lakes. There are several lakeside resorts in the Spicer-New London area.

Glacial Lakes

In the rolling countryside surrounding Alexandria and Fergus Falls, hundreds of glacial lakes are clustered like constellations in the green hills. Among the best and best-known are Otter Tail and Clitherall near Fergus Falls, Lake Minnewaska next to Glenwood, and Le Homme Dieu, Carlos, Darling, Ida and Osakis near Alexandria. They offer a variety of species, from panfish to walleye. Several lakes have become muskie hotspots through carefully managed stocking programs. Among these are Lake Miltona north of Alexandria and West Battle Lake in Ottertail County.

While You're Here

This region offers hundreds of resorts, ranging from classic lakeside cabins to the large, full-service resorts with townhouses and condos, restaurants, golf courses, spas and even water parks. The Brainerd Lakes area, in particular, is well-known for its many excellent golf courses. South of Brainerd at Little Falls, the Minnesota Fishing Museum displays antique fishing lures and gear. Anglers will also enjoy the beautiful antique boats and old fishing gear at the Minnesota Lakes Maritime Museum in Alexandria.

Continuing Education Program

The Continuing Education Committee has put together a diverse suite of courses for the 2012 Annual Meeting. The courses cover a variety of topics, ranging from standardization in electrofishing, leading effective technical meetings, digital photography, and statistical concepts for fisheries scientists. When you register for the meeting, please consider taking one or more of these courses or technology workshops. All of them will help increase your professionalism, perspective, and skill set when you return to your job.

BEGINNING/INTERMEDIATE GIS FOR FISHERIES BIOLOGISTS

Joanna Whittier, University of Missouri; whittierJ@missouri.edu

Date/Time: Saturday, 18 August, 8:00 am – 5:00 pm

Location: U of M | **Room:** 50 Coffey Hall

Tuition: Student \$125; Member \$220; Non-member \$250

This course will provide an overview of basic/intermediate GIS skills for fisheries biologists using ArcGIS, including use of existing data, creating your own data, and review of fundamental concepts for GIS. The lectures will provide information on data formats that can be used in a GIS, coordinate systems and projections, cartography, and online resources. Lectures are designed to facilitate responses and discussion. The hands-on exercises will primarily be self-paced with assistance from the instructors.

INTRODUCTION TO PROGRAMMING IN R FOR FISHERIES SCIENTISTS

Matt Catalano, Michigan State University; mcatalano@msu.edu

Date/Time: Saturday, 18 August, 8:00 am – 5:00 pm

Location: Crowne Plaza | **Room:** Governors I

Tuition: Student \$100; Member \$150; Non-member \$200

This course will introduce the basics of program R (and using a commandline interface), drawing from examples in fisheries research. Topics will include:

- Interactive calculations
- Importing/exporting data, built-in and user-defined functions
- Graphing, and
- Statistical analyses (linear regression, t-test, randomization, ANOVA, basic nonlinear optimization.)

Program R is a powerful open-source mathematical and statistical software program gaining popularity in the fisheries and ecological sciences. Program R is a powerful open-source mathematical and statistical software program gaining popularity in the fisheries and ecological sciences. No prior experience with R or programming is required or expected.

NEW! SCIENTISTS' GUIDE TO ENGAGING THE PUBLIC THROUGH AQUATIC EDUCATION EVENTS

Tom Lang, Kansas Department of Wildlife and Parks and Aquatic Resources Education Association President; tom.lang@ksoutdoors.com

Steve A. Marshall; Florida Fish and Wildlife Conservation Commission; Steve.Marshall@myfwc.com

Date/Time: Saturday, 18 August, 1:00 pm – 5:00 pm; Sunday, 19 August, 1:00 pm – 4:00 pm

Location: Crowne Plaza; Thompson Park, West Saint Paul | **Room:** State I

Tuition: **FREE!**

This course will provide participants with important skills, resources and hands-on experiences to successfully develop and run youth sport fishing programs at their facilities. This training provides a professional complement to “Kid’s Fishing Event with FiN!” In order to register for the “Kids’ Fishing Event with FiN!” portion of this course on Sunday, 19 August, 1:00 pm – 4:00 pm, please visit the following website: <http://afs2012.org/kids-fishing-event/>.

NEW! POWER-BASED STANDARDIZATION IN ELECTROFISHING

James Reynolds, University of Alaska Fairbanks; jbreynolds@alaska.edu

Date/Time: Sunday, 19 August, 8:00 am – 12:00 pm

Location: Crowne Plaza | **Room:** Governors II

Tuition: Student \$25; Member \$50; Non-Member \$75

The recent AFS book, Standard Methods for Sampling North American Freshwater Fish, emphasizes the growing importance of sampling standardization in fisheries science and management. Standardization of electrofishing, a common sampling method, requires an understanding of electrical principles, particularly power transfer theory. This half-day course is aimed at professional fisheries personnel who use electrofishing, or supervise electrofishing, and desire to effectively standardize their operations.

The 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). Upon course completion, participants will understand basic electrical principles as applied to standardized electrofishing, know and appreciate the elements of a standardized program, and be able to demonstrate skill in constructing standard power tables based on field data. Each participant must attend all three sessions and participate in the Session 3 exercise for satisfactory course completion.

EFFECTIVE SPEAKING WHEN THE HEAT IS ON!

Michael E. Fraidenburg, The Cooperation Company; fraid@earthlink.net

Date/Time: Sunday, 19 August, 8:00 am – 12:00 pm

Location: Crowne Plaza | **Room:** Governors III

Tuition: Student \$25; Member \$50; Non-member \$75

Participants learn how to deliver their message using six speaking models that are designed to persuade. Use the techniques professional speakers use to get your audience to STOP, LOOK, and LISTEN, even if they don’t want to.

LEADERSHIP AT ALL LEVELS IN AFS

Dirk Miller, Wyoming Game and Fish Department; dirk.miller@wyo.gov

Date/Time: Sunday, 19 August, 8:00 am – 12:00 pm

Location: Crowne Plaza | Room: Governors I

Tuition: **FREE!**

This workshop is targeting leaders at all levels of the American Fisheries Society. The goal is to help you work effectively within the Society's governance structure by understanding how the Society functions. Many times we've heard from people going out of office about the things they learned along the way. This workshop is designed to get some of that information to you before your term of office has ended. The workshop will review the structure of the Society and the programs that exist, and suggest ways you can be more effective within the governance structure and within your unit (Chapter, Section, or Division). Issues to be addressed include:

- Roles and responsibilities of the volunteer leadership teams. What is the difference between the Elected Officers, the Management Committee, and the Governing Board? How do they fit together to lead the Society? If you serve in one or more of those capacities, what are your duties and responsibilities?
- Roles and responsibilities of the Executive Director and AFS Staff. What do they do for you as a member and volunteer leader? How can you interact effectively with them?
- AFS programs relative to unit needs. How do those programs fit with your Chapter, Section, or Division, and how do you fit with them?
- Effectively leading your unit. How can you lead and inspire the volunteers in your unit? What does it take to run a good meeting? How do you keep from doing everything yourself, and why should you strive to delegate?

ADVANCED GIS FOR FISHERIES BIOLOGISTS

Joanna Whittier, University of Missouri; whittierj@missouri.edu

Date/Time: Sunday, 19 August, 8:00 am – 5:00 pm

Location: U of M | Room: 50 Coffey Hall

Tuition: Student \$150; Member \$220; Non-member \$270

Building on the "Basic/Intermediate GIS for Fisheries Biologists' course," this course will focus on geoprocessing, interpolation, and spatial analysis methods to aid in fisheries monitoring and research. The Lectures are designed to facilitate responses and discussion. The hands-on exercises will primarily be self-paced with assistance from the instructors. Course exercises are designed to introduce the participants to ArcGIS by guiding them through increasingly complex tasks for practical application on the job.

INTRODUCTION TO STATISTICS AND SAMPLING DESIGN

Ken Gerow, University of Wyoming; gerow@uwyo.edu

Date/Time: Sunday, 19 August, 8:00 am – 5:00 pm

Location: Crowne Plaza | Room: Governors V

Tuition: Student \$100; Member \$150; Non-Member \$200

Many working fisheries professionals only periodically engage in the use of statistical concepts and tools. This course will help participants refresh their knowledge of traditional statistics while also learning about contemporary statistical concepts and tools.

HOW TO LEAD AN EFFECTIVE TECHNICAL MEETING

Jim Berkson, National Marine Fisheries Service; Jim.Berkson@NOAA.gov

Date/Time: Sunday, 19 August, 8:00 am – 5:00 pm

Location: Crowne Plaza | Room: State III

Tuition: Student \$50; Member \$75; Non-Member \$100

This course will teach you how to be an effective technical meeting leader and is intended for all career stages. Topics include: handling difficult personalities, time budgeting, and reaching meeting objectives.

MAPPING AQUATIC HABITAT OF INLAND FRESHWATER SYSTEMS USING SIDE-SCAN SONAR

Thom Litts, Georgia Department of Natural Resources; Thom.litts@dnr.state.ga.us

Date/Time: Sunday, 19 August, 8:00 am – 5:00 pm

Location: Crowne Plaza | Room: Governors IV

Tuition: Student \$100; Member \$150; Non-member \$200

Workbook provided. PowerPoint presentations, demonstration datasets and processing tools will be made available to all participants.

Session I: Introduction to side scan sonar and image interpretation

Session II: Mission planning and execution (capturing and working with sonar data)

Session III: Image processing in ArcGIS (practical demonstration)

Session IV: Habitat map development and applications

A need exists within the natural resource community for an inexpensive and rapid technique to map and quantify aquatic habitat features in navigable waterways. The Humminbird® Side Imaging system allows users to quickly capture high-resolution, geo-spatially referenced images of underwater habitat. Unlike more expensive side scan systems, the Humminbird® system employs a boat-mounted transducer that allows for the survey of shallow, rocky environments. We have developed a technique utilizing ArcGIS 9.x to transform Humminbird® images into georeferenced sonar image maps (SIMS.) These maps show underwater habitat in a spatial context and can be used within a GIS to map, measure, and quantify features such as: rocky areas, large woody debris, and areas of fine sediment (sand/mud). The potential fisheries applications for such detailed habitat maps are numerous and widespread, and the tools and techniques to develop such maps are just now within reach natural resource professionals and their agencies/institutions.

Target audience: Natural resource professionals interested in aquatic habitat. Background required: Basic understanding of GIS is helpful, but not required.

DIGITAL PHOTOGRAPHY FOR AQUATIC SCIENTISTS

Jeremy Monroe, Freshwaters Illustrated; jeremy@freshwatersillustrated.org

Date/Time: Sunday, 19 August, 8:00 am – 5:00 pm

Location: Crowne Plaza; afternoon outdoors | Room: State I

Tuition: Student \$75; Member \$100; Non-member \$150

Participants in this course will learn how to use photography as part of their communication portfolios. The course will cover the importance of photography in aquatic education, science, and outreach; digital equipment, techniques, and workflow; techniques for underwater natural-history photography; and photographic sampling and documentation for science.

COLLABORATIVE NEGOTIATIONS

Michael E. Fraidenburg, The Cooperation Company; fraid@earthlink.net

Date/Time: Sunday, 19 August, 1:00 pm – 5:00 pm

Location: Crowne Plaza | Room: Governors III

Tuition: Student \$25; Member \$50; Non-member \$75

Learn to solve your toughest bargaining challenges and preserve relationships you will need in the future. Get direct, hands-on experience building negotiations that will work for you in the present and set the stage for healthier collaborations in the future.

AFS Technology Workshops

VEMCO ACOUSTIC TELEMETRY TECHNOLOGY WORKSHOP

Nancy Edwards, VEMCO Division and AMIRIX Systems Inc.; afsagm.seattle@vemco.com

Date/Time: Sunday, 19 August, 1:00 pm – 5:00 pm

Location: Crowne Plaza | Room: Governors II

Tuition: **FREE!**

The development and popularity of VEMCO acoustic telemetry technology designed and produced by VEMCO has significantly increased over the last five years. This technology is currently being used by biologists worldwide to assess movement patterns, behavior, and site fidelity of fishes and invertebrates. VEMCO staff will discuss several detailed technical issues related to this passive and active acoustic technology thus providing the user with the necessary tools to use the equipment effectively.

Potential topics include:

- Understanding Single Frequency Telemetry
- Equipment Overview and Representative Deployments
- Detection Performance and Range Limits
- Vemco User Environment (VUE) Software
- VR2W Positioning System (VPS), and
- Future Product Directions.

Participants are encouraged to help us explore problems regarding deployment methods, experimental design, identification of unknown codes, data management, handling, and analysis.

SOUND METRICS ARIS TECHNOLOGY WORKSHOP

Presenter: Bill Hanot, Sound Metrics Corp.; bill@soundmetrics.com

Date/Time: Sunday, 19 August, 1:00 pm – 5:00 pm

Location: Crowne Plaza | Room: Governors I

Tuition: **FREE!**

Advances in imaging sonar and software now allow more accurate assessment of fish behavior and population enumeration. This workshop will introduce participants to ARIS (Adaptive Resolution Imaging Sonar) and its applications to fisheries management, with an entirely new approach to post-processing image files for enumeration of migrating fish.



Schedule at a Glance

American Fisheries Society 142nd Annual Meeting

Twin Cities, Minnesota

Thursday August 16				
<i>Time</i>		<i>Event</i>	<i>Location</i>	<i>Room</i>
8:00 AM	12:00 PM	AFS Officer's Meeting	Crowne Plaza	President's Suite
11:00 AM	5:00 PM	Wireless Availability	Crowne Plaza	LL Coat Check
12:00 PM	4:30 PM	AFS2012 Command Post	RiverCentre	Meeting Room 1
1:00 PM	5:00 PM	AFS Management Committee Meeting	Crowne Plaza	Kellogg III
Friday August 17				
<i>Time</i>		<i>Event</i>	<i>Location</i>	<i>Room</i>
8:00 AM	4:30 PM	AFS2012 Command Post	RiverCentre	Meeting Room 1
8:00 AM	5:00 PM	AFS Governing Board Retreat	Science Museum	
11:00 AM	5:00 PM	Wireless Availability	Crowne Plaza	LL Coat Check
6:00 PM	9:00 PM	AFS Governing Board Reception	Eagle Street Grille	
Saturday August 18				
<i>Time</i>		<i>Event</i>	<i>Location</i>	<i>Room</i>
8:00 AM	4:30 PM	AFS2012 Command Post	RiverCentre	Meeting Room 1
8:00 AM	5:00 PM	AFS Governing Board	Crowne Plaza	Capitol Ballroom
9:00 AM	5:00 PM	Annual Exec Business Mtg of AIFRB	Crowne Plaza	Kellogg I
11:00 AM	5:00 PM	Wireless Availability	Crowne Plaza	LL Coat Check
12:00 PM	6:00 PM	Registration	RiverCentre	Main Floor
6:00 PM	11:00 PM	AFS2012 Committee & Volunteer Social	Crowne Plaza	AFS2012 Suite
Continuing Education				
8:00 AM	5:00 PM	Beginning/Intermediate GIS for Fisheries Biologists	U of MN	50 Coffey Hall
8:00 AM	5:00 PM	Intro to Programming in R for Fisheries	Crowne Plaza	Governors I
1:00 PM	5:00 PM	Scientists' Guide to Engaging the Public Via Aq Ed	Crowne Plaza	State I
Sunday August 19				
<i>Time</i>		<i>Event</i>	<i>Location</i>	<i>Room</i>
8:00 AM	12:30 PM	Climate Change & Fish Habitat Project Workshop	Crowne Plaza	Kellogg II
8:00 AM	4:30 PM	AFS2012 Command Post	RiverCentre	Meeting Room 1
8:00 AM	6:00 PM	Info Booth	RiverCentre	Main Floor
8:00 AM	7:00 PM	Registration	RiverCentre	Main Floor
9:00 AM	5:00 PM	Annual Exec Business Mtg of AIFRB	Crowne Plaza	Kellogg I
10:00 AM	1:00 PM	Tour of Historic Mississippi River Sites	River Centre	
11:00 AM	5:00 PM	Wireless Availability	Crowne Plaza	LL Coat Check
12:00 PM	2:30 PM	AFS Journal Editors Luncheon	Crowne Plaza	Kellogg III
1:00 PM	4:00 PM	Kid's Fishing Event	Thompson Park	
1:00 PM	5:00 PM	AFS Time & Place Committee Meeting	Crowne Plaza	Kellogg I
2:00 PM	6:00 PM	Trade Show Exhibitor Move-in	RiverCentre	Exhibition Hall
2:00 PM	6:00 PM	Poster Set-up	RiverCentre	Exhibition Hall
2:00 PM	8:00 PM	AV Loading	RiverCentre	Rotunda
7:00 PM	10:00 PM	Welcome to Twin Cities Social	Crowne Plaza	Great R Ballroom
AFS Section Meetings				
1:00 PM	3:00 PM	Fisheries Administration Section	Crowne Plaza	Kellogg II
2:45 PM	3:15 PM	Fisheries Admin and Mgt Sections Joint Mtg	Crowne Plaza	Kellogg II
3:00 PM	5:00 PM	Fisheries Management Section Meeting	Crowne Plaza	Kellogg II
5:00 PM	7:00 PM	Estuaries and Marine Fisheries Sections	Crowne Plaza	State II
5:00 PM	7:00 PM	Education Section Meeting	Crowne Plaza	Kellogg II

Continuing Education				
8:00 AM	12:00 PM	Power-Based Standardization in Electrofishing	Crowne Plaza	Governors II
8:00 AM	12:00 PM	Effective Speaking When the Heat Is On!	Crowne Plaza	Governors III
8:00 AM	12:00 PM	Leadership At All Levels of AFS	Crowne Plaza	Governors I
8:00 AM	5:00 PM	Advanced GIS for Fisheries Biologists	U of MN	50 Coffey Hall
8:00 AM	5:00 PM	Intro to Statistics and Sampling Design	Crowne Plaza	Governors V
8:00 AM	5:00 PM	How to Lead An Effective Technical Meeting	Crowne Plaza	State III
8:00 AM	5:00 PM	Mapping Habitat Using Side-Scan Sonar	Crowne Plaza	Governors IV
8:00 AM	5:00 PM	Digital Photography for Aquatic Scientists	Crowne Plaza	State I
1:00 PM	5:00 PM	Sound Metrics ARIS Technology	Crowne Plaza	Governors I
1:00 PM	5:00 PM	Collaborative Negotiations	Crowne Plaza	Governors III
1:00 PM	5:00 PM	VEMCO Acoustic Telemetry Technology	Crowne Plaza	Governors II

Monday August 20

Time		Event	Location	Room
6:00 AM	6:00 PM	AFS2012 Command Post	RiverCentre	Meeting Room 1
7:00 AM	8:00 AM	AFS 2012 Operations Team Briefing	RiverCentre	Meeting Room 1
7:00 AM	8:00 AM	Plenary Speakers Breakfast	RiverCentre	Meeting Room 2
7:00 AM	6:00 PM	AV Loading	RiverCentre	Rotunda
7:30 AM	6:00 PM	Registration	RiverCentre	Main Floor
8:00 AM	12:00 PM	Plenary Session	RiverCentre	Ballroom BCFG
8:00 AM	6:00 PM	Info Booth	RiverCentre	Main Floor
9:00 AM	11:00 AM	Trade Show Exhibitor Move-in	RiverCentre	Exhibition Hall
9:00 AM	6:00 PM	Poster Set-up	RiverCentre	Exhibition Hall
9:30 AM	10:00 AM	Break	RiverCentre	2nd Fl Concourse
11:30 AM	6:00 PM	CyberCafe	RiverCentre	Exhibition Hall
11:30 AM	8:30 PM	Raffle and Silent Auction Open	RiverCentre	Exhibition Hall
11:30 AM	8:30 PM	Trade Show Open House	RiverCentre	Exhibition Hall
12:30 PM	2:30 PM	Plenary Speakers & Award Luncheon	RiverCentre	Meeting Room 2
1:15 PM	5:15 PM	Symposia and Contributed Papers	RiverCentre	
2:00 PM	4:00 PM	Student Colloquium	RiverCentre	Ballroom H
3:00 PM	3:30 PM	Break	RiverCentre	2nd Fl Concourse
3:30 PM	5:30 PM	AFS Journal Editorial Board Meeting	RiverCentre	Meeting Room 2
4:00 PM	5:00 PM	AFS Hutton Oversight Committee Meeting	RiverCentre	RC Auth Brd Rm
6:00 PM	8:30 PM	Trade Show and Poster Social	RiverCentre	Exhibition Hall
AFS Section Meetings				
5:30 PM	7:00 PM	Habitat Section Meeting	Crowne Plaza	State I
5:30 PM	7:00 PM	Fisheries Info and Technology Section Meeting	Crowne Plaza	Kellogg II
5:30 PM	7:00 PM	Genetics Section Meeting	Crowne Plaza	State III

Tuesday August 21

Time		Event	Location	Room
6:00 AM	6:00 PM	AFS2012 Command Post	RiverCentre	Meeting Room 1
7:00 AM	8:00 AM	AFS 2012 Operations Team Briefing	RiverCentre	Meeting Room 1
7:00 AM	9:30 AM	AFS Fisheries Magazine Breakfast	RiverCentre	RC Auth Brd Rm
7:00 AM	6:00 PM	AV Loading	RiverCentre	Rotunda
7:30 AM	5:00 PM	Registration	RiverCentre	Main Floor
8:00 AM	12:00 PM	Symposia and Contributed Papers	RiverCentre	
8:00 AM	6:00 PM	Info Booth	RiverCentre	Main Floor
9:00 AM	5:00 PM	CyberCafe	RiverCentre	Exhibition Hall
9:00 AM	5:00 PM	Trade Show Open House	RiverCentre	Exhibition Hall
9:45 AM	10:15 AM	Break	RiverCentre	2nd Fl Concourse

12:00 PM	1:30 PM	AFS Award Recipients Luncheon	RiverCentre	Meeting Room 2
12:00 PM	2:00 PM	Project Meeting - Achieving Sustainable Fisheries	Crowne Plaza	State III
12:00 PM	3:00 PM	Best Student Paper-Poster Judges' Luncheon	RiverCentre	Meeting Room 9
1:15 PM	3:00 PM	Symposia and Contributed Papers	RiverCentre	
2:30 PM	3:30 PM	AFS Book Editorial Advisory Board Meeting	RiverCentre	RC Auth Brd Rm
3:00 PM	3:30 PM	Break	RiverCentre	2nd FI Concourse
3:30 PM	5:30 PM	AFS Business Meeting	RiverCentre	Ballroom FG
4:00 PM	6:00 PM	Student Career Fair	RiverCentre	Meeting Room 3
6:00 PM	10:00 PM	Student Social (Students Only)	Eagle Street Grille	
Wednesday August 22				
Time		Event	Location	Room
6:00 AM	6:00 PM	AFS2012 Command Post	RiverCentre	Meeting Room 1
7:00 AM	8:00 AM	AFS 2012 Operations Team Briefing	RiverCentre	Meeting Room 1
7:00 AM	10:00 AM	Spawning Run	Harriet Island	
7:00 AM	6:00 PM	AV Loading	RiverCentre	Rotunda
8:00 AM	12:00 PM	Symposia and Contributed Papers	RiverCentre	
8:00 AM	4:00 PM	Info Booth	RiverCentre	Main Floor
8:00 AM	5:00 PM	Registration	RiverCentre	Main Floor
9:00 AM	2:00 PM	Trade Show Open House	RiverCentre	Exhibition Hall
9:00 AM	2:00 PM	CyberCafe	RiverCentre	Exhibition Hall
9:45 AM	10:15 AM	Break	RiverCentre	2nd FI Concourse
12:00 PM	2:00 PM	AFS Past President's Luncheon	Crowne Plaza	Kellogg I
1:15 PM	5:15 PM	Symposia and Contributed Papers	RiverCentre	
2:00 PM	6:00 PM	Poster Take-Down	RiverCentre	Exhibition Hall
3:00 PM	3:30 PM	Break	RiverCentre	2nd FI Concourse
6:00 PM	11:55 PM	A Taste of Minnesota: The Famous and Infamous!	Nicollet Island Pavillion	
9:00 PM	9:30 PM	Raffle Closed and Announcement of Winners	Nicollet Island Pavillion	Kellogg I
AFS Section Meetings				
12:00 PM	1:00 PM	Water Quality Section	Crowne Plaza	
Thursday August 23				
Time		Event	Location	Room
6:00 AM	6:00 PM	AFS2012 Command Post	RiverCentre	Meeting Room 1
7:00 AM	8:00 AM	AFS 2012 Operations Team Briefing	RiverCentre	Meeting Room 1
7:00 AM	8:30 AM	AFS Incoming Governing Board Breakfast	Crowne Plaza	Kellogg I
8:00 AM	12:00 PM	Registration	RiverCentre	Main Floor
8:00 AM	12:00 PM	Symposia and Contributed Papers	RiverCentre	
8:00 AM	4:00 PM	Info Booth	RiverCentre	Main Floor
9:45 AM	10:15 AM	Break	RiverCentre	2nd FI Concourse
1:00 PM	4:00 PM	Twin Cities - Little Rock Handoff Luncheon (invitation only)	Eagle Street Grille	
1:15 PM	5:15 PM	Symposia and Contributed Papers	RiverCentre	
3:00 PM	3:30 PM	Break	RiverCentre	2nd FI Concourse
6:00 PM	9:00 PM	Goodbye Twin Cities, Hello Little Rock Social	Harriet Island	
Friday August 24				
9:00 AM	11:30 AM	Tour of the St. Anthony Falls Laboratory	RiverCentre	
9:00 AM	12:00 PM	Bike along the Mississippi River with a Park Ranger	RiverCentre	

Current as of 5/10/2012. Please consult the AFS 2012 website (afs2012.org) as the meeting approaches, and the schedule in the meeting program book when arriving at the conference to verify event locations and times.



AFS St. Paul Booth Reservation Request

August 19-23 2012

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 (75 word max) as you would like it to appear in the meeting program guide; please also include your address, phone and web-link to sjohnston@fisheries.org,

BOOTH FEES

- AFS member firm*: \$1,500.00 per 10 x 10 booth
- AFS nonmember firm: \$1,650.00 per 10 x 10 booth
- *Crafters/Non-Profit: \$550.00 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 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 2012 Annual Meeting Booth Reservation Terms and Conditions specified on this booth reservation form, which are made part hereof by reference.

Signature _____

PAYMENT

Send request with your 50% deposit of the full exhibit fee for space required. Make checks payable to **AFS 2012 Annual Meeting**. The balance will be due by June 1, 2012. Applications submitted after June 1, 2012 must be accompanied by full payment.

Cancellations received on or after April 15, 2012 and prior to June 1, 2012 will be assessed a cancellation fee equal to 50% of the total exhibit space rental fee. Cancellations received after June 1, 2012 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 DEPOSIT TO

American Fisheries Society, 5410 Grosvenor Lane, Suite 110, Bethesda, MD 20814, Attn: Shawn Johnston

Questions about the Trade Show? Please contact Shawn Johnston, AFS Trade Show Coordinator, 301-897-8616 x 230, sjohnston@fisheries.org Fax 301-897-8096



AFS 142nd ANNUAL MEETING



Registration materials and payment MUST be received by Friday, 29 June 2012, to receive the early bird rate. Registrations received after this date will be processed at the higher rate. Registrations after Friday, 3 August 2012, must be done in person at the conference. Student registrations must be accompanied by student ID. Full registration includes all plenary and technical sessions, symposia, breaks, socials, program, and digital abstracts. Daily registration includes all activities for the day. Please note that the \$10 less offer to manage your meeting online ONLY applies to Early Bird Registrations.

REGISTRATION

PERSONAL INFORMATION

First name: _____ MI: _____ Last name: _____ Suffix: _____

AFS member # if known (from Fisheries mailing label): _____

Address: _____

City: _____ State/Province: _____

Country: _____ Zip/Postal code: _____

Phone: _____ Fax: _____

Cell: _____

Check if this is a new address for all AFS membership mailings:

E-mail address: _____

Are you judging a poster or paper?

Are you presenting a poster or paper?

NAME BADGE INFORMATION

Name to appear on badge: _____

Affiliation: _____

Home City: _____

CIRCLE ALL THAT APPLY:

Employment:	State/Province	Federal	Industry	Academia	Self	Student	Native Org.	Other
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I am attending the Sunday Welcome Social: (Yes) (No)

I am attending the Monday Trade Show Social: (Yes) (No)

I am attending the Wednesday night Social: (Yes) (No)

I am attending the Thursday night social: (Yes) (No)

I wish to be a volunteer and assist with conference functions: (Yes) (No)

Please go online to sign up for volunteering at http://www.afs2012.org/page_id-356

Students may be paid \$10/hr contingent on funding.

I am attending the Student Social (students only): (Yes) (No)

I am interested in attending the Kids Fishing Event on 19 August (see website)(Yes) (No)

REGISTRATION - Full registration includes plenary & technical sessions, all symposia, and socials. Guests may pay \$120 for access to all socials.

Name badges must be worn to all events.

Registration Item	Early Bird Rate (Prior to 6/29/12)	Regular Rate (After 6/29/12)	Amount
AFS Member	\$375	\$505	\$
Non-Member	\$455	\$570	\$
Student Member (need ID)	\$110	\$145	\$
Student Non-member (need ID)	\$140	\$160	\$
Retired (member)	\$145	\$180	\$
Daily - Circle: M, T, W, Th	\$170	\$250	\$
Guest - includes all 4 socials and coffee breaks (excluding student social)	\$125	\$160	\$
Spawning Run (please sign up using link below)	\$25	\$30	\$
Registration SUBTOTAL			\$

You can register for the Spawning Run @ http://www.afs2012.org/page_id-367 CE Class Information please visit: <http://afs2012.org/continuing-education>

To register for CE classes only, please use registration link: <https://secure.fisheries.org/afsevent/Login.aspx>

Early Bird Green Special- The above early bird rate reflects a \$10.00 discount for choosing the online FREE program guide.

Check here if you prefer to receive a hard copy program guide, for a \$10.00 fee.

Payment MUST accompany registration. ALL FEES MUST BE PAID IN U.S. CURRENCY. Make checks/money orders payable to 'American Fisheries Society'. For tax purposes AFS is a Non-Profit 501C3 organization. Checks must be drawn on a U.S. bank.

Total remittance: \$ _____

Method of payment: Check* _____ Money Order _____ MasterCard _____ Visa _____ Amex _____

Credit Card No.: _____ Expiration Date: _____ 3 Digit Security Code: _____

Name on Card (Please Print): _____ Signature: _____

Register online at http://www.afs2012.org/page_id-232 or send forms to: American Fisheries Society, 5410 Grosvenor Lane, Suite 110, Bethesda, MD 20814; fax 301-897-8096

Questions? Contact Eva Przygodzki, przygod@fisheries.org. Refund policy: All refunds requests must be made in writing by fax or email by Monday, 23 July 2012. 80% of that total charge will be refunded, if request is submitted before this deadline. **No refunds, or cancellations will be made after Monday, 23 July 2012.** Full refund will be issued only in case of workshop cancellation by the instructor. *A \$35.00 service charge will be added to all returned checks.

Special needs? Please list any special transportation, dietary, or hearing impaired needs we should be aware of: _____

GUEST 1 BADGE INFORMATION

Name to appear on badge: _____

Affiliation: _____

Home City: _____

GUEST 2 BADGE INFORMATION

Name to appear on badge: _____

Affiliation: _____

Home City: _____