REMINDER:

The deadline for the Room Block at the Hilton Garden Inn Expires Friday (January 24)

Please Book Your Register for the Conference and Book Your Room **Today**

Doing So, Saves Your Chapter Money

Hilton Garden Inn

406-756-4500

Room Block MTAFS

Conference Registration thru Eventbrite

[https://www.eventbrite.com/e/montana-chapter-afs-meeting-2020-tickets-85643521077 [eventbrite.com]](https://urldefense.com/v3/__https:/www.eventbrite.com/e/montana-chapter-afs-meeting-2020-tickets-85643521077?aff=utm_source*3Deb_email*26utm_medium*3Demail*26utm_campaign*3Dnew_event_email&utm_term=eventurl_text__;JSUlJSU!!GaaboA!_-cBLAleeVyfON1MOoIR8lYK55TSqdE2WI5G5PcfIxTNxdenA4vc-U2TCBAQcnBN$)

**Schedule at a Glance**

|  |  |  |
| --- | --- | --- |
| Date/Time | Event | Location |
| Tuesday, Feb. 25 |  |  |
| 8:00 | Registration |  |
| 8:00-12:00 pm | Continuing Ed. Intro to R |  |
| 1:00 pm-5:00 pm | Continuing Education Fish Genetics |  |
| 6:00 pm-9:00 pm | Welcome social with drinks and hors d’ oeuvres |  |
|  |  |  |
| **Wednesday, Feb. 26** |  |  |
| 7:00 am | Registration |  |
| 8:00 am | Trade show ongoing |  |
| 8:00 am | Plenary session: Balancing Opportunity and Conservation |  |
| 10:30 | Break |  |
| 10:50 | Lightening Round Presentations |  |
| 12:10 pm | Working Committee Lunch **or** Lunch on your own |  |
| 1:10 pm | Symposium: Fish Management in Montana contributing to conservation and opportunity |  |
| 3:10 pm | Break |  |
| 3:30 pm | **Symposium**: Fish Management in Montana contributing to conservation and opportunity |  |
| 4:50 pm | End session |  |
| 6:00 pm | Trade show |  |
| 6:30 pm-9:30 pm | Student mixer social and Fish Trivia | Scotty’s Bar |
| **Thursday, Feb. 27** |  |  |
| 7:00 am | Registration |  |
| 8:00 am | Trade show ongoing |  |
| 8:00 am | **Symposium**: ESA: Is it working for MT fishes? |  |
| 10:30 am | Break |  |
| 10:50 am | Contributed papers |  |
| 11:50 am | Business lunch |  |
|  | **Concurrent Sessions Begin** |  |
| 1:20 pm | **Symposium**: State, Federal and Tribal hatchery contributions to conservation and opportunity |  |
| 1:20 pm | Contributed papers |  |
| 3:30 pm | Break |  |
| 3:50 pm | Contributed papers |  |
| 3:50 pm | Contributed papers |  |
| 5:10 pm | Concurrent sessions end |  |
| 5:15 pm | Montana Association of Fish & Wildlife Biologist meeting |  |
| 5:30 pm | Poster session / Evening Social |  |
| 7:00 pm | Trade show concludes |  |
| 7:00 pm | Awards banquet and raffle |  |
| **Friday, Feb. 28** |  |  |
| 8:00 am | Contributed papers |  |
| 10:10 am | Break |  |
| 12:30 pm | Adjourn. Thank you for attending and safe travels |  |

**Draft Skeleton Agenda for MT AFS 2020 Meeting**

**Notes: Only primary authors listed (full abstracts in the program will include co-authors)**

**Final order of presentations not yet determined**

**\*\*represents student presenter**

**Plenary Session: Balancing Recreation and Conservation**

Welcome and Introduction of Plenary Session: Jim Dunnigan (Montana Fish, Wildlife & Parks)

Martha Williams (Montana Fish, Wildlife & Parks)

David Brooks (Montana Trout Unlimited)

Jodi Bush (US Fish and Wildlife Service)

John Wallschleger (National Park Service)

**Symposia: ESA: Is It Working for Montana Fishes?**

**State conservation of wildlife in the shadow of the Endangered Species Act: Montana Fish, Wildlife and Parks’ management of threatened, endangered and candidate species.** Bill Schenk (Montana Fish, Wildlife and Parks)

**Progress for Pallid Sturgeon *Scaphirhynchus Albus* downstream of Fort Peck Dam? An overview of where we are and what’s been done for Pallid Sturgeon downstream of Fort Peck Dam in almost 30 years of being listed.** Tyler Haddix (Montana Fish, Wildlife and Parks)

**The long road to Pallid Sturgeon recovery action on the Yellowstone River: A cause for hope?** Mat Rugg (Montana Fish, Wildlife & Parks)

**What ESA listing of the Kootenai River White Sturgeon has accomplished after 25+ Years?** Jim Dunnigan (Montana Fish, Wildlife & Parks)

**2001: a chub odyssey…or where Sturgeon Chub and Sicklefin Chub have come from and where they might be headed under the Endangered Species Act.** Zach Shattuck (Montana Fish, Wildlife and Parks)

**Bull Trout** Dan Brewer (US Fish and Wildlife Service)

**ESA and Federal Lands: aquatic outcomes, challenges, and opportunities for Montana and beyond** Scott Spaulding (US Forest Service)

**Symposia: Managing Montana Recreational Fisheries**

**The upper Missouri River Reservoirs fisheries management plan – A public engagement saga** Adam Strainer (Montana Fish, Wildlife & Parks)

**Balancing fisheries objectives in Flathead Lake management** Barry Hansen (Confederated Salish and Kootenai Tribes)

**Talking anglers out of what they are asking for, to give them what they want.** Caleb Bollman (Montana Fish, Wildlife & Parks)

**Managing fish and fishing opportunity in Glacier National Park** Chris Downs (National Park Service)

**Natal origins of walleye in Fort Peck Reservoir using otolith microchemistry** Heath C. Headley (Montana Fish, Wildlife & Parks)

**Angler use and characteristics in the upper Flathead River system** Amber Steed (Montana Fish, Wildlife & Parks)

**Lake Trout suppression in Yellowstone Lake: Have we turned the corner?** Patricia E. Bigelow (National Park Service)

**Special Draw: Assessing the implementation of a lottery draw harvest tag for Paddlefish on the upper Missouri River** Cody Nagel (Montana Fish, Wildlife & Parks)

**Paddlefish Management plan development in Montana and North Dakota: A retrospective and prospectus of a cooperative interstate effort** Dennis L. Scarnecchia (University of Idaho)

**Bull Trout fishing in the South Fork Flathead River drainage** Leo R. Rosenthal (Montana Fish, Wildlife & Parks)

**Symposia: Aquaculture and its contribution to conservation and recreational fisheries**

**Strategic and novel use of the Kootenai River native fish conservation aquaculture program to restore White Sturgeon and Burbot** Shawn P. Young (Kootenai Tribe of Idaho)

**The Giants of Gerrard at the Murray Springs Fish Hatchery** Jason Nachtmann (Montana Fish, Wildlife & Parks)

**Status and success of conservation aquaculture used to restore Kootenai River Burbot** Nathan R. (Kootenai Tribe of Idaho)

**Life History of Rainbow trout *Oncorhynchus mykiss*** Matthew M. Wipf (Montana Fish, Wildlife & Parks)

**Replicating fish populations for planting lakes after eradication of unwanted species** Scott Relyea (Montana Fish, Wildlife & Parks)

**\*\*The influence of interindividual variation of phenotypic traits on survival and growth of wild origin westslope cutthroat trout (*​Oncorhynchus clarki lewisi*) in a conservation hatchery** Preul, Taylor (Montana State University)

**Lightening Round Session:**

**\*\*Reproductive timing of Western Pearlshell Mussels in Montana** Kristen Cook(Montana State University)

**\*\*Assessing Westslope Cutthroat Trout and Arctic Grayling restoration efforts in Yellowstone National** Park Andriana Puchany, (Montana State University)

**Washoe Park Trout Hatchery** Angela Smith(Montana Fish, Wildlife & Parks)

**Aging septic systems as a non-point pollution source** Mike Koopal, (Whitefish Lake Institute)

**404, 303d, 401, hut, hut, what?** Leanne Roulson (AFS Vice President)

**Retirement – “It Doesn’t Suck”** Mark Novak

**\*\*Use of eDNA to estimate abundances of spawning Yellowstone Cutthroat Trout in tributaries to Yellowstone Lake** Colleen R. Detjens (Montana State University)

**\*\*Using otolith microstructure to investigate age-0 daily growth of Westslope Cutthroat Trout and Rainbow Trout hybrids** Anthony Dangora (University of Montana)

**Contributed Papers**

**Twenty One years of monitoring in the Swan River Valley: A candid review of timber management impacts on habitat in wadeable mountain streams**. Beth Gardner (US Forest Service)

**Evaluating Western Pearlshell Mussel populations for viability, reproduction and host Fish infections across five watersheds in western Montana** David Stagliano (Montana Biological Survey)

**Redefining the Blackfoot River through aquatic habitat restoration in the upper Blackfoot mining complex, Montana** Nathan Wyatt (River Design Group)

**Evidence for increased dispersal in a dynamic hybrid zone** Sam Bourret (Montana Fish, Wildlife & Parks)

**\*\*Using PIT technology to investigate out-migration dynamics of juvenile Bull Trout** Madeline C. Lewis (Montana State University)

**Where do the big trout roam in Montana?** Robert Al-Chokhachy (US Geological Survey)

**Bull Trout and Westslope Cutthroat Trout movement in the Pend Oreille River basin**

Shannon Blackburn (Montana Fish, Wildlife & Parks)

**\*\*Effects of Lake Trout carcass deposition on benthic invertebrates in Yellowstone Lake** Michelle Briggs (Montana State University)

**The Overwhich Creek fish removal project: challenges, confusion, questions, and a decision to leave the area fishless.** Christopher G. Clancy (Montana Fish, Wildlife & Parks – retired)

**Potential consequences of climate change on Montana’s popular trout fisheries** Timothy Cline (U.S. Geological Survey)

**Aquatic invasive species (AIS) risk management through a local partnership: The Whitefish AIS Management Program** Lori Curtis (Whitefish Lake Institute)

**Understanding climate change effects on native salmonids for climate adaptation in the Crown of the Continent Ecosystem, USA and Canada** Vin D’Angelo (US Geological Survey)

**\*\*Determining the suitability of the distell fatmeter to estimate energetic reserves of juvenile Pallid Sturgeon (Scaphirhynchus albus): A follow-up** Matea A. Djokic (Montana State University)

**\*\*Comparative historical feeding ecology of native and nonnative salmonids during the suppression of a nonnative apex predator in Yellowstone Lake, Wyoming** Hayley Glassic, (Montana State University)

**Twenty years of hydro mitigation on the Madison-Missouri river system; creating a legacy of compliance and accomplishments.** Grant Grisak (NorthWestern Energy)

**Habitat restoration in Montana: Opportunities, challenges, and innovations** Michelle McGree (Montana Fish, Wildlife & Parks)

**\*\*Assessing the capacity of relative rondition to predict apparent survival of adult Pallid Sturgeon in the lower Missouri River** Joshua Heishman

**Restoration of mining impacted river and floodplain ecosystems in Montana: A case example from Ninemile Creek in the middle Clark Fork River Watershed** John Muhlfeld (River Design Group)

**\*\*Aerial application of organic pellets for Lake Trout embryo suppression in Yellowstone Lake** Drew J. MacDonald(Montana State University)

**Within-site variation in macroinvertebrate samples and implications for using bioassessment methods to assess community change in support of fisheries or watershed studies.** Brett D. Marshall (River Continuum Concepts, Inc.)

**Things I learned during my career with Montana Fish Wildlife & Parks** Brian Marotz (Montana Fish, Wildlife & Parks)

**\*\*Variation in spawning location of reproductively-active hatchery-origin female Pallid Sturgeon during two different water years** Tanner L. Cox (Montana State University)

**\*\*Identifying Spawning Locations of Lake Trout in Swan Lake, MT to Inform Future Suppression Efforts** Michael J. Siemiantkowski (Montana State University)

**Specialized meltwater biodiversity persists despite rapid deglaciation across a mountain region** J. Joseph Giersch(US Geological Survey)

**Global status of trout and char: Conservation challenges in the 21st century** Clint Muhlfeld (US Geological Survey)

**\*\*Integrated pest management: From experimental evaluation to implementation of Lake Trout embryo suppression in Yellowstone Lake** Nathan A. Thomas (Montana State University)

**\*\*Do Didymo Blooms Affect Fishes in the Kootenai River Basin?** Niall G. Clancy (Utah State University)

**\*\*Investigating metabolomics as a means of quantifying the primary stress response in Rainbow Trout (*Oncorhynchus mykiss*)** Ben Noble (Montana State University)

**Cottus: it’s not what it used to be** David A. Schmetterling (Montana Fish, Wildlife & Parks)

**\*\*The effects of Rainbow Trout admixture on survival and movement in three Westslope Cutthroat Trout populations** Jeffrey Strait (University of Montana)

**Integrating underutilized technologies to predict the spread of aquatic invasive species** Charles B. van Rees (University of Montana)

**Posters**

**\*\*Does Relative Condition Predict Probability of Spawning and Post-Spawning Mortality for a Migratory Inland Trout?** Maggie Wallace (University of Montana)

**Washoe Park Trout Hatchery** Angela Smith (Montana Fish, Wildlife & Parks)

**\*\*Effects of non-native Brown Trout (*Salmo trutta*) on native Yellowstone Cutthroat Trout (*Oncorhynchus clarkii bouvieri*) in Duck Creek, MT, USA**. Kadie Heinle (Montana State University)

**High Resolution Hydro-Acoustic River Mapping** Mark Lorang (Freshwater Map)

**Westslope Cutthroat Trout summer movement in western Montana headwater tributaries** Hayden Cody (University of Montana)

**Configuration of StreamPro acoustic doppler current profiler (ADCP) to measure streamflow in Montana’s rivers for a wide range of conditions** Tanner Traxler (RESPEC)

**\*\*Review of the effectiveness of Tiger Muskellunge introductions to control over-abundant prey fish populations in Montana and surrounding** **states** Levi G. Umland (Montana State University)

**Preserving Yellowstone Cutthroat Trout in Slough Creek, Yellowstone National Park** Keith D. Wellstone (Montana State University)

**It’s complicated… relationships between environmental DNA concentration and trout abundance in the Pacific Northwest** Adam Sepulveda (US Geological Survey)