



# The Tributary

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# President's Hook

By Jim Bowker, WDAFS President



*WDAFS President, Jim Bowker*

Just about the time I was trying to wrap my mind around the next President's Hook message, I was reminded that this would be my last one. My term as WDAFS President is winding down, I'm stepping aside and watching the other officers begin organizing the 2017 WDAFS annual meeting in Missoula, and beginning to think about my role as Past-President. I know that I'll be staying busy, serving as chair of the awards and small grant committees, but it'll be nothing compared to the past 10 months. I don't think anybody truly realizes how much time is required to serve as a Division officer until they actually do it. Serving as a Section officer gave me a good introduction, but serving as a Division officer is really a step up into the 'big leagues.' Serving as general meeting co-organizer for the annual meeting, monthly Division Executive Committee meetings, preparing governing board

reports, ensuring monies coming in balance (or hopefully exceed) monies going out—these are just some of the balls that are in the air at one time. It all takes time because a standard of excellence has been set by my predecessors and I do not want to let them, or our other members, down. Although the Reno meeting is in the rearview mirror, I just recently sent out the last thank-you letters to those that contributed funds to the meeting or were involved in the field trips. I may be a little biased, but I think “we” were quite successful as a Division this past year, and that success is largely due to the active involvement of the WDAFS officers, Excom members, meeting organizers, committee chairs and members, and those that presented and attended annual Division and Chapter meetings. It was a pleasure and an honor to work with folks who are not only passionate about fisheries, but also passionate about serving in a society that has provided us with so many opportunities. There is some unfinished business at hand, such as finalizing an initial draft MOU between the WD and Chapters hosting the annual WDAFS meeting and trying to secure funding for a book project. But as my responsibilities to the Division begin to wane, I've become more involved with a few other activities.

I'll continue my role as Emerging Leader Mentorship Award committee co-chair seeking out future AFS leaders and trying to make this program as rewarding as possible for mentors and mentees. I've been working with a core group of folks to develop a web-based platform for submitting Governing Board reports. It's going to be aligned with the 15 strategies described in the AFS 5-Year Strategic Plan and will allow AFS and any Unit officer to be able to access quantifiable results. We're working with a database development team to create an online reporting system that makes it easier for Presidents to report their Unit accomplishments, focus on activities directly supporting the Strategic Plan, and track Unit (HOOK *continued on pg. 3*)

(HOOK continued from pg. 2)



and Society performance over time. I recently reengaged with the AFS membership committee and am working with some other WD members on projects that we hope will benefit the Society, Units, and members. A small group has been tasked with finding brochures, preferably professional

organization-type brochures, that really hit the mark. The committee would like to develop something that focuses on membership value and not necessarily membership features.

I'm going to wrap this message up with a challenge...and the promise of a reward. I will buy a beverage of choice (using funds from my vast wealth as an agency employee) at the meeting in KC or in Missoula, for anybody who provides me with a link to a killer brochure we can use as an example. Those who provide me with a 1-2 sentence testimonial about why you're an AFS member (email them to me at [jim\\_bowker@fws.gov](mailto:jim_bowker@fws.gov)) can also count on something to quench their thirst. AFS membership is so much more than journal or meeting registration discounts and it would be great to put together a very powerful 'elevator speech' on member value. I hope some of you take me up on this challenge and I look forward to buying a few beverages in the near future. As I wrap this up, I want to share my thanks to the wonderful people I have met on this WDAFS officer journey. I am scanning the horizon for what I can help with next—maybe alongside you!—and I look forward to continuing to serve this wonderful Society.

## Clearwater Flyathlon

July 29 – 31<sup>st</sup>, 2016

### *Nez Perce-Clearwater Forest of North Idaho*

During an official event, your score is determined as the time it takes you to run (with all of your fishing equipment on your back) through the entire course, adjusted by a “fish factor” based on what you caught during your run. Both the night before and after the race, fine local craft beer will be served. Rocky Mountain Flyathlon races are exclusively used to raise funds for native fish projects in the Western US.

There is still space to compete in the new Clearwater Flyathlon which will be held in the Nez Perce-Clearwater Forests of Northern Idaho. There will be opportunity to catch and release several native species. All proceeds of the event will go to the Western Native Trout Initiative, investing in on-the-ground restoration projects to benefit native species.



For more information about the Clearwater Flyathlon, please visit:

<http://flyathlon.com/wp-content/uploads/2016-Clearwater-Flyathlon-Summary.pdf>.

To register for the Clearwater Flyathlon, please visit: <http://www.wafwa.org/flyathlon/>

# 2016 WDAFS Student Colloquium Recap

By Rich Walker, University of Wyoming

Hosted by the University of Wyoming's AFS student subunit, the 2016 Western Division AFS student colloquium was held at the Nature Conservancy's Red Canyon Ranch near Lander, WY from April 13-16<sup>th</sup>, 2016. This year's colloquium theme shadowed the 2016 Society for Freshwater Science conference theme, "Running on Empty: Increasing Demands on Freshwater Resources in the Face of a Changing Climate." We truly appreciate all those who generously supported the event: the WDAFS, Habitat Section of AFS, CO/WY AFS, CSU Student Subunit, UW Biodiversity Institute, UW Student Association, Coal Creek Tap, Altitude Chophouse and Brewery, West Laramie Fly Shop, and many, many individual donations. Thank you all for your support! Through these donations, we raised over \$4,500 to bring 24 students – including 14 undergraduates and 10 graduates from Wyoming, Colorado, and Montana – to the colloquium for free. All students and workshop leads received a free t-shirt, illustriously designed by Dr. Stephanie Januchowski-Hartley, a conservation scientist dedicated to solving pressing global conservation problems related to aquatic ecosystems.

The colloquium kicked off Wednesday night with socializing and a barbeque. Thursday began with seven student oral presentations ranging from stable isotope ecology to anthropogenic impacts on stream ecosystems. All students gave well-structured and fascinating talks. That afternoon we held our first workshop which focused on job applications and curriculum vitae/resume improvement and was led by Tracy Wendt, aquatic habitat project biologist, Wyoming Game and Fish Department (WGFD). Students networked with professionals from WGFD, Trout Unlimited, and BLM. Next, Harold Bergman, professor, Department Zoology and Physiology, University of Wyoming, led a workshop on writing improvement using Herman Struck's book, "Better Prose: A Method." The evening's events began with 4 student poster presentations, followed by dinner provided at the Ranch by Laramie Gourmet catering.



Friday morning started with Tom Annear, Water Management Supervisor, WGDF, who spoke about Wyoming's in-stream flow program and western water policy. Friday afternoon's workshop continued with in-stream flows and was led by Cheryl Miller and Brooks Stephens (USGS). Students learned to use various instruments to measure stream surface flows. Friday night ended with five rounds of aquatic trivia and dinner at Gannett Grill in Lander. Thanks to the University of Washington's AFS subunit for providing trivia questions for the event. Saturday morning and free time throughout the colloquium were filled with fishing on the Little Popo Agie River and hiking the red cliffed trails of Red Canyon.

I would like to thank those who helped make this event such a huge success. The colloquium is a student led, student run event; the organization of which is no small task. Colloquium dates and event location choice are paramount to high student attendance. A theme must be chosen, workshops and speakers organized, invitations sent, and accommodations secured. On top of all that, students and professionals must be entertained, hunger and thirst quenched, and most importantly, fundraise fundraise! Despite these seemingly daunting tasks, the entire endeavor was a thrill to run and it was a joy to be part of such a dedicated group of students. Many thanks to the students and professionals that made the journey to Lander. It was fulfilling to have such a great turnout. We look forward to next year's colloquium! Who wants to host!?

***If your student subunit is interested in hosting a future WDAFS Student Colloquium, contact the Western Division Student Representative at [WDAFSStudent@gmail.com](mailto:WDAFSStudent@gmail.com)***

# 2016 WDAFS Annual Meeting Recap

By Joe Merz, CalNeva Chapter President-Elect

*The 41st Annual Meeting of the Western Division of the American Fisheries Society was held in collaboration with the 50th Annual Meeting of the California-Nevada Chapter: 21-24 March, 2016 in Reno, Nevada.*



The conference was a big success with over 500 attendees from 22 U.S. states, Canada, and as far away as Yugoslavia; 208 session papers and 45 contributed posters. The four continuing education courses included Section 7 Endangered Species Act Consultation, Fish Passage and Screening, Passive Integrated Transponder (PIT) Tagging Workshop, and R for Biologists. Field trips included the M.S. Dixie II Scenic Tahoe Cruise, the Lake Tahoe Science Tour, Lake Trout Fishing, Lahontan Cutthroat Country: Pyramid Lake and Lower Truckee River, Trout Unlimited Little Truckee River Restoration Tour and Fishing – with over 1/5<sup>th</sup> of our attendees participating in these activities.

The meeting began with a plenary session that focused on the meeting theme "Fisheries, Society, and

the Scientific Method: Challenging our Perception of Science, Policy and Management, included talks by Taylor Pool, AFS; Paul Angermeier, Virginia Polytechnic Institute and State University, Dr. Sundeep Chandra, University of Nevada, Reno, and Dr. Joe Merz, University of California, Santa Cruz. Other meeting highlights included a welcome social at The Discovery Center Science Museum and a student social at the National Automobile Museum. Dr. Zeb Hogan, host of National Geographic's tv series "Monster Fish" and assistant professor at the university of Nevada Reno gave a presentation at the Grand Social and Banquet.

We also had great attendance by student chapters, including 63 students from more than five states. Many students were supported by donations from chapters. Over 80 students and mentors took part in student mentoring activities.

## STUDENT AWARDS:

### Best Oral Presentations (15 judges)

1<sup>st</sup> Place: **Adam Herdrich**, Colorado University - *Effects of large wood and log jams on Eastern Slope Rocky Mountain trout populations*

2<sup>nd</sup> Place: **Jane Sullivan**, University of Alaska - *Can fishing explain declines in size-at-age of Pacific halibut?*

3<sup>rd</sup> Place: **Abigail Hughes**, St. Mary's College - *Food web ecology in the California newt, Taricha torosa*

### Best Posters (15 judges)

1<sup>st</sup> Place: **Rennie Winkelman**, University of Montana *Decadal impacts of wildfire on stream food webs*

2<sup>nd</sup> Place: **Travis Apgar**, UC Santa Cruz - *Evolutionary restoration of anadromous migration in steelhead trout*

3<sup>rd</sup> Place: **Alexander Tasoff**, CSU, Long Beach - *Differences in mortality among families of California Grunion, Leuresthes tenuis*

(RENO continued on pg. 6)

(RENO continued from pg. 5)  
Katrina Martin Memorial Award  
**Sylvester Cacy**, Humboldt State  
University - *Aquaponics in the  
classroom: A student's  
perspective*

*Many thanks...*

Over 35 professional members, officers, and students made the meeting a great success. A total of 41 vendors and sponsors participated in the meeting, including: AFS; AZ-NM AFS Chapter; Alpha Mach, Inc; Aquis; Aquatactics; Advanced Telemetry Systems; Biomark; CDWR; Cardno; cbec eco-engineering; ESA; Fish Transport Systems, LLC; HDR, Inc; ID AFS Chapter; Lotek Wireless; Montana Fish, Wildlife and Parks, OR AFS Chapter; Oregon RFID; OTT Hydromet; Real Time Research; Smith Root, Inc; Sonoma County Water Agency; State of Montana; Taylor & Francis; Upper Snake River Tribes Foundation; USFWS regions 1, 6, & 8; the Yakima Nation; Vemco; and Whoosh Innovations.

We'd also like to thank our generous donors for raffle prizes, which number too many to mention, but combined raised nearly \$4,000 for student and professional travel.

## Santa Cruz Monterey Bay Students Comments on the 2016 Meeting in Reno

*Collage by Gina Contolini*

**Katie McElroy** SCMBAS President  
Poster Title: Chinook, Ontogeny, and the River Continuum  
Presented at Cal-Neva Business lunch on subunit activities

I really enjoyed the opening social at WDAFS. The Discovery Museum had some awesome exhibits on huge fish and the local flora and fauna. The best part was definitely the cloud climbing structure.

The conference had some great talks on the interface of science and policy. One of my favorite integrated the economics and social science of the halibut fishery with best fishing practices.

I really enjoyed presenting my poster. Even though my study system is not directly related to fisheries, everyone that I discussed my project with was really excited about what I was doing. It was very encouraging and fun to talk with such positive people.

I also greatly enjoyed the banquet: the food, the music, the awards, and most importantly, the people. It was a wonderful way to build old and new relationships.

**Gina Contolini** SCMBAS Webmaster  
Poster Title: Adaptation in Acid: Predation in an Acidifying Ocean

**Hayley Nuetzel** SCMBAS Outreach Committee Chair  
Received Western Division Small Grants Award

I really enjoyed hearing the immense variety of research currently taking place to better understand and improve the state of fisheries. Given that I am part of a molecular ecology collaborative research unit, I particularly enjoyed hearing about the diverse ways in which genetic data is being used to understand natural population dynamics, as well as being applied to hatchery management efforts. The atmosphere of the conference was great, from the social events to the symposiums, and with a very relevant overall message of establishing greater connectivity between science and policy!

**Ben Wasserman** SCMBAS member from UCSC  
Talk Title: Intermittent estuary environments promote diverse armor genotypes and phenotypes in Threespine Stickleback on California's Central Coast

I really enjoyed networking with a diverse group of managers and scientists. It was a great place to talk about different conservation strategies and research projects with people with very varied experience.

I was impressed by the range of research at AFS CalNeva this year - from highly applied and management-oriented experiments to descriptive studies and integrative analyses. This meeting is a great opportunity to give-and-get feedback from colleagues doing exciting work in the fisheries world.

**Diana Baetscher** SCMBAS member from UCSC  
Talk title: Intergenerational genetic mark-recapture in marine fish populations using high-throughput sequencing and micro-haplotypes

**Liam Zarri** SCMBAS member from NMFS SWFSC

I enjoyed learning new things, meeting new folks and watching Joe Merz text from the top of the cloud forest exhibit on the night of Opening Social.

The best part of WDAFS for me was the diversity of research going on throughout the fisheries world. Everything from removing a pier in the middle of the San Francisco bay in a way that didn't do unnecessary harm to the environment to discussing the potential negative impacts of dam-removal on fish habitat had a place in one of the presentation sessions. This meeting does such a great job of inspiring minds, both young and old!

**Emerson Kanawi** SCMBAS member from NMFS SWFSC

**Colin Nicol** SCMBAS member from NMFS SWFSC

My favorite part of the conference was seeing all of the student talks. It was fun to see the excitement of the young researchers talking about their work, and it was interesting to hear about the wide range of the topics that they are working on. Particularly inspiring for me as I consider going back to graduate school.

AFS CalNeva is one of my favorite conferences. I enjoy the blend of research experiments, monitoring, and implementation of management. It is inspiring to see how diverse tools and approaches contribute to science and policy.

**Megan Sabal** SCMBAS member from NMFS SWFSC

We had the terrific opportunity to bring a large group to the meeting this year and benefitted hugely. Our group interacted widely with various professionals we had at most hitherto only been in contact with via the internet. Students and young professionals in our group formed new collaborations and contacts which will undoubtedly lead to future collaborations and opportunities. I was particularly happy with the networking that went on among students at various institutions. We benefitted greatly from the experience and look forward to making progress within local arenas under our subunit activities and anticipate attending future meetings.

**David Fryxell** SCMBAS Vice president  
Talk title: Contemporary thermal adaptation of a predator exacerbates ecological consequences of climate warming

# 2016 WDAFS Awards

By Hilda Sexauer, Past President

*WDAFS presented several awards at the 2016 Annual meeting in Reno, NV. See future issues of the Tributary and wdafs.org for a notification regarding the nomination period for 2017.*

## **EUGENE MAUGHAN AND SUSTAINABLE FISHERIES FOUNDATION WILLIAM TRACHTENBERG SCHOLARSHIPS**

Western Division of AFS provided \$10,000 to the student scholarship program. There were 10 applicants (4 MS and 6 PhD) for three awards, and they represent 10 institutions in nine western states and a Canadian Province. The choice was extremely difficult as always. This was an outstanding group of students (again)!

Members of the WDAFS Scholarship Committee include: Colleen Caldwell: New Mexico Cooperative Fishery Research Unit, New Mexico State University, Las Cruces, New Mexico; Pat Connolly: USGS Western Fisheries Research Center, Columbia River Research Laboratory, Cook, Washington; Lisa Eby: University of Montana, Missoula, Montana; Peggy Wilzbach: California Cooperative Fishery Research Unit, Humboldt State University, Arcata, California; Bob Gresswell (Chair): USGS Northern Rocky Mountain Science Center, Bozeman, Montana.

The 2016 Scholarship Recipients are:

Eugene Maughan Scholarship

MS student

*Meredith Campbell      New Mexico State University*

PhD student

*Katrina Cook      University of British Columbia*

Sustainable Fisheries Foundation William Trachtenberg Scholarship

PhD student

*Zachary Klein      University of Idaho*

## **OUTSTANDING CHAPTER AND SUBUNITS**

These awards are given to the Chapter and Student Subunit that exhibit commitments to the mission of the Society by actively working to achieve the goals set forth in the AFS Strategic Plan, and any other activities that further the mission of the Society. This year we received applications from two Chapters and three Student Subunits.

The 2016 Chapter Award Recipients are:

*Palouse Student Subunit, University of Idaho*

*Oregon Chapter of the American Fisheries Society*



*Meredith Campbell, Eugene Maughan Scholarship  
Photo by Taylor Spaulding*



*Troy Brandt, Oregon, Outstanding Chapter  
Photo by Taylor Spaulding*

(AWARDS continued on pg. 8)

(AWARDS *continued from pg. 7*)

**CONSERVATION ACHIEVEMENT AWARD**

The Conservation Achievement Award was first presented in 1991. This award is given to a federal, state, or tribal natural resource agency for the entity's conservation projects.

2016 Conservation Achievement Award Recipient:  
*Grant County PUD*

- for their work quick and effective work to the Wanapum Dam spillway in 2014 and 2015.

**AWARD OF MERIT**

The Award of Merit was first presented in 1984. This award is given annually to an AFS member for a unique or special contribution involving service above and beyond the normal call of duty.



*Scott Hamelberg, Award of Merit  
Photo by Taylor Spaulding*

2016 Award of Merit Recipient:

*Scott Hamelberg*

- recently retired from the U.S. Fish and Wildlife Service as the manager of Coleman National Fish Hatchery (NFH). He has a long history of service above and beyond the call of duty in the production and management of salmon throughout the state of California.

**AWARD OF SPECIAL RECOGNITION:**

This award is given to an individual or to an entity (AFS member or non-member) making a significant

contribution to the development and success of the Western Division.

2016 Award of Special Recognition Recipient:

*Travis Neebling*

- WD Secretary/Treasurer (2<sup>nd</sup> term). The responsibilities of this position requires a significant workload. Travis goes way above these responsibilities and as he continues to do the heavy lifting on many Division projects not directly related his secretary/treasurer position.

**AWARD OF EXCELLENCE**

This is the most prestigious award offered by the Western Division (Division). The award is intended to recognize sustained, professional excellence. This award is given annually to an AFS member who has demonstrated outstanding achievement and exceptional competence in fishery resource applications through monumental works, new methodologies, or multiple successful contributions that benefit our resources and profession. This is the highest award given by the Division and also the oldest award, first being presented in 1970.

2016 Award of Excellence Recipient:

*Dr. John Skalski*

- of the School of Fisheries and Aquatic Sciences at the University of Washington. John's sustained professional achievement and exceptional competence in fishery resource efforts over the past three decades. As stated by his colleagues and students:

"He understands the strengths of his students and how to help them take advantage of them in their studies and research."

"He is simply the most competent and practical investigator that I have had the distinct honor of working with- ever"

"...he has a great sense of humor and is incredibly insightful about human nature."

*2017 WDAFS awards will be presented at the annual meeting in Missoula, MT May 21-24  
Watch the Tributary newsletter and wdafs.org for announcements regarding the call for nominations!*

*Committee Spotlight*

# Riparian, Watersheds, and Habitat Committee

By Tracy Wendt, Committee Chair

Riparian, Watersheds, and Habitat Committee is a special WDAFS committee whose main responsibility is to select winners of the Riparian Challenge Award each year. The purpose of the Riparian Challenge Award is to encourage BLM, USFS, and other conservation agencies or private industry to strive for excellence in riparian and watershed habitat management; encourage agencies to progress in on-the-ground accomplishments which, when added together throughout the West, will significantly improve riparian systems; and recognize managers and resource specialists for their efforts in maintaining, restoring, and improving riparian and watershed ecosystems.

Each year the committee receives nominations in three categories: BLM, USFS, and other agency. Each entry is scored based on criteria that describe the mission of the award. Results are tabulated and the award goes to the highest average score in each of the three categories. Evaluating entries is a time-consuming process and I would like to thank all of the committee members for their commitment to making the time each year.

2016 WDAFS Riparian Challenge awards were presented at the Annual Meeting in Reno, NV. We received four nominations in the USFS category, four in the BLM category, and nine nominations in the "other agency" category. Winning nominations were chosen based on projects that encourage collaboration by incorporating multiple agencies, corporations, conservation groups, landowners, and government as project partners. Points are also earned by addressing habitat issues for threatened and endangered species. This year's winners also had extensive public outreach components, disseminating project information to a wide public base, as well as thorough monitoring plans that measured project success towards specific goals and objectives.

## 2016 RIPARIAN CHALLENGE AWARDEES

Bureau of Land Management (BLM)  
Collaborative Restoration and Monitoring in Maggie  
Creek, NV  
Elko District BLM Field Office



United States Forest Service (USFS)  
Still Creek Restoration Project  
Zigzag Ranger District, Mt. Hood National Forest



Other Agency  
Napa River Rutherford to Oakville Restoration  
Napa County Public Works, ESA



*Committee Update*

# Western Native Fishes

By Luke Schultz, Committee Co-chair

The winter/spring of 2016 has found the Western Native Fishes Committee (WNFC) continuing its efforts to formalize the group within the Western Division, as well as seeing some of our annual efforts coming to fruition. Our vision is to provide a network of fisheries scientists and managers with expertise and interest in the native fishes of Western North America to address emerging ecological and conservation concerns for these organisms and their habitat. To reach our full potential, we are actively seeking to formalize the WNFC within the Western Division. As part of this effort, Nate Cathcart and Phil Branigan have co-conspired to draft procedures that will serve as guiding documents for WNFC. Once these procedures are in place, the committee will work with Hilda Sexauer to sync them with the Western Division procedures manual.

At the annual Western Division meeting in Reno, Nevada this March, WNFC combined efforts with Troy Brandt (OR chapter president) and Kathy Boyer (Desert Fishes Council) to plan and host a symposium that highlighted research and management efforts related to native fishes from across the West. The symposium wound up being one of the largest (and most diverse) at the Reno meeting, spanning two full days that covered a variety of topics from alpine lakes and streams to estuarine and marine environments. We'd like to send out a sincere thank you to all of the participants and attendees, as well as a special thank you to Nate Cathcart for handling moderating duties for one of the sessions.

Currently, there are other specific objectives and planning underway for the WNFC that seek to provide insight into fish conservation and future meetings, respectively. For example, Committee chair Luke Schultz has been actively working with the Cutthroat Trout taxonomic revision organizing committee as that process continues to move forward. We are currently gathering manuscripts for the individual chapters to start putting together the book that will wind up being the finished product of the effort.

Planning is already underway for the Missoula meeting next May, so if you have ideas for symposia topics or continuing education that you'd like to see WNFC get involved in, please don't hesitate to contact the chairs. We'll be having our annual committee meeting in conjunction with the Missoula WD meeting and the Western Native Fishes Symposium – so mark your calendars now.

As always, we also encourage your involvement in any of the things we have going on. Please contact Committee Chairs Luke Schultz ([lschultz@usgs.gov](mailto:lschultz@usgs.gov)), Eric Wagner ([ericwagner@utah.gov](mailto:ericwagner@utah.gov)), Hilda Sexauer ([hilda.sexauer@wyo.gov](mailto:hilda.sexauer@wyo.gov)), and Mark Smith ([mark.smith2@wyo.gov](mailto:mark.smith2@wyo.gov)) to get up to speed on the group and get involved with our initiatives moving forward. We're also on our push to hit 100 Facebook likes, so look us up and become one of our stalker/gawkers (#suckerlove).



## **2016 *Salvelinus confluentus* Curiosity Society Meeting Registration Now Open!**

Sula Community Clubhouse-East Fork Guard Station, Montana  
August 30 – September 1, 2016

To register, go to: <http://www.cvent.com/d/8fqg1g>

Please register by July 15 or contact Dan Kenney to reserve your spot ([dkenney@fs.fed.us](mailto:dkenney@fs.fed.us))

*Thank you to the 2016 ScCS Organizing committee: Mike Jakober, Dan Kenney, Scott Spaulding, Chris Clancy, and Leslie Nyce.  
Thanks to the Western Association of Fish and Wildlife Agencies, with the assistance of the Western Native Trout Initiative for hosting the registration site. For details see the flyer at the end of this newsletter.*

*Committee Update*

# 57<sup>th</sup> Western Fish Disease Workshop

By Luciano Chiaramonte, Tributary co-editor



The 57<sup>th</sup> Western Fish Disease Workshop- AFS Fish Health Section Meeting and 22<sup>nd</sup> USFWS Aquaculture Drug Approval Coordination Workshop were held jointly in Jackson, WY. The meeting, co-hosted by Wyoming Game and Fish Department (WGFD) and the US Fish and Wildlife Service Aquatic Animal Drug Partnership (USFWS-AADAP) Program was very successful in bringing together those who study and manage fish health problems and those involved in research or who approve, regulate, and manufacture the therapeutants available for use in aquaculture.

110 attendees represented 28 states and 4 countries. A continuing education workshop on Landscape Ecology and Modeling in Fish Health provided an array of modeling approaches addressing disease impacts to wild and hatchery fish populations.

The disease workshop covered Parasitology, Virology, Bacteriology, Technology, and Diagnostics and Treatment of fish diseases. Presentations varied in scope, from the specific mechanisms and expressions of disease in individual fish, to the broad ecological and epidemiological processes of pathogens across the hosts' range. Discoveries of emerging pathogens were presented, as were new methods of detecting and screening for pathogens.

In the aquaculture drug approval workshop, experts spoke on the importance of drug approval to fisheries, the status of ongoing approval efforts, and changes regarding veterinarians' treatment of diseases in fish and other animals. Studies on specific drugs were presented detailing the use and effectiveness of drugs used to treat disease and those used as sedatives or sex reversal agents.

This meeting was a tremendous success for the fields of aquatic animal health and aquaculture. A special thank you to WGFD and USFWS-AADAP, along with the sponsors who made the meeting possible.

Awards given at the meeting included:

### ***S.F. Snieszko Distinguished Service Award***

This award honors outstanding accomplishments in the field of aquatic animal health. Dr. Mamoru Yoshimizu (Hokkaido University) received this award for his work with *Oncorhynchus masou* virus.

### ***Special Achievement Award***

Presented to a FHS member who has made a significant accomplishment in the field regarding a new discovery, diagnostic method, or publication during the past year. Dr. Jerri Bartholomew (Oregon State University) received this award for her massive contributions to our knowledge of the parasite *Ceratonova shasta* and its impacts on wild salmonids.

***Snieszko Student Travel and Best Student Paper Award*** was presented to Megan Tomamichel (University of Minnesota) for her presentation on *Heterosporosis* effects in fish populations in Minnesota lakes.

Doug Munson was recognized as past president, and Dave Groman took over as president of the Fish Health Section. Marilyn (Guppy) Blair was announced as the vice president of the section.

Visit the following links for more information about the AFS Fish Health Section ([www.afs-fhs.org](http://www.afs-fhs.org)) and the USFWS-AADAP Program (<http://www.fws.gov/fisheries/aadap/home.htm>).

*Chapter Update*

# Idaho Chapter Annual Meeting

By Helen Neville, President Elect, Idaho Chapter

Idaho's annual meeting in Coeur d'Alene was a great success: please join us for next year's joint meeting with The Wildlife Society in Boise, March 1-3, 2017!



*Plenary speakers Jesse Trushenski, Sharon Kiefer, Julie Collins and Morgan Case. Photo by Bart Gamett*

This year's meeting was held at the Coeur d'Alene Resort, a perfect venue for productive and fun interactions. Our meeting was attended by 313 participants from 63 different organizations, with 59 students and 7 young professionals. President-Elect Jay Hesse created a cross-cutting theme for the meeting, "Horizontal and Vertical Transmission of Fish Related Information". This theme set the stage for a fantastic all-female plenary session with talks by Morgan Case, Julie Collins, Sharon Kiefer and Jesse Trushenski, who discussed their varied interpretations of, and experience with, fisheries "information", and gave valuable advice on effective tools for communicating to diverse audiences.

We had 49 oral presentations organized by "Adaptive Management", "Habitat and Fish Restoration", "Modelling and Monitoring", "Climate Change and Invasive Species", and a special symposium, "A Commemoration of the Idaho Supplementation Studies".

Eighty-four people participated in 3 workshops.

Our poster session included 27 presentations and interaction with the poster presenters was bolstered by adding a breakfast session to our traditional evening session.

At our business meeting we welcomed a new student sub-unit, Brigham Young University-Idaho. The R.L. Wallace Native Fish Conservationist of the Year was awarded to Joe DosSantos of Avista Corps for his work towards development and implementation of the Lower Clark Fork River Native Salmonid Restoration Plan, and a new Aquatic Habitat Restoration Award was given to the Caribou-Targhee National Forest for the Jackknife Watershed Restoration Project. Our excellence in Aquaculture Award went to the Kootenai Tribe of Idaho for their burbot and sturgeon programs. We awarded 6 scholarships to high school, undergraduate and graduate students, and quite a few Distinguished Service Awards. Our Lifetime Achievement Award was given to a very surprised Al Van Vooren for his service to the chapter and fisheries profession.

We pulled off a wonderful welcoming social, student mixer, and banquet - with record-breaking fundraising from our 32 much-appreciated sponsors and successful auctions and raffles. Even the skies held clear for 83 participants in our 7th-annual Spawning Run/Walk along the shores of Lake Coeur d'Alene.



*Excellence in Aquaculture Award presented to the Kootenai Tribe of Idaho. Photo by Bart Gamett*

*Chapter Update*

# Pallid Sturgeon and the Intake Dam EIS

By Leanne Roulson, MT Chapter Resource Management Concerns, Committee Chair

Reclamation's Lower Yellowstone Project (aka "Intake") is located in eastern Montana and western North Dakota. Intake Diversion Dam is approximately 70 miles upstream of the confluence of the Yellowstone and Missouri rivers near Glendive, Montana. The Lower Yellowstone Project was authorized by the Secretary of the Interior on May 10, 1904. Construction of the Lower Yellowstone Project began in 1905 and included Intake Diversion Dam (also known as Yellowstone River Diversion Dam)—a wood and stone diversion dam that spans the Yellowstone River and diverts water into the Main Canal for irrigation. The Lower Yellowstone Project was authorized to provide a dependable water supply sufficient to irrigate approximately 54,000 acres of land on the benches above the west bank of the Yellowstone River. Water is also supplied to irrigate approximately 830 acres in the Intake Irrigation Project and 2,200 acres in the Savage Unit. The average annual volume of water diverted for these projects is 327,046 acre-feet.

The U.S. Fish and Wildlife Service (Service) listed the pallid sturgeon as endangered under the Endangered Species Act (ESA) in 1990. The best available science suggests Intake Diversion Dam impedes upstream migration of pallid sturgeon and their access to spawning and larval drift habitats. The lower Yellowstone River is considered by the Service to provide one of the best opportunities for recovery of pallid sturgeon.

In September 2015 an injunction was granted halting the Intake Dam project and initiating talks between the US Army Corps of Engineers and the Bureau of Reclamation and Defenders of Wildlife and NRDC (both Plaintiffs in a lawsuit challenging the agencies' EA). The judge supported the Plaintiff's argument that an EIS should have been prepared instead of an EA and that "the Plaintiffs demonstrated a likelihood



*Yellowstone Intake Dam Photo by Bureau of Reclamation*

of irreparable harm absent a preliminary injunction". That is judicial speak for, "the agencies should take another look at how the project would affect the Pallid Sturgeon before proceeding."

The Plaintiffs and agencies met and developed a settlement that the judge accepted and which required that the agencies complete an EIS that examines at least one additional "non-weir" alternative that would open the main channel of the Yellowstone River at Intake Dam to Pallid Sturgeon migration. The U.S. Army Corps of Engineers and the Bureau of Reclamation issued a notice of availability for the Draft EIS on June 3, 2016 (for more information:

[http://www.usbr.gov/gp/mtao/loweryellowstone/EIS/noa\\_2016eis.pdf](http://www.usbr.gov/gp/mtao/loweryellowstone/EIS/noa_2016eis.pdf)). The purpose of the Lower Yellowstone Intake Diversion Dam Fish Passage Project is to improve passage for the endangered pallid sturgeon while continuing the effective and viable operation of the Lower Yellowstone Project. The Draft EIS analyzes six alternatives which includes a No Action Alternative. Comments on this EIS are now being accepted, and can be submitted until July 18, 2016. Links to the EIS are available at the following link:

<http://www.usbr.gov/gp/mtao/loweryellowstone/>  
The MT AFS RMCC intends to submit comments stressing the following points from Montana AFS's previous involvement with the project:  
(INTAKE continued on pg. 14)

*Student Subunit Update*

# BYU-Idaho New Student Subunit

By Darcy McCarrick, President

BYU-Idaho is an undergrad-only university located in Rexburg, Idaho. We received approval from AFS to have a student subunit on campus this April. As a subunit, we hope to provide students with as many opportunities as possible to gain hands on experience, network, attend trainings and learn from a variety of different agencies. This year's officers are: President Darcy McCarrick, Vice President Jason Spillet, Secretary/Treasurer Drew Scott, Program Committee Chair Devin Skidmore, and our faculty advisor is Eric Billman.

So far this semester students have gone gillnetting and PIT tagging with Idaho Department of Fish and Game. We held a fishing trip and have multiple students working on research projects. We had guest speaker Bart Gamett with the U.S. Forest Service and will be sending students to a fish identification course with him later this month. We are also planning a clean-up at Warm Slough, electrofishing, and a fish disease/pathology training with Laura Sprague from the U.S. Fish and Wildlife Service.



***New WDAFS Student Subunit, BYU-Idaho AFS Students at Birch Creek helping with trout and sculpin research projects***

(INTAKE *continued from pg. 13*)

1. Any alternative considered should prioritize fish passage as a critical component for the analysis,
2. The long-term goals of Pallid Sturgeon recovery should be given precedence
3. The existing water rights of the irrigators need to be honored
4. Explicit assignment of responsibility for achieving recovery goals for the Pallid Sturgeon should be included in the mitigation and monitoring plans for any alternative selected.

For our Eastern-MT members, public “open house” meetings will be held Tuesday, June 28, 2016, 5:30 p.m. to 9:00 p.m., in Sidney, MT and Wednesday, June 29, 2016, 5:30 p.m. to 9:00 p.m., in Glendive, MT. The agencies have agreed to hold a 3<sup>rd</sup> public

meeting in Billings on Thursday, June 30<sup>th</sup> at the Lincoln Center (415 North 30<sup>th</sup> Street) from 5:30 to 9 pm. Each meeting will begin with an open house at 5:30 p.m. followed by a formal presentation at 6:00 p.m. The public meeting scheduled for Billings should help increase the profile of the project as well as expand the scope of public input.

If you would like to comment on the EIS, the project, or the NEPA process, please send written comments, and/or requests to be added to the mailing list to U.S. Army Corps of Engineers Omaha District, ATTN: CENWO-PM-AA, 1616 Capitol Ave, Omaha, NE 68102; or email to [cenwo-planning@usace.army.mil](mailto:cenwo-planning@usace.army.mil) The USACOE project contact is Ms. Tiffany Vanosdall, U.S. Army Corps of Engineers, 1616 Capitol Ave, Omaha, NE 68102, or [tiffany.k.vanosdall@usace.army.mil](mailto:tiffany.k.vanosdall@usace.army.mil)

# Whirling Disease Resistant Rainbow Trout Fry Stocking Evaluations

By Eric Fetherman, Aquatic Research Specialist, Colorado Parks and Wildlife



*Rainbow trout and Brown trout fry  
Photo by Brian Avila*

Whirling disease continues to be an active area of research in Colorado. Although restocking efforts using whirling disease resistant rainbow trout have been successful in many locations, research is ongoing to determine which strains of rainbow trout to stock where, what life stages to stock to increase post-stocking survival and recruitment, and if resistance is maintained in established, naturally reproducing populations of whirling disease resistant rainbow trout.

Brian Avila, a master's student at Colorado State University has been working with Colorado Parks and Wildlife (CPW) to evaluate post-stocking survival of two strains of whirling disease resistant rainbow trout stocked as fry. The German Rainbow (GR) is a highly resistant rainbow trout strain that developed resistance over a century of selection in a German hatchery. It is also known to be highly domesticated, and survival evaluations of GR stocked at 100 mm or larger have shown that post-stocking survival is low. In an attempt to increase post-stocking survival, the GR was crossed with the Colorado River Rainbow (CRR), a wild rainbow trout strain that was well suited to surviving and reproducing in Colorado's rivers prior to the establishment of whirling disease.

This cross, known as the GR×CRR, retains the wild characteristics of the CRR and the resistance characteristics of the GR. However, laboratory evaluations of GR×CRR outcrosses and backcrosses

with pure CRR have shown that resistance both decreases and becomes more variable in future generations, an issue that is not encountered with the GR.

Brian designed a study in which he stocked 5,000 fry each of the GR and GR×CRR into a one mile study section of nine streams throughout Colorado. Using coded wire tags to differentiate the two strains, Brian conducted population estimates in all nine streams at two months, eight months, and 12 months post-stocking. Although survival differed among the streams, primarily due to average daily temperature, differences in survival among the GR and GR×CRR were not apparent in Brian's study. To confirm what he found in the field, Brian ran two laboratory experiments in which a 50:50 mix of the GR and GR×CRR were stocked into a tank with a brown trout predator. Again, Brian did not observe a difference in survival between the two strains. Additionally, survival did not differ between tanks with and without cover, suggesting that fry of both strains were able to utilize cover similarly to avoid predation as opposed to previously observed differences in survival when these fish were stocked as advanced fingerlings or catchable-sized fish.

Brian's work shows that the GR may be a good candidate for stocking into rivers in which whirling disease has become established if stocked as fry.



*GR fry two months post-stocking  
Photo by Brian Avila*

(WHIRLING continued on pg. 16)

# Amazonian 'Goliath' Catfish Migration Research

By Jens Hegg, PhD Candidate, Fish & Wildlife Sciences, University of Idaho

With the help of the Palouse Unit, AFS members from across the country, and the general public, PhD candidate Jens Hegg raised \$5,664 to jumpstart a study on the migration of Amazonian 'goliath' catfish migration and freshwater movement of sawfish in the Amazon. The research team, which also includes Dr. Tomasso Giarrizzo at the Federal University of Pará in Brazil and Dr. Brian Kennedy at University of Idaho, plan to build on the success of their prior work which has provided the first detailed look at this relatively poorly known migration. The crowdfunding effort was hosted on Experiment.com and received 214% of the initial goal, with an average donation of \$25 from 162 individuals. The project also received a \$1,500 challenge grant awarded to the fisheries project with the most individual donors. As the research gets underway Hegg will be providing public updates on the fieldwork, analysis, and publication on the project website ([experiment.com/amazonianfish](http://experiment.com/amazonianfish)).

The goal of the research is to improve our understanding of the longest and least understood freshwater fish migration in the world using otolith isotopic chemistry, a technique the team validated in these species in a publication in PLOS One in 2015. The spawning migration of several species of the genus *Brachyplatystoma* proceeds as far as 5,500km from the Amazon estuary to the Andes foothills. This migration has been an enigma for ecologists due to the size of the basin and the large rivers these apex predators inhabit, despite the fact that these species make up the largest fishery in the Amazon basin. With large hydropower dams being built at a rapid clip on the main stem tributaries of the Amazon, dams which threaten to block access to the spawning grounds, understanding the migratory ecology of these so called 'goliath catfish' has become a priority. In addition, Hegg and Giarrizzo plan to expand their work to explore the use of microchemical tracers in IUCN Redlisted sawfish, which make long freshwater

forays into the Xingu River for reasons that are not understood.

During the crowdfunding project Hegg partnered with Ecologists Without Borders an organization with deep ties to the WA-BC Chapter and the Western Division. Ecologists Without Borders can provide logistical and volunteer support as well as funding oversight as the project grows. Ecologists Without Borders is a non-profit organization that helps environmental professionals lend technical expertise to address environmental problems where they occur, closing the gap between communities who need ecological expertise and the experts who often reside elsewhere in the world. Ecologists Without Borders will continue to raise funds in support of the project on their webpage:

(<http://ecowb.org/projects-programs/amazon-megafish-migration/>).

(WHIRLING *continued from pg. 15*)

CPW will continue to evaluate the utility of the GR fry. Population estimates will be conducted in the fall of 2016 to determine if GR and GR×CRR continue to persist in the streams Brian stocked. Additionally, GR fry will be stocked in the upper Colorado River in 2016, and fry and adult population estimates will be used to estimate post-stocking survival and recruitment in coming years. The GR×CRR is currently stocked into many Colorado rivers. Evaluations in the upper Colorado River have shown a six-fold increase in the adult rainbow trout population following three years of stocking the GR×CRR as fry. Several rivers, including the Colorado River, Gunnison River, and South Platte River, have had increasing rainbow trout populations in recent years as a result of stocking whirling disease resistant rainbow trout.

**Send your research updates to  
[westerndivnewsletter@gmail.com](mailto:westerndivnewsletter@gmail.com)  
for inclusion in a future Tributary!**

WDAFS Small Project Grant Update

# Underwater Nevada at The Discovery

Recipient: Dr. Zeb Hogan and the Terry Lee Wells Nevada Discovery Museum (The Discovery)



The Discovery in Reno was delighted to meet so many WDAFS members during the conference social on March 21<sup>st</sup>. Shortly after the social, The Discovery installed a new exhibit called *Underwater Nevada: Connecting Fish, Water, and People*. The Discovery is grateful to the WDAFS for your \$5,000 in support of *Underwater Nevada*, which was developed in partnership with Dr. Zeb Hogan and the University of Nevada, Reno College of Science, Jeremy Monroe of Freshwaters Illustrated, and several other partners.

*Underwater Nevada* was designed to introduce The Discovery's visitors to the freshwater fish, and accompanying aquatic habitats, of arid Nevada. The

primary activities surrounding this exhibit were fieldwork and content development in collaboration with Dr. Hogan surrounding Nevada's native freshwater fish species, leading to the creation of a photographic exhibit piece for The Discovery. Additional content development focused on "Water in the West," with highlights on Nevada's heritage tied to conservation efforts in the state. The final exhibit is now installed on a 12' x 30' curved wall in The Discovery's *Nevada Stories* gallery.

The Snake River, Great Basin and Colorado River are the three geographic areas of focus for *Underwater* (UNDERWATER continued on pg. 18)

(UNDERWATER continued from pg. 17)

*Nevada*. The exhibit displays high-resolution, underwater images and artistic renderings of fish species from around Nevada, as well as content about the species featured – all on a giant vinyl print. The fish species highlighted include the Chinook salmon, White River springfish, Devils Hole pupfish, and the Colorado pikeminnow, razorback sucker, and humpback chub – three of Nevada’s most endangered species. Topics addressed within *Underwater Nevada* include fish ecology and conservation, the challenges of water quality and quantity in a high desert landscape; how humans, plants and animals co-exist in these environments; and what is being done to restore and recover these freshwater landscapes.

*Underwater Nevada* was installed in time to announce its addition to The Discovery by including it in a press release about the recent extension to the National Geographic traveling exhibition, *Monster Fish: In Search of the Last River Giants* through September 5<sup>th</sup>, 2016 (Labor Day). The Discovery has already enjoyed a consistent 25% increase in our visitors since opening *Monster Fish*, and we expect that to translate into even more public exposure to *Underwater Nevada* this summer.

*Underwater Nevada* promotes the AFS mission and WDAFS objectives by educating students and the general public about fisheries and aquatic science. In the first four weeks after opening *Underwater Nevada*, more than 15,000 visitors – including 3,000 Pre-K through 7<sup>th</sup> grade students on field trips – have been exposed to the exhibit. By providing young people with approachable fish-related educational content, *Underwater Nevada* will help generate excitement around fisheries science and promote the development of fisheries professionals.

The Discovery, Dr. Zeb Hogan, and the University of Nevada, Reno College of Science continue to work together to promote science-based management, conservation and understanding of fisheries resources by focusing on northern Nevada’s freshwater fish, watershed health, water quality, and regional conservation issues within *Underwater*

*Nevada*. One way we have carried this goal forward is by obtaining permission to host live hybrid Devils Hole pupfish in a tank at The Discovery tied to the learning objectives of *Underwater Nevada*, in addition to hosting four other live, global freshwater fish species tied to the *Monster Fish* exhibition: alligator gar, a red tail catfish, white sturgeon, and a four-foot-long electric eel named “The Creature.”

The Discovery encourages WDAFS members to come back to Reno’s only science center and see *Underwater Nevada* in person over the summer – or sign your kids up for one of our awesome camps! Thank you so much again for the WDAFS’ support of *Underwater Nevada*, for your role in making The Discovery a part of your recent WDAFS conference in Reno, and for supporting hands-on, informal science education! For more information about The Discovery, please visit [www.nvdm.org](http://www.nvdm.org).



**Danielle Williams, Development Officer, II and Patrick Turner, Marketing & Communications Director. (above) and panel installation in progress (below)**



# Importance and Value of being AFS Certified

By Tracy Wendt, Tributary Co-editor, AFS Associate Fisheries Professional

*"We are all aware that professional certification and licensing are required for practitioners in fields like medicine, law, and engineering...[M]any natural resource scientific professional organizations provide certification programs for their members...These organizations...recognize the value of these certification programs to their professions, as does AFS." AFS President Ron Essig, April 5, 2016 News, President Commentary*

AFS certification is available to fisheries professionals, retirees, and recent graduates. By becoming a certified professional or associate professional, you are making it known to your employer and others that you have the education, work experience, and have demonstrated a high level of commitment to the fisheries profession. Certification carries with it a level of professionalism and credibility in the field and may give you a competitive advantage as you apply for jobs – in some cases, certification may be a requirement for certain jobs or grants. To this end, I have compiled this list of facts about AFS certification and encourage all WDAFS members to become certified and keep their certification current.

*"I became certified as soon as I finished my BS. As an emerging river restoration professional, I wanted to let potential employers know my education included fisheries curriculum that met the AFS standard. I also wanted the prestige and recognition that come with signing 'AFS FP-A' next to my name." Tracy Wendt, AFS FP-A, Wyoming Game and Fish*

*"Fisheries professionals should be dedicated to high quality service and the achievement of specific goals and objectives. A pathway to demonstrating that is to have a professional certification program." Joe Merz, CalNeva Chapter President-Elect*

*"I became certified when working for a consulting company. When working with Engineers on stream restoration or Fish Passage projects, they have more respect for you if you have "Certified" in your title. Engineers have to pass meet certain standards to become a licensed engineer and place greater value on other professional who are Certified within their profession." Laura Burckhardt, FP-C*

Did you know...

- There are two levels of certification: FP-A (Associate Fisheries Professional) is for early professionals and is focused on education requirements; FP-C (Certified Fisheries Professional) considers work experience in addition to education.
- Undergrads can be certified as FP-A even before starting grad school (I was!).
- An individual who is retired or works less than full-time can receive FP-C status if they have been certified for at least 20 years.
- Professional development requirements for certification and renewal are fairly easy to fulfill for moderately active AFS members.
- AFS certification may be preferred for some jobs – and even required for others.
- AFS Certification needs to be renewed every five years.
- NEW!!! Western Division may reimburse part of your \$100 AFS Certification costs. Details will soon be available in the procedures manual at: [wdafs.org](http://wdafs.org). Chapters may offer reimbursement, too!

In short, professional certification is a sign of accomplishment, status, and credibility. It signals your colleagues, professors, and employers that you have met minimum levels of education, experience, and professional development.

How do you become certified? Applications are available at <http://fisheries.org/membership/afs-certification/>. Once you have paid the fee and completed your application, it will be screened by the AFS Educational Program Coordinator for completeness, then reviewed by the Board of Professional Certification on a quarterly basis. It may take up to three months to learn the outcome of your application, depending on the timing of your submission.

## ***WDAFS has 154 AFS Certified Associates and Professionals. Are you one?***

### **ALASKA**

Bruce Wing, FP-C  
David Witherell, FP-C  
Frank Thorwer, FP-C  
Kate Wedemeyer, FP-C  
Kevin Fraley, FP-A  
Lynn Noel, FP-C  
Peter Bangs, FP-C  
Reid Brewer, FP-C  
Samantha Simpson, FP-A  
Stephen Grabacki, FP-C  
Tim Sands, FP-C  
Trent Sutton, FP-C  
William Bechtol, FP-C

### **ARIZONA-NEW MEXICO**

Aaron Webber, FP-C  
Michael Gatlin, FP-A  
Michael Porter, FP-C

### **CALIFORNIA-NEVADA**

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Beverly Chaney, FP-C  
Brian Finlayson, FP-C  
Cory Hamilton, FP-C  
Cynthia LeDoux-Bloom, FP-C  
David Fuller, FP-C  
Douglas Rischbieter, FP-C  
Glen Merron, FP-C  
Jared Varonin, FP-C  
Jessica Dee Strickland, FP-A  
Joseph Miyamoto, FP-C  
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Marin Greenwood, FP-C  
Michael Gibson, FP-A  
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Patricia Brandes, FP-C  
Peter Alexander, FP-C  
Ross Taylor, FP-C  
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Ashley Ficke, FP-A  
Brian Hodge, FP-A  
Darren Rhea, FP-C  
Frank Rahel, FP-C  
Jason Burckhardt, FP-C  
Juli Stahli, FP-A  
Laura Burckhardt, FP-C  
Mark Smith, FP-C  
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Paul Gerrity, FP-C  
Ryan Colyer, FP-C  
Stephen Hunter, FP-C  
Steve Gale, FP-C  
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William Mancini, FP-C

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Daniel Dauwalter, FP-C  
Daniel Kenney, FP-C  
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John Ernhardt, FP-C  
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James Bowker, FP-C  
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Leanne Roulson, FP-C  
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Greg Koonce, FP-C  
Gretchen Sausen, FP-C  
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Michele Weaver, FP-C  
Raymond Haak, FP-C  
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Richard Pyzik, FP-C  
Robert Spateholts, FP-C  
Thomas Sanders, FP-A  
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Ronald Kegerries, FP-C  
Scott Tolentino, FP-C  
Trina Hedrick, FP-C  
Zachary Anglin, FP-A

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Benjamin Cross, FP-A  
Bill Mavros, FP-C  
Bradly Trumbo, FP-C  
Brian Missildine, FP-C

Bobbi Johnson, FP-A  
Bradly Trumbo, FP-A  
Chris Carlson, FP-C  
Cory Bettles, FP-C  
Craig Haskell, FP-C  
David Duvall, FP-C  
Dean Holecek, FP-C  
Donald Finney, FP-C  
Gregory Johnston, FP-C  
Hans Berge, FP-C  
Heather Layes, FP-C  
Jason Scott, FP-C  
Jeffrey Jolley, FP-C  
Jennifer Sampson, FP-C  
Joel Green, FP-C  
John Foltz, FP-A  
Joseph Parzych, FP-A  
Karl Mueller, FP-C  
Kerrie McArthur, FP-C  
Larry Ward, FP-C  
Lillian Herger, FP-C  
Matthew Klungle, FP-C  
Nathan Schwarck, FP-C  
Patrick Cooney, FP-C  
Paul Schlenger, FP-C  
Peter Heltzel, FP-C  
Phong Nguyen, FP-A  
Riley Gallagher, FP-A  
Sarah Sandstrom, FP-C  
Tad Schwager, FP-C  
Todd Pearsons, FP-C  
Traci Sanderson, FP-C  
Troy Baker, FP-C  
Wayne Wright, FP-C  
William Brignon, FP-C

### **OTHER**

Kevin Hopkins, FP-C, Hawaii  
Michael Trianni, FP-C, Saipan

## **Get AFS Certified or Renew Your Certification Now!**

Go to [www.fisheries/membership/afs-certification](http://www.fisheries/membership/afs-certification)

*"Although not required by my agency, I thought it was important to become an AFS certified fisheries professional to show that through my education and what I've been able to accomplish in my career I've been trained in proper fisheries science and have stayed current in select disciplines in the field of fisheries." Jim Bowker, WDAFS President, FP-C*

# 2017 WDAFS Meeting Planning Underway

*“Change and Continuity: Celebrating 50  
years of Fisheries in the West”*

**May 21 – 25, 2017**

Planning for the 2017 WDAFS meeting in Missoula, Montana is well underway! The Planning Committee had a site visit and planning meeting June 2 & 3, visiting the University of Montana and some of the hotels that will be used for the conference. The Montana Chapter looks forward to sharing the celebration of their 50<sup>th</sup> anniversary with the Division. The 2017 meeting will include:

- Symposia covering a wide range of captivating topics
- Fun and educational field trips
- Off-site social celebrating the Chapter’s anniversary
- The mother of all raffles & auctions at the closing social and banquet

The meeting will be held at the University of Montana on the banks of the Clark Fork River.



*UM Campus Photo by Cleve Steward*

## **Anyone interested in AFS can now support the Society financially, *at no additional expense to yourself or business, through Amazon!***

AmazonSmile is a website operated by Amazon that lets customers enjoy the same wide selection of products, low prices, and convenient shopping features as on Amazon.com. The difference is that when customers shop on AmazonSmile ([smile.amazon.com](https://smile.amazon.com)), the AmazonSmile Foundation will donate 0.5% of the price of eligible purchases to the charitable organizations selected by customers. This is *not* an additional expense to the customer, nor is it an add-on to the price. No. There is no cost to charitable organizations or to AmazonSmile customers. **The shopping experience is identical to Amazon.com with the added benefit that the AmazonSmile Foundation will donate to the charitable organizations selected by customers.**

### How it works:

On your first visit to **AmazonSmile** ([smile.amazon.com](https://smile.amazon.com)), you are prompted to select a charitable organization from our list of eligible organizations. You can change your selection at any time.

### **To change or select your charitable organization:**

1. Sign in to [smile.amazon.com](https://smile.amazon.com) on your desktop or mobile phone browser.
2. From your desktop, go to **Your Account** from the navigation at the top of any page, and then select the option to **Change your Charity**. Or, from your mobile browser, select **Change your Charity** from the options at the bottom of the page.
3. Select a new charitable organization to support. You can search “American Fisheries Society” **Select “American Fisheries Society”**
4. And done! 0.5% of the price of eligible purchases will be donated to your AFS!

Gearing up for field season? Shop at [smile.amazon.com](https://smile.amazon.com)

Looking for new household goods and want free shipping? Shop at [smile.amazon.com](https://smile.amazon.com)

Know someone else who shops at [amazon.com](https://amazon.com)? Tell them to shop at [smile.amazon.com](https://smile.amazon.com)!

# Students: Vote for the next WDAFS Student Representative now!

***Voting for the next WDAFS Student Representative is now open!***

*The Western Division Student Representative is a non-voting member of the WDAFS Executive Committee (Excom) and is the conduit connecting student and professionals members of the Division.*

*All WDAFS students in good standing are encouraged to vote between now and July 15, 2016. Vote at this link today: [WDAFS Student Voting](#). Your candidates this year are Zach Klein from the University of Idaho, and Estevan Vigil from Colorado State University. Read on for personal messages from each candidate – and don't forget to vote!*

Student Representative Candidate  
**ZACH KLEIN**

Dear Western Division Members,

My name is Zach Klein and I am currently running for Student Representative of the Western Division of the American Fisheries Society (WDAFS). I am a PhD student in the lab of Dr. Mike Quist at the University of Idaho (UI). During my time at UI, I have served as Treasurer and Vice-President of the Palouse Unit of AFS. I found both position incredibly fulfilling, and now want to serve AFS members at state and regional levels. I am currently the Co-Chair of the Native Fish Committee of the Idaho Chapter and am excited at the opportunity to serve as the Student Representative of WDAFS.

As the Student Representative, my primary focus would be to serve as a bridge between student members of WDAFS and the Executive Committee. Student members and student subunits are critically important to our organization and represent the next generation of fisheries professionals. Therefore, providing students with avenues by which they can communicate with and learn from experienced

fisheries professionals will help to create competent scientist and valuable members of WDAFS. With that in mind, I would like to provide students with numerous opportunities to directly interact with knowledgeable fisheries scientist to enhance their research and professional development. In addition, I would like to offer workshops with direct applications to fisheries research (e.g., applied regression) at this year's student colloquium. I strongly believe in the mission of WDAFS and hope to serve the student membership in any way I can.

Thank you very much for your time and consideration.

Sincerely,

*Zach Klein*



Student Representative Candidate  
**ESTEVAN VIGIL**

Dear Western Division Members,

My name is Estevan Vigil and I am currently a graduate student pursuing a Master's of Science Degree in Fisheries at Colorado State University. I am very interested in running for Western Division Student Representative of the American Fisheries Society. It has been a pleasure to serve as Vice President and President of the Colorado State University Subunit over the last two years. My dedication to the American Fisheries Society started when I first became involved with the CSU Student Subunit in 2005. I have enjoyed working with other fisheries professionals throughout the West with the common goal of advancing fisheries science and conserving fisheries resources. During my officer appointments with the subunit I have dedicated time to advancing our club and increasing undergraduate involvement with fisheries related activities. I believe if given the chance to serve as the WDAFS Student Representative I can bring my hard work and dedication to all of the subunits in the Western Division. I think that the future of fisheries will depend on our abilities to communicate with other fisheries professionals throughout the West and beyond. As student representative I will work to increase communication and networking skills between all the student subunits in the Western Division. Thank you for your time and consideration for the position.

Sincerely,

*Estevan Manuel Vigil*

***Don't forget to vote for the next WDAFS Student Representative before July 15!***

*All WDAFS students in good standing are encouraged to vote between now and July 15, 2016. Vote at this link today: [WDAFS Student Voting](#).*



## Mid-year Flashback

The Western Division Executive Committee held its mid-year meeting in December 2015 in Bozeman, MT. Pictured here are your fearless leaders. Thanks to Jim Bowker for sharing this picture.



## In other news... Tidbits from around AFS

### *Congratulations, Doug Austen!*

AFS Executive Director, Doug Austen was recently acknowledged with two prestigious awards: the Gerald H. Cross Alumni Leadership Award from Virginia Tech Department of Fish and Wildlife Conservation and the College of Natural Resources and the Environment, and the NRM Distinguished Alumni Award from South Dakota State University Department of Natural Resource Management.

For more information, go to:

<http://fisheries.org/2016/05/afs-executive-director-receives-two-leadership-awards/>



The Oregon Chapter American Fisheries Society Native Fish Committee organizes a 24-hour annual workshop featuring nongame native fish of Oregon. This year's featured species are the Umpqua chub, dace, and pikeminnow. We will study these species through presentations and field sampling at Tiller, Oregon, September 13-14. We will camp at the 3C Rock Campground the night of September 13. If you plan on attending, please email Jim Capurso at [jcapurso@fs.fed.us](mailto:jcapurso@fs.fed.us) including your name, email, and telephone number. Although some presentations are lined up, if you have studied these species and wish to present, please notify Jim as well.

More information can be found in the flyer at the end of this newsletter.



INTERNATIONAL  
TROUT CONGRESS

**“Conversations to Promote a Global Trout Conservation Network”**

**October 2-6, 2016  
Bozeman, Montana, USA**

The 1<sup>st</sup> International Trout Congress includes an art festival, open house at the “Trout and Salmonid Collection” at the Montana State University Library, hosted social at world famous Simms Manufacturing, and more.

Call for papers is currently open. Papers related to the themes of the Congress, including trout conservation and science, literature, art, culture, and education are welcome. Deadline for submissions is August 15, 2016.

For more information, visit [www.troutcongress.org](http://www.troutcongress.org)

# Important Dates and Deadlines

## **2016**

### **July 15**

#### **Voting for WDAFS Student Rep Closes!**

For more information see page 22-23 of this newsletter. Cast your vote today!

### **August 21-25**

#### **146<sup>th</sup> Annual AFS Meeting, Kansas City, MO**

*Fisheries Conservation and Management: Making Connections and Building Partnerships.* Register today at: [2016.fisheries.org/registration/](http://2016.fisheries.org/registration/) Early registration ends July 8.

### **August 30 – September 1**

#### **Salvelinus confluentus Curiosity Society Meeting, Bitterroot Valley, MT**

More information is available on page 10 of this newsletter.

### **September 13-14**

#### **2016 Nongame Native Fish Workshop, Tiller, OR**

This year's featured species are the Umpqua chub, dace, and pikeminnow. More information in flyer at the end of this newsletter.

### **October 2-6**

#### **1<sup>st</sup> International Trout Congress, Bozeman, MT**

*Conversations to Promote a Global Trout Conservation Network.* Call for papers is currently open. For more information, visit [www.troutcongress.org](http://www.troutcongress.org).

## **2017**

### **May 22-25**

#### **WDAFS Annual Meeting – Missoula, MT**

Save the date! More information is available at <http://wdmtg.fisheries.org/>

### **August 20-24**

#### **AFS Annual Meeting – Tampa, FL**

Details to come – watch [www.fisheries.org](http://www.fisheries.org) for updates.

If you have an important date or deadline you'd like to have featured in this newsletter, please send the information to [westerndivnewsletter@gmail.com](mailto:westerndivnewsletter@gmail.com)

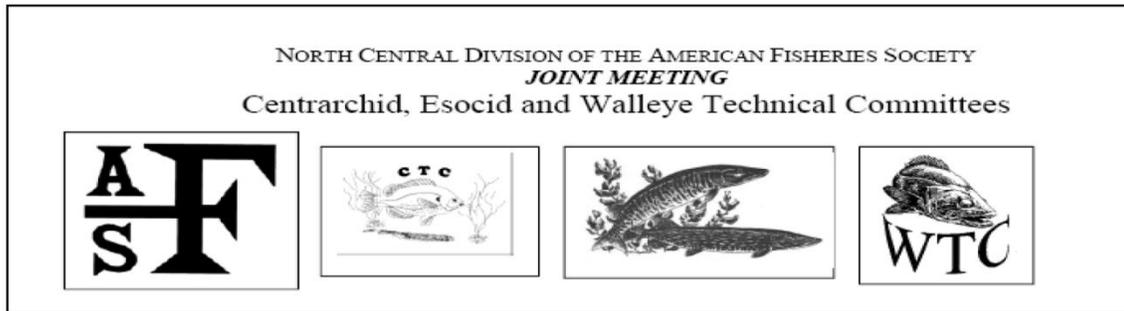
Deadlines for the Tributary are on the 8<sup>th</sup> of March, June, September and December. We aim to have the Tributary posted by the 15<sup>th</sup> of that month.

Past Tributaries can be found at <http://wdafs.org/newsletter/>

Your Tributary co-editors are *Tracy Wendt (CO/WY Chapter)* and *Luciano Chiaramonte (ID Chapter)*. We are always looking for chapter news, research updates, small grant updates, and other interesting news from around the Western Division.

Drop us a note today!

[Westerndivnewsletter@gmail.com](mailto:Westerndivnewsletter@gmail.com)



2016 Joint Meeting of the Centrarchid, Esocid, and Walleye Technical Committees – North Central Division of the American Fisheries Society  
*and featuring*



## ANNOUNCEMENT AND CALL FOR PAPERS

Dates: July 25-28, 2016

Location: Ak-Sar-Ben Aquarium, Gretna, Nebraska

Lodging Location: Super 8 14355 NE-31, Gretna, NE (1 402 332-5188)

<http://www.super8.com/hotels/nebraska/gretna/super-8-gretna/hotel-overview>

A block of rooms have been reserved until June 25, 2016 at a rate of Single (\$61.99/night + tax), and Double (\$71.99/night + tax), Available under the name Fisheries Technical Committee Meeting (holding 30 rooms)

### Registration Cost

Cost is anticipated at \$60 for the entire meeting, which includes a fish fry or BBQ social Tuesday; morning and afternoon breaks, lunch and dinner on Wednesday; morning break on Thursday. Students are half price. A continental breakfast is available at the Super 8 in Gretna.

### Continuing Education

A continuing education workshop is planned for Tuesday, July 26<sup>th</sup>. The topic options will include: Habitat Improvement Workshop (Site Visit Included), Developing Methods for Sportfish Control, Upper Colorado Endangered Fishes Recovery Program, and an Optional Free Float Trip for the first 30 registrants. Cost is anticipated at \$50 per person.

### Registration and Presentation Submittal

If you have a paper for inclusion please forward the abstract to John Bruner ([jbruner@ualberta.ca](mailto:jbruner@ualberta.ca)). Meeting registration will be via email to Hilary Meyer at [Hilary.Meyer@state.sd.us](mailto:Hilary.Meyer@state.sd.us). We will accept payment by cash or check at the door. Sorry, we are not equipped to accept credit cards or other forms of electronic payment. Deadline for registration is **June 17th, 2016**. Hope to see you there!

The Native Fish Committee of the  
Oregon Chapter American Fisheries Society  
Presents  
**The 2016 Nongame Native Fish Workshop**  
This Year's Featured Species are  
**Umpqua Chub, Dace, and Pikeminnow**



Umpqua Chub (*Oregonichthys kalawatseti*)



Umpqua Dace (*Rhinichthys evermanni*)



Umpqua Pikeminnow (*Ptychocheilus umpquae*)

**September 13-14, 2016**  
**Tiller, Oregon**

The Native Fish Committee of the Oregon Chapter American Fisheries Society organizes annual field workshops featuring nongame native fish in Oregon. This year, the committee will study three nongame native fish found in the Umpqua River; the Umpqua Chub, Dace, and Pikeminnow. Species experts will lead discussions and field sampling to assist workshop participants to understand the biology of the species and associated management challenges. This is an opportunity to experience the species and their habitat.

There is no charge to participate in the workshop. All biologists are welcome to participate and students are encouraged to attend. We will camp the night of September 13 at Three C Rock Campground, 4 miles from Tiller on County Road 46. No water is available at the campground. Bring your own food, water, and camping gear.

The workshop will start 1:00 PM September 13 at the conference room in Tiller Ranger Station (27812 Tiller Trail Highway) and will end at 100 PM on September 14. If you plan to attend, please RSVP James Capurso, OCAFS Native Fish Committee Chair, at [jcapurso@fs.fed.us](mailto:jcapurso@fs.fed.us).

Photos courtesy of Brian Sidlauskas

## 2016 Joint Meeting of the Centrarchid, Esocid, and Walleye Technical Committees – North Central Division of the American Fisheries Society

July 25-28, 2016

Ak-Sar-Ben Aquarium, Gretna, Nebraska



The Tuesday afternoon workshop of the joint summer meeting will feature presentations by members of the Upper Colorado River Endangered Fish Recovery Program. Some of the presentations and speakers will be:

1. **The Upper Colorado River Endangered Fish Recovery Program's Nonnative Fish Management: Why Are We Here Today?**  
Kevin McAbee, Nonnative Fish Coordinator, Upper Colorado River Endangered Fish Recovery Program
2. **A Summary of the Current Ecology and Management of Smallmouth Bass in the Upper Colorado River Basin**  
Tildon Jones, Fisheries Supervisor, U.S. Fish and Wildlife Service
3. **A Summary of the Current Ecology and Management of Northern Pike in the Upper Colorado River Basin**  
Koreen Zelasko, Research Associate, Larval Fish Laboratory, Colorado State University
4. **A Summary of the Current Ecology and Management of Walleye in the Upper Colorado River Basin**  
Travis Francis, Fisheries Supervisor, U.S. Fish and Wildlife Service
5. **Empirical Research Supports Development of a Multi-Faceted Nonnative Fish Removal Program in the Upper Colorado River Basin**  
Dr. Kevin Bestgen, Senior Research Scientist, Larval Fish Laboratory, Colorado State University

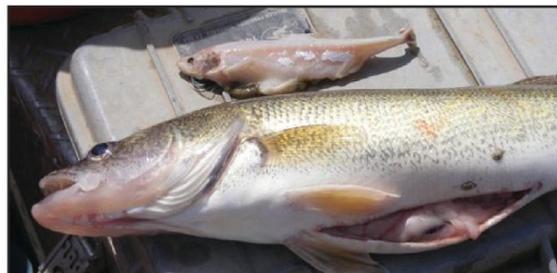
### Upper Colorado River Endangered Fish Recovery Program



Established in 1988, the Recovery Program is a voluntary, cooperative partnership involving state and federal agencies, environmental groups, and water and power user organizations in Colorado, Utah and Wyoming. Its purpose is to recover the endangered humpback chub (*Gila cypha*), bonytail (*Gila elegans*), Colorado pikeminnow (*Ptychocheilus lucius*), and razorback sucker (*Xyrauchen texanus*) while water development proceeds in accordance with federal and state laws. The Recovery Program performs recovery actions in five program elements: flow protection and delivery; habitat restoration; hatchery propagation and stocking; nonnative fish management; and research and monitoring.

### Nonnative Predatory Fish

The introduction, establishment, and proliferation of nonnative fishes is now considered the primary threat to the recovery of the endangered fishes. Unfortunately, in the upper Colorado River basin, despite years of significant effort, the nonnative threat remains largely uncontrolled. Although there are more than 50 nonnative fish species in the upper Colorado River basin, northern pike (*Esox lucius*), smallmouth bass (*Micropterus dolomieu*), and walleye (*Sander vitreus*) are the species considered to pose the greatest threat to the endangered fishes. These large bodied, predatory species cause substantial ecological harm to the endangered species.





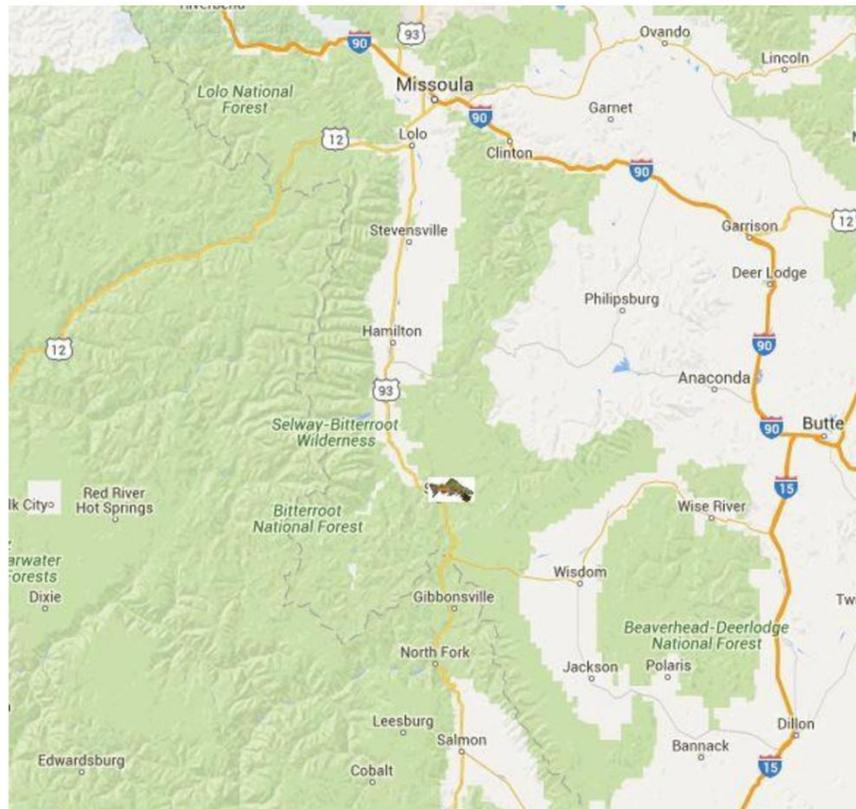
***Salvelinus confluentus* Curiosity Society 2016  
Meeting  
East Fork Bitterroot River, Montana**

We'll be having the 2016 ScCS meeting in Sula, MT on the East Fork Bitterroot River, and will focus on bull trout research and issues in the Bitterroot River drainage and western Montana.

*Registration is now OPEN  
for the 2016 ScCS meeting in Sula, Montana.*

*Go to: <http://www.cvent.com/d/8fqglg>*

*Also, check out:  
<https://www.facebook.com/2016SalvelinusConfluentusCuriositySociety/>  
For more and updated information—*



*2016 ScCS Organizing Committee:  
Mike Jakober, Dan Kenney, Scott Spaulding; U.S. Forest Service  
Chris Clancy, Leslie Nyce; Montana Fish, Wildlife & Parks*

When we get a better idea of attendance, we will provide more information about proposed types of sampling and request your preferences.

Miscellaneous:

- Please don't hesitate to bring along family or friends—there are non-fishy things to do in the area, including a soak at the Lost Trail Hot Springs and a visit to the Big Hole National Battlefield. There is an option for guest registration on the website at the same fee for full ScCS participants, but we can work with you on lowering the cost for extra folks if they aren't eating or don't want a keepsake.
- The fishing in the Bitterroot River and tributaries, especially for westslope cutthroat trout is pretty good, and there are opportunities to catch native grayling nearby.
- We have the Guard Station reserved from about 2 p.m. on Tuesday through about noon on Thursday, so if you will arrive on Monday or stay over until Friday, you will need to arrange another campsite for those nights—get in touch for ideas.
- On the registration page is a deadline for refunds on registration. Despite the deadline there, full or near-full refunds up to the date of the meeting shouldn't be a problem, with the possible exception of commitments to caterers. So please don't hesitate to register even if you think that there is a fair chance that you might have to cancel.

Additional Information:

Mike Jakober [mjakober@fs.fed.us](mailto:mjakober@fs.fed.us)  
Dan Kenney [dkenney@fs.fed.us](mailto:dkenney@fs.fed.us)  
Scott Spaulding [scottspaulding@fs.fed.us](mailto:scottspaulding@fs.fed.us)  
Chris Clancy [cclancy@fs.fed.us](mailto:cclancy@fs.fed.us)  
Leslie Nyce [lnyce@fs.fed.us](mailto:lnyce@fs.fed.us)

East Fork Cabin:

<http://www.fs.usda.gov/recrea/bitterroot/recreation/camping-cabins/recrea/?recid=60346&actid=101>

Sula Country Store and Resort:

<http://www.bitterroot-montana.com/index.html>

Lost Trail Hot Springs

<http://losttrailhotsprings.com/>