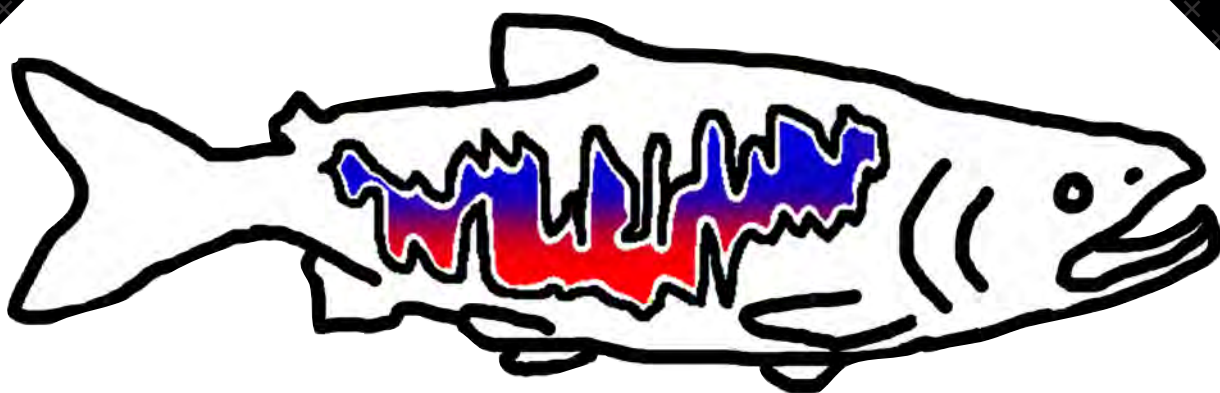




**Oregon Chapter of the
American Fisheries Society**



Research and Management in a Changing Climate

**March 13–16, 2018 | Eugene, Oregon
54th Annual Meeting**

PROGRAM PRINTING





Get Involved!

Become a More Active Member of the Oregon Chapter

Now is the time to get involved with the Oregon Chapter! At the beginning of the Annual Meeting, all of the External Committees will meet in the Vista Room at a Meet Your External Committees Networking Event. This will be a great time to meet members of each committee and learn how you can get involved. Some committees will also hold separate committee meetings (listed in the program) to discuss annual work plans.

Every committee can use some fresh ideas, more participants, and new faces. If you are interested in stepping up your participation but can't attend the meetings, email ExternalDirector@orafs.org.

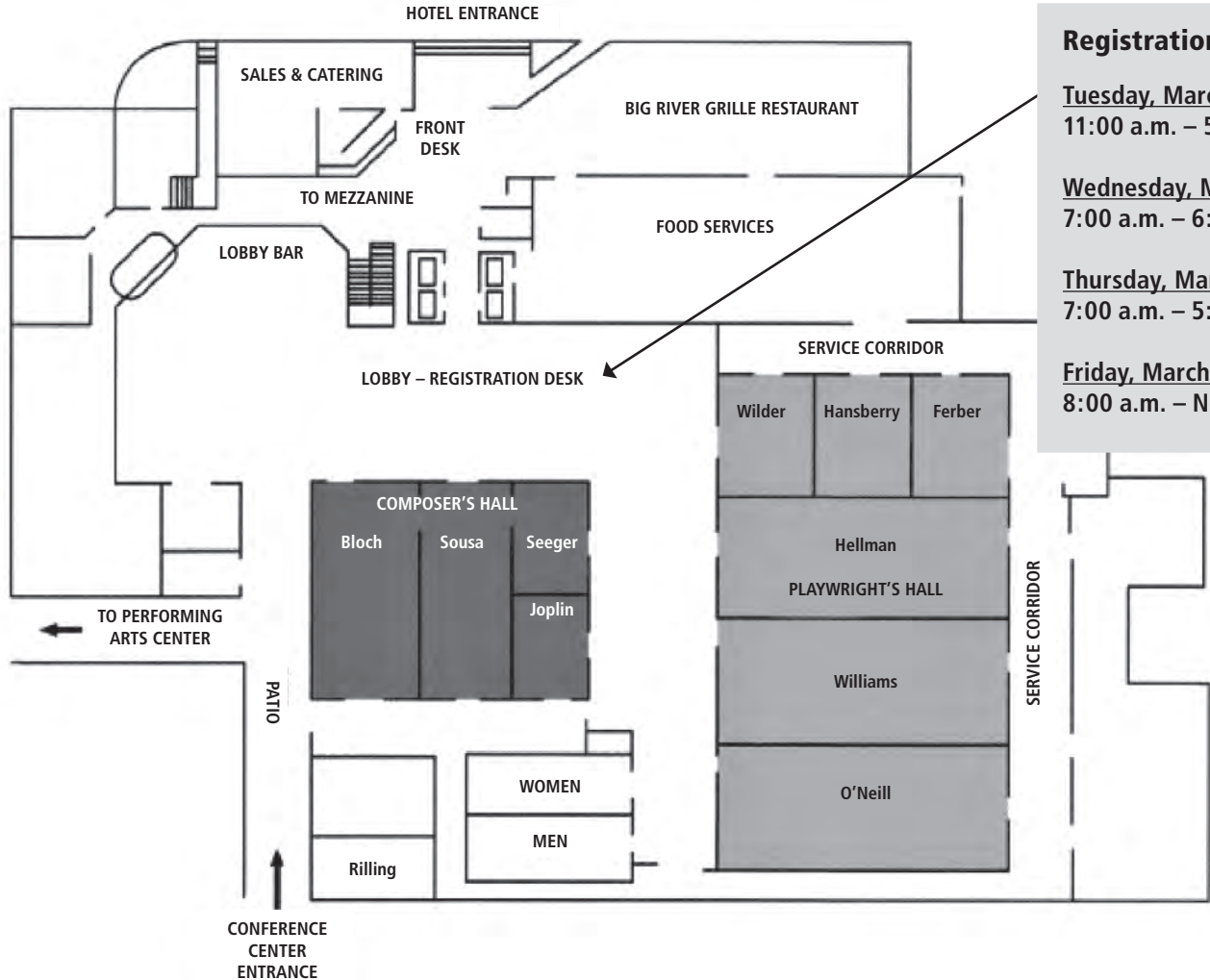
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SCHEDULE AT A GLANCE

TUESDAY, MARCH 13		
11:00 a.m. – 5:00 p.m.	Registration / Information	Lobby
1:00 p.m. – 5:00 p.m.	Workshops (Restoration & Communication)	Bloch / Sousa
3:00 p.m. – 3:20 p.m.	Coffee & Refreshment Service	Lobby
5:00 p.m. – 6:00 p.m.	Workshop Social	Vista
WEDNESDAY, MARCH 14		
7:00 a.m. – 6:30 p.m.	Registration / Info / Sales Desk Open	Lobby
7:00 a.m. – 8:00 a.m.	Coffee & Refreshment Service	Lobby
8:00 a.m. – Noon	Workshops (Restoration & eDNA)	Bloch / Sousa
8:00 a.m. – Noon	Reservoir Dogs Meeting	Wilder
8:00 a.m. – 2:30 p.m.	Trade Show Display Setup	Lobby
10:00 a.m. – 11:00 a.m.	External and Internal Committee Chairs Brunch	Vista
11:00 a.m. – Noon	Meet Your External Committees Networking Event	Vista
Noon – 7:30 p.m.	Poster Session Setup	Hellman
1:00 p.m. – 1:10 p.m.	Welcome	O’Neill / Williams
1:10 p.m. – 2:40 p.m.	Plenary Session (2 speakers)	O’Neill / Williams
2:30 p.m. – 11:30 p.m.	Trade Show	Lobby
2:40 p.m. – 3:00 p.m.	Break & Refreshment Service	Lobby
3:00 p.m. – 5:00 p.m.	Concurrent Sessions (6)	See Sessions at a Glance
6:00 p.m. – 7:30 p.m.	Student-Mentor Mixer	Vista
8:00 p.m. – 11:30 pm	Poster Session and Trade Show Social	Williams / Hellman/ Lobby
9:00 p.m. – 10:30 p.m.	Cornhole Tournament / Film Festival	Williams / Hellman
THURSDAY, MARCH 15		
7:00 a.m. – 5:00 p.m.	Registration / Info / Sales Desk Open	Lobby
7:00 a.m. – 8:00 a.m.	Spawning Run / Carcass Crawl	Lobby
7:30 a.m. – 8:30 a.m.	Coffee & Refreshment Service	Lobby
8:00 a.m. – 5:00 p.m.	Trade Show	Lobby
8:00 a.m. – Noon	Concurrent Sessions (6) + Break & Refreshment Service 10:00 – 10:20 a.m.	See Sessions at a Glance
Noon – 1:45 p.m.	Awards Luncheon (no charge), Professional Awards, Scholarship Awards	Playwright’s Hall
1:45 p.m. – 3:00 p.m.	OR AFS Business Meeting, followed by coffee break at 2:45 p.m.	Playwright’s Hall
3:00 p.m. – 5:00 p.m.	Concurrent Sessions (6)	See Sessions at a Glance
5:30 p.m. – 6:30 p.m.	Meet Your Manager Networking Event	Playwright’s Hall
6:00 p.m. – 8:30 p.m.	Silent Auction	Playwright’s Hall
6:30 p.m. – 9:00 p.m.	Banquet, Awards, Oral Auction, Raffle	Playwright’s Hall
9:00 p.m. – 10:30 p.m.	Cornhole Tournament	Playwright’s Hall
9:00 p.m. – 11:30 p.m.	Entertainment: D.J. / Open Mic	Playwright’s Hall
FRIDAY, MARCH 16		
8:00 a.m. – Noon	Registration / Info / Sales Desk Open	Lobby
7:30 a.m. – 8:30 a.m.	Coffee & Refreshment Service	Lobby
8:00 a.m. – 10:20 a.m.	Trade Show	Lobby
8:00 a.m. – Noon	Concurrent Sessions (5) + Break & Refreshment Service 10:00 – 10:20 a.m.	See Sessions at a Glance

Hilton Eugene Conference Center



Registration Desk

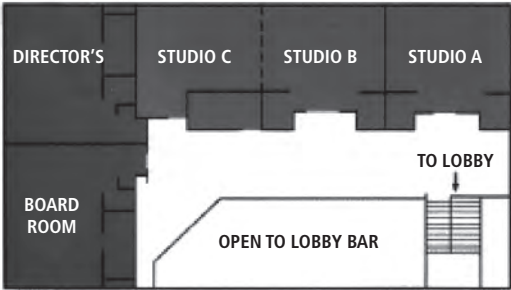
Tuesday, March 13
11:00 a.m. – 5:00 p.m.

Wednesday, March 14
7:00 a.m. – 6:30 p.m.

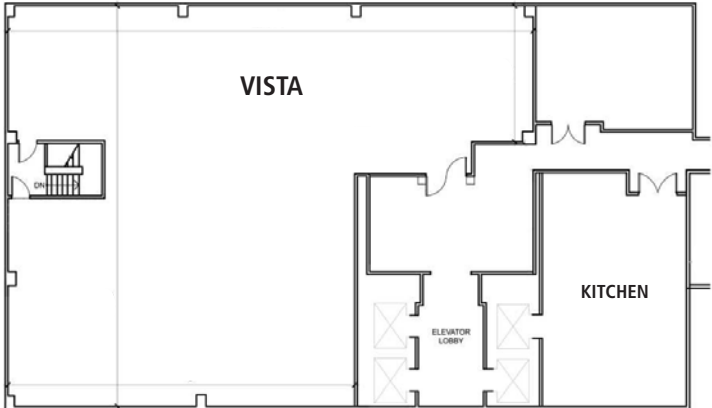
Thursday, March 15
7:00 a.m. – 5:00 p.m.

Friday, March 16
8:00 a.m. – Noon

Hotel Mezzanine



Vista, 12th Floor





Welcome to the 54th Annual Meeting of the Oregon Chapter of the American Fisheries Society. Wow—54 years! On behalf of the Executive Committee and the 2018 Planning Team, we want to welcome you and encourage you to get the most out of this meeting. We know that whether this is your first meeting or your 54th, the program and networking events will have you coming back for more!

I would like to express a heartfelt thank-you to Kris Homel and the Planning Team. The planning and execution of a meeting of this size and caliber would not be possible without the energy and efforts of so many people. Thank you, team! Thanks to the workshop organizers, session moderators, and all the speakers and poster presenters. We have a diverse slate of symposia and presentations, so thanks to everyone for your contributions. I would also like to thank all of our vendors, sponsors, and raffle auction donors for your continued support!

This meeting theme, *Research and Management in a Changing Climate*, is a timely topic, and the technical program is packed with talks on climate change science as it relates to fisheries research, management, and resiliency. For first-time attendees and students, please consider attending the Skills for All Stages session on Thursday morning. Students, please attend the Student-Mentor Mixer on Wednesday night. For those of you interested in getting more involved, please attend the Meet Your External Committees networking event on Wednesday morning or attend any External Committee meeting that might be of interest to you. On Thursday we will be announcing recipients of scholarships and awards during the awards luncheon, followed by the business meeting. All are invited and welcome to attend.

It continues to be an honor and a privilege to serve as the President of the Oregon Chapter, the most decorated Chapter in AFS. I look forward to connecting with old friends and making new friends this week. Enjoy the meeting and please take advantage of all the learning and networking opportunities the meeting has to offer. Lastly, I would like to thank all of you for your commitment to the Chapter and our profession.

SHIVONNE NESBIT
President, Oregon Chapter of the American Fisheries Society

2017–2018 Executive Committee



Shivonne Nesbit
NOAA
President



Kris Homel
ODFW
President-Elect



Benjamin Clemens
ODFW
Past President



Shannon Richardson
ODFW, Vice President



Josie Thompson
ODFW
Secretary



Katie Pierson
ODFW
Treasurer



Dan Bingham
Rogue Biological
External Director



Kevin Stertz
ODFW
Internal Director



Brook Schlipf
OSU
Student Subunit Rep.



Rachel Lertora
OSU
Student Subunit Rep.

The **President** of the Chapter presides at all Chapter meetings, chairs the ExCom, is Chapter Representative to the Western Division and to the parent society, makes appointments and performs other duties and functions as authorized and necessary for overall Chapter effectiveness, crafts a one-year work plan and budget, arranges sponsorships, and writes columns for the newsletter.

The **President-Elect** chairs the Program Committee, assumes the duties of the President in the event of the President's absence or inability to act, plans the Annual Meeting theme, program, and presentations.

The **Past President** chairs the Nominating Committee and also chairs the ExCom if neither the President nor President-Elect is available, imparts historical wisdom, manages the Trade Show, and prepares for retirement.

The **Vice President** chairs the Resolutions and Bylaws Committee, assumes the duties of the President-Elect in the event that office is vacated prior to completion of the term, and manages Student Activities and Raffle & Auction committees.

The **Secretary** keeps the official records of the Chapter.

The **Treasurer** collects and banks any funds allotted to the Chapter, disburses funds as authorized by the Executive Committee, serves on the Financial Sustainability Committee, and disseminates information regarding the performance of the ORAFS investment portfolio.

The **External Director** supervises and motivates all External Committees. Ensures that committees respond to ExCom (and vice-versa) and participate in the Annual Meeting.

The **Internal Director** appoints the Historian and chairs of the Awards, Scholarships, and the Arrangements committees. Manages facility, food breaks, and A/V needs and costs for the Annual Meeting.

The **Student Subunit Representatives** serve as liaisons between the Chapter and the approved student subunit(s) of the Chapter. Assist Vice President with student planning for the Annual Meeting.

2017–2018 Committee Chairs

INTERNAL COMMITTEES

AFS/TWS LIAISON
Laura Tesler (ODFW)

AWARDS
Colleen Fagan (ODFW)

RESOLUTIONS & BYLAWS
Shannon Richardson (ODFW)

HISTORIAN
Jason Seals (ODFW)

INVESTMENT
Anthony Siniscal (ODFW)

NEWSLETTER EDITOR
Natalie Scheibel (ODFW)

SCHOLARSHIPS
Scott Heppell (OSU)

WEBMASTER
Lora Tennant (NPT)

EXTERNAL COMMITTEES

EDUCATION & OUTREACH
Ryan Battleson (ODFW)

FISH CULTURE
Ryan Couture (ODFW)

FRESHWATER HABITAT
Cory Sipher (BLM)

LEGISLATIVE
Haley Lutz (NNWC)

Troy Brandt (RDG)

MARINE HABITAT & ECOLOGY
Ashley Knight (OSU)
Michael Harte (OSU)

NATIVE FISH
Jim Capurso (USFS)

NATURAL PRODUCTION
Ian Tattam (ODFW)

SOCIAL MEDIA
Demian Ebert (PC)

DIVERSITY, EQUITY, AND INCLUSION
Gabe Sheoships (FTC / PSU)

COMMUNICATIONS
William 'Jim' Yeo (OSU)



Greetings, Colleagues!

It is my pleasure to welcome you to the 54th Annual Meeting of the Oregon Chapter of AFS. The theme of our meeting is *Research and Management in a Changing Climate*. We typically think about changing climates in a scientific context. However, socio-economic and political climates are also changing, and these can have profound effects on fisheries research and management. The planning team (page 7) has worked hard to build a program that explores these concepts, and I would like to personally thank all the volunteers who donated their time, effort, and resources to bring this program to fruition!

Our theme connects to the diversity initiatives that have formed the core of Shivonne Nesbit's leadership with ORAFS. Just as diversity increases the ability of a species to adapt, so too must we embrace diversity to encourage the greatest range of ideas, perspectives, and technologies so that our profession can adapt to meet changing demands.

This adaptation is actively ongoing and takes many forms. For example, it occurs through continuing to investigate physical and biological changes to the environment and then incorporating this into our research, conservation, and management plans. At times, this may require revisiting past assumptions about how ecosystems function, as climate change results in novel conditions. Adaptation also occurs as we take advantage of new technologies, which may rapidly enhance our ability to sample or understand the environment, or when we develop new communication strategies to help us overcome political or socio-economic barriers. And, now more than ever, adaptation of our profession occurs as we strike a balance between scientific neutrality, detailed interpretation of results, and advocacy. How we navigate this balancing act will shape the public's impression of us as scientists and, in return, how effectively we can conduct our research and management.

Our Annual Meeting program reflects this adaptation through workshops and technical sessions, in the plenary with Dr. Bachelet and Dr. Biedenweg, and through networking events. We hope you will take advantage of opportunities to attend a diverse range of sessions, to meet your external committees, and to enjoy our socials, which are designed to foster new collaborations and solution-oriented thinking. Thank you to everyone for attending this meeting and for contributing your ideas to our profession as we conduct *Research and Management in a Changing Climate*!

KRISTEN HOMEL

President-Elect, Oregon Chapter of the American Fisheries Society

2018 Annual Meeting Planning Committee

PROGRAM COMMITTEE CHAIRS

Kris Homel (ODFW) and Natalie Scheibel (ODFW)

ANNUAL BUSINESS MEETING

Shivonne Nesbit (NOAA)

BUDGET

Katie Pierson (ODFW)

FACILITY & FOOD ARRANGEMENTS

Kevin Stertz (ODFW)

IMBIBEMENTS

Michael Scheu (OSU)

POSTER CHAIR

Christina Murphy (OSU)

RAFFLE & AUCTION

Kevin Rybacki (ODFW)
Sarah Sapienza (ODFW)
Shannon Richardson (ODFW)
Christine Hirsch (USFS)
Doug Garletts (USACE)
Benji Ramirez (ODFW)

REGISTRATION

Katie Pierson (ODFW)
Josie Thompson (ODFW)

SIGNS & BANNERS

Britta Baechler (PSU)
Lauren Zatkos (OSU)
Francisco Pickens (OSU)

VENDOR EXHIBITS

Ben Clemens (ODFW)
Troy Brandt (RDG)

TECHNICAL PROGRAM

Kris Homel (ODFW)
Natalie Scheibel (ODFW)
Shivonne Nesbit (NOAA)

ENTERTAINMENT

Shivonne Nesbit (NOAA)
Ryan Flaherty (PNNL)
Kris Homel (ODFW)

STUDENT COORDINATION & ACTIVITIES

Jitesh Pattni (ODFW)
Shannon Richardson (ODFW)

STUDENT PAPER JUDGING

Johnny Armstrong (OSU)

SPAWNING RUN & CARCASS CRAWL

Katherine Nordholm (ODFW)
Shannon Richardson (ODFW)

WEBSITE & ONLINE ABSTRACT SERVICE

Lora Tennant (NPT)
Mike Meeuwig (ODFW)

WORKSHOPS

Julie Sharp (UA)
Kris Homel (ODFW)

SPONSORSHIPS

Troy Brandt (RDG)
Ben Clemens (ODFW)

VOLUNTEER COORDINATORS

Jitesh Pattni (ODFW)
Shannon Richardson (ODFW)

PHOTOGRAPHY

Rich Grost (PC)

LOGO DESIGN

Kris Homel (ODFW)

ADVERTISING

Josie Thompson (ODFW)
Holly Huchko (ODFW)
Demian Ebert (PC)



Fisheries-Relevant Facts About the Current State of Climate Change Science

Dr. Dominique Bachelet will welcome attendees to the 2018 Oregon AFS meeting with an overview of the state of climate science as it relates to fisheries. Dominique will briefly review the state of climate modeling and the strengths and limitations of the climate projections as well as touch on Representative Concentration Pathways land-use implications. She will review the downscaling methods, highlighting the differences between the various approaches. Finally, she will continue with a brief description of Dynamic Global Vegetation Models (DGVMs) and how their results will affect projections of streamflow.

Dominique is an ecologist with 38 years of combined education and work experience. Her research has focused on global climate change impacts since 1989, and she has been involved in several Intergovernmental Panel on Climate Change reports since 1995. She has published over 80 peer-reviewed papers and 30 book chapters, co-edited two books, and participated in model documentation and data archiving. She helped develop the first DGVM (MC1) that included a dynamic fire model. Her modeling team at the Conservation Biology Institute (CBI) updated it (MC2) by including a land-use component.

Since 2007, she has spent much time in the nongovernmental organization world, focusing on science information delivery and communication. As the director of climate change science at The Nature Conservancy, Dominique worked with her team to create the “climate wizard” (climatewizard.org) to deliver climate projections. At CBI, she worked closely with web application developers to ensure that the most relevant state-of-the-art climate change information, including impacts, was delivered to the stakeholders who needed it (e.g., climateconsole.org/conUS).

Her most recent work produced a variety of web tools, including an online state-and-transition modeling platform (landscapesim.org) and a decision support tool (eemsonline.org) developed by her doctoral student. She is now at Oregon State University, working on a backlog of papers that should document the modeling work done by her team at CBI over the last five years. She hopes to continue doing research simulating future fires and creating user-friendly web tools to deliver the results.

Dominique holds a PhD from Colorado State University and has worked as a quantitative ecologist with the U.S. EPA Environmental Lab in Corvallis, Oregon. She is currently an associate professor in the Department of Biological and Ecological Engineering at OSU and also serves as the senior climate change scientist at CBI.

Dominique Bachelet, Senior Climate Change Scientist at the Conservation Biology Institute and Associate Professor at OSU

Dominique Bachelet
1:10–1:55 p.m.
Wednesday, March 14
O’Neill / Williams



Kelly Biedenweg

Assistant Professor of Human Dimensions at OSU

Kelly Biedenweg

1:55–2:40 p.m.

Wednesday, March 14

O'Neill / Williams

Fisheries Research and Management in a Changing Social Climate

Dr. Kelly Biedenweg will present an overview of how a changing social climate affects research and management. Social science is increasingly discussed as critical for holistic fisheries research and management, as we recognize that since humans benefit from and impact the fisheries themselves, we cannot study biophysical processes in a vacuum. While the field is still grappling with understanding how to make this integration, we are also faced with a glaring shift in sociocultural values, attitudes, and benefits about fish and their ecosystems throughout the U.S. This presentation will explore these broad sociopolitical trends and their implications for fisheries research and management.

Kelly is an assistant professor of human dimensions at Oregon State University, where she instructs Communication Skills for Fisheries and Wildlife Professionals, Multicultural Perspectives in Natural Resource Management, and Psychology of Environmental Decisions. Her research interests are in human well-being and social values associated with the natural environment, social learning, natural resource management processes, adult education and communication, and program evaluation and facilitation. She has focused her research in Latin America and the Pacific Northwest, often collaborating with The Nature Conservancy, the U.S. Forest Service's Pacific Northwest Research Station, the Puget Sound Partnership, and King County, among others. Kelly recently received a three-year Environmental Protection Agency early career award for her research on integrating human well-being and ecosystem services.

Kelly also received a three-year NSF Science, Education and Engineering for Sustainability Postdoctoral Fellowship to explore quantitative and spatial metrics of human values that could be integrated into resource management planning. Through this fellowship, she worked with the Puget Sound Partnership, where she led a study to develop holistic human well-being indicators that were relevant to the broad Puget Sound population. In 2015, 15 of these indicators were adopted by the Leadership Council and will now be monitored biennially to evaluate changes as a result of changing (or not) environmental conditions and to promote strategy development that explicitly acknowledges diverse social trade-offs.

Kelly is a former NSF IGERT, American Association of University Women, and University of Florida Alumni fellow. She earned a PhD from the University of Florida in the human dimensions of natural resource management, with certificates in environmental education and communication and Latin American studies, and a concentration in tropical conservation and development. She also holds a master of science in conservation biology and a bachelor of science in marine ecology.

Please Welcome Our 2018 Vendors!



Advanced Telemetry Systems (ATS)
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jadsem@atstrack.com | www.atstrack.com

Advanced Telemetry Systems (ATS) offers innovative and reliable wildlife tracking products designed for researchers world-wide. Visit ATStrack.com to see complete product details and to request your same day product quote.



Aquatic Contracting, LLC
 Portland, Oregon | 503-799-0934
justin@aquatic-con.com | www.aquatic-con.com

Aquatic Contracting, LLC was founded in 2001 by a fisheries biologist, and we are committed to restoring aquatic habitats. As a full-service contractor, our expertise in design/build and our ability to provide planning, permitting, and construction services makes us leaders in the field of habitat restoration.



Biomark, Inc.
 Boise, Idaho | 208-275-0011
customerservice@biomark.com | www.biomark.com

Biomark specializes in RFID tag (PIT tag) and related PIT tagging equipment and services for the fisheries and wildlife communities and integrates these products by designing, manufacturing, installing and maintaining the systems that detect the tags at specific and strategic locations for invaluable data collection and comprehensive results. Biomark also provides additional specialized services including fish tagging, statistical analysis, software development, study execution, report writing and computational model development to support analysis and decision making.



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loren.jensen@bio-oregon.com
www.bio-oregon.com

Bio-Oregon commits itself to producing top quality fish feeds backed up by extensive research and highly developed logistics. Bio-Oregon's experienced technical support and sales team are readily available to help all aspects of your operations and ensure that you get the best out of our fish feed products.



John L. Fryer Aquatic Animal Laboratory
 Corvallis, OR | 541-737-0743
aahl.manager@oregonstate.edu
www.microbiology.science.oregonstate.edu/aahl

The J.L. Fryer AAHL is a research facility with wet and dry labs, available to researchers and agencies studying disease, environmental or climatic factors in a range of freshwater species.

Little Pond Nature Prints



Specializing in the Japanese
 Art of Fish Printing

Little Pond Nature Prints
 Newport, Oregon | 541-961-7567 |
koike.bruce@gmail.com
www.koikebruce.wixsite.com/koike-fish-prints

Bruce Koike specializes in the Japanese art of fish printing (Gyotaku). Presented are original impressions taken directly from various aquatic animals. Contact Bruce about the post-conference fish printing workshop.



Lotek Wireless, Inc.
 Seattle, Washington |
 206-783-9356
matt@biosonicstelemetry.com
www.biosonicstelemetry.com

Lotek fish and wildlife monitoring systems allow researchers in over 100 countries worldwide to track animals, birds and fish of almost any size, in almost any environment. Our craft is technology, but our passion is the environment. We're committed to providing innovative solutions for a sustainable future.



Oregon RFID
 Portland, Oregon |
 503-788-4380
teddi@oregonrfid.com |
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Oregon RFID has manufactured equipment for tracking fish and wildlife using low frequency PIT tags and readers since 2003. Our products are used worldwide for scientific research and commercial operations. Oregon RFID also provides technical support and is an AFS member corporation.



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wwilliams@pcpipe.com
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Pacific Corrugated Pipe Co. has been manufacturing corrugated metal pipe and related drainage products since 1935. Our company offers the highest quality products at competitive prices, great customer service, and timely deliveries.



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**Portland State University
 – Environmental
 Professionals Program**
 Portland, Oregon
 503-725-5388 | epp@pdx.edu

The PSU Environmental Professional Program (EPP) offers respected university-level, technical short courses to Northwest, national, and international professionals. Our classes are offered in short-course format and focused on the skills and knowledge required to implement a wide-range of environmental projects. Major topics include: ecology, analytical methods, field techniques, regulations and project management. Google PSU EPP.



River Design Group, Inc.
 Corvallis, Oregon | 541-738-2920
 tbrandt@riverdesigngroup.com | www.riverdesigngroup.com

River Design Group, Inc. (RDG) provides clients with a team of skilled professionals that combine science-based knowledge with proven restoration techniques to advance the field of ecosystem and river restoration. RDG assists project stakeholders with fish passage, dam removal, stream and river restoration, and other ecological restoration practices across the Pacific Northwest and Intermountain West.



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 doja@smith-root.com
 www.smith-root.com

Smith-Root is offering the only purpose-built eDNA filtration system with pre-loaded filter packets that will standardize eDNA sample collection. Check out our new line of Apex electrofishers that record electrofishing inputs / outputs every second while displaying them on a color LCD screen.



Soul River Inc.
 Portland, Oregon
 503-954-7625 | www.soulriverinc.org

Soul River Inc. connects inner city youth and US military veterans to the outdoors through incredible outdoor educational transformation experiences. By engaging U.S veterans as mentors for inner city youth, we believe that rich, powerful opportunities of healing authentically happen in the midst of Mother Nature. We believe that by connecting youth and veterans to our public lands, wild rivers and fresh waters, and beyond through genuine community, we will ultimately establish and inspire a new generation of environmental leaders that will advocate for our public lands, freshwater and wildlife charging as conservation advocacy leaders.



Upper Snake River Tribes
 Portland, Oregon | 503-880-8164
 Bob@usrtf.org | www.usrtf.org

The Upper Snake River Tribes (USRT) coordinates and pursues fish, wildlife, land, water, air, Cultural Resource, and federal trust responsibility objectives and strategies to meet the policy and guiding principles of their Compact through information gathering and dissemination, facilitation of technical and policy meetings, and drafting of technical and policy statements. USRT Compact tribes include the Burns Paiute Tribe, Fort McDermitt Paiute-Shoshone Tribe, Shoshone-Paiute Tribes and the Shoshone-Bannock Tribes.



Wolf Water Resources
 Portland, Oregon | 503-207-6688
 dcase@wolfwaterresources.com
 www.wolfwaterresources.com

Wolf Water Resources is a multi-disciplinary consulting firm based out of Portland, Oregon. We specialize in watershed science and water resources engineering to restore streams, rivers, and floodplains.



**WORLD
 SALMON
 COUNCIL**

World Salmon Council
 Portland, Oregon | 850-321-4993
 rachel@worldsalmoncouncil.org | www.worldsalmoncouncil.org

World Salmon Council is a 501(c)(3) nonprofit environmental for-purpose organization. Our mission is to provide experiential education and encounters with Pacific wild salmon to connect students and adults with nature and empower community engagement.



▲ **Ian and Shelley Tattam** – Fishing and Crabbing trip, 1 night stay, meals for 2

◀ **JW's Guide Service** – 4 seats on a Fall Chinook Salmon trip at Winchester Bay

Something is bound to reel you in!

Organizations and individuals throughout Oregon have graciously donated fantastic auction and raffle items to show their support for the 54th ORAFS Annual Meeting. All proceeds from the auction and raffle will be used for student scholarships, to support travel to our meeting, and to provide assistance for young professionals to attend the meeting. Silent and live auction items will be displayed at the Meet Your Manager Networking Event and Banquet prior to the Auction and Raffle Event on Thursday evening. This is your chance for a sneak peek at some of the items that will be available.

Art

Christopher Michael Creath – 3 prints

Peter McNamee Photography – Ollalie Creek, Mt. Rainier National Park print

Red Parasol Productions – 2 prints

Roads End Pottery – Handmade pottery plate

Spoonman Creations – Fishy wind chimes

Charles Broda – Fish carving

Jan Roberts-Dominguez – Stoneyburn Gallery art

Mari Williams – 7 art greeting cards, fishy 5x7 postcard art prints

Raven Maps and Images Inc. – Laminated wall map of Oregon

Steve Kucas – Large salmonid picture, wood fish carving, original signed "native fish" print

West of the Moon – Hanging fish bones decoration

Studio Abachar – Print

Ruth Farr – Fish print

Soho Coho-Troll Art – "Fish are not for farming" poster and "From the tidepool" T-shirt

Dede Olson – Art note cards

Laura Tesler – Middle Fork Willamette Bass print

PSM: Joy Cha Studio – 3 handmade salmon "Cheers from PNW" cards

Freshwaters Illustrated – Prints

Tweten Photography – Prints

Books

Carl Schreck – *Biology of Stress in Fish* signed by author

Frank Amato Publications – Books

Steve Kucas – *The Greatest Fishing Stories Ever Told*, *Fishing the Northwest*, *Rivers of America & Coho* tray

Haugen Enterprises – Hunting books

Brew/Wine and Swag

10 Barrel Brewing – Beer

Cascade Lakes Brewing – 20-inch Brown hat & 6-pack

Ex Novo Brewing Company – Beer and pint glasses

Flyboy Brewing – Growlers, hats, gift cards

Hopworks Urban Brewery – 2 cases of beer

Oregon Brewfest – Gift card good for two mugs and 36 tokens

Deschutes Brewery – Beer

Falling Sky Brewing – \$20 gift card

Stag Hollow wines – Wine

Pelican Brewing Company – Gift basket

Willamette Valley Vineyards – Tour and tasting gift certificate for 8

- Claim 52 Brewing** – Gift certificates + hats
- Sunriver Brewing Company** – \$30 gift card, hat, T-shirt, pint glass
- East Side Distilling** – Private party/tasting for 10
- 7 Devils Brewing** – Growler, refill, 2 pint glasses, hat, coasters, sticker
- Buoy Beer** – 6-pack, 2 bottles of seasonal release, 2 koozies, socks
- Worthy Brewing Company** – Case of beer, merch
- Bull Run Distillery** – Gift basket with spirits, tasting cards, glasses
- Sky High Brewing** – Gift basket
- Cor Cellars** – 6-person private tasting



Art Martin Guide Service – 4 seats on a Spring or Fall Chinook trip or a catch and release Sturgeon trip on the Columbia or Willamette River

Fishing Gear

- Sportsmans Warehouse: Albany** – Gift card
- Sportsmans Warehouse: Kalamath Falls** – Gift card
- Sportsmans Warehouse: Portland** – Lamiglass Redline Rod (\$149.99), Pflueger Reel(\$59.95) and (4) \$50 gift cards
- Sportsmans Warehouse: Salem** – Gift card
- Tenkara Rod Co.** – Tenkara fly rod: Sawtooth package
- St. Croix Rods of Park Falls** – 2 separate 40% discount certificates
- Silver Horde** – Lure bag & various lures fishing gear
- Rajeff Sports** – Reel combo & Swing Switch 11'7 #7 fly rod
- Rajeff Sports** – Echo Traverse 690 Kit Rod/reel combo & Swing Switch 11'7 #7 fly rod
- Rajeff Sports**– Echo Traverse 690 Kit Rod
- The Fly Fishing Shop** – Box of flies
- Tenkara USA** – Tenkara fly rod
- Englund Marine: Astoria** – \$30 gift card
- Englund Marine: Charleston** – 3 crab rings with rope
- Oregon Rod, Reel and Tackle** – \$80 gift card

Food

- Arrowhead Chocolates** – \$25 gift card
- Fire on the Mountain** – \$25 Gift card
- New Seasons Market** – \$50 gift card
- Skyway Bar & Grill** – 2 \$25 gift certificates
- Human Bean** – 2 \$20 gift cards
- Cowboy Dinner Tree** – Dinner for 2
- Stumptown Coffee Roasters** – Coffee
- Bob's Red Mill** – 2 variety 4 packs and 2 \$25 gift cards
- Portland Saturday Market** – Portland Saturday Market Display: DIY plate-holder hangers

Guide Trips

- Kevin Gray's Guide Service** – Salmon or Steelhead Drift boat trip on North Coast or Willamette Valley
- Northwest Connection** – 2 seats on drift boat for Fall Chinook or Winter Steelhead on the Alsea or Siletz River
- Gary Vanderhoe** – 2 seats on Coos Bay Guided crab trip
- Fly Side Angling** – Half-day trip on the Wallowa River (between June and Sept)
- Minam Store** – 1 seat on 4-day raft and guided fishing trip on roadless section of Wallowa and Grande Ronde Rivers



Misc.

- Bowtech Archery** – Hunting gear
- PSM: Closed Loop Woodworks** – Salmon cribbage board
- Smith Root** – Stay tuned!
- Tillamook Estuary Partnership** – Gift basket
- Backyard Bird Shop** – Suet feeder and 4 suets
- PSM: Spirit Song Flutes** – Handmade wood flute
- Rumble Roller** – Foam roller
- Alder Creek Canoe and Kayak** – Gift certificate for 2 basic skills kayak or SUP classes
- Sunriver Rock & Gem** – Gift certificate
- Breitenbush Hot Springs** – Gift certificate
- Otter Box** – \$90 gift certificate
- Theracane** – Theracane
- Helen Spieth** – 1 acupuncture assessment and treatment and 1 follow-up and treatment
- PSM: Cosmic Garden Designs** – Earrings
- PSM: Sabrina Leaf** – Earrings and necklace
- PSM: Tangoista Designs** – Jewelry tree
- Winding River Expeditions** – Swag, hydroflask, hat, etc.
- Proof Eyewear** – 2 pairs of wood sunglasses (McCall and Ontario)

continued on Page 14

RAFFLE & AUCTION



Scott Heppell – Bottom fishing trip out of Newport for up to 5 people



Watertime Outfitters – Half-day shad fly-fishing trip + STHDR-brand hooded sweatshirt and T-shirt



Willamette Sailing Club/Rivers West – Family boat-building weekend

Belknap Hot Springs – 2 day passes

Trailblazers – Autographed Evan Turner shoe

Miller Coors – Metal fire pit

Smith Optics – 5 pairs of polarized sunglasses (Dockside, Colsonand, Prospect x 2, Evolve)

PSM: Strike Master Survival Tool – Survival fire tool

Coastal Farm and Ranch: Oregon City – \$75 item(s)

Michele Weaver – Fish-themed jewelry

Ranger Station – 2 \$25 gift cards

Sky High Sports – 4 passes

UO Duck Store – \$30 gift card

Wilco – Gift card

Overnight Stays

Wallowa Lake Lodge – 2-night stay in deluxe room and dinner for 2

The Mill Casino and Resort – 1-night stay and dinner for 2

Summer Lakes Hot Springs – 2-night stay at any cabin (Sun–Thurs)

Sunset Lodging at Sunriver – 2-night stay

Hallmark Inn – 1-night stay in ocean-front room

Riverhouse on the Deschutes – 2-night stay

Spirit Mountain Casino – 1-night stay and dinner for 2

Wildhorse Casino and Resort – 1-night stay in Tower Room or RV Park and \$60 dinner voucher

Theater/Festivals/Museums

Alpine Entertainment – Pass for party of 4

Columbia River Maritime Museum – 4 passes to museum and light ship

High Desert Museum – 4 tickets

Oregon Country Fair – 2 tickets

Oregon Symphony – 2 vouchers for 2018

Oregon Zoo – 4 tickets

Portland Center Stage – Theater tickets

Science Factory – 2 admission tickets

World Forestry Center – Family pass 4-pack

PSM = Portland Saturday Market





Meet Your External Committees

Wednesday, March 14

11:00 a.m.–Noon.....Vista
 Prior to the start of the plenary, external committees will be meeting in the Vista room on the 12th floor. This is a great time to meet the committee chairs and find a committee to join!

Student-Mentor Mixer

Wednesday, March 14

6:00–7:30 p.m.Vista
 After the sessions on Wednesday afternoon, we will hold our Student-Mentor Mixer, where students can meet professionals to ask questions, get advice, build relationships, and network. If you decide to sign up as a mentor and forgot to do so when you registered for the meeting, check at the registration desk to see if spaces are available. The mixer is a great opportunity for students, early-career biologists, and established professionals to share ideas, provide insight, bridge generation gaps, and build new relationships.

Poster Session and Trade Show Social

Wednesday, March 14

8:00–11:30 p.m.Williams / Hellman / Lobby
 Interact with poster presenters, share ideas, and network with peers! The trade show will be set up so that you can connect with vendors who provide us the innovative tools of today. This is also a social, so be sure to imbibe the complimentary beer and wine, enter day one of the Cornhole Tournament, or check out the first night of the Film Festival.

Spawning Run and Carcass Crawl

Thursday, March 15

7:00–8:00 a.m.Lobby
 Dress warm for the popular Spawning Run 5K or the 2-mile Carcass Crawl fun walk. Get your blood flowing and your mind open for a great day of talks. Information and course routes are available at the registration

desk. Runners and walkers will gather at the Convention Center Lobby, and the run/walk will begin and end at the Convention Center. And if you ordered one, don't forget to bring your commemorative T-shirt.

Meet Your Manager

Thursday, March 15

5:30–6:30 p.m. Playwright's Hall
 The Meet Your Manager Social is a new event designed to connect managers and researchers to further collaboration. Join us for complimentary beverages before the banquet, and take advantage of this opportunity to meet your manager!

Banquet, Awards, Oral Auction, Raffle

Thursday, March 15

6:30–9:00 p.m. Playwright's Hall
 Don't miss out on Thursday night's events! A banquet ticket is required to receive a banquet meal, but not to participate in the raffle and auction. Be sure to get your raffle tickets, sharpen your pencil for the silent auction items, and be ready for the competitive live auction. Our Raffle Auction Committee has done a REMARKABLE job of obtaining amazing items, including great gear, guided fishing trips, artwork, and much more. Enjoy the banquet and the complimentary craft beer and wine.

D.J., Open Mic, and Cornhole Tournament

Thursday, March 15

9:00–11:30 p.m. Playwright's Hall
 We are excited to showcase great music spun by D.J. Alvaro Campomanes, intermixed with an open mic. If you have a special musical talent, bring your own instrument and take the stage! Back by popular demand, we will also have a Cornhole Tournament.

POSTER SESSION

SETUP

Noon – 7:30 PM • Wednesday, March 14

Boards will be provided and names of poster authors will be indicated on each board. Authors are responsible for their own hanging hardware.

POSTER SOCIAL

8:00 PM – 11:30 PM • Wednesday, March 14

During the social, authors are asked to be with their posters between 8:00 and 9:00 pm.

DISPLAY HOURS

8:00 PM – 11:30 PM • Wednesday, March 14
 8:00 AM – 6:00 PM • Thursday, March 15
 8:00 AM – 10:20 AM • Friday, March 16

Posters will be on display in Hellman on Wednesday and in the Lobby on Thursday and Friday.

TAKEDOWN

10:20 AM – Noon • Friday, March 16

Cory Sipher* BLM	1	2	Brooke Schlipf* OSU
Camoran Hollan* BTC	3	4	Xanth Kirschenman* BTC

Joseph Gregoire* MHCC	5	6	Micah Bennett PGE
Tim Danner* BTC	7	8	Brent Priz ODFW

Elizabeth Lee* OSU	9	10	James White USGS
Grace Ghrist* HSU	11	12	Kara Jaenecke ODFW

Gwendolyn Bury OSU	13	14	Casie Smith USGS
Alex Koeberle* OSU	15	16	Andres Olivos* OSU

Francisco Pickens* OSU	17	18	Lauren Zatkos* OSU
Michael Manning OSU	19	20	Judith Barkstedt USFWS

Alvaro Cortes* OSU	21	22	Allison Swartz* OSU
Damien Barrett* OSU	23	24	Christine Trahan* UI

Benjamin Briscoe MHE	25	26	Christopher Derrickson* OSU
Native Fish Committee	27	28	Fish Culture Committee

Legislative Committee	29	30	Social Media Committee
Marine Habitat and Ecology Committee	31	32	Education and Outreach Committee

Natural Production Committee	33	34	Diversity, Equity, and Inclusion Committee
Communications Committee	35	36	Amanda Hyman OSU

KEY TO ACRONYMS ON PAGE 24

*Student

TITLE	AUTHOR, ORGANIZATION
1 Freshwater Habitat Committee	Cory Sipher , BLM
2 Oregon State University ORAFS Student Subunit	Brooke Schlipf* , OSU
3 Effects of Sediment and Filtration on Chum Salmon Embryo Development	Camoran Hollan* , BTC
4 Impact of Artificial Lighting on Early Chum Development	Xanth Kirschenman* , BTC
5 Fisheries Technology Program, Mount Hood Community College	Joseph Gregoire* , MHCC
6 Advancements in Technology Increase Accuracy and Efficiency of <i>O. Mykiss</i> and Fall Chinook Redd Mapping on the Deschutes River	Micah Bennett , PGE
7 The Influence of Broodstock Management and Ocean Condition on Whatcom Creek, WA, Chum Return Dates and Escapement	Tim Danner* , BTC
8 Assessing Variability in Length Measurements of Chum Salmon Carcasses over Time	Brent Priz , ODFW

9	Examining the Genomic Connectivity Among Dungeness Crab (<i>Cancer magister</i>) Recruits Along the Coast of Oregon	Elizabeth Lee,* OSU
10	Fusing Remote Sensing and Acoustically Measured Depth to Map High-Resolution Bathymetry and Habitats on the Willamette River	James White, USGS
11	The Effect of Juvenile Life History on the Marine Survival Rate of Coho Salmon	Grace Ghrist,* HSU
12	Examining Growth, Timing, and Run Characteristics of Iteroparous Wild Adult Steelhead in the Lewis & Clark River	Kara Jaenecke, ODFW
13	Assessing Lotic Water Quality Using Satellite Imagery: Oregon as a Case Study	Gwendolyn Bury, OSU
14	Effects of Beaver on Water Quality in Urban Streams in the Tualatin River Basin, Oregon	Casie Smith, USGS
15	Otolith Shape and Microchemistry Revealing Life History Traits of Introduced Chinook Salmon in Patagonia	Alex Koeberle,* OSU
16	Predicting the Establishment of Pacific Salmon in Chilean Patagonia: Is Propagule Pressure Enough?	Andres Olivos,* OSU
17	Synchronicity of Environmental Regimes Affecting Aquatic Vertebrates in Mediterranean Rivers: An Experimental Approach	Francisco Pickens,* OSU
18	Coexistence of Top Aquatic Predators in Headwater Streams: Intraguild Predation and Implications of Shrinking Habitat Ranges	Lauren Zatkos,* OSU
19	Climate Change and Salmonid Hybridization Risk	Michael Manning, OSU
20	Installation of a Lamprey Passage System and Evaluation of Adult Pacific Lamprey Upstream Passage at Warm Springs NFH, Oregon	Judith Barkstedt, USFWS
21	Influence of Climate Variability on Cutthroat Trout and Coastal Giant Salamander in Headwater Streams	Alvaro Cortes,* OSU
22	Primary Production and Consumer Responses to a Riparian Canopy Gap	Allison Swartz,* OSU
23	A Genome-wide Association Study (GWAS) for Resistance to the Parasite <i>Ceratonova shasta</i> in Rainbow Trout	Damien Barrett,* OSU
24	CRISPR/Cas9 Mutation to Knockdown Estrogen Receptors in the Hepatocytes of Rainbow Trout	Christine Trahan,* UI
25	Impacts of Angling Techniques and Gear Types on Coho Salmon (<i>Oncorhynchus kisutch</i>) Mortality in the Lower Cowlitz River	Benjamin Briscoe, MHE
26	The Blob and El Nino on Siletz River Salmon	Christopher Derrickson,* OSU
27	Native Fish Committee	Jim Capurso, USFS
28	Fish Culture Committee	Ryan Couture, ODFW
29	Legislative Committee	Haley Lutz, NNWC Troy Brandt, RDG
30	Social Media Committee	Demian Ebert, PC
31	Marine Habitat and Ecology Committee	Ashley Knight,* OSU Michael Harte,* OSU
32	Education and Outreach Committee	Ryan Battleson, ODFW
33	Natural Production Committee	Ian Tattam, ODFW
34	Diversity, Equity, and Inclusion Committee	Gabe Sheoships, FTC/ PSU
35	Communications Committee	Jim Yeo,* OSU
36	Improving Climate Resilience through the Culture of Native and Adaptive Species	Amanda Hyman, OSU

SESSIONS AT A GLANCE

TUESDAY, MARCH 13						
1:00 p.m.	Concurrent Workshops – Bloch / Sousa					
5:00 p.m.	Workshop Social – Vista					
WEDNESDAY, MARCH 14						
8:00 a.m.	Concurrent Workshops – Bloch / Sousa					
1:00 p.m.	Welcome and Plenary Sessions – O’Neill / Williams					
Room	Bloch	Sousa	Seeger	Wilder	Hansberry	Ferber
3:00 p.m.	Speed Talks	Ecological Responses to Regulated Flow in the Willamette R.	Research to Support Recovery	What’s in Your Water?	Habitat Restoration	Policy and Advocacy
6:00 p.m.	Student-Mentor Mixer - Vista					
8:00 p.m.	Poster Session & Trade Show Social - Williams / Hellman / Lobby					
THURSDAY, MARCH 15						
7:00 a.m.	Spawning Run / Carcass Crawl - Lobby					
Room	Bloch	Sousa	Seeger	Wilder	Hansberry	Ferber
8:00 a.m.	Resilience Thinking in Salmon Management	Ecological Responses to Regulated Flow in the Willamette R.	Food Web	Skills for All Stages	Habitat Restoration	Policy and Advocacy
10:00 a.m.	><)))> Break <(((><					
10:20 a.m.	Resilience Thinking in Salmon Management	Planning Downstream Fish Passage Improvements for Willamette Project Dams	Climate Change and Freshwaters: Are We Ready to Adapt?	Skills for All Stages + Panel Discussion	Behavior	Native Fish
Noon	Awards Luncheon – Playwright’s Hall					
1:45 p.m.	OR AFS Business Meeting - Playwright’s Hall					
3:00 p.m.	Unmanned Aircraft for Fish and Habitat Monitoring and Research	Planning Downstream Fish Passage Improvements for Willamette Project Dams	Climate Change and Freshwaters: Are We Ready to Adapt?	Diversity, Equity, and Inclusion	Behavior	Native Fish
5:30 p.m.	Meet Your Manager Networking Event – Playwright’s Hall					
6:00 p.m.	Silent Auction – Playwright’s Hall					
6:30 p.m.	Banquet, Awards, Oral Auction, Raffle – Playwright’s Hall					
9:00 p.m.	Entertainment: D.J. / Open Mic / Cornhole Tournament – Playwright’s Hall					
FRIDAY, MARCH 16						
Room	Bloch	Sousa	Seeger	Wilder	Hansberry	
8:00 a.m.	Fisheries Management	Fish Passage	Climate Change and Freshwaters: Are We Ready to Adapt?	Film Festival	Genetics	
10:00 a.m.	><)))> Break <(((><					
10:20 a.m.	Catch and Release	Fish Passage	Aquaculture	Film Festival	Genetics	
Noon	ORAFS 54 th Annual Meeting Ends					

Technical Sessions, Wednesday, 3/14/2018, 3:00–5:00 pm

Room	Speed Talks	Ecological Responses to Regulated Flow in the Willamette River	Research to Support Recovery	What's in Your Water?	Habitat Restoration	Policy and Advocacy
	Bloch	Sousa	Seeger	Wilder	Hansberry	Ferber
Moderator	Brian Sidlauskas, OSU	Rich Piaszkowski, USACE Rose Wallick, USGS	Jim Yeo, OSU	Julie Sharp, UA	Cory Sipher, BLM	Haley Lutz, MNWC Troy Brandt, RDG
3:00 PM	3:00 – National Fish Hatchery Production and the 2018–2027 U.S. v. Oregon Management Agreement Doug Olson, USFWS	USACE Water Management—Willamette River System Salina Hart, USACE	Pacific Lamprey Recolonization of a Pacific Northwest River Following Dam Removal Julianne Harris, USFWS	Effects of Terrestrial Herbicides and Pesticides on Aquatic Organisms: Implications for Policy and Management Ian Tattam, ODFW	Hydraulics, Geomorphology, Wetlands, Design, and Construction for the 3 Crabs Restoration Project, Olympic Peninsula Daniel Elefant, CRE&G	Use of Functions and Values Assessments to Achieve Compensatory Mitigation of Aquatic Resources in Oregon Eric Metz, ODSL
3:20 PM	3:10 – Life Stage Lexicon for Lamprey Ben Clemens, ODFW	Willamette River Environmental Flows Christina Budai, USACE	An Evaluation of Fitness and Return Timing of Reintroduced Spring Chinook Salmon in Fall Creek, Oregon Sandra Bohn, OSU	Variability of Thermal and Water-Quality Conditions in Off-Channel Features Along the Willamette River Cassandra Smith, USGS	Zisaba Estuary Restoration for Salmon Habitat and Climate Resilience Daniel Elefant, CRE&G	2018 State of Oregon Fish Passage Prioritization Greg Apke, ODFW
3:40 PM	3:20 – Differentiating Mixed Stock Chinook Salmon to Distinct Life Histories Using Morphometric Analysis Alexander Jensen, OSU*	Utilizing Flow and Geomorphic Processes to Enhance Rearing Habitats for Spring Chinook Salmon in the Willamette River Basin Rose Wallick, USGS	Does Freshwater Life History Affect Marine Survival Rate of Coho Salmon? Grace Ghrist, HSU*	Update: Science and Applications of Biotic Tools to Assess Sediment Regime in Streams Robert Danehy, CAE	Spatial Patterns of Riparian Shade, Light, and Stream Temperature in Response to Riparian Thinning in Redwood Headwater Streams David Roon, OSU*	ODFW-ODOT Culvert Repair Programmatic Agreement Pete Baki, ODFW
4:00 PM	3:30 – Assessment of Fish Biodiversity at Three Proposed Dam Sites in Gabon Brian Sidlauskas, OSU	Willamette River Tributary Instream Flow Study: Determining Habitat-Flow Relationships in the North and South Fork Santiam Rivers Mike Gagner, RZ	Movement and Survival of Acoustic-Tagged Juvenile Chinook Salmon Released Upriver of Shasta Dam, 2017 John Plumb, USGS	Pathogen-Related Health Impacts on Chinook Salmon in the Deschutes River Basin with a Focus on <i>Ceratonova shasta</i> Kalyn Hubbard, OSU*	Fish-Driven Restoration: Strategies for Incorporating Science into Restoration Projects Greer Mater, UCSRB	Suction Dredge Mining Post 2017 Legislative Prohibition in Essential Indigenous Salmonid Habitat Richard Nawa, KSWC
4:20 PM	3:40 – Does More Wood Equal More Coho Smolts? Intensive Monitoring to Figure Out Where, When, and Why Chris Lorton, ODFW	Rearing and Movement of Juvenile Chinook Salmon in the Willamette River Luke Whitman, ODFW	Effective Population Size, Connectivity, and Occupancy of Bull Trout: Tools to Assist in Recovery Michael Hudson, USFWS	Aspects of the Parasite Fauna of Juvenile Fishes in Upper Klamath Lake Andrew Janik, OSU *	Middle Fork John Day River Intensively Monitored Watershed: Lessons Learned from 10 Years of Monitoring Steelhead and Chinook Kirk Handley, ODFW	Cute, Cute, Cute, Until They Get BIG Rick Boatner, ODFW
4:40 PM	3:50 – The Role of Beaver in Stormwater Attenuation and Sediment Transport in Urban Streams of the Tualatin River Basin, Oregon Erin Poor, USGS	The Stored Water Volume Required to Meet Willamette BiOp Minimum Flows Using a Reservoir Simulation Model Cindy Bowline, USACE	Application of the Stream Salmonid Simulator (S3) for Chinook Salmon in the Trinity River, CA Edward Jones, USGS	Development and Application of a Molecular Quantification Method for <i>Ichthyophthirius multifiliis</i> in the Lower Klamath River, CA Claire Howell, OSU	Coquille Working Landscapes Projects—“Beef in the Summer and Fish in the Winter” Michael Gray, ODFW	Legislative Committee Meeting Haley Lutz MNWC and Troy Brandt, RDG
5:00 PM	4:00 – Fish Entrainment Evaluation Using a Custom Weir at a Municipal Pumping Facility on the Tualatin River, Oregon Joshua Richards, MHE		Communications Committee Meeting Jim Yeo, OSU			
	4:10 – Cameron’s Crater Lakes —Biodiversity and Conservation Joe Cutler, UC Santa Cruz*					
	4:20 – Evolution of Reproductive Strategies in Intertidal Sculpins Thaddeus Buser, OSU*					
	4:30 – Genetic Monitoring of Tribal Pacific Lamprey Translocation Programs in the Interior Columbia River Basin Laurie Porter, CRITFC					

*Student

Technical Sessions, Thursday, 3/15/2018, 8:00–10:00 am

Room	Resilience Thinking in Salmon Management	Ecological Responses to Regulated Flow in the Willamette River	Food Web	Skills for All Stages	Habitat Restoration	Policy and Advocacy
	Bloch	Sousa	Seeger	Wilder	Hansberry	Ferber
Moderator	Daniel L. Bottom, OSU courtesy faculty Kim K. Jones, ODFW Charles A. Simenstad, UW Matthew R. Sloat, WSC	Rich Piaskowski, USACE Rose Wallick, USGS	Ted Sedell, ODFW	Shannon Richardson, ODFW	Cory Sipher, BLM	Haley Lutz, MNWC Troy Brandt, RDG
8:00 AM	Resilience Thinking in Salmon Management Session chairs	Factors and Processes Determining Water Temperature in the Willamette River, Oregon Stewart Rounds, USGS	Understanding Large-Scale Dynamics of Diverse Shelf Ecosystems—the Importance of Physical Context and Response to Change James Ruzicka, OSU	Introduction to Skills for All Stages Shannon Richardson, ODFW Shivonne Nesbit, NOAA	Changes in Native Salmonid Production Potential in Response to Forest Fire Benjamin Briscoe, MHE	Historical Abundance of Oregon Coho: It's Not What We Thought Steve Cramer, CFS
8:20 AM	Regime Shifts and Resilience Thinking for Salmon in the Sacramento/San Joaquin Delta Michael Healey, UBC	Past, Present, and Future Willamette Tributary Temperatures Norman Buccola, USACE	Relative Abundance and Isotopic Characteristics of Fishes in the Odell Lake Food Web Mike Meeuwig, ODFW	The Future's So Bright, or, How Do You Become What You Decided You Wanted to Be When You Grew Up? Demian Ebert, PC	Best Practices in Aquatic Restoration to Protect Declining Native Freshwater Mussels Emilie Blevins, XERCES	A Supplemental Conservation Framework May Be Necessary to Protect Adaptive Variation within Closely Related Populations Tasha Thompson, UC DAVIS*
8:40 AM	Climate Contribution to Hard Times in US West Coast Salmon Fisheries Nate Mantua, NOAA	Water in the Willamette: Identifying Environmental Flows for the Ecosystem and Listed Salmonids Jefferson (Tyrell) Deweber, OSU	What's for Lunch? An Assessment of Piscivorous Fish Diets in the Columbia River Related to Targeted Northern Pike/minnow Removals Andrea Carpenter, ODFW	Beyond Borders: Working as a Natural Resource Professional in a Foreign Country Justin Bohling, USFWS	Fivemile Bell Restoration Project Aquatic Organism Relocation: What to Do When You Are Up to Your Ankles in Lamprey Annuceetes Ana Hernandez, USFS	Klamath Dam Removal Process—Current Status Glen Spain, PCFFA
9:00 AM	Resilience Thinking About Estuarine Habitat Support for Fishery Species Ronald Thom, PNWL emeritus	Willamette River Floodplain Restoration—Reconnecting Overwintering Habitats for Juvenile Salmonids Troy Brandt, RDG	Effects of Carcass Additions on Stream Food Webs Along a Temperature and Fish Assemblage Gradient in NE Oregon Matthew Kaylor, OSU*	Finding Your Niche in the Private World Rich Grost, PC	A Fearless Approach to Stage 0 Floodplain Restoration at Deer Creek, McKenzie River, Oregon Johan Hogervorst, USFS	An Update on the Reintroduction Implementation Plan for Anadromous Fishes to the Oregon Portion of the Upper Klamath Basin Chuck Huntington, CBS
9:20 AM	Resilience and Vulnerability in Salmon Watersheds Jonathan Moore, SFU	Planning and Implementation of Fish Passage at High-Head Dams in the Willamette River Basin, OR Rich Piaskowski, USACE	Fish Culture Committee Meeting Ryan Couture, ODFW	Writing for the Record: Lessons Learned on Why and How to Publish Your Work Ben Clemens, ODFW	Review of Tools for Identifying, Planning and Implementing Habitat Restoration for Pacific Salmon and Steelhead Phillip Roni, CFS	A Historic, Regulatory, and Scientific Review of Atlantic Salmon Net Pen Operations in Puget Sound Kurt Beardslee, WFC
9:40 AM	Resilient Responses by Pacific Salmon to Climate Change Require Diverse Thermal Landscape Aimee Fullerton, NOAA	Synthesis of Downstream Fish Passage Information at Dams in the Willamette River Basin, Oregon Amy Hansen, USGS		What Do You Want to Do with Your Life? Career Trajectories and Transitions Rebecca Flitcroft, USFS	Freshwater Habitat Committee Meeting Cory Sipher, BLM	Evaluating an Experimental Commercial Pound Net Trap for Stock-Selective Harvest in the Lower Columbia River Adrian Tuohy, WFC / UW*

*Student

Abstracts from the technical sessions and symposia, as well as other conference information, may be found on the ORAFS website at www.orafs.org.

Technical Sessions, Thursday, 3/15/2018, 10:20 am–Noon

Room	Resilience Thinking in Salmon Management	Planning Downstream Fish Passage Improvements for Willamette Project Dams	Climate Change and Freshwaters: Are We Ready to Adapt?	Skills for All Stages	Behavior	Native Fish
	Bloch	Sousa	Seeger	Wilder	Hansberry	Ferber
Moderator	Daniel L. Bottom, OSU courtesy faculty Kim K. Jones, ODFW emeritus Charles A. Simenstad, UW Matthew R. Sloat, WSC	Rich Piaskowski, USACE Fenton Khan, USACE	Jason Dunham, USGS	Shannon Richardson, ODFW	Tom Friesen, ODFW	Jim Capurso, USFS
10:20 AM	Resiliency: The Application to Aquatic Ecosystems Gordie Reeves, USFS	Adaptation of N-Mixture Model Analysis Using Genetic Tagging to Estimate Fry Survival in Lookout Point Reservoir Adam Pope, USGS	Multispecies Rarity and Climate Vulnerability Kara Anlauf-Dunn, ODFW	Stay the Course—Navigating a Career Through the Ever-Shifting Currents of Priorities, Leadership, Public Interest, and Politics Michael Gray, ODFW	Anadromous Salmon Display Maladaptive Orientation to Southern Hemisphere Magnetic Fields Michelle Scanlan, OSU	The Influence of Geologic Events upon the Distribution of Westslope Cutthroat Trout in Eastern Oregon Jason McCloughry, ODGMI
10:40 AM	Humans Impact Some Life Histories More Than Others: Potential Consequences for Resilience Explored Through Salmon Runtime Genetics Tasha Thompson, UC DAVIS*	Evaluation of Chinook Salmon Fry Survival in Lookout Point Reservoir, Oregon Tobias Kock, USGS	Predicting Flow Permanence in Streams from Time Series of Stream Temperature Ivan Arismendi, OSU	How to Enjoy Being a Fish Biologist Stewart Reid, WF	Hydrologic and Thermal Regime Relationships to Coho Salmon Spawning in the Smith River Watershed, Oregon Mackenzie Baxter, OSU / IFI*	The Phylogeography of Westslope Cutthroat Trout Mike Young, USFS
11:00 AM	Application of Portfolio Theory in Recovery Planning for Pacific Salmon Joe Ebersole, EPA	Evaluation to Determine the Effects of Foster Dam Fish Weir on Juvenile Salmonid Passage and Behavior Stephanie Liss, PNNL	Bioenergetic Modelling Shows that Climate Change Could Reduce Growth of Reservoir Rearing Juvenile Chinook Salmon Christina Murphy, OSU*	Panel Discussion	Collective Behavior of Zebrafish in the Wild Delia Shelton, OSU	Translocation of Lost River and Shortnose Suckers from Lake Ewauna to Augment Spawning Populations in Upper Klamath Lake, Oregon Nathan Banet, USGS
11:20 PM	Modeling Resilience: Prospects for Quantitatively Assessing Salmon Habitats under Uncertain Futures Kate Buenau, PNNL	Behavior, Distribution, and Passage Metrics of Juvenile Chinook Salmon Above and Below Lookout Point Dam Eric Fischer, PNNL	Spatiotemporal Variability of Aquatic Habitat and Fish Distribution Over a 16-Year Record in the Elk River Basin in the Oregon Coast Range Kim Yazzie, UW*		To Move or Not To Move: Downstream Rearing Chinook Salmon in the Upper John Day River Michael Scheu, OSU*	Temperature Constraints on Redband Trout Life History in Klamath Lake: Seasonal Patterns and Climate Change Implications Nick Hahlbeck, OSU*
11:40 AM	Quantifying the Stabilizing Effects of Population Diversity with the Portfolio Effect Lauren Yamane, UC DAVIS	Behavior and Passage of Juvenile Salmon and Steelhead at Detroit and Cougar Dams, Oregon Amy Hansen, USGS	Climate, Drought, and Streams in the Western United States Jason Dunham, USGS		Winter Movement and Survival of Juvenile Coho Salmon in Freshwater Creek, California Nick Van Vleet, HSU*	In Consideration of the Pkeminnows Stewart Reid, WF

*Student

Technical Sessions, Thursday, 3/15/2018, 3:00–5:00 pm

Room	Unmanned Aircraft for Fish and Habitat Monitoring and Research	Planning Downstream Fish Passage Improvements for Willamette Project Dams	Climate Change and Freshwaters: are we ready to adapt?	Diversity, Equity, and Inclusion	Behavior	Native Fish
	Bloch	Sousa	Seeger	Wilder	Hansberry	Ferber
Moderator	Erik Suring, ODFW	Rich Piaskowski, USACE Fenton Khan, USACE	Jason Dunham, USGS	Gabe Sheoships, FTC / PSU	Luke Whitman, ODFW	Jim Capurso, USFS
03:00 PM	Fish and Habitat Monitoring with Unmanned Aircraft: Session Introduction and Overview of ODFW's Program Erik Suring, ODFW	Evaluating Factors Affecting the Performance of Surface Collectors to Inform Future Developments at High Head Dams Russell Perry, USGS	Opportunities and Limitations of Using LiDAR to Model Sea-Level Rise on the Oregon Coast Rebecca Flitcroft, USFS	AFS DEIL Lessons and Reflections: Year 1 Gabe Sheoships, FTC / PSU	The Role of Magnetic Maps in Marine Migration Nathan Putman, LGL ERA	A Status Update of Age-0 White Sturgeon Recruitment in the Lower Columbia River Basin Eric Anderson, ODFW
03:20 PM	Use of Small Unmanned Aircraft Systems (sUAS) for Fall Chinook Salmon Spawning Surveys in the Snake River Brad Alcorn, IP	Alternatives and Design of Cougar Downstream Fish Passage Scott Fielding, USACE	Oregon's Bull Trout Recovery Strategy: Accounting for a Changing Climate Stephanie Gunckel, ODFW/USFS	Native Science: The First Salmon Ceremony Jason Younker, UO	Catherine Creek and Grande Ronde River Spring Chinook Salmon Reach-Specific Survival During Spring Emigration Scott Favrot, ODFW	Oregon's Native Freshwater Mussels – What Are They, Who Manages Them, and Why Should We Care Michele Weaver, ODFW
03:40 PM	Using a Small Unmanned Aerial System to Survey Fall Chinook Salmon Redds and Recover Carcasses in the Snake River Ken Tiffan, USGS	Detroit and Big Cliff Long-Term Temperature Control and Downstream Fish Passage Jon Rerecich, USACE	Assessing Climate Vulnerability of Columbia River Basin Steelhead: A 3-Step Decision Process Framework for Management Actions Jill Hardiman, USGS	Diversifying the Profession: Unwrapping Economic Barriers Christine Moffitt, UI emerita / AFS Hutton	Use of the Deschutes River by PIT Tagged Migrating Adult Snake River Steelhead Blane Bellerud, NOAA	Modeling Spawning Habitat Potential for Chum and Pink Salmon in Relation to Landscape Characteristics in Coastal Southeast Alaska Bernard Romey, RE
04:00 PM	Above the Mud: Using UAS to Visualize Small Features for Estuary Monitoring in Oregon Liz Perotti, ODFW	Foster Dam Improvements for Upstream and Downstream Fish Passage Fenton Khan, USACE	Meeting Challenges of Climate Change Gordie Reeves, USFS	Shifts in the US Academic Fisheries Network Over Time Ivan Arismendi, OSU	How to Train Your Fish: Offactory Learning and Conditioning to Assess Potential Imprinting Odorants for Chinook Salmon Maryam Kamran, OSU	Resource Selection by Winter Steelhead on the West Fork Smith River, Oregon Morgan Davies, ODFW
04:20 PM	The Use of sUAS Based LiDAR to Capture Channel Cross Sections and Detailed Terrestrial Surfaces in a Riverine Environment Andres Vargas, QSI	Use of Deep Drawdowns for Downstream Juvenile Chinook Salmon Passage at Fall Creek Reservoir, Willamette Basin, Oregon Greg Taylor, USACE	Restoration Strategies to Mitigate Future Changes in Climate: How Long Will They Take? Steve Wondzell, USFS	The Importance of Diversity in Focused Internships and Mentoring Siena Lopez-Johnston, BPA	The Effect of Rearing Environment on Spatial Learning Ability in Juvenile Chinook Salmon Karen Cogliati, OSU	Native Fish Committee Meeting, starting with the presentation of the 2018 Native Fish Conservationist of the Year Award Jim Capurso, USFS
04:40 PM	Using Unmanned Aircraft for Habitat Restoration Implementation Monitoring Erik Suring, ODFW	Individual Based Modelling Approach to Thermal Refuge Use by Migrating Adult Salmon and Steelhead Marcia Snyder, EPA	Diversity, Equity, and Inclusion Committee Meeting Gabe Sheoships, FTC/ PSU	Temporally Dynamic Spatial Distributions of American Plaice (<i>Hippoglossoides platessoides</i>) and Yellowtail Flounder (<i>Limanda ferruginea</i>) Devin Flawd, MIMUN		

Technical Sessions, Friday, 3/16/2018, 8:00–10:00 am

Room	Fisheries Management	Fish Passage	Climate Change and Freshwaters: are we ready to adapt?	Film Festival	Genetics
	Bloch	Sousa	Seeger	Wilder	Hansberry
Moderator	Lauren Zatkos, OSU	Andy Peters, PN	Jason Dunham, USGS	Blane Bellerud, NOAA Derek Wiley, ODFW	Terry Luecker PUR
8:00 AM	Evaluating Angler Harvest in an Intensely Stocked Trout Fishery in Coos Bay, Oregon Gary Vonderohe, ODFW	Tidal Exchange through a MTR Tide Gate: Do Passage Windows and Seasonal Water Management Strategies Mimic Natural Tidal Dynamics? Edward Hughes, CWA	The Oregon Hatchery Research Center in A Changing Environment: of What Use is Research? David Noakes, OSU	Film Festival	Genetic Tools to Inform Fisheries Management and Conservation in Oregon Kathleen O'Malley, OSU
8:20 AM	Mixed-Effect Models to Estimate Angler Tag-Reporting Rates Applied to the Oregon Tag-Reward Program Michelle Jones, ODFW	Putting Time Back in Space-for-Time Mark Recapture to Estimate Survival, Collection and Travel Time for Migrating Fish Dalton Hance, USGS	Temperature Change may Affect Migration Differently across Chinook Salmon Phenotypes Carl Schreck, OSU		Genome Wide Markers of Reproductive Success and Mate Choice in Coho Salmon Heather Auld, OSU
8:40 AM	Estimating Size Selectivity of Longline Sampling Gear Targeting White Sturgeon in the Lower Columbia River Colin Chapman, ODFW	Expanding the Portfolio: Increased Chinook Outmigrant Diversity through the North Fork Floating Surface Collector Nick Ackerman, PGE	Warming Winter Climate Reduces Landscape-Scale Variability in Pacific Salmon Incubation Duration Luca Adelfio, USFS		Stream Transport and Retention of Environmental DNA Pulse Releases in Relation to Hydrogeomorphic Scaling Factors Joseph Parzych, IFI
9:00 AM	Learning to Fly, but I Ain't Got Wings: Injury and Survival of Trout after Air-Stocking. Is Coming Down Really the Hardest Thing? Jeff Yanke, ODFW	Effects of Stocking and Translocation on White Sturgeon Movement through the Federal Columbia River Power System (FCRPS) Peter Stevens, ODFW	Forecasting Salmon and Tuna Abundances and Marine Habitat Quality based on Climatic and Oceanographic Drivers Stephen Brandt, OSU		Genetic Monitoring of Bull Trout Populations in the upper Willamette River Basin Justin Bohling, USFWS
9:20 AM	Detecting Change in Coastal Coho Population Dynamics Matt Falcly, ODFW	A Decade of Steelhead Entrainment: Fish Diversion Patterns at Irrigation Dams of the Umatilla River Basin, Oregon Will Simpson, USFWS	Predicting Effects of Climate Change on Myxozoan Disease Dynamics using an Epidemiological Model Julie Alexander, OSU		Stream Samples to Species Lists: Multiple Species Detection Using Multiplex PCR and High-Throughput Sequencing Kevin Weitemier, OSU
9:40 AM	Commercial Salmon Fisheries in Off-channel Areas of the Lower Columbia River; 10-Year Trends in Harvest and Stock Composition Tony Siniscal, ODFW	Downstream Movement and Foster Dam Passage of Juvenile Winter Steelhead in the South Santiam River Fred Monzyk, ODFW	Not Always Nasty: Exploring the Conservation Significance of Seasonally Warm Habitats Johnny Armstrong, OSU	The OBG: Genomic Data Assembly for the Development of Enhanced Molecular Monitoring Tools Emily Dziedzic, OSU	

Technical Sessions, Friday, 3/16/2018, 10:20 am–Noon

Room	Moderator	Marine Habitat and Ecology Committee: Catch and Release	Fish Passage	Aquaculture	Film Festival	Genetics
		Bloch	Sousa	Seeger	Wilder	Hansberry
	Ashley Knight, OSU	Demian Ebert, PC	Ryan Couture, ODFW	Blane Bellerud, NOAA Derek Wiley, ODFW	Rebecca Flitcroft USFS	
10:20 AM	Relative Catchability of Wild Summer Steelhead Caught and Released by Sport Anglers in the Deschutes River, Oregon Jason Seals, ODFW	Upstream Passage of Bull Trout at Large Dams in the Upper Willamette Basin—Successes, Challenges, and Knowledge Gained Nik Zymonas, ODFW	Structure in Hatchery Tanks Appears to Moderate Handling and Crowding Stress Response in Juvenile Chinook Salmon Crystal Herron, OSU	Film Festival		
10:40 AM	Playing with Our Food: Catch-and-Release Angling for White Sturgeon Peter Stevens, ODFW	Adult Spring Chinook Migratory Response to Passage Improvements at the Clackamas River Hydroelectric Project Maggie David, PGE	Recent Research and Management of Japanese Chum Salmon Propagation in a Changing Climate Hiroshi Ueda, HU- HAPC			
11:00 AM	Salmon and Steelhead Hooking Mortality in the Lower Cowlitz River Forrest Carpenter, MHE	Wild Surrogate Chinook and Steelhead for Dam Passage Studies David Noakes, OSU	The Impact of Different Hatchery Rearing Environments on Smolt-to-Adult-Survival of Spring Chinook Salmon Ryan Gerstenberger, CTWS			
01:20 PM	Descending Rockfish: Incorporating the Science into Fisheries Management Christian Heath, ODFW	Timing and Environmental Cues for Downstream Migrating Juvenile Lamprey in the Clackamas River Dan Cramer, PGE	When Chinook Go Astray: Analyzing Straying Trends in Elk River Hatchery Chinook Salmon Amanda Pollock, OSU			
11:40 AM	Hooks, Slime, and Sinkers: Life After Barotrauma, Lessons Learned in the Field Kelly Lawrence, ODFW		Effects of Dietary Lipid Concentration on Growth, Survival, and Smoltification of Hatchery-Reared Steelhead Ronald Twibell, USFWS	Education and Outreach Committee Meeting Ryan Battleson, ODFW		

AFFILIATION ACRONYMS

BLM = Bureau of Land Management
BPA = Bonneville Power Administration
BTC = Bellingham Technical College
CAE = Catchment Aquatic Ecology
CBS = Clearwater Biostudies
CFS = Cramer Fish Sciences
CRE&G = Cardno Restoration Engineering & Geomorphology
CRITFC = Columbia River Inter-tribal Fish Commission
CTWS = Confederated Tribes of the Warm Springs
CWA = Coos Watershed Association
EPA = Environmental Protection Agency

FTC = Friends of Tryon Creek
HSU = Humboldt State University
HU-HAPC = Hokkaido University, Hokkaido Aquaculture Promotion Corporation
IFI = Inter-fluve, Inc.
IP = Idaho Power
KSWC = Klamath-Siskiyou Wildlands Center
L&C = Lewis & Clark Law School
LGL ERA = LGL Ecological Research Associates
MHCC = Mt. Hood Community College
MHE = Mount Hood Environmental
MIMUIN = Marine Institute of Memorial University of Newfoundland
NMFES = National Marine Fisheries Service

NNWC = Nestucca, Neskowin Watersheds Council
NOAA = National Oceanic and Atmospheric Administration
NPT = Nez Perce Tribe
ODFW = Oregon Department of Fish and Wildlife
ODGMI = Oregon Department of Geology and Mineral Industries
ODSL = Oregon Department of State Lands
OSU = Oregon State University
PC = PacifiCorp
PCFFA = Pacific Coast Federation of Fishermen's Associations
PGE = Portland General Electric

PN = Pacific Nets
PNNL = Pacific Northwest National Labs
PSU = Portland State University
PUR = Partnership for the Umpqua Rivers
QSI = Quantum Spatial Inc
R2 = R2 Resource Consultants
RDG = River Design Group
RE = Romey Environmental Consulting, LLC
SFU = Simon Fraser University
SR = Smith-Root
UA = University of Auburn
UBC = University of British Columbia
UC DAVIS = University of California, Davis
UCSRB = Upper Columbia Salmon Recovery Board

UI = University of Idaho
UO = University of Oregon
USACE = U.S. Army Corps of Engineers
USFS = U.S. Forest Service
USFWS = U.S. Fish & Wildlife Service
USGS = U.S. Geological Survey
UW = University of Washington
WF = Western Fishes
WFC = Wild Fish Conservancy
WSC = Wild Salmon Center
XERCES = Xerces Society for Invertebrate Conservation

Agenda

Oregon Chapter of the American Fisheries Society Annual Business Meeting

March 15, 2018 | Eugene, Oregon

- 1:45 PM Call to Order (Shivonne Nesbit)**
- Identify Parliamentarian
 - Determination of Quorum (50 voting members)
 - Recognitions:
 - 2017 Division & National Outstanding Chapter of the Year Awards
 - Executive Committee, External and Internal Committees
 - Annual Meeting Planning Team, Sponsors, Vendors
- 1:50 PM Approve Minutes from 2017 Business Meeting (Shivonne Nesbit)**
- Summarize Financial Statement, FY 2017-2018 (Katie Pierson)
 - Disbursement Strategy (Katie Pierson)
- 1:55 PM President's Report (Shivonne Nesbit)**
- Strategic Plan Goals and Accomplishments
 - New Business
- 2:05 PM WDAFS Update (Cleve Steward)**
- WDAFS activities
 - 2018 WDAFS Meeting – Anchorage, Alaska
- 2:10 PM Student Subunit Report**
- OSU (Brooke Schlipf, Rachel Lertora)
 - MHCC (Anthony Pedro)
- 2:15 PM External Director's Report (Dan Bingham)**
- Legislative Committee
 - Other Committee Actions
- 2:20 PM Election of New Officers (Shivonne Nesbit)**
- Candidates*
- President-Elect: Becky Flitcroft (USFS)
 - Vice President: James Barlett (PGE)
 - Secretary: Natalie Scheibel (ODFW)
 - Internal Director: Kevin Stertz (ODFW); Terry Luecker (Partnership for the Umpqua Rivers)
 - External Director: Jason Brandt (ODFW)
- 2:35 PM Presentation of Past President Award (Shivonne Nesbit)**
- 2:45 PM Adjourn**

Annual Business Meeting Minutes

Oregon Chapter of the American Fisheries Society

March 2, 2017 | Riverhouse on the Deschutes Conference Center, Bend, Oregon

Date: March 2, 2017

To: Oregon Chapter of the American Fisheries Society Membership

From: Katie Pierson, Secretary

Subject: Minutes from ORAFS Business Meeting at the 53rd Annual Meeting of the Oregon Chapter of the American Fisheries Society, Thursday, March 2, 2017, from 1:47 to 2:45 PM

Location: Riverhouse on the Deschutes Conference Center, Bend Oregon

President Ben Clemens called the 2017 Business Meeting to order at 1:47 PM and selected Carl Schreck and Bob Hughes as parliamentarians; Carl declared that a quorum was present. Ben thanked everyone for attending the 2017 Business Meeting and announced that ORAFS received the 2016 AFS Outstanding Chapter of the Year Award, the 13th time ORAFS has received this award since 1992. Ben introduced the 2016–2017 ORAFS Executive Committee. Ben acknowledged the external committee chairs, web administrator, and newsletter editor. In addition, Ben acknowledged the sponsors, vendors, and donors. Ben expressed thanks to the Riverhouse on the Deschutes staff, tribes, agencies, nongovernmental organizations, and contractors in attendance. Ben recognized the hard work of all the session moderators, workshop instructors, judges, and other volunteers (student and non-student).

Ben sought approval for the business meeting minutes from the Seaside 2016 meeting, as submitted by Tony Siniscal, and the motion passed unanimously. Ben introduced Treasurer Tony Siniscal, who summarized the Chapter's finances and expenditures as related to the strategic plan goals of the Chapter for Fiscal Year 2016 (May 1, 2015–April 30, 2016). Fiscal Year 2016 included both the 2015 AFS Portland meeting and the 2016 ORAFS Seaside meeting and was a profitable year for the Chapter. Tony went over the Chapter's eight-year financial history. In 2014, declining revenues became apparent, and the Executive Committee worked to tighten up the operating and annual meeting budgets and increase revenue. The Chapter subsequently held a profitable symposium and an annual meeting in a new location, hosted a very successful AFS meeting in Portland, and established the Financial Sustainability and Investment Committee. The revenue from the last few years has been put into an

investment account to ensure the financial sustainability of the Chapter. The dividends and interest from this account could be used in the future to support additional scholarships, research, and grants. The investment account has experienced some early success, and the Financial Sustainability Committee is looking for input from the membership on how to reinvest the gains back into the Chapter.

Ben provided a high-level overview of the seven strategic goals and deliverables accomplished over the last year. He included some metrics from the Seaside Annual Meeting: 362 attendees, two plenary speakers, and two well-attended continuing education workshops addressing culvert replacement and drones in fisheries research. ORAFS provided sponsorships for the 2017 Fish Passage Conference, the 2017 West Coast Salmon Summit, and the 2017 Oregon State University Fish and Wildlife Graduate Student Association's symposium. ORAFS provided \$1,500 in support of Dr. Douglas Markle's book, *A Guide to Freshwater Fishes of Oregon*. ORAFS has continued to maintain a website, Twitter and Facebook accounts, and an email list serve reaching more than 1,000 students and professionals. ORAFS has also maintained its quarterly newsletter, the Piscatorial Press, and utilized online polls for votes on bylaws, Executive Committee elections, and annual meeting satisfaction surveys.

Ben highlighted that ORAFS retained a legislative liaison, updated the Chapter's suction dredge mining white paper, and produced a joint position paper with the Oregon Chapter of the Wildlife Society on Oregon's marine reserves. ORAFS is currently working with some of its external committees to produce a white paper on herbicides and pesticides.

Through the Education and Outreach Committee, ORAFS has offered \$3,000 in educator grants and provided \$12,000 for student scholarships. ORAFS provided a \$2,000 sponsorship for the ORAFS student subunit and implemented a new Fisheries Career Counselors program to connect students and young professionals with established aquatic scientists. In addition, ORAFS continues the tradition of implementing the student/mentor mixer at the annual meeting. During 2016–2017, ORAFS reimbursed three AFS fisheries professional certifications and recognized distinguished professionals through six different awards (Award of Merit, Fishery Worker of the Year, Fishery Team of the Year,

Lifetime Achievement Award, Award of Merit for the outgoing treasurer, and Past President Award). The Executive Committee created a new ad hoc external committee on Human Diversity to increase outreach, recruitment, and retention of a membership reflective of the human diversity and to actively educate the Chapter about diversity and biases. This committee has over a dozen members, and interest in the committee continues to grow.

Ben recognized that ORAFS currently has 537 members from multiple and diverse entities, and that our newly implemented Financial Sustainability Plan & Investment Policy was touted by AFS Deputy Executive Director Daniel Cassidy.

Ben opened the floor to the membership and asked for new business. Laura Tesler, Chair of the AFS Hutton Scholarship Committee, made a motion to have the Chapter sponsor one Hutton Scholarship at the cost \$6,800. The motion was seconded. There was discussion about the merits of the program, the high administrative cost, and potential cost sharing with other entities in Oregon. There was a suggestion of putting the sponsorship to vote by membership e-ballot; it was explained that the Executive Committee would need to approve the sponsorship as part of the work plan and budget. Laura amended her motion to have the Executive Committee consider the Hutton Scholarship at the Spring Retreat, where the FY 2017 work plan and budget are created and approved. The amended motion was seconded and passed unanimously.

Ben introduced Western Division AFS (WDAFS) President-Elect Brian Missildine. He invited attendees to attend the Western Division Meeting being held May 22–25 in Missoula, Montana. This meeting coincides with the Montana Chapter's 50th meeting. Brian also reported that their Western Division website has been hacked, so they are transitioning to a website being housed under fisheries.org. Brian encouraged people to take advantage of the small grants and travel awards that are available at the Western Division level.

Ben introduced the ORAFS Student Subunit Liaison, Jacob Peterson. Jacob described the mission of the Oregon State University Fisheries and Wildlife Club and explained the change in the Club's name. The Club has had a successful year, with workshop events at the Oregon

continued on Page 28

FINANCIAL STATEMENT FOR FISCAL YEAR 2017

May 01, 2016 to April 30, 2017

EXPENSES	
Core Costs	
Total	\$(8,633.46)
Goal 1 - Develop programs that advance understanding of fishery science and responsible stewardship of fishery resources	
Total	\$(3,365.16)
Goal 2 - Advocate policies and laws that benefit the conservation and sustainability of Oregon fishery resources	
Total	\$(6,339.96)
Goal 3 - Increase public awareness, understanding, and appreciation of fishery resources	
Total	\$(2,999.00)
Goal 4 - Promote development of fishery and aquatic science professionals	
Total	\$(12,254.90)
Goal 5 - Support and encourage development of professional members	
Total	\$(1,048.53)
Goal 6 - Maintain an active and diverse membership	
Total	\$-
Goal 7 - Fiscal responsibility and investments	
Total	\$-
Other Expenses	
Total	\$(558.00)
Designated/Restricted Funds	
Diversity scholarship	\$(2,000.00)
External Committee Award	\$(350.00)
Total	\$(2,350.00)
OPERATING COSTS SUBTOTAL	
	\$(37,541.01)
Annual Meeting Expenses	
Total	\$(89,707.49)
TOTAL EXPENSES	
	\$(127,256.50)

INCOME	
Annual Meeting	
Total	\$161,271.00
Dues	
Total	\$5,793.40
Other Income	
Total	\$2,376.62
Investments	
Money Market Savings Interest Accrued	\$-
WDAFS Endowment Fund Interest Accrued	\$3,176.17
ORAFS Investments Account Interest Accrued	\$16,668.73
Total	\$19,844.90
TOTAL INCOME	\$189,285.92
NET INCOME/DEFICIT	\$62,029.42
ASSETS	
Checking Account (Beginning of Fiscal Year 2017)*	\$89,331.40
Money Market Savings Account (05/01/16)	\$224,958.08
WDAFS Endowment Fund (05/01/16)	\$15,848.08
ORAFS Investments Account (05/01/16)	\$-
BEGINNING BALANCE	\$330,137.56
TOTAL ASSETS END OF FISCAL YEAR 2017	\$392,166.98

*Beginning balance is calculated after all previous Fiscal Year payments and deposits have been settled

2017 MEETING MINUTES continued from Page 26

Hatchery Research Center, presentations by Club members at several meetings, and the selection of the Club as Oregon State University College of Agriculture's Club of the Year. Jacob summarized the Club's spring break trip and mentioned that the club will be participating with sage grouse and redband trout surveys and organizing ArcGIS and R workshops.

Ben introduced the External Director, Cory Sipher. Cory acknowledged the external committee chairs and highlighted a few achievements of the committees. Notably, the Marine Habitat and Ecology Committee has worked to update the Chapter's joint position paper on marine reserves with the Oregon Chapter of the Wildlife Society. The Native Fish Committee held its annual Non-game Native Fish Workshop. The Legislative Committee updated the suction dredge mining white paper. Cory reminded attendees about the Legislative Science and Policy session to be held during the Annual Meeting. Cory closed by noting that all of the committees are seeking new members and suggested that Chapter members get involved.

Ben announced the winners of the election for Executive Committee 2017-2018. The officers are Kris Homel for President-Elect, Shannon Richardson for Vice President, Josie Thompson for Secretary, Katie Pierson for Treasurer, Kevin Stertz for Internal Director, and Dan Bingham for External Director. Ben congratulated the winners and reminded the attendees that many positions ran unopposed and that the Chapter would like to see more people running for office. Ben presented the Past President Award to Troy Brandt and thanked Troy for always being the one to act and always leading by example. Troy's leadership will be missed on ExCom. Troy accepted the award and gave a brief speech, telling the membership that the reason why he was there was because he griped about vendor space at a past meeting and was told, "If you don't like something, get on ExCom to change it!"

Ben thanked the membership for attending the business meeting and asked for a motion to adjourn. There was a motion and a second to adjourn. All voted in favor, and the 2017 ORAFS Business Meeting adjourned at 2:45 PM.

Save the Date!

ORAFS Annual Meeting 2019



Tuesday, March 5 – Friday, March 8

Riverhouse | Bend, OR



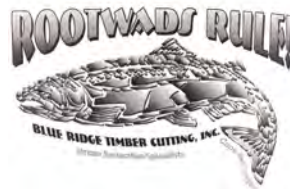
2018 OREGON CHAPTER AMERICAN FISHERIES SOCIETY Annual Meeting

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