

# American Fisheries Society



## **Idaho Chapter**

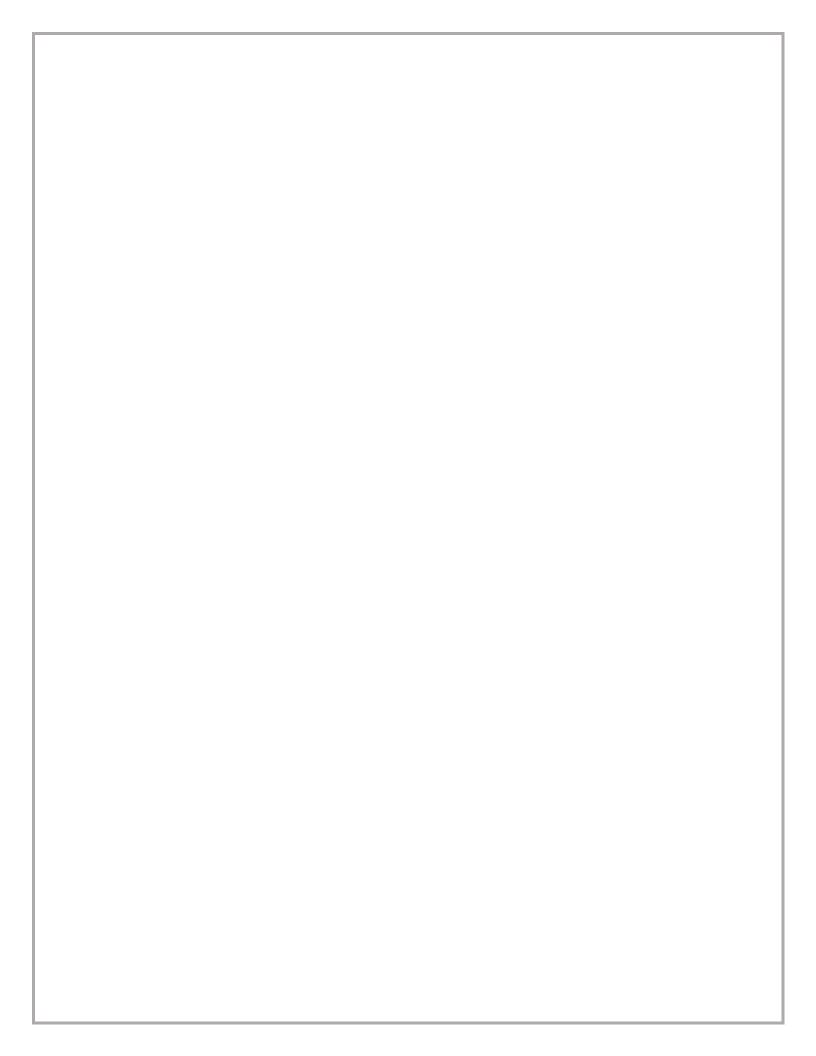
# 57<sup>th</sup> Annual Meeting



Program

March 5-8, 2019, Boise Centre Boise, Idaho

Plenary Session: Science-based regulations and angler ethics. Are tools missing from the toolbox?



# **Thanks to Our Meeting Sponsors!**

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# ICAFS EXCOM AND COMMITTEE CHAIRS



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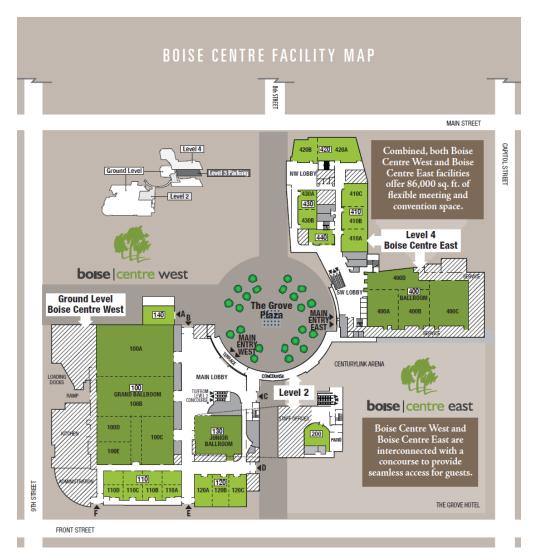
#### **Schedule at a Glance**

Tuosday March 5		
All Davi	Tuesday, March 5	440
All Day	AV - load talks	440 440
All Day	Registration	_
All Day	Poster Setup	400A
0800-1100	Trade Show Setup	400A
1630-1700	Volunteer Meeting	410C
1700-1800	EXCOM Meeting	410C
1800-2100	Welcome Social	420
	Wednesday, March 6th	
0700-0800	Breakfast	400D
0700-1700	Meeting Registration	440
	AV Table Open	
All Day	Vendor & Poster Displays	400A
0800-1010	Welcome and Plenary Session	400C
1010-1040	Morning Break	400D
1040-1200	Contributed Presentations	400C
1200-1320	Lunch Break & Committee Meetings (box lunch	
	See page 11)	
1320-1500	Contributed Presentations	400C
1500-1520	Afternoon Break	400D
1520-1620	Contributed Presentations	400BC
1630-1730	Spawning Run/Walk	<b>Biomark Office</b>
1800-2200	Student/Professional Mixer	420 ABC
Thomas dec. 10 To		
0700 4000	Thursday, March 7	400D
0700-1200	Breakfast Masting Registration AV Table Ones	400D
0700-1600	Meeting Registration AV Table Open	440
All Day	Vendor & Poster Displays	400A
0820-0940	Contributed Presentations	410AB
0940-1010	Morning Break	400D
1010-1150	Contributed Presentations	410AB
1150-1420	ICAFS Annual Business Meeting and Luncheon	400BC
1420-1520	Contributed Presentations (Concurrent)	410AB, 420AB
1520-1550	Afternoon Break	400D
1550-1710	Contributed Presentations (Concurrent)	410AB, 420AB
1710-1830	Poster Session and Trade Show	400A
1830-2300	Banquet & Auction Fundraiser!	400BC

#### Schedule at a Glance (Cont'd)

Friday, March 8		
0700-0800	Breakfast	400D
0810-1010	Contributed Presentations (Concurrent)	400C
1010-1040	Morning Break	400A
1010-1040	Poster Display Take-down	400A
1040-1200	Contributed Presentations	400C
1200	Best Paper Awards and Closing Remarks	400C
1200	EXCOM Post Meeting Wrap-up	430B

## **Convention Center Floor Plan**



#### **2019 ICAFS Plenary Session Speakers**

#### **Justin Hayes**

Justin is the General Manager at The Lodge at Palisades Creek on the South Fork Snake River. As the manager at an Orvis-endorsed lodge, he has worked with and fished



with guests from all across the Unites States and several countries. His guests are primarily fly anglers who practice catch-and-release while the South Fork Snake River has a regulation allowing and encouraging unlimited harvest of Rainbow Trout.

#### **Tim Traver**

Tim is an author from New England who grew up exploring the saltwater bays, marshes, and rivers of coastal Rhode Island and southeastern Massachusetts. Tim received a B.S. in Wildlife Biology from the University of Vermont, and a M.S. from Yale School of Forestry and Environmental Studies. Writing started as a sideline of Tim's work as a professional land conservationist and natural science educator, but has progressed to a full time occupation. Tim has published many articles and interest pieces and is the author of two books, Sippewissett: Or, Life on a Salt Marsh and Lost in the Driftless: Trout Fishing on the Cultural Divide.

#### **Chip Corsi**

Chip Corsi first put on an IDFG uniform shirt in 1978 as temporary at the Rapid River hatchery, back when rotary dial phones were still common and e-mail hadn't been invented. Since then he has worked as a fish culturist, a fishery research and then management biologist, a regional fishery manager, staff biologist, and state fisheries manager, working in the upper Snake, Magic Valley and Panhandle regions, and in headquarters. In 2003 he had an opportunity to go back out to a field office, and has served as the regional supervisor in the Panhandle region ever since. Along the way, he's



had a few opportunities to use regulations and other forms of incentives to work with anglers to help meet sport fishing and/or conservation objectives. He has a BS in Fishery Resource Management from the University of Idaho, and an MS in Zoology from Idaho State University. He is a fellow of the National Conservation Leadership Institute and a past president of ICAFS.

# Tuesday, March 5

2019 ICAFS Annual Meeting Workshops			
0700-1700	Meeting and Workshop Registration AV Load Talks	440	
0800-1100	Vendor Setup	400A	
0800-1200	Workshop - "In-stream PIT Tag Detection Systems- Equipment and Analytics"	410AB	
0800-1200	Workshop – "Nuts and Bolts in Genetics in Aquaculture"	Eagle Genetics Lab	
1200-1300	Lunch (on your own)		
1300-1600	Workshops Continued		
0800-1700	Poster Presentation Setup	400A	
1630-1700	Volunteer Meeting	410C	
1700-1800	EXCOM Meeting	410C	
1800-2100	Welcome Social	420	

Wednesday, I	March 6
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0700-0800 0700-1700	Breakfast Meeting and Workshop Registration AV Load Talks	400D 440
All Day	Vendor and Poster Displays	400A
0800	Plenary Session: Science-Based Regulations and Angler Ethics. Are Tools Missing from the Toolbox?	400C
0800-0810	Opening remarks and short video  Dr. Dan Schill  Retired IDFG	
0810-0815	Plenary Introduction Brett High Idaho Department of Fish and Game	
0815-0845	Angler attitudes in special regulation waters, perspectives for Outfitter/Guide  Justin Hayes  The Lodge at Palisades Creek	rom an
0845-0920	Catch-and-Release fishing ethic, a historical review Tim Traver Author	
0920-0950	Special regulation use in managing Idaho fisheries, been there  Chip Corsi  Idaho Department of Fish and Game	done that
0950-1005	Q&A and Roundtable Discussion	
1005-1010	Plenary Wrap-up <b>Brett High</b>	

Wednesday, March 6 (continued)

1010-1040	Morning Break Room 400D	
	Go Check out the Posters and Vendors in room 400A	
	· · · · · · · · · · · · · · · · · · ·	
1040	Wednesday Morning Contributed Presentations Moderator Eli Felts - IDFG Room - 400C	
1040-1100	Effect Of Trematode Infection On Growth, Reproduction, And Mortality Of Shorthead Sculpin  Darby Byington	
	Brigham Young University-Idaho Biology Department	
1100-1120	Integration Of Environmental DNA-Based Biological Monitoring Within The USGS National Streamgage Network  David Pilliod	
	US Geological Survey Forest and Rangeland Ecosystem Science Center	
1120-1140	Migration And Spawning Potential Of Bull Trout Occupying the South  Fork of the Boise River	
	Joe Benjamin US Geological Survey Forest and Rangeland Ecosystem Science	
	Center	
1140-1200	Global Warming Rates Of Salmon And Trout Rivers In The Pacific Northwest  Donna Horan  US Forest Service	

Wednesday, March 6 (continued)

1200-1320	<b>Committee Meetings</b>	
	Box Lunch	
	Anadromous Fish	410A
	Native Fish	410C
	Aquaculture	430B
	Mentoring	400B
	Public Education	410B
	Aquatic Habitat	Level 2 Lobby
	Sub-Unit EXCOM	430A

1320	Wednesday Afternoon Contributed Presentations  Moderator: Ken Lepla Idaho Power 400C
1320-1340	Exploiting Dietary Differences to Develop Species-Specific Control of Common Carp using Toxic Food Pellets  Josh Poole
	Idaho Fish and Game, University of Minnesota

	IGNITE Presentations
1340-1345	Using Mark-Resight Surveys To Investigate Sightability During Snorkel
	Surveys
	Matthew Amick
	Idaho Department of Fish and Game
1345-1350	Where Did You Come From, Where Did You Go? Juvenile White Sturgeon
	Telemetry
	Jacob Hughes
	Idaho Power Company
	• •
1350-1355	Estimating The Abundance Of Chinook Salmon Redds With The Use Of
	UAVs
	Curtis Roth
	Idaho Department of Fish and Game
1355-1400	I Want To Teach You Everything I Have Ever Learned With You In The
	Next Five Minutes. Reframing How We Approach Educational Outreach
	In Fisheries.
	Natasha Wingerter
	University of Idaho, Idaho Cooperative Fish and Wildlife Research Unit

Wednesday	, March 6 (continued)		
1400-1420	Moving Mountains and Making it Rain: Enhancing Riparian Resiliency		
	with Grazing Management and Beaver		
	Kurt Fesenmyer Trout Unlimited		
1420-1440			
1420-1440	Investigating The Potential For Reverberating Responses To Trophic Cascades Across Ecosystems		
	Jeremy Brooks		
	Idaho State University		
1440-1500	A First Look At Genotyping Archived DNA Samples. Can We Do Better?		
	David Venditti		
	Idaho Department of Fish and Game		
1500-1520	Afternoon Break		
	Sponsored by Idaho Power Company		
1520	Wednesday Afternoon Contributed Papers		
	Moderator: Rob Van Kirk - Henrys Fork Foundation		
	Room 400C		
	Treesin 1999		
1520-1540	Smallmouth Bass Predation On Juvenile Chinook Salmon In The Snake		
	River		
	John Erhardt		
1540-1600	U.S. Fish and Wildlife Service, Idaho Fish and Wildlife Conservation Office		
1540-1600	The Effect Of Pulse Frequency On Capture Efficiency And Injury Of Trout Sampled With Backpack Electrofishing In Small Streams		
	Luciano Chiaramonte		
	Idaho Department of Fish and Game		
1600-1620	Assessment Of Largemouth Bass Growth In Northern Idaho Lakes:		
	Spatiotemporal Patterns And Environmental Associations  Carson Watkins		
	Idaho Department of Fish and Game		
	igalio Departificiti di i isti alia dallic		
1620-1800			
1620-1800	Spawning Run		
1620-1800	Spawning Run Sponsored by Biomark		
1620-1800	Spawning Run		
1620-1800 1800-2100	Spawning Run Sponsored by Biomark		

# Thursday, March 7

	<b>y</b> /		
0700-0800	Breakfast	400D	
0700-1700	Meeting Registration/AV Table	440	
0800-1700	Vendor and Poster Displays	400A	
0820	Thursday Morning Contributed Pres	entations	
	Moderator: Patrick Kennedy IDFG		
	Room 410AB		
0820-0840	Two Methods Of Estimating Fish Conductivity Fo	or Electrofishing	
	Jim Reynolds		
	University of Alaska Fairbanks		
0840-0900	Long-Term Evaluation Of Fitness And Demographic I	Effects Of A Chinook	
	Salmon Supplementation Program		
	llana Koch		
	Columbia river inter-tribal fish commi	ssion	
0900-0920	A Comparison Of Three Backpack Electrofishing C	Configurations For	
000000=0	Sampling Juvenile Pacific Lamprey Entosphen	_	
	Jason Fortier		
	Idaho Department of Fish and Gar	ne	
0920-0940	Effects Of Fishery Related Fight Time And Air Expos	sure On Pre-Spawn	
	Survival And Reproductive Success Of Adult Hatchery Steelhead		
	Don Whitney		
	Idaho Department of Fish and Gar	ne	
0940-1010	Morning Break		
		Sponsored by <b>The Kootenai Tribe of Idaho</b>	
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Thursday,	March 7	(continued)	
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1010	Thursday Late Morning Contributed Presentations  Moderator: Greg Schoby IDFG  Room 410AB
1010-1030	Distribution And Movement Of Steelhead And Anglers In The Clearwater River, Idaho Stacey Feeken University of Idaho, Idaho Cooperative Fish and Wildlife Research Unit
1030-1050	Movements Of Yellowstone Cutthroat Trout, Brown Trout, And Rainbow Trout In The South Fork Snake River, Idaho. Kayden Estep University of Wisconsin-Stevens Point
1050-1110	Southeast Idaho Fish Screen Inventory And Database  Jim DeRito  Trout Unlimited
1110-1130	The Feasibility Of In-Situ Gamete Collection, And Early Life Stage Rearing, Of Wild Lake Trout (Salvelinus Namaycush); The Path Towards Developing A YY Male Captive Broodstock In The Future.  William Harryman  Idaho Department of Fish and Game
1130-1150	Otolith Analysis Reveals Variable Juvenile Growth And Migration In Chinook Salmon Experiencing Different Environmental Conditions Katherine Gillies-Rector University of Idaho, Idaho Cooperative Fish and Wildlife Research Unit

Business Lunch - Room 400BC

# Thursday, March 7 (continued)

1420	Thursday Afternoon Contributed Presentations
	Concurrent Sessions
	Rooms 410AB and 420

Room	440AB	420
	410AB	
Moderator	Bart Gamett - USFS	Evan Brown - IDFG
1420-1440	Foundations Of Relational Values	Changes In Resource Selection Due
	In River Socio-Ecological Systems	To Seasonally Induced Intraspecific
	In The Western Us	Competition In Steelhead
	Adam Eckersell	Oncorhynchus mykiss
	Idaho State University	Natasha Wingerter
		University of Idaho, Idaho Cooperative
		Fish and Wildlife Research Unit
1440-1500	Prioritization Of Management	Monitoring And Adaptive
	Actions For A Threatened Trout	Management: Small Investment, Big
	Using Multiple Population Viability	Savings
	Analysis	Katie Salsbury
	Helen Neville	Intermountain Aquatics, Inc
	Trout Unlimited	_
1500-1520	Evaluation Of Monitoring Scenarios	Using Lake Nutrient Budgets And
	To Inform Multiple Population	Stable Isotopes To Reconstruct
	Viability Analysis For Lahontan	Historical Sockeye Salmon
	Cutthroat Trout	Abundance In Redfish Lake, Idaho
	Daniel Dauwalter	Rachel Brinkley
	Trout Unlimited	Idaho State University
1520-1550	A 44 a via a	on Dreek
1320-1330	7	on Break
		n 400D
	•	sored by
	Idaho Fis	h and Game
1550	Thursday Afternoon Con	tributed Presentations
	Concurrent	Sessions

Thursday, March 7 (continued)

Room	410AB	420
Moderator	Jim Chandler - Idaho Power	John Erhardt - USFWS
1550-1610	Effects Of Air Exposure On Survival Of Yellowstone Cutthroat Trout From A Warm Water Stream Darcy McCarrick University of Idaho, Idaho Cooperative Fish and Wildlife Research Unit	How Many Fish Should We Stock? Using Population Dynamics Of Kokanee In Lake Pend Oreille To Inform Stocking Goals. Sean Wilson Idaho Department of Fish and Game
1610-1630	Effects Of Flow Management On Yellowstone Cutthroat Trout And Rainbow-Hybrid Trout Populations In The South Fork Snake River Bryce Oldemeyer Henry's Fork Foundation	Understanding The Factors Influencing Population Dynamics Of Kokanee In Northern Idaho Zach Klein University of Idaho, Idaho Cooperative Fish and Wildlife Research Unit
1630-1650	Describing Life History Structure Of Westslope Cutthroat Trout In The St. Maries River Basin Using Otolith Microchemistry John Heckel University of Idaho, Idaho Cooperative Fish and Wildlife Research Unit	Kokanee Salmon Management At Deadwood Reservoir: Supporting An Increasingly Popular Statewide Fishery John Cassinelli Idaho Department of Fish and Game
1650-1710	Estimating Yellowstone Cutthroat Trout Population Dynamics Using An Integrated Population Model Joshua McCormick Idaho Department of Fish and Game	Rainbow Trout Growth Is Linked To Kokanee Abundance In Lake Pend Oreille, Idaho Nicky Graham Idaho Department of Fish and Game
1710-183	1 00101 0000101	n and Trade Show m 400A

1830-2300

# The 57<sup>th</sup> Annual ICAFS Banquet/Fundraiser Auction Room 400BC

# Friday, March 8

0810	Friday Morning Contributed Presentations  Moderator: Ernest Keeley ISU  Room 400C
0810-0830	eBLIMP: The eDNA Basinwide Lamprey Inventory and Monitoring Project  Mike Young  US Forest Service
0830-0850	Change In Species Composition And Abundance Of Tropical Fish Fallowing Sudden Temperature Changes In Barney Hot Spring, Idaho Skyler Smith Brigham Young University-Idaho Biology Department
0850-0910	Early Detection And Monitoring Of A Reintroduced Spring-Chinook Population In The Okanogan Basin Matthew B. Laramie U.S. Geological Survey
0910-0930	Fish Community Trends In The Lower Payette River, Idaho, Associated With A 2013 Fish Kill Mike Peterson Idaho Department of Fish and Game
0930-0950	A Bioenergetic Analysis Of Habitat Suitability For Cutthroat Trout Oncorhynchus clarki In Headwater Streams Treated With Instream Structures Tyson Hallbert Idaho State University
0950-1010	Invasion Of Non-Native Crayfish <i>Faxonius virilis</i> In The Henrys Fork Drainage, Idaho Peyton Shaw Brigham Young University-Idaho Biology Department
1010-1040	Last Morning Break Room 400D
1040	Friday Morning Contributed Presentations  Moderator: Jeanne McFall IDFG  Room 400C

Friday , M	arch 8 (continued)
1040-1100	Advances In Hard-Part Chemistry In The Context Of Idaho Fish Populations  Jens Hegg
	University of Idaho, Idaho Cooperative Fish and Wildlife Research Unit
1100-1120	Predicting The Distribution Of Yellowstone Cutthroat Trout In The Upper Snake River Using Spatial Stream Network Analysis.Predicting The Distribution Of Yellowstone Cutthroat Trout In The Upper Snake River Using Spatial Stream Network Analysis Cody Feldman Idaho State University
1120 1110	The Effect Of A Coline Coorne Astinating Colution On Fautilization Of
1120-1140	The Effect Of A Saline Sperm Activating Solution On Fertilization Of Chinook Salmon And Steelhead Eggs
	Steve Pomerleau
	Idaho Department of Fish and Game
1140-1200	Identification Of New Diagnostic SNPS For Assessing Hybridization In Salmonids Thomas Delomas Idaho Department of Fish and Game
	Best Paper Awards

**EXCOM Meeting** Room 430B

## **Poster Titles and Presenters**

Angler Science: Engaging Our Grassroots, Matt Barney, Trout Unlimited

Movement Patterns and Habitat Use of Walleye in Lake Pend Oreille, **Gavin Aguilar, Idaho Fish and Game** 

Genetic Sex Marker Discovery in Three Non-Native Fish Species, **Katharine Coykendall**, **Pacific States Marine Fisheries Commission** 

Examining Standard Environmental DNA Sample Extraction and Archival Methods, Kelly Mazur\*, U.S. Geological Survey/Boise State University

Juvenile Life Stages and Hosts of the Trematode *Euryhelmis cotti*, **Ian Holmes\***, **BYU Idaho** 

Estimating Distribution of Sensitive Species in the Salt River and Blackfoot River Drainages Using Environmental DNA, Jordan Norman\*, Brigham Young University - Idaho

Salvage and Relocation of Western Pearlshell Mussel in Tincup Creek, Idaho, **Emma Brandon\***, **Brigham Young University** - **Idaho** 

Mussel Behavior and Density in Lolo Creek, Idaho, **Michael Murray, U.S. Fish and Wildlife**Service

Describing Freshwater Mussel Species in the Portneuf River, Loni Nelson\*, Idaho State University

Pacific Lamprey Distribution and Density in the Clearwater River Basin, **Doug Nemeth, U.S. Fish and Wildlife Service** 

Pacific Lamprey Abundance and Passage at the Lower Columbia River Dams, **David** Swank, U.S. Fish and Wildlife Service

Population Dynamics of Longnose Dace in an Eastern Idaho Stream, **Taylor Morlan, Idaho Fish and Game** 

Age and Growth Patterns of Paiute Sculpin (*Cottus Beldingii*) in Antelope Creek, Idaho, **Shawnie Geisler, Brigham Young University – Idaho** 

Meristic and Morphological Analysis Provides Evidence for Distinctiveness Between Populations of Bluehead Suckers (*Catostomus Discobolus*), **Tyson Halbert, Idaho State University** 

Principal Components of Thermal Regimes in Central Idaho Rivers and Streams, **Dan** Isaak, U.S. Forest Service

Thermal Regimes of Flowing Waters in the Western United States, **Dan Isaak, U.S. Forest Service** 

## **Poster Titles and Presenters (cont.)**

Migration Timing of Three Salmonid Species in the Yankee Fork Salmon River, Josh Jackson, Shoshone-Bannock Tribes' Fish and Wildlife Department

Returning eggs to gravel: evaluating the efficacy of the Shoshone-Bannock Tribes' egg supplementation efforts in Panther Creek, Idaho, **Keats Conley, Shoshone-Bannock Tribes' Fish and Wildlife Department** 

Fertilization of Chinook Salmon and Steelhead Eggs Using a Saline Solution for Sperm Activation, **Steeve Pomerleau**, **Idaho Fish and Game** 

Evaluating the Relationship between In-Stream Habitat and Salmonid Densities within the Salmon River Basin, Idaho, **Amber Young, Idaho Fish and Game** 

Examining Long-Term Trends in Abundance of Juvenile Salmonids in South Fork Clearwater Tributaries, **Hunter Distad, Idaho Fish and Game** 

Shared Waters: Utilizing Scales to Distinguish Rainbow Trout from Steelhead in Idaho Streams, Tyler Zumwalt, Pacific States Marine Fisheries Commission

Improving Estimates of Abundance for ESA-Listed Wild Adult Chinook Salmon and Steelhead in the Snake River Basin, **John Hargrove**, **Pacific States Marine Fisheries Commission** 

Mapping the Foodscape for Drift-Feeding Salmonids Identifies Spatial and Temporal Scales of Resource Exploitation, **Hope Owens\***, **Idaho State University** 

Contrasting Isotopic Niche Size and Overlap of Native and Non-Native Salmonids in a Large River, Nick Birmingham, Idaho Fish and Game

Measuring Aggressive Foraging Behavior and Competition of Invasive Juvenile Brook Trout with Juvenile Cutthroat Trout, Ryan Whitworth, Idaho State University

Distribution, Abundance, and Habitat Use of Westslope Cutthroat Trout in the St. Maries River Basin, John Heckel\*, University of Idaho

Spawning Migration Timing of Yellowstone Cutthroat Trout and Native Suckers in the South Fork Teton River, Idaho, **Drew Suchomel\***, **Brigham Young University – Idaho**