

# Schedule

## Day 1

Tuesday, December 3, 2019

9:00 am	Registration and Exhibitor Setup
1:00 pm	Welcome Address
1:15 pm	<b>Keynote: J. Trushenski.</b> Telling our stories—Why we raise fish
<b>SESSION: EFFECTIVE REARING AND RELEASE STRATEGIES</b>	
1:45 pm	<b>G. Marston.</b> Assessing the performance of Washington State Hatchery Chinook Salmon with coded-wire tag data
2:05 pm	<b>J. Bokvist.</b> Multi-generational application of environmental enrichment increases escapement of Nitinat River Hatchery Coho Salmon ( <i>Oncorhynchus kisutch</i> )
2:25 pm	<b>M. Moser.</b> Use of olfactory cues to guide fish movement: A Steelhead Trout hatchery application
2:45 pm	<b>P. Branigan.</b> Cost effectiveness and angler return-to-creel in catchable-sized trout stocking programs: Does size matter?
3:05 pm	<b>COFFEE</b> - Courtesy of Freshwater Fisheries Society of BC
3:30 pm	<b>1st Raffle</b>
3:35 pm	<b>C. Schmitt.</b> Natural freshwater rearing program for Chinook juveniles which significantly increases marine survivals resulting in greater numbers of adult fish for marine fisheries and escapements (spawner returns)
<b>SESSION: ADVANCES IN INFRASTRUCTURE AND HATCHERY TECHNOLOGY</b>	
3:55 pm	<b>C. Willard.</b> Post-release performance of summer Chinook Salmon smolts reared in a partial reuse aquaculture system compared to cohorts reared in flow-through raceways
4:15 pm	<b>M. Johnson.</b> Survival of adult hatchery summer Chinook reared in a partial reuse aquaculture system to flow-through super raceways
4:35 pm	<b>V. Autier.</b> Planning for the inevitable? Lake water filtration system to prevent Zebra Mussel infestation at the Gavins Point Hatchery
4:55 pm	<b>Hall of Fame Presentation</b>
5:15 pm	<b>Adjourn</b>
5:30 pm	<b>Executive Committee Meeting</b> (Penthouse Suite 1706, Double Tree by Hilton)
6:30 pm	<b>Pub Crawl</b>

# Schedule

## Day 2

Wednesday, December 4, 2019

8:00 am	<b>2nd Raffle</b>
8:05 am	Housekeeping and Pub Crawl Awards
8:20 am	<b>Keynote: G. Iwama.</b> Aquaculture: A part of future food production
<b>SESSION: FISH HEALTH AND NUTRITION</b>	
8:50 am	<b>T. Bruce.</b> Live-attenuated Bacterial Coldwater disease (BCWD) vaccine provides cross-protection against novel Flavobacteriaceae
9:10 am	<b>S. Strickland.</b> Copepod-induced morbidity of spring Chinook smolts in the Upper Deschutes Basin: Implications for reintroduction success
9:30 am	<b>S. Bjork.</b> Innovative approaches to treating Columnaris in juvenile steelhead at an Oregon hatchery: What's old, what's new and what actually worked
9:50 am	<b>R. Hepburn.</b> Melting fast and furiously: Application of multiplexed melt analysis qPCR in fish health
10:10 am	<b>COFFEE</b> - Courtesy of Bio-Oregon
10:35 am	<b>3rd Raffle</b>
10:40 am	<b>L. Miceli.</b> Potential of black soldier fly larvae as a sustainable alternative source of protein for aquaculture diets – Supply, performance, and functionality
11:00 am	<b>J. Mann.</b> New ingredient innovations for fish feed
11:20 am	<b>E. Rechisky.</b> The coast-wide collapse in Northeast Pacific Chinook and steelhead survival
11:40 am	<b>B. Robinson.</b> Things I have learned during my 35+ years within the industry
12:00 pm	<b>LUNCH</b> - Courtesy of Pacific Salmon Foundation
1:05 pm	<b>4th Raffle</b>

## Day 2 (continued)

SESSION: CONSERVATION AND NEW SPECIES AQUACULTURE	
1:10 pm	<b>C. Tatara.</b> Sorting for growth potential improves smoltification in steelhead ( <i>Oncorhynchus mykiss</i> ) conservation hatcheries
1:30 pm	<b>M. Earhart.</b> Early-rearing effects on larval White Sturgeon ( <i>Acipenser transmontanus</i> ) physiology, growth, and survival
1:50 pm	<b>M. Manky.</b> Nechako White Sturgeon Conservation Centre
2:10 pm	<b>A. Huff.</b> Continuing the journey: Southern Resident Killer Whales
2:30 pm	<b>B. Dymowska.</b> Hatchery release timing studies
2:50 pm	<b>COFFEE</b> - Courtesy of EWOS
3:15 pm	<b>5th Raffle</b>
SESSION: POTPOURRI	
3:20 pm	<b>D. Engemann.</b> Fertilization of Chinook Salmon and steelhead eggs using a saline solution for sperm activation
3:40 pm	<b>S. Francke.</b> The importance of extending quality salmonid sperm
4:00 pm	<b>N. Fisher.</b> Mysis shrimp: An invasive species in the interior lakes of British Columbia, Canada, and the pioneering of a sustainable freshwater fishery
4:20 pm	<b>J. Krajcik.</b> Salmon research at the Oregon Hatchery Research Center
4:40 pm	<b>Wrap-up</b>
4:50 pm	<b>Adjourn</b>
5:30 pm	<b>Vendor Social and Poster Session</b>

# Schedule

## Day 3

Thursday, December 5, 2019

8:00 am	<b>6th Raffle</b>
8:05 am	Housekeeping
<b>SESSION: PHYSIOLOGY AND GENOMICS</b>	
8:10 am	<b>A. Mueller.</b> Role of genomics in advancing B.C.'s fisheries and aquaculture sector
8:30 am	<b>P. Schulte.</b> Applications of genomics in Rainbow Trout culture – An overview
8:50 am	<b>J. McKenzie.</b> Effects of acclimation temperature on gene expression in two strains of Rainbow Trout
9:10 am	<b>D. Larsen.</b> Is out-of-basin rearing an underappreciated problem? Stress, acute mortality and long-term survival of Chinook Salmon reared in different water chemistries and released in the Yankee Fork of the Salmon River
9:30 am	<b>W. Bugg.</b> Thermal physiology of age-0 Lake Sturgeon from geographically different populations
9:50 am	<b>N. Strowbridge.</b> Intraspecific variation in thermal and hypoxia tolerance across populations and life-stages of Rainbow Trout
10:10 am	<b>COFFEE</b>
10:35 am	<b>7th Raffle</b>
10:40 am	<b>B. Riddell.</b> The Pacific Salmon Foundation's analyses of hatchery effectiveness in B.C.
<b>SESSION: HATCHERY INNOVATIONS</b>	
11:00 am	<b>J. Deupree.</b> Wild stock enhancement programs support systems and infrastructure.
11:10 am	<b>D. Hardie.</b> Redesign and custom-built fish transport tanks
11:20 am	<b>D. Ingram.</b> Feeding eFISHently, one meal at a time
11:30 am	<b>S. Atamanchuk.</b> Bug attractor - Mutilator - Killer bug zapper
11:40 am	<b>Final Raffle and Closing Remarks</b>
11:50 am	<b>Adjourn</b>

# Poster Presentations

**Kari Alex.** Okanagan River restoration initiatives.

**Kylie Anderson.** Delayed release strategy for juvenile Coho impacts on survival and size at spawn.

**Ryan Benson.** Sockeye smolt out of basin survival: pit tagging.

**Randall Bock.** Humane percussive stun/killing of salmon using the Bock Industries Zephyr-F.

**Don Chamberlain.** Puntledge River Summer Chinook conservation – Annual DNA sampling and analysis.

**Curt Edmondson.** Applications and results of moist air salmonid incubation systems.

**Chad Fuller.** Building capacity for basin management.

**Kevin Hall.** Adult salmon handling at Inch Creek Hatchery: Electro-anesthesia system.

**Maureen A. Hess.** Monitoring salmonid hatchery stocks with parentage based tagging (PBT) in the Columbia River basin.

**Norm Johnson.** Increasing survival of cultured Sockeye.

**Tod Jones.** Advances in oxygen supplementation for hatcheries.

**Tod Jones.** Instant hatchery in a box.

**Lori Kishimoto.** Assessing the fisheries contributions of Washington State hatchery Chinook salmon with coded-wire tag data.

**Jacob Knight and Lyndy Vroom.** The benefits of using aerial drones for scouting and estimating salmon abundance.

**Robert Konrad, Trina De Monye, Brian Har.** Capilano Watershed trap and truck program.

**Alexa N. Maine.** Polyculture increases growth and survival of larval Pacific Lamprey.

**Doug Olson.** 10 years of Chinook salmon contribution to Pacific Ocean and Columbia River fisheries from our Columbia River Gorge national fish hatcheries.

**Jeremy Pike.** Salmon in Idaho: Dworshak NFH hurdles challenges in the race to beat the effects of climate change.

## Poster Presentations (continued)

**Ravinder Sappal.** Substituting fish meal with freshwater mysid shrimp in the formulation of fish feed: Effects on the performance of juvenile Rainbow trout (*Oncorhynchus mykiss*) reared in hatchery.

**Carol Schmitt.** Natural freshwater rearing program for Chinook juveniles which significantly increases marine survivals resulting in greater numbers of adult fish for marine fisheries and escapements (spawner returns).

**Tristan Shonat.** Developing culture methods for larval Pacific lamprey: Energetic demands.

**Geraldine Vander Haegen.** How to tag 278,000 fish in an hour, and why do we need to?

**Jeremy van Woerden.** Tenderfoot Creek Hatchery: The re-introduction of Chinook and Coho to the upper Elaho River.

**Kayla P. Warden.** Comparison of dissolved oxygen and the cost of using the O<sub>2</sub> generator.