



66th Annual Northwest Fish Culture Concepts:

A Workshop for Fish Culturists “Angling for Sustainability”

December 1 – 3, 2015
Holiday Inn Portland South
Wilsonville, Oregon

Hosted by:

The Oregon Department of Fish & Wildlife



Day 1: Tuesday December 1st

9:00am **Registration Begins**
1:10pm **Welcome: Scott Patterson (ODFW)**
1:20pm **Welcome: Curt Melcher (ODFW)**
1:40pm **Keynote Speaker, Steve Williams**

Session #1: Aquaculture in Fisheries Management

Session Chair: Ryan Queen (ODFW)

2:10pm Kyle Bratcher (Oregon Dept. of Fish and Wildlife) *Getting paid to fish? Using a tag-reward model to evaluate a stocked trout fishery in Wallowa Lake, Oregon*

2:30pm Michelle Scanlan (Oregon State University) *Trans-located Atlantic salmon (*Salmo salar*): Using geomagnetic orientation responses for invasion risk assessment*

2:50pm Andy Dittman (NWFC, NMFS) *Effects of hatchery-rearing practices on olfactory imprinting in Pacific salmon*

3:10pm **Afternoon Break**

3:40pm **Door Prize Drawing**

3:50pm Garth Wyatt (Portland General Electric (PGE)) *“Hey you, get your hands off me!” An overview of PGE’s new hands-free adult fish sorting facility at the North Fork Dam on the Clackamas River near Estacada, Oregon*

4:10pm Todd Alsbury (Oregon Dept. of Fish and Wildlife) *Controlling stray hatchery fish with various styles of weirs*

4:30pm Terry Shrader (Oregon Dept. of Fish and Wildlife) *Use of fluorescent grit marking as a means of mass marking salmonids*

4:50pm **Hall of Fame Induction**
5:00pm **Announcements/Door Prize Drawing/Adjourn**
5:30-9:00pm **Poster Session/Vendor Social**

Day 2: Wednesday December 2nd

6:00-7:30am **Breakfast**

8:00am **Announcements/ Door Prize Drawing**

Session #2: New Technologies in Aquaculture

Session Chair: Doug Curtis (ODFW)

8:10am Darrel Nice (Tetra Tech) *Construction and startup of a new Sockeye Hatchery in British Columbia*

8:30am Patrick Cooney (Smith-Root) *Electric fish handling gloves: new technology for immobilizing and handling*

8:50am Todd Deligan (Whooshh Innovations) *Head-first and hands-free: advances in use of the Whooshh system since 2014*

9:10am Whooshh Demonstration in the parking lot

9:30am **Morning Break**

Session #3: Effects of Climate Change and Drought

Session Chair: Kyle Wilson (ODFW)

9:50am **Door Prize Drawing**

10:00am Brian Beckman (NWFSC, NMFS) *The NE Pacific Ocean and Columbia River Salmon returns: past, present and future*

10:20am Mark Clifford (California Dept. of Fish and Wildlife) *California Department of Fish and Wildlife hatcheries as drought safe haven: self-contained recirculating aquaculture systems for fish populations in peril*

10:40am Michael Dege (California Dept. of Fish and Wildlife) *Year-around drought monitoring, impacts and rescues of McCloud River Redband trout*

11:00am Eric Jones (California Dept. of Fish and Wildlife) *Drought impacts on McCloud River Redband trout: recirculating aquaculture systems used as a safe haven at Mt. Shasta Hatchery*

Day 2: Wednesday December 2nd (cont.)

Session #3: Effects of Climate Change and Drought (cont.)

11:20am Mark Drobish (US Fish and Wildlife Service, Dworshak NFH) *Hot summer temperatures have unique impacts to Dworshak National Fish Hatchery*

11:40am Kathleen Cole (U of Hawaii) *Comparison of family, source and rearing temperature effects on early gonad development and phenotypic sex in wild and hatchery steelhead (*Oncorhynchus mykiss*)*

12:00pm **Lunch Break (Taco Bar provided by Holiday Inn, \$14)**

Session #4: Research in Aquaculture #1

Session Chair: Deb Eddy (ODFW)

1:20pm **Door Prize Drawing**

1:30pm Dina Spangenberg (NWFSC, NMFS) *Physiological measures of smolt quality at time of release successfully predict relative smolt to adult performance in the Hood River Spring Chinook salmon*

1:50pm Don Larsen (NWFSC, NMFS) *Using physiological indices to estimate residualism rates in hatchery reared winter-run steelhead trout (*Oncorhynchus mykiss*) in the Hood River, Oregon*

2:10pm Neil Thompson (Oregon State University) *The effects of high rearing density on the potential for domestication selection in hatchery culture of steelhead (*Oncorhynchus mykiss*)*

2:30pm Marc Johnson (Oregon Dept. of Fish and Wildlife) *Outmigration, saltwater readiness, growth and survival of triploid summer steelhead*

2:50pm David Noakes (Oregon State University) *OHRC Research Plan: mate choice, domestication and straying*

3:10pm **Afternoon Break**

Day 2: Wednesday December 2nd (cont.)

Session #5: Fish Health and Nutrition

Session Chair: Craig Banner (ODFW)

- 3:30pm **Door Prize Drawing**
- 3:40pm Phong Nguyen (Smith-Root, Inc.) *Humane fish slaughter: A comparison of animal welfare standards in the United States and the United Kingdom. What is the next step?*
- 4:00pm Rick Stocking (Oregon Dept. of Fish and Wildlife) *Copepod-induced morbidity of spring Chinook smolts in the Upper Deschutes River: Implications for reintroduction success*
- 4:20pm Sarah Bjork (Oregon Dept. of Fish and Wildlife) *Assessment of Ceratonova shasta in the Clackamas River upstream of Clackamas Hatchery*
- 4:40pm Katie Haman (Washington Dept. of Fish and Wildlife) *Is DRAXXIN a good substitute for Gallimycin?*
- 5:00pm Derek Gibbs (Oregon Dept. of Fish and Wildlife) *An overview of Columnaris: Diagnosis and treatment*
- 5:20pm Nikolas Zymonas (Oregon Dept. of Fish and Wildlife) *Implications of pathogens for captive-rearing and reintroduction of Bull Trout (Salvelinus confluentus) in the Upper Willamette Basin, Oregon*
- 5:40pm **Announcements/Adjourn**
- 6:30pm **Ex-Com Meeting (Hospitality Room)**

Day 3: Thursday December 3rd

6:00-7:30am **Breakfast**

8:00am **Announcements/Door Prize Drawing**

Session #6: Research in Aquaculture #2

Session Chair: Deb Eddy (ODFW)

- 8:10am Carlin McAuley (NOAA Fisheries, Manchester Research Station) *Salmon broodstocks in seawater – life in a 20' ocean – the Manchester experience*
- 8:30am Timothy Hoffnagle (Oregon Dept. of Fish and Wildlife) *The influence of size at release on performance of Imnaha River Chinook Salmon hatchery smolts*
- 8:50am Cameron Sharpe (Oregon Dept. of Fish and Wildlife) *Performance of Upper Willamette River hatchery spring Chinook salmon released in the fall and spring*
- 9:10am Julia Unrein (Oregon State University) *Applications of alternative rearing strategies to produce juvenile migratory phenotypes in spring Chinook salmon*
- 9:30am Heather Stewart (Oregon State University) *You've got to know when to hold 'em: Determination of appropriate transport and release timing of juvenile Chinook salmon*
- 9:50am **Morning Break**

Day 3: Thursday December 3rd (cont.)

Session #7: Miscellaneous Programs and Techniques

Session Chair: Diane Deal (ODFW)

- 10:10am **Door Prize Drawing**
- 10:20am Mary Moser (NWFSC, NMFS) *Implanting PIT tags in larval Pacific Lamprey*
- 10:40am Dan Magneson (US Fish and Wildlife Service, Quilcene NFH) *“June Hogs:” The legend of the SuperSalmon*
- 11:00am Eric Pankau (Idaho Dept. of Fish and Game) *The effects of specific gravity on inventory methods for hatchery Rainbow Trout*
- 11:20am Neil Ashton (Aquaculture Research Institute, U of Idaho) *Burbot conservation aquaculture: A decade of advancements in the Kootenai Region*
- 11:40am Kristen Home (Oregon Dept. of Fish and Wildlife) *Addressing the critical uncertainties in the reintroduction of Chum salmon to Oregon tributaries of the Columbia River.*
- 12:00am Dan Stefanovic (Okanagan Nation Alliance, KŁ CPƏLK STIM Hatchery) *KŁ CPƏLK STIM Hatchery and the use of cryopreservation for conservation of Okanagan Sockeye salmon (*Oncorhynchus nerka*)*
- 12:20pm **Closing Remarks (including 2016 NWFCC)**
Raffle Prize Drawing
Adjourn

2015 NWFCC Organizing Committee:

Scott Patterson
Erik Withalm
Brett Requa
Guy Chilton
Linda Lytle
Mark Traynor
Manny Farinas
Greg Grenbemer
Tami Edmunds
Dan Straw
Shari Beals
John Thorpe
Greg Davis
Deb Eddy
Greg Lipsiea
Ryan Couture

2015 NWFCC Session Moderators:

Deb Eddy
Doug Curtis
Diane Deal
Ryan Queen
Kyle Wilson
Craig Banner



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