

## 2021 PACIFIC COAST STEELHEAD MANAGEMENT ON-LINE MEETING

MARCH 16-18, 2021

## TUESDAY, MARCH 16, 2021

9:00 – 9:10 am	WELCOME, INTRODUCTIONS & HOUSEKEEPING ITEMS STEERING COMMITTEE CHAIR, ROGER HARDING, ALASKA DEPARTMENT FISH AND GAME, RETIRED STEPHEN PHILLIPS, PACIFIC STATES MARINE FISHERIES COMMISSION
9:10 – 9:55 am	<ul> <li>SESSION ONE – BRIEF OVERVIEW/HIGHLIGHTS OF STEELHEAD STOCK STATUS REVIEW PLEASE NOTE: COMPLETE PRESENTATIONS POSTED ON PSMFC\STEELHEAD WEB PAGE (THIS SHORT SESSION WILL HIGHLIGHT OVERALL STATUS, SIGNIFICANT CHANGES OR ISSUES)</li> <li>CHAIR: BRIAN MARSTON, ALASKA DEPARTMENT OF FISH AND GAME</li> <li>9:10 California – Ryon Kurth, California Department of Fish and Wildlife (CDFW)</li> <li>9:15 Oregon – Tom Friesen, Oregon Department of Fish and Wildlife (ODFW)</li> <li>9:20 Idaho – Alan Byrne, Idaho Department of Fish and Wildlife (IDFG)</li> <li>9:25 Washington – Dan Rawding, Washington Department of Fish and Wildlife (WDFW)</li> <li>9:30 British Columbia – Robert Bison, Ministry of Forests, Lands, Natural Resource Operations and Rural Development (MFLNRORD)</li> <li>9:35 Alaska – Matt Catterson, Alaska Department of Fish and Game (ADFG)</li> <li>9:40 Questions and Discussion</li> </ul>
9:55 – 10:00 ам	BREAK - 5 MINUTES
10:00 – 11:40 ам	<ul> <li>SESSION TWO - (PART 1) GENETICS UPDATES</li> <li>CHAIR: BRIAN MARSTON, ALASKA DEPARTMENT OF FISH AND GAME</li> <li>10:00 Can angler-assisted brood stock programs improve the catch rate of hatchery steelhead? Preliminary results from the "Biter Study" - Marc A. Johnson, Ph.D., ODFW</li> <li>10:20 Conservation and Management of Adaptive Genomic Variation - Devon Pearse, NOAA Fisheries Ecology, Southwest Fisheries Science Center, Santa Cruz, CA</li> <li>10:40 Evidence of Hatchery-Wild Introgression in A Winter Steelhead Population In The Green River, WA - Bethany Craig, Joseph Anderson, Todd Seamons, and Kenneth Warheit, WDFW</li> <li>11:00 Using genetic analysis to assess barriers and historical distribution of steelhead in the Eel River, California - Samantha Heather Kannry, University of California, Davis</li> <li>11:20 Questions and Discussion</li> </ul>
11:35 – 11:40 ам	BREAK - 5 MINUTES
11:40 – 12:30 рм	<ul> <li>SESSION TWO - (PART 2) APPLICATION OF GENETICS FOR STEELHEAD MANAGEMENT</li> <li>CHAIR: ALAN BYRNE, IDAHO DEPARTMENT OF FISH AND GAME</li> <li>11:40 The Snake River Basin Wild Steelhead Run Reconstruction Model: Genetic Foundations and Management Application - Eric Stark, IDFG</li> <li>12:00 Single parent and grandparent genetic assignments, what is possible and what is not -Tomas Delomas, IDFG</li> <li>12:20 Questions and Discussion</li> </ul>

## WEDNESDAY, MARCH 17, 2021

9:00 – 10:10 am	<ul> <li>SESSION THREE - (PART 1): REVIEW OF POPULATION DYNAMICS MODELS TO GUIDE QUANTITATIVE MANAGEMENT</li> <li>CHAIR: THOMAS BUEHRENS, WASHINGTON DEPARTMENT OF FISH AND WILDLIFE</li> <li>9:00 Combining matrix models and decision theory to manage steelhead harvest - Matt Falcy, ODFW</li> <li>9:20 Skagit Steelhead Integrated Population Model - Mark Scheuerell, U.S. Geological Survey, Washington Cooperative Fish and Wildlife Research Unit</li> <li>9:40 Recent Issues in the Idaho Steelhead Fisheries and Use of an Integrated Population Model to Address Them - Lance Hebdon, Timothy Copeland, Joshua McCormick, IDFG</li> <li>10:00 Summary, Questions and Discussion (10 minutes)</li> </ul>
10:10 – 10:15 ам	BREAK – 5 MINUTES
10:15 – 11:35 ам	<ul> <li>SESSION THREE - (PART 2): REVIEW OF BEST MANAGEMENT TOOLS AVAILABLE FOR USE ON DEPRESSED RECREATIONAL STOCKS</li> <li>CHAIR: THOMAS BUEHRENS, WASHINGTON DEPARTMENT OF FISH AND WILDLIFE</li> <li>10:15 Integrating tools to manage steelhead fisheries - Thomas Buehrens, WDFW</li> <li>10:35 Hooking mortality rates for use in steelhead fisheries - Ian Courter, Mt Hood Environmental</li> <li>10:55 Air exposure, fight times, and deep hooking rates of steelhead caught in Idaho fisheries - Luciano Chiaramonte, IDFG</li> <li>11:15 Effects of fishery related fight times and air exposure on pre-spawn survival and reproductive success of adult hatchery steelhead - Don Whitney, IDFG</li> </ul>
11:35 – 11:40 ам	BREAK – 5 MINUTES
11:40 – 1:00 рм	<ul> <li>11:40 "Real time" steelhead escapement estimates to maximize potential hatchery harvest rates - Ben Truscott, WDFW</li> <li>12:00 Generating estimates of catch for wild steelhead in recreational fisheries: Challenges and solutions - Kale Bentley, WDFW</li> <li>12:20 Using recreational e-tagging data to monitor steelhead fisheries - Angela Ward and Michelle Jones, ODFW</li> <li>12:40 Summary, Questions and Discussion</li> </ul>

## THURSDAY, MARCH 18, 2021

9:00 – 10:55 am	<ul> <li>SESSION FOUR - CHALLENGES AND INFORMATION NEEDS FOR OREGON STEELHEAD</li> <li>CHAIR: TOM FRIESEN, OREGON DEPARTMENT OF FISH AND WILDLIFE</li> <li>9:00 Measuring the additive effects of colonial waterbird predation on the survival of Upper Columbia River steelhead: implications for predator management - Quinn Payton, Allen Evans, Nathan Hostetter, Daniel Roby, Brad Cramer, and Ken Collis, Real Time Research, Inc., U of W, and OSU</li> <li>9:20 California sea lion predation on steelhead at Willamette Falls, 2014-2019 - Bryan Wright and Sheanna Steingass, ODFW</li> <li>9:40 Migration and survival of juvenile winter steelhead above and below high-head dams - Karen M. Cogliati, Thomas A. Friesen, Marc A. Johnson, and Paul Olmsted, OSU and ODFW</li> <li>10:00 The changing North Pacific ecosystem and potential impacts to steelhead - Elizabeth Daly, Hillary Thalmann, Richard Brodeur, Brian Burke, and Don Van Doornik, OSU</li> <li>10:20 Information needs for managing native winter steelhead in the upper Willamette River, Oregon - Luke D. Whitman, Brian Cannon, Michael Hogansen, and Mark Lewis, ODFW</li> <li>10:40 Summary, Question and Discussion</li> </ul>
10:55 – 11:00 ам	BREAK – 5 MINUTES
11:00 – 12:20 рм	<ul> <li>SESSION FIVE: INVITED PAPERS</li> <li>CHAIR: ALAN BYRNE, IDAHO DEPARTMENT OF FISH AND GAME</li> <li>11:00 Life History Diversity and Energetic Tradeoffs of Oncorhynchus mykiss in the Utkholok River, Kamchatka - Mara Zimmerman, Matthew Sloat, Kirill Kuzischin, Martini Arostegui, Tom Quinn, and Todd Seamons; Coast Salmon Partnership, Wild Salmon Center, MSU in Moscow, Russia, U of W, and WFDW</li> <li>11:20 Using non-lethal microchemistry techniques to validate life history pathways in a fjord population of O. mykiss - Lance Campbell, WDFW</li> <li>11:40 Abundance and Migration Success of Overshoot Steelhead in the Upper Columbia River - Andrew R. Murdoch, Kevin See, BioMark, and Benjamin L. Truscott, WDFW</li> <li>12:00 Trends, Survival, and Productivity of Wild Steelhead in Idaho - Marika Dobos, IDFG</li> </ul>
12:20 – 12:30 рм	Break – 10 minutes
12:30 – 1:50 рм	<ul> <li>SESSION FIVE: INVITED PAPERS – CONTINUED</li> <li>12:30 Environmental DNA (eDNA) Identification of Steelhead and Coho Salmon Redds in the Hoh River, WA - Sarah K. Brown and Mara Zimmerman, WDFW</li> <li>12:50 Variability in harbor seal predation on steelhead smolts in the Nisqually Estuary and main basin of Puget Sound - Barry Berejikian and Megan Moore, NOAA</li> <li>1:10 Ocean movements and behavior of steelhead kelts as revealed by pop-up satellite tags - Emily Miller, Monterey Bay Aquarium</li> <li>1:30 The Impacts of Dam Construction and Removal on the Genetics of Recovering Steelhead (<i>Oncorhynchus mykiss</i>) Populations across the Elwha River Watershed – Alexandra K. Fraik, WSU</li> <li>1:50 Questions and Discussion</li> </ul>
2:00 рм	CLOSING REMARKS ROGER HARDING/STEPHEN PHILLIPS, PACIFIC STATES MARINE FISHERIES COMMISSION