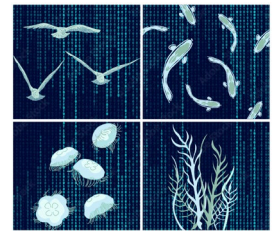




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Emerging Technologies Information Sessions

AGENDA Day 1



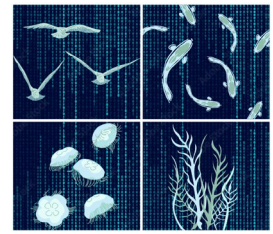
9:00 AM	Training/ Workshop Genetics 101 for Fisheries Professionals	Audrey Harris (PSMFC/ IDFG), Rebekah Horn (CRITFC)
12:00 PM	Check-in Registration	
1:00 PM	Welcome/Orientation	
1:10 PM	Plenary Conservation technology and innovative approaches for fisheries and ecosystem monitoring	Scott Heppell (Oregon State University)
	Data QA/QC Session	
1:40 PM	Transparent management inputs – data workflows incorporating GitHub	Erik Suring (ODFW)
2:00 PM	OXBOW: Wrangling Fish and Environmental Data into a Single SQL Database Using Advanced Claude Models	Derrek Faber (ODFW)
2:20 PM	The Data Mindful PDF: How to Make Table-filled Reports More Useful	Brian Maschhoff (Salmonetics)
2:40 PM	Automating salmon counting and identification with computer-vision deep learning	Dr. William I. Atlas ; Sami Ma, Charles Xu, Henry Fang, Thor Veen (Wild Salmon Center; Salmon Vision Collaborative)
3:00 PM	Break	
	Data QA/QC Continued	
3:20 PM	Developing a Fish Age Database: Lessons Learned & Future Considerations	Matt Weeber (ODFW)
3:40 PM	Structuring Knowledge, Not Just Data: An Ontology Framework for Comparable, Reproducible Conservation Indicators	Elizabeth Ng , Erika Rubenson, Sam Haffey (Spheros Environmental)
4:00 PM	Using Manual Text Annotation and Machine-learning-assisted Natural Language Processing (NLP) to Extract, Classify, and Compare Conservation Actions and Strategies Across Management Plans	Jacob Usinowicz , Michelle Stantial, Lauren Kemper, Erika Rubenson, Elizabeth Ng (Spheros Environmental)
4:20 PM	Modernizing Spawning Ground Surveys with Mobile Technologies: Joint Insights from Oregon and Idaho on Survey123 Design, Deployment, and Field Application	Kasey Bliesner , Joseph Feldhaus, Melody Feden, Joe Dittmer, Alex Woolen, Erik Suring, Briana Sounhein, Matt Weeber (ODFW) Evan Brown , Megan Merkley, Bryan Boson, Chris Harrington, Brock Lipple (IDFG)
4:40 PM	Additional Q&A	
4:50 PM	Break	
5:00 PM	Poster Session and Exhibitor Spotlight Reception in Stevenson Ballroom with appetizers and no-host bar	
7:00 PM	Adjourn	



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Emerging Technologies Information Sessions

AGENDA Day 2



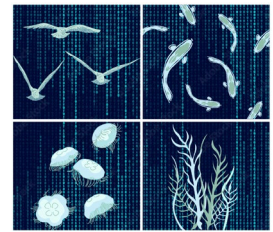
7:40 AM	Breakfast	
8:40 AM	Orientation for Day 2	
Tagging and Trapping Tech Session		
8:50 AM	A Self-Powered Acoustic Transmitter for Long-Term Fish Movement Monitoring	Daniel Deng , Huidong Li, Jun Lu, Hyunjun Jung, Zhaocheng Lu, Bingbin Wu, Stephanie Larson (Pacific Northwest National Laboratory)
9:10 AM	Tracking Ocean Migration Routes of Steelhead Using Pop Up Satellite Archival Tags (PSATs)	Matthew Thornton , Ryan Solee (The Wilderness Calling Conservation Initiative)
9:30 AM	SMART -Dart(TM): Development and Feasibility Testing of a Novel RFID Fish Tagging System for Enhanced Detection and Monitoring	Keith van den Broek , Stine Griep (Hinchinbrook, Inc.)
9:50 AM	Tiny Tags, Big Results: Using FRYID™ RFID Technology to Study Early Life-Stage Salmonids	Stine Griep , Keith van den Broek (Hinchinbrook, Inc.)
10:10 AM	Additional Q&A	
10:20 AM	Break	
Predictive Modeling and More Session		
10:40 AM	Proof of Concept: Stocking YY-males to Eradicate Brook Trout in a Closed Population	Brian Davis , Jen Poirier (US FWS)
11:00 AM	Evolving Ecosystem Diagnosis & Treatment: Integrating Monitoring Data to Advance Adaptive Salmon Recovery Planning	Laura McMullen (ICF)
11:20 AM	Integrating Ecosystem Models with Long-Term Monitoring to Support Salmon Recovery	Eric Doyle (Confluence Environmental Company), John Arterburn, Ryan Klett (Confederated Tribes of the Colville Reservation)
11:40 AM	Investigating precision and bias of commonly used salmonid abundance survey methods	Brian McGreal , William Jaeger, Mark Scheuerell (University of Washington)
12:00 PM	Lunch	



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Emerging Technologies Information Sessions

AGENDA Day 2 Continued



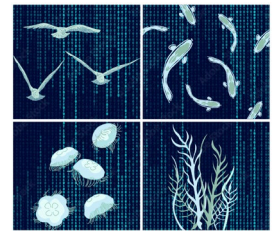
Remote Sensing Session		
1:30 PM	Advancing Habitat Monitoring with Bathymetric LiDAR in the Methow Basin	Ryan Klett (Confederated Tribes of the Colville Reservation)
1:50 PM	Wetland Vegetation Modeling with UAV Lidar & Multispectral Data for Habitat Monitoring	Katarina Lunde (Lower Columbia Estuary Partnership)
2:10 PM	Leveraging UAV Lidar Data in Wetland Habitat Monitoring	Derek Marquis (Lower Columbia Estuary Partnership)
2:30 PM	3D Characterization of Streambank Complexity from UAS Surveys	Jen O'Neal , Shawn Higgins (Natural Systems Design)
2:50 PM	Integrating UAV and Ground Surveys to Monitor Redd Superimposition of Tule Fall Chinook in the White Salmon River, WA	Justin Baker , Rikeem Sholes, David Hand (US FWS)
3:10 PM	Additional Q&A	
3:20 PM	Break	
Genetics (eDNA, PBT, etc.) Session		
3:40 PM	Implementation of a mobile DNA sequencing laboratory for real-time assessment of Columbia River basin fisheries	Lanie Galland , Shawn Narum (Columbia River Inter-Tribal Fish Commission)
4:00 PM	Can Metabarcoding of Aquatic eDNA Replace Traditional Biological Assessments in Streams and Rivers?	Daren Carlisle , Karen Beaulieu, Yer Lor, David Pilliod, Stephen Spear, Paul Frandsen, Chuck Hawkins (USGS)
4:20 PM	Environmental DNA as a Tool for Aquatic Pathogen Surveillance: From Detection to Population Health Inference	Corbin J. Schuster , Bailey Morgan, Tamsen Polley, Michael Kent (Oregon State University)
4:40 PM	Mapping Washington's Aquatic Biodiversity Using Environmental DNA	Allison Ying (WDFW)
5:00 PM	Adjourn	



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Emerging Technologies Information Sessions

AGENDA Day 3



7:30 AM	Breakfast	
8:30 AM	Orientation for Day 3	
	<i>Best Practices – Survival and Competition Analysis Session</i>	
8:40 AM	Incremental improvements in RFID technology leads to major gains	Nicholas J. Porter. (Biomark)
9:00 AM	Incorporating angler perspectives and ecological evidence to inform management of non-native fish interactions with native Yellowstone Cutthroat Trout in the Teton River Basin, Idaho	Lucas Ellingson-Cosenza, Colden Baxter, Morey Burnham (Idaho State University)
9:20 AM	Finding the Bottlenecks: Stage-Specific Survival of Juvenile Chinook Across Eastern Vancouver Island	Sam James, Jamieson Atkinson, Will Duguid, Nicole Hill, Joe Thorley, Katie Innes, Thomas Negrin, Cypress Hunder-Rookes, Isobel Pearsall (Pacific Salmon Foundation)
9:40 AM	Additional Q & A	
9:50 AM	Break	
	<i>AI and Machine Learning Session</i>	
10:10 AM	Replacing the Clipboard: Computer Vision for Scalable, Continuous Recreational Salmon Catch Monitoring in the Strait of Georgia	Jamieson Atkinson, Sami Ma, Philip Lemp, Sam James, Riya Shaju, Matthew Clarke, Jiangchuan Liu (Pacific Salmon Foundation)
10:30 AM	Applying Machine Learning to Learn from Fish Returning to the Klamath River After Dam Removal	Michael Hobbey, Damon Goodman (CalTech and CalTrout)
10:50 AM	Advancing AI-Assisted Fish Counting in the Columbia River Basin Using BlueFish	Elliot Koontz (Spheros Environmental)
11:10 AM	AI-Enabled, Uncertainty-Aware 3D Tracking for Acoustic Telemetry in Ecological Monitoring	Daniel Deng, Wenqian Chen, Tao Fu, Jayson Martinez, Adam Hall (Pacific Northwest National Laboratory)
11:30 AM	Additional Q&A	
11:40 AM	Closing Remarks	
11:50 AM	Lunch/Adjourn	
1:30 PM	Field Trip Mobile Genetics Lab - Oxbow Fish Hatchery in Cascade Locks, Oregon	Lanie Galland, Shawn Narum (Columbia River Inter-Tribal Fish Commission)