

2015 PIT Tag Workshop Agenda

Skamania Lodge, Stevenson, WA

Tuesday, January 27, 2015

10:00 am - 5:00 pm **Workshop Check-in**

1:00 pm - 2:00 pm **Workshop Introduction and Opening Presentations**

Introductions and Overview

John Tenney
PSMFC

A review of the 2014 Marking Procedures Manual

Tiffani Marsh
NOAA Fisheries

Recent PTAGIS accomplishments and future direction

John Tenney
PSMFC

2:00 pm - 3:00 pm **Research and Monitoring Applications**

Utilizing PIT tags to assess spatial and temporal distribution of spawning adult summer steelhead in Asotin Creek, Washington

Ethan Crawford
WDFW

Seasonal usage of off-channel habitats in the Entiat River by juvenile Chinook salmon

Nicholas Albrecht
USFWS

Use of a passive interrogation array to evaluate entrainment of endangered fish in an irrigation canal

David W. Speas
USBR

3:00 pm - 3:20 pm **Break**

3:20 pm - 5:00 pm **Research and Monitoring Applications (cont)**

Summer movements of juvenile salmonids in the upper Chehalis River

John Winkowski
WDFW

Population and individual-level metrics for over-wintering juvenile Coho in three adjacent tributaries in the lower Columbia River

Trevor Johnson
WDFW

New approaches afforded by PIT tag technology have yielded important answers about fish behavior and habitat needs

Patrick J. Connolly
USGS

Use of passive integrated transponder technology to improve hatchery mitigation in the Columbia River Basin

Josh Murauskas
Anchor QEA

Understanding *O. mykiss* life history diversity using a combination of PIT tags and genetic parentage assignments

Gabriel M. Temple
WDFW

5:00 pm - 7:00 pm **Welcome Reception**

8:00 am - 10:00 am Data Modeling and Analysis

Estimates of salmon and steelhead harvest rates in lower Columbia River fisheries based on the recovery of passive integrated transponder (PIT) tags	Thomas Buehrens WDFW
Multi-state model of Entiat River spring Chinook to estimate seasonal survival and outmigration rate	Michael B. Ward Terraqua
Columbia River steelhead life cycle modeling based on PIT tags	Dan Rawding WDFW
TribPit: estimating salmonid cohort survival during juvenile outmigration	Rebecca Buchanan Univ. of Washington
Estimating Chinook escapement in the John Day River basin using a mark-recapture approach	Chris Bare ODFW
Examining the effects of juvenile migration timing, hydropower-system passage type, and environmental factors on adult age-at-return of PIT-tagged Snake River spring/summer Chinook salmon	Benjamin Sandford NMFS

10:00 am - 10:20 am Break

10:20 am - 12:00 pm Tag Effects

Tagging size restrictions: evidence for effect on survival of fish less than 60 mm and effect on survival estimates	Michael B. Ward Terraqua
Experiments in double tagging (coded wire tag plus PIT tag) juvenile Hanford Reach fall Chinook salmon	Jeffrey K. Fryer CRITFC
Survival, growth, and tag retention in age-0 Chinook salmon implanted with 8.0 mm, 9.0 mm, and 12.0 mm PIT tags	C. Rabe, K. Tiffan Nez Perce Tribe & USGS
Comparing detectability of 9 and 12mm PIT tags in the Middle Fork John Day River	Keith B. DeHart ODFW
Effects of PIT tagging upstream migrating adult Columbia Basin sockeye salmon	Jeffrey K. Fryer CRITFC

12:00 pm - 1:00 pm Lunch

1:00 pm - 3:00 pm

Detection Methods

Development and testing of a floating PIT tag antenna detection system

Mark C. McKinstry
USBR

A 2.4- by 6.1-m flexible antenna for detecting full-duplex passive integrated transponder tagged fish

Matthew S. Morris
NMFS

Use of submersible PIT antennas to augment endangered fish active-capture surveys

David W. Speas
USBR

Evaluation of a prototype spillway transceiver

Gordon Axel
NOAA Fisheries

Vertical antenna arrays: A prototype system for full water column detection

N. Phil Peterson
West Fork Env.

Expanding from creeks to hydroelectric diversion facilities – construction and in situ evaluation of large half-duplex PIT tag antennas to evaluate fish entrainment at high velocity water diversions

Gabriel Kopp
FISHBIO

3:00 pm - 3:20 pm

Break

3:20 pm - 4:00 pm

Detection Methods (cont)

PIT tag reader synchronization, multiplexing and data logging innovations

Robert Stewart
Biomark

Biomark's IS1001-MTS reader platform - into the river

Steve Anglea
Biomark

4:00 pm - 5:00 pm

Open Forum on Tributary Detection Infrastructure

Longterm planning for design, implementation and maintenance of instream detection systems across the Columbia Basin

Chris Jordan
NOAA

8:00 am - 9:40 am

Other PIT Tag Applications

Use of PIT tag antennas to test a weir designed to reduce entrainment of endangered fish in canals

Mark McKinstry
USBR

The use of PIT tags in small streams and non-migratory fish

Dalton Hance
Anchor QEA

Monitoring fluvial bull trout migration and movements in the Lemhi River Subbasin, Idaho: integrating PIT tag technology with radio telemetry

Kevin Poole
IDFG

Sturgeon site fidelity near a pile dike in the Columbia River Estuary

Richard D. Ledgerwood
NMFS

Evaluation of prototype fish passage structures in the Lower Granite Dam juvenile fish bypass system – juvenile Pacific lamprey results 2013-2014

Rolland R. O'Connor
Blue Leaf Environmental

9:40 am - 10:40 am

Data Management and Coordination

From needles to numbers: electronic data collection and data exchange of steelhead smolt counts, biological data, and passive integrated transponder tag codes

Benjamin Warren
WDFW

A model for improved data access through an integrated data management system

Samuel Haffey
Anchor QEA

The PIT Tag Forecaster; a new database system to aid investigators and managers

Al Giorgi
BioAnalysts

10:40 am - 11:00 am

Break

11:00 am - 12:00 pm

P4 Preview and Feedback

Next generation tagging software and data model preview

John Tenney
PSMFC

12:00 pm - 1:00 pm

Lunch

1:00 pm - 3:00 pm

PTAGIS Reporting Training

PTAGIS Reporting Training

N. Tancreto, C. White
PSMFC