

Cordova Otolith Lab

Alaska Hatchery Research Project

2014 Progress Report

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AHRP Stakeholder and Science Panel Meeting

December 2014



Overview

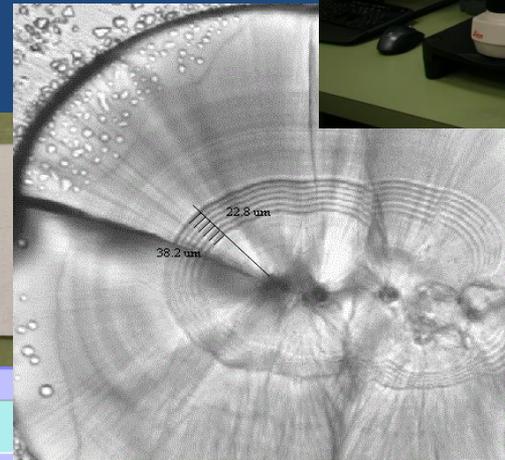
- Introduction
- Ocean Test Fishery
 - Overall summary
 - Species breakdown by year
- Stream-Stray
 - Overall summary
 - Species breakdown by year
- Pedigree
 - 2013 read status
 - Progress on 2014 samples
- Project notes and recommendations



Methods for Sample Processing

Same protocols as MTA Lab.

1. Sample login
2. Otolith preparation and mounting
3. Read and scan otoliths



Mortal Status	Sex	Sampled Location	Way Point	Weight	Length	Research Comment

Age	Questionable	Mark Status	Mark ID	Hatch Code
0.1	<input type="checkbox"/>	<input type="checkbox"/> Y <input type="checkbox"/> N	SGH12	6H
Comment	<input type="checkbox"/> Non-PWS Mark			

Prep Used	Left Prep Status	Right Prep Status	Specimen Status	Add/Edit Comment
Left	Core Vis,OK		OK	

Fish#	Marked?	Quest.	Mark ID	Hatch Code	Age	Spec. Status	Oto Used	L Oto Status	R Oto Status	Reader	Sex	Comment
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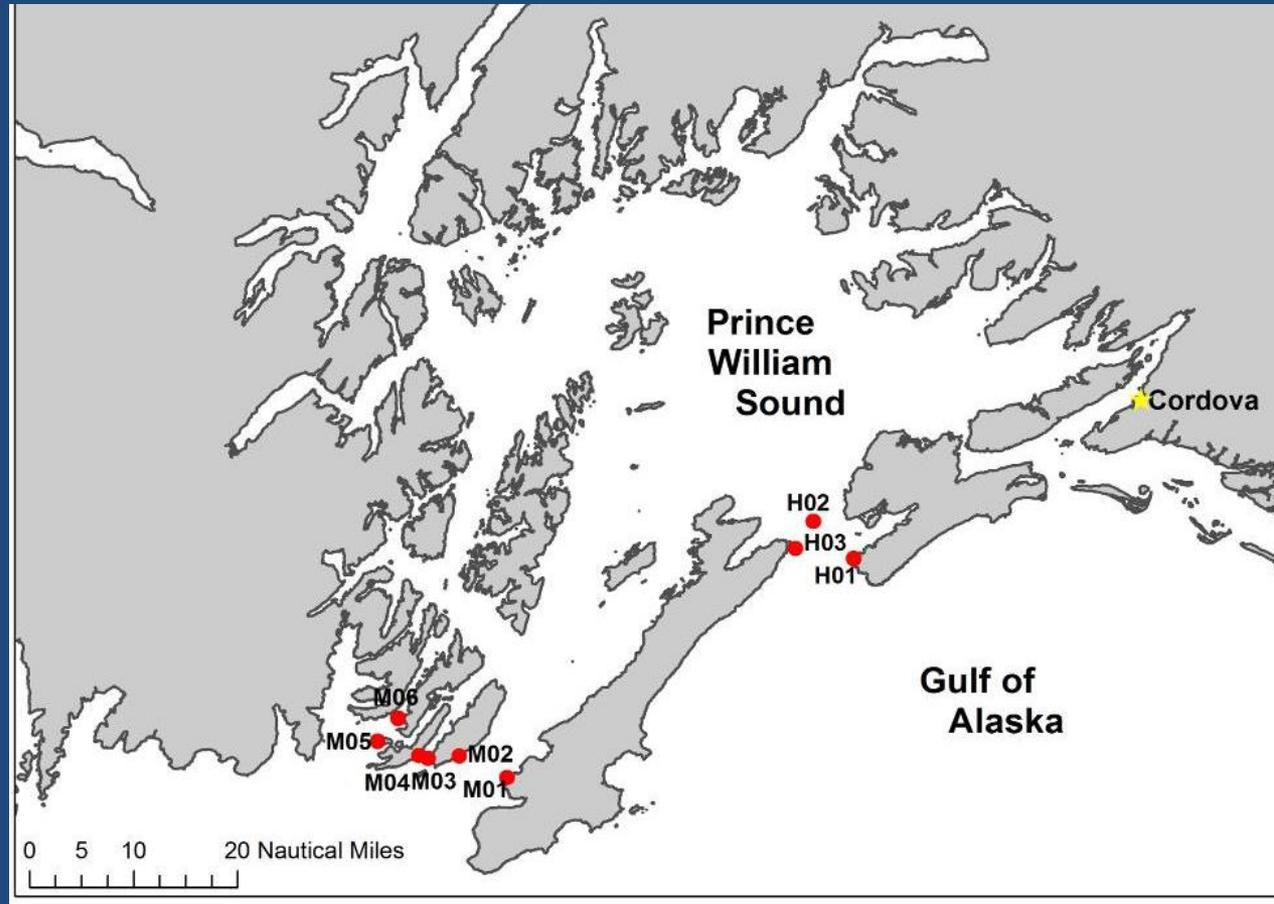


Reader Assessment

- Blind tests of known vouchers at beginning of season for quantitative assessment ability.
 - 2014 completed blind test prior to AHRP sample processing.
- Second read 10-30% of all otoliths sampled in a project .
 - Time and funding constraints.
 - Resolve discrepancies prior to end of season.

AHRP Prince William Sound

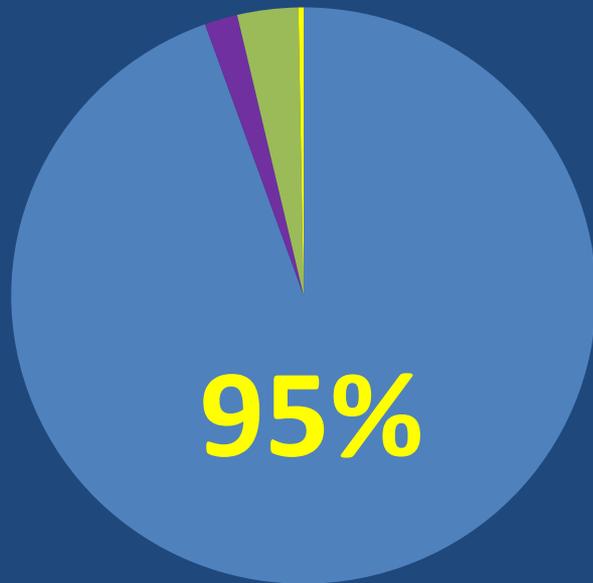
- Ocean Test Fishery
 - All 5 species
 - 9 stations
 - 5,657 total otoliths for 2013 and 2014



Map from PWSSC 2014 annual report

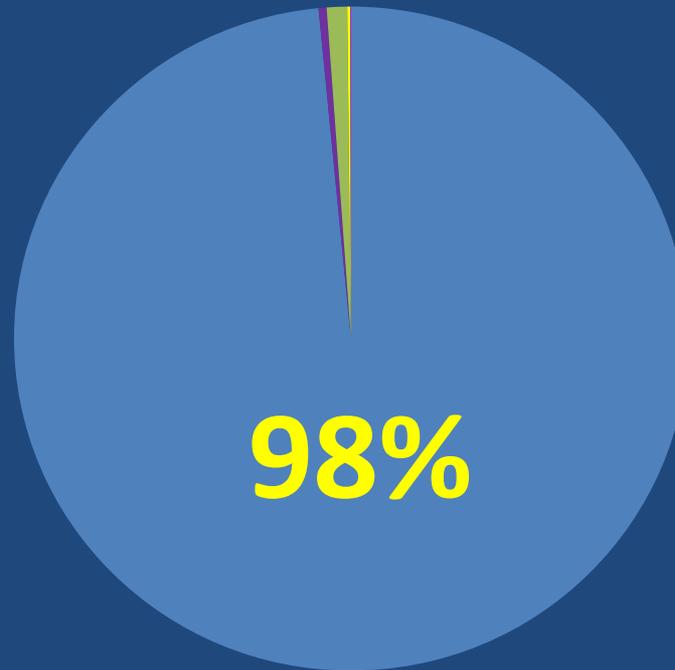
2013-2014 Ocean Test Fishery Read Status Comparison

2013



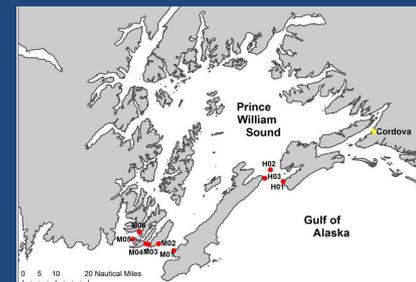
n= 2,794

2014

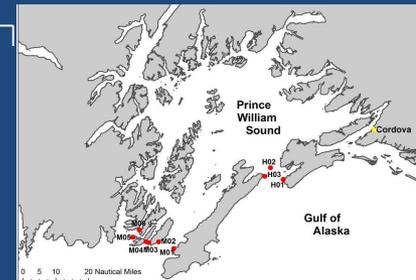
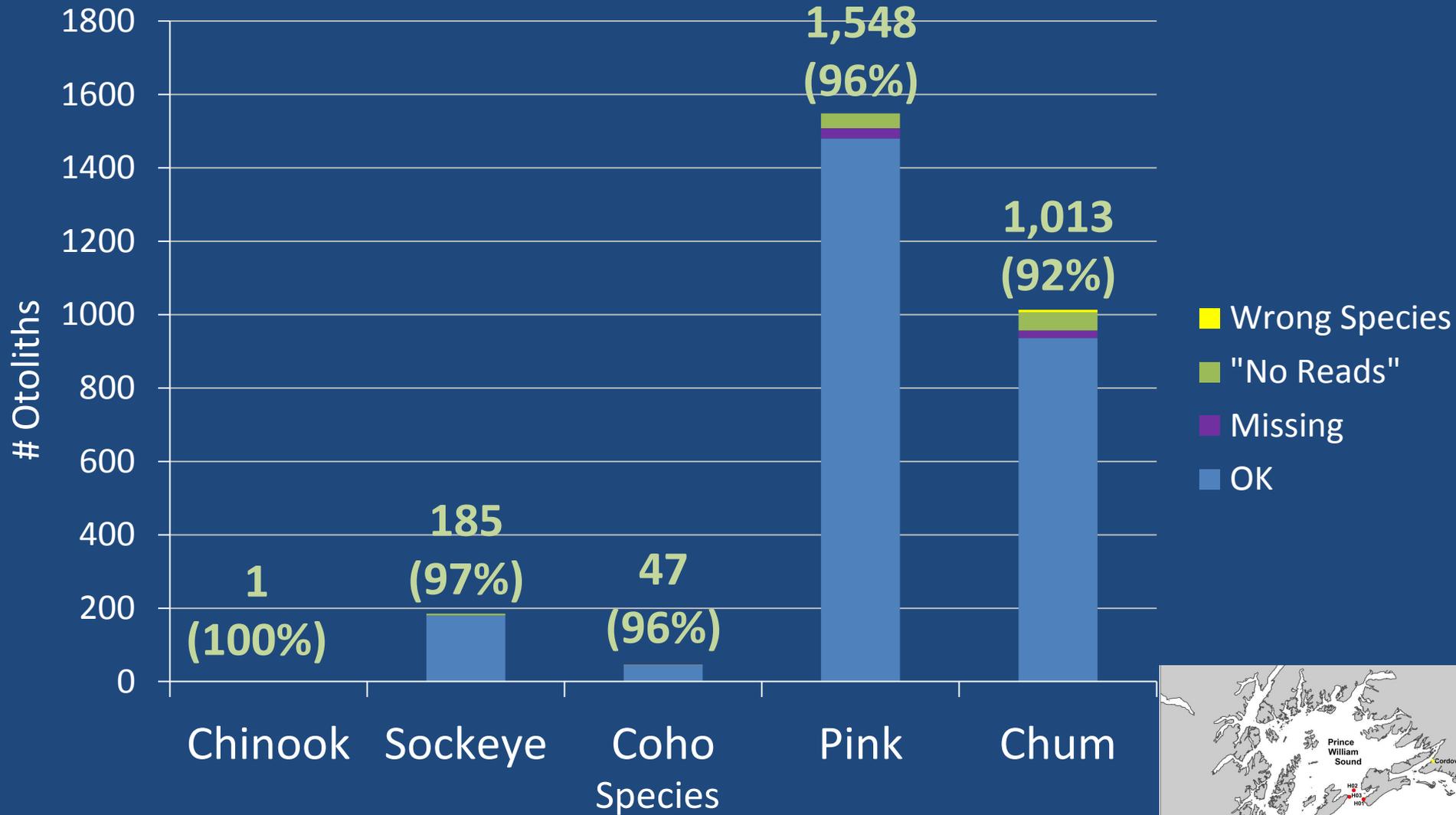


n= 2,863

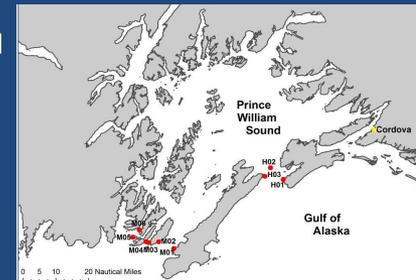
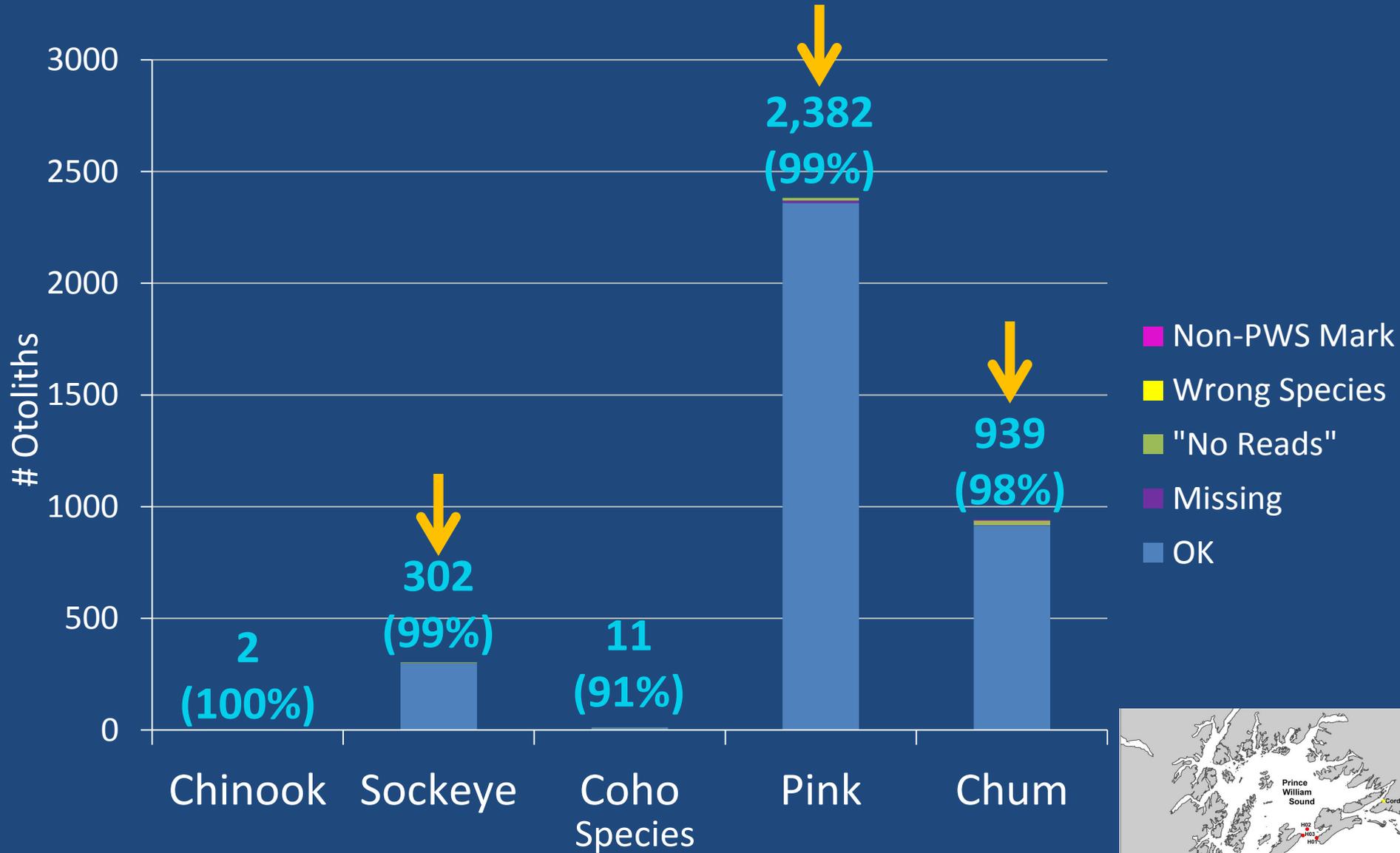
- OK
- Missing
- "No Reads"
- Wrong Species
- Non-PWS Mark



2013 Ocean Test Fishery Read Status by Species

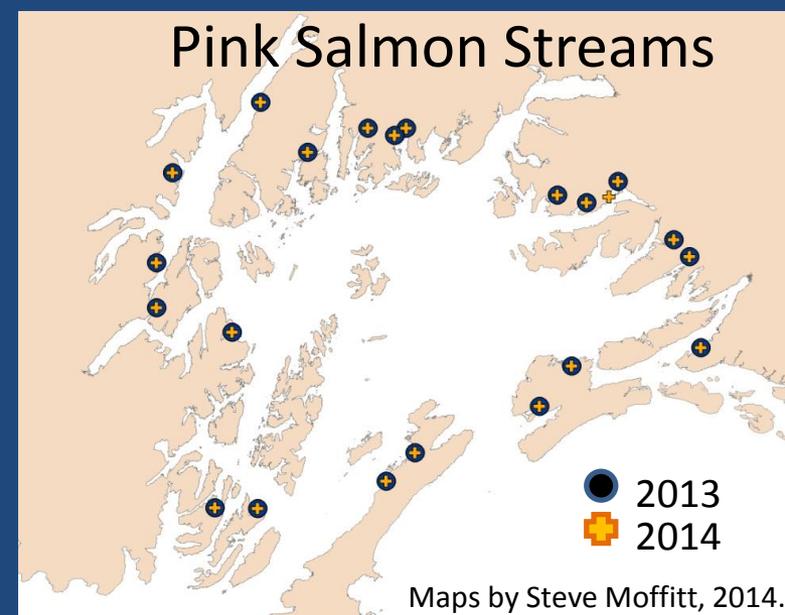
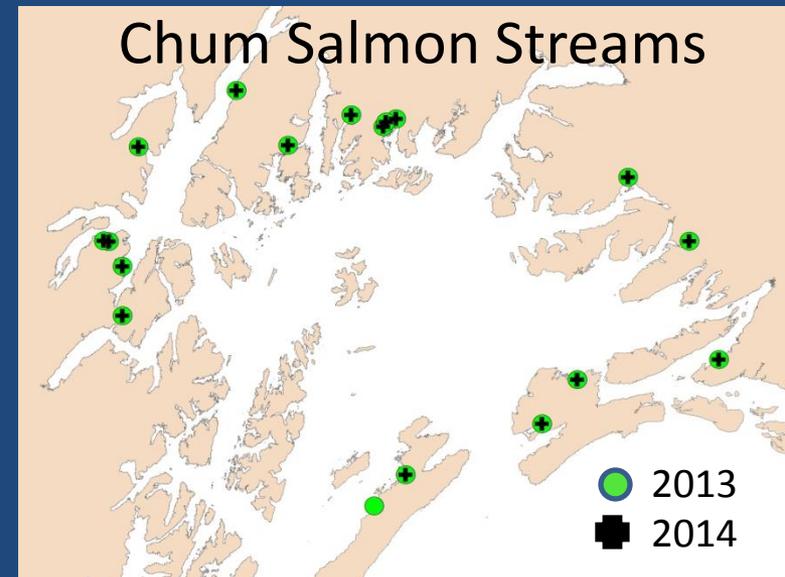


2014 Ocean Test Fishery Read Status by Species



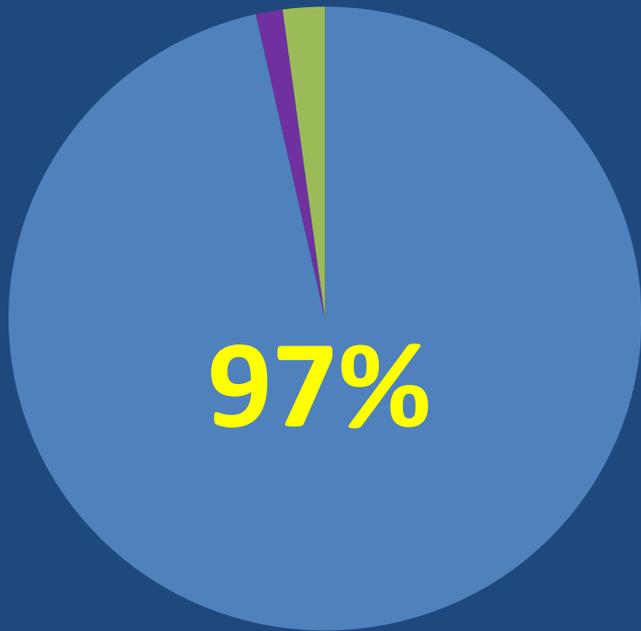
AHRP: Prince William Sound

- Stream-Stray
 - Chum and pink salmon
 - 26 streams in 2013, 27 streams in 2014
 - 28,690 total otoliths in 2013 and 2014



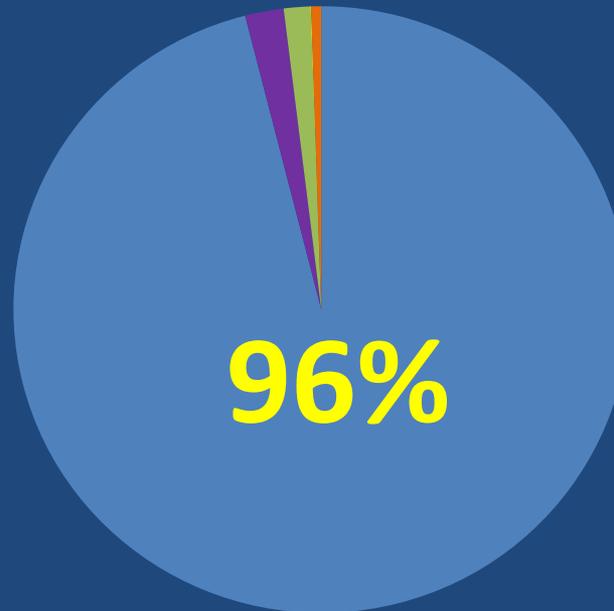
2013-2014 Stream-Stray Read Status Comparison

2013



n= 16,566

2014

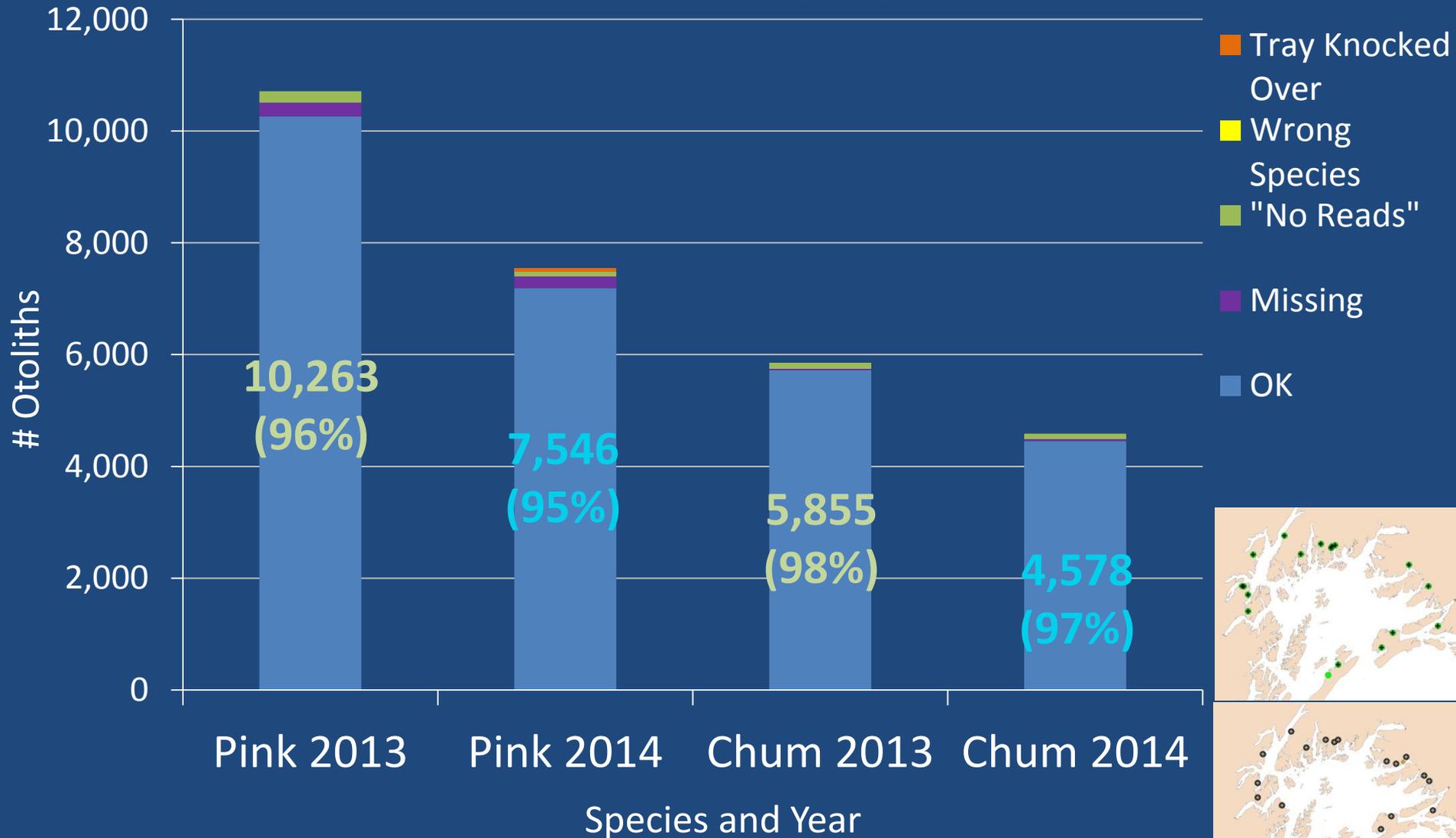


n= 12,124

- OK
- Missing
- "No Reads"
- Wrong Species
- Tray knocked over

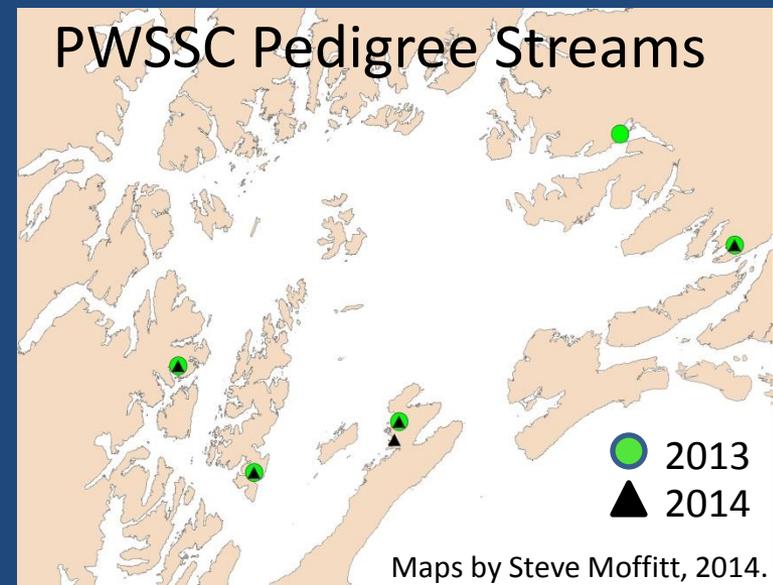
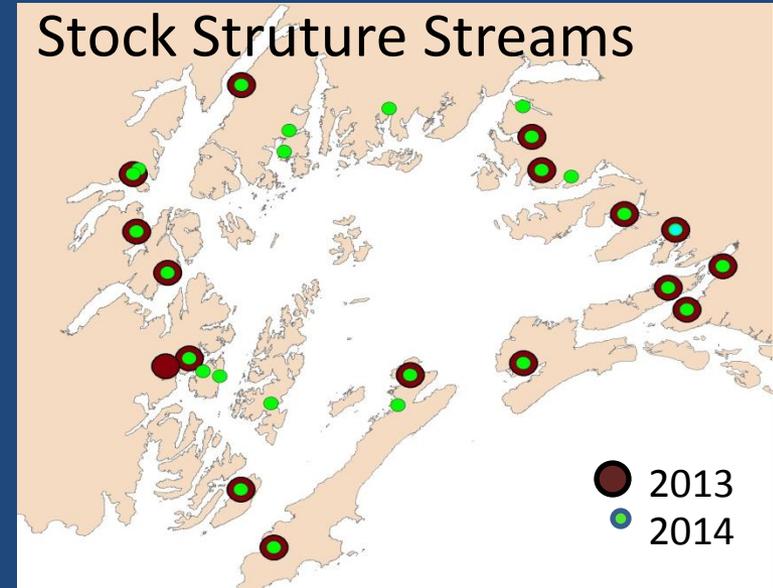


2013 and 2014 Stream-Stray Read Status by Species



AHRP: Prince William Sound

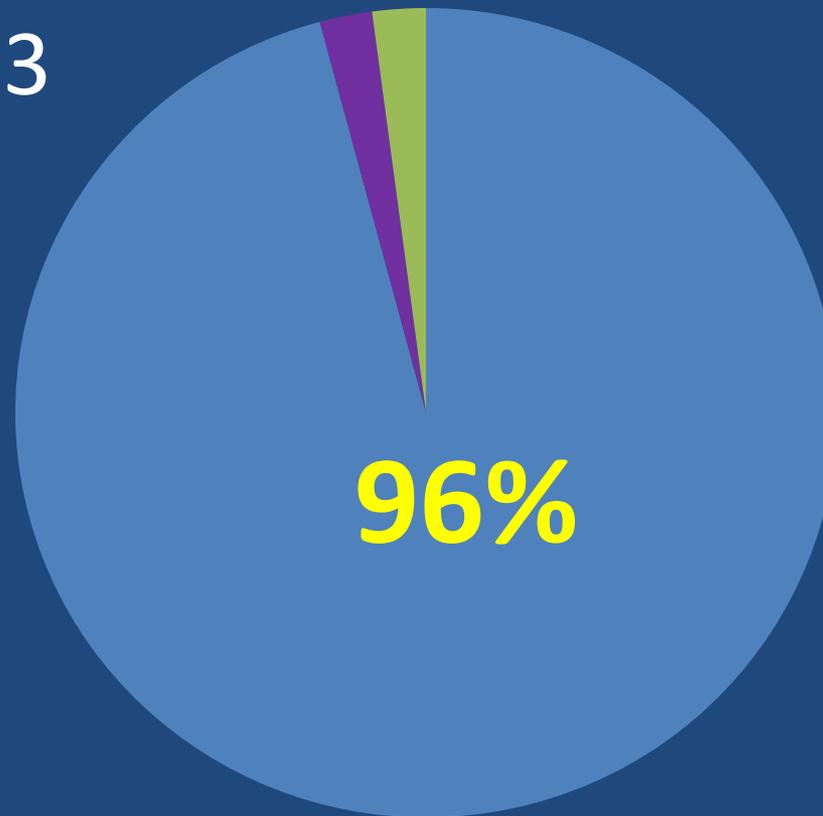
- Pedigree/Stock Structure
 - Pink salmon
 - 22 streams in 2013, 32 streams in 2014
 - 9,944 total otoliths and counting for 2013 and 2014...



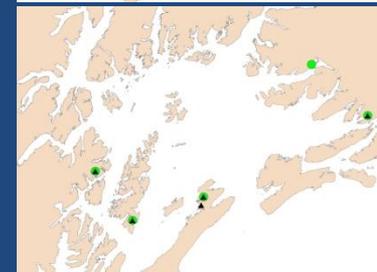
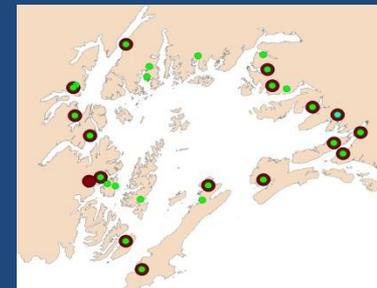
Pedigree/Stock Structure Read Status

- Pink salmon only
- n= 7,990 in 2013
- Currently processing 2014 samples.

2013 Pedigree/Stock Structure
Otoliths



- OK
- Missing
- "No Reads"



2014 Pedigree/Stock Structure Samples

- Received half of the Stock Structure samples 11/24 (~3,500). Started processing them 12/3.
 - Estimated completion date: 12/17
- Waiting for the rest of the Pedigree samples (~10,200) from GCL.
 - Time to complete these otoliths: 30 days.

**We need these samples
as soon as possible!**

Project Notes

2013

- Sample documentation issues.
 - Labels
 - Inventory sheets
- Sample quality issues.
 - Tissue on samples, trays
 - Broken, missing otoliths
- Communication issues.
- Sample delivery.
- Species identification.

2014

- Improved sample documentation.
- Improved sample quality.
 - Fewer missing otoliths
- Improved communication issues.
- Continued improvement of sample delivery
- Continued improvement of species identification.

Major improvements seen in:

- Documentation
- Sample quality
- Communication
- Sample delivery

Recommendations

- Electronic and hard-copy inventory sheets.
- Continued in-season sample delivery.
- Continued improvement of documentation, timely delivery.



- ADF&G assists training field crews.
- Continued review of species ID.

Acknowledgements

Otolith Lab Technicians:

Jane Allen-Schmid

Ellen Americus

Cindy Stimson



Questions?

