

Juvenile Salmonid Trapping & ID



A presentation by
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*IN***S***TREAM*
FISHERIES RESEARCH INC.

Why Do We Trap Juvenile Fish?

- Presence or Absence
- Identify Habitat Preferences
- Identify Habitat Connectivity i.e. Potential Barriers to anadromous fish
- Fish Salvage
- Collect biological data i.e. size, weight, age.
- Population Monitoring
 - Migration Timing
 - Abundance estimates



Fish Fences Trap
“100%” of the Fish

Giyuxw (Keogh) River Fish Fence



Kitsuksis
Creek Fish
Fence



Archery Restoration Pond Fish Trap



Partial Traps
Capture an
“Unknown” Portion
of Migrating Fish

Incline Plane Traps





Fyke Net

Fkye Net

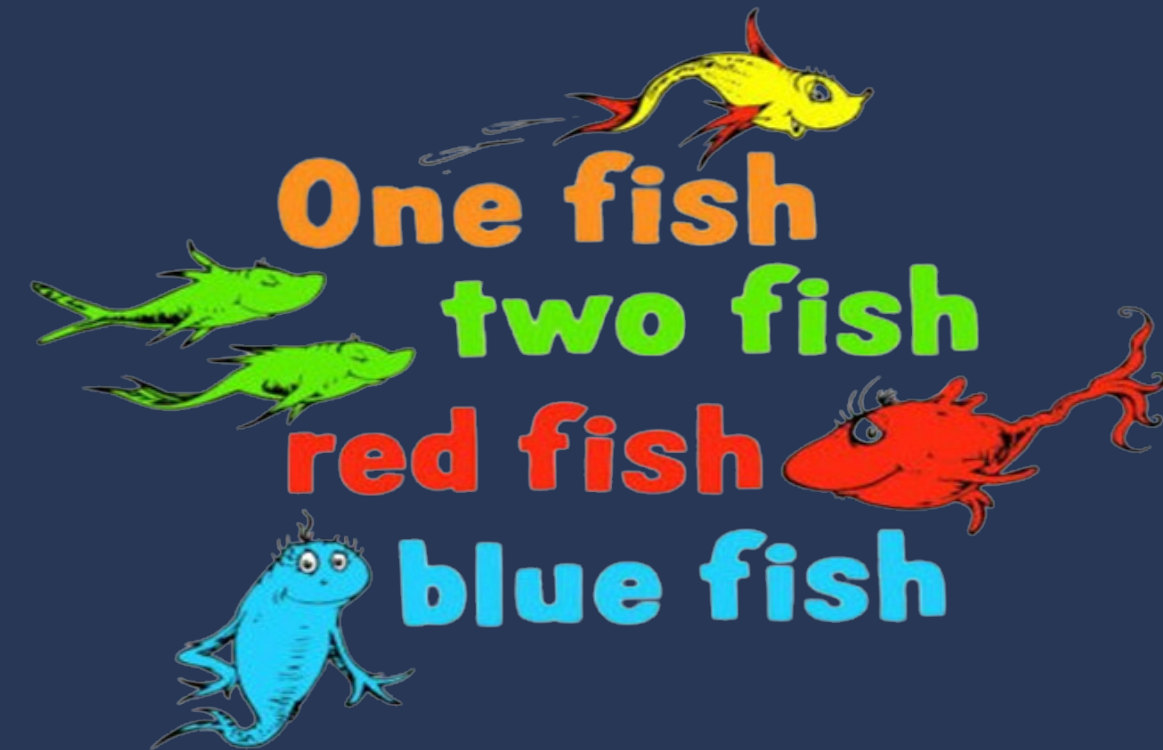
LARGE GEE &
FKYE NET





ROTARY SCREW TRAPS

Partial Traps Use Capture-Recapture Models to Generate Population Estimates



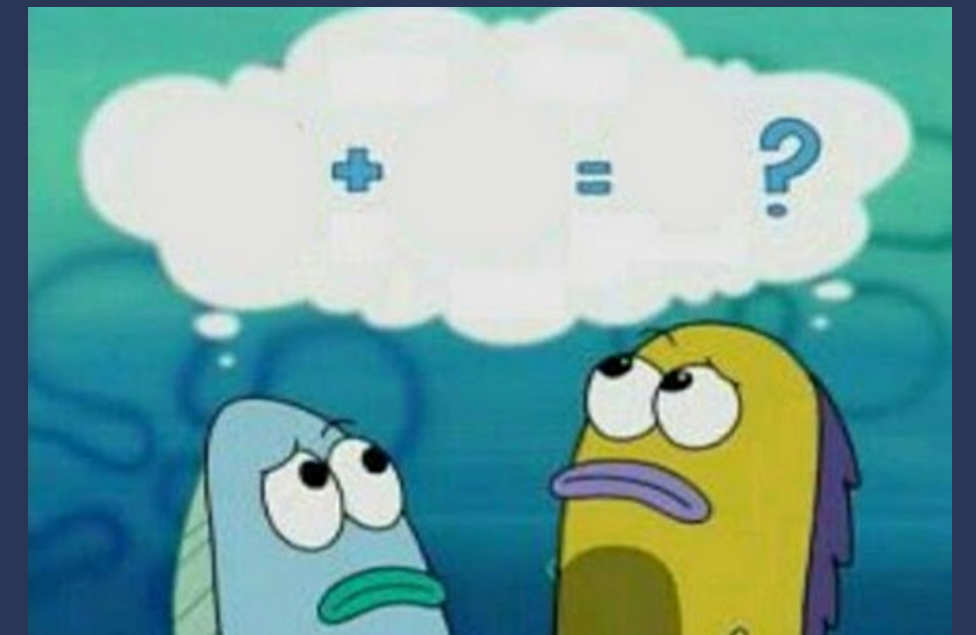
$$N = \frac{(M+1) * (C+1)}{(R+1)} + \text{Mortalities}$$

N = Population Estimate

C = Total Catch

R = Number of Recaptures

M = Number of Marks Released



Tagging

VISUAL IMPLANT ELASTOMER



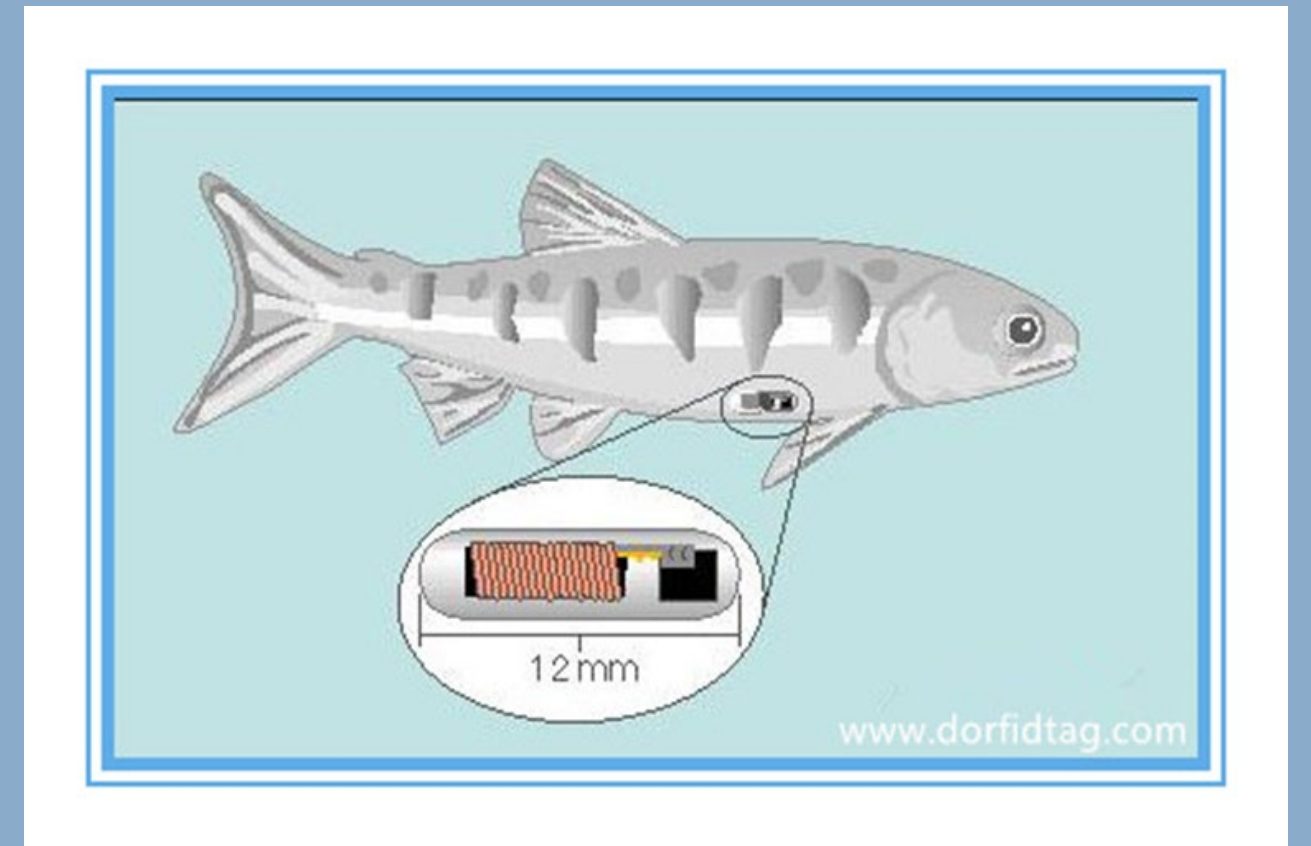
Tagging



FRY - MARKED WITH
BISMARCK BROWN



PASSIVE INTEGRATED TRANSPONDER (PIT)



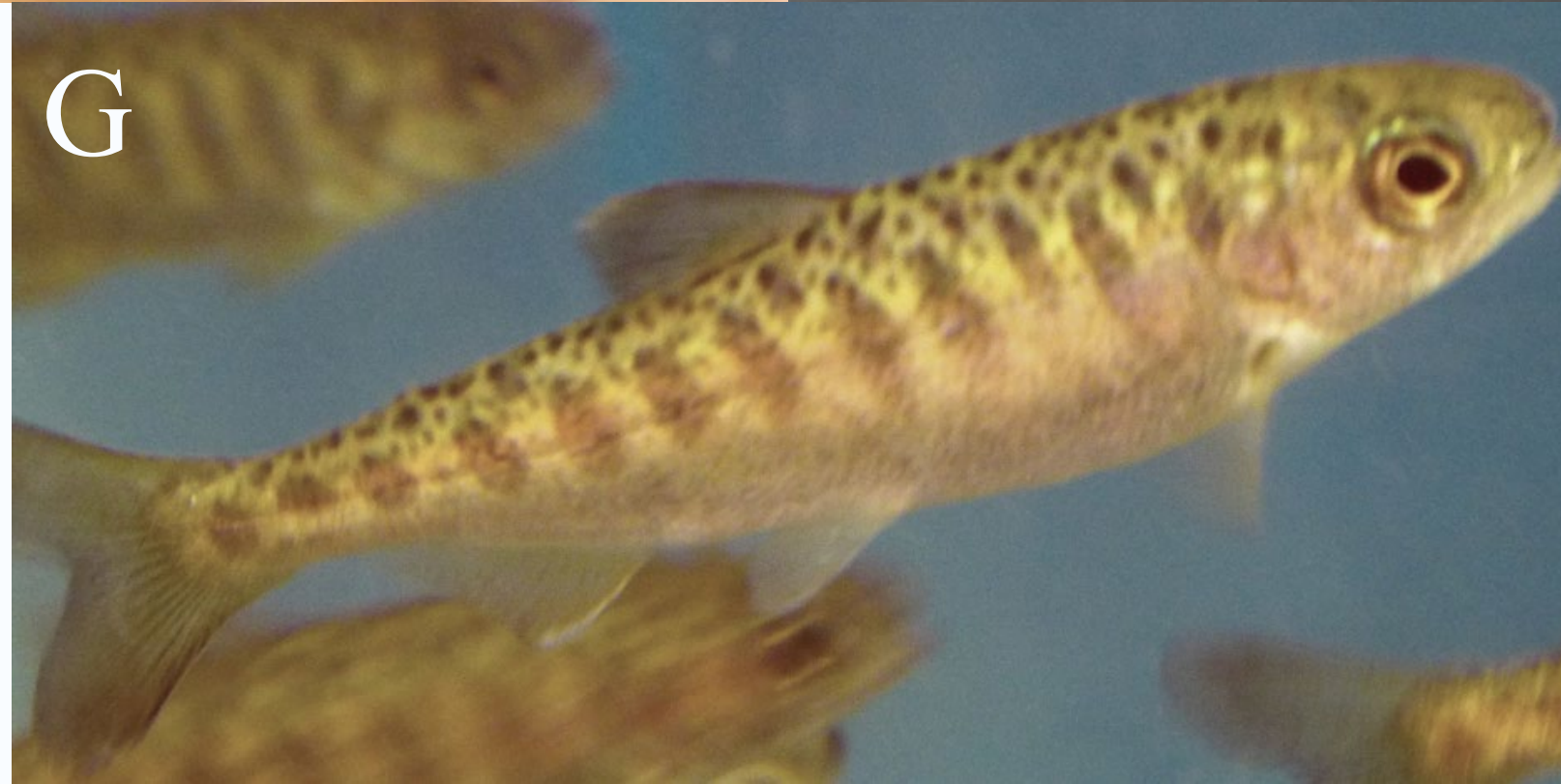
Identifying the Catch of the Day

STEELHEAD VS. CUTTHROAT



Identifying the Catch of the Day

COHO FRY VS. RAINBOW FRY VS. CHINOOK FRY



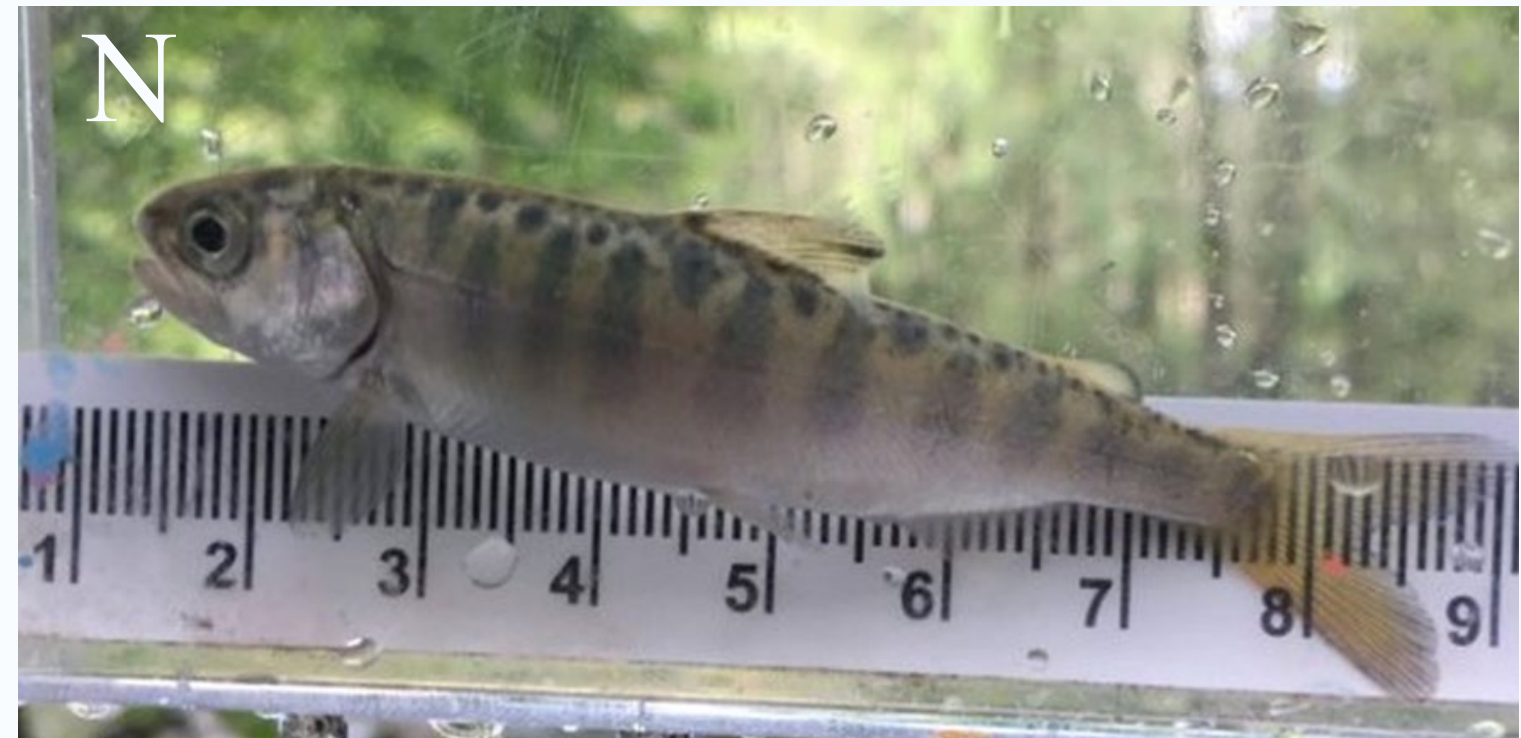
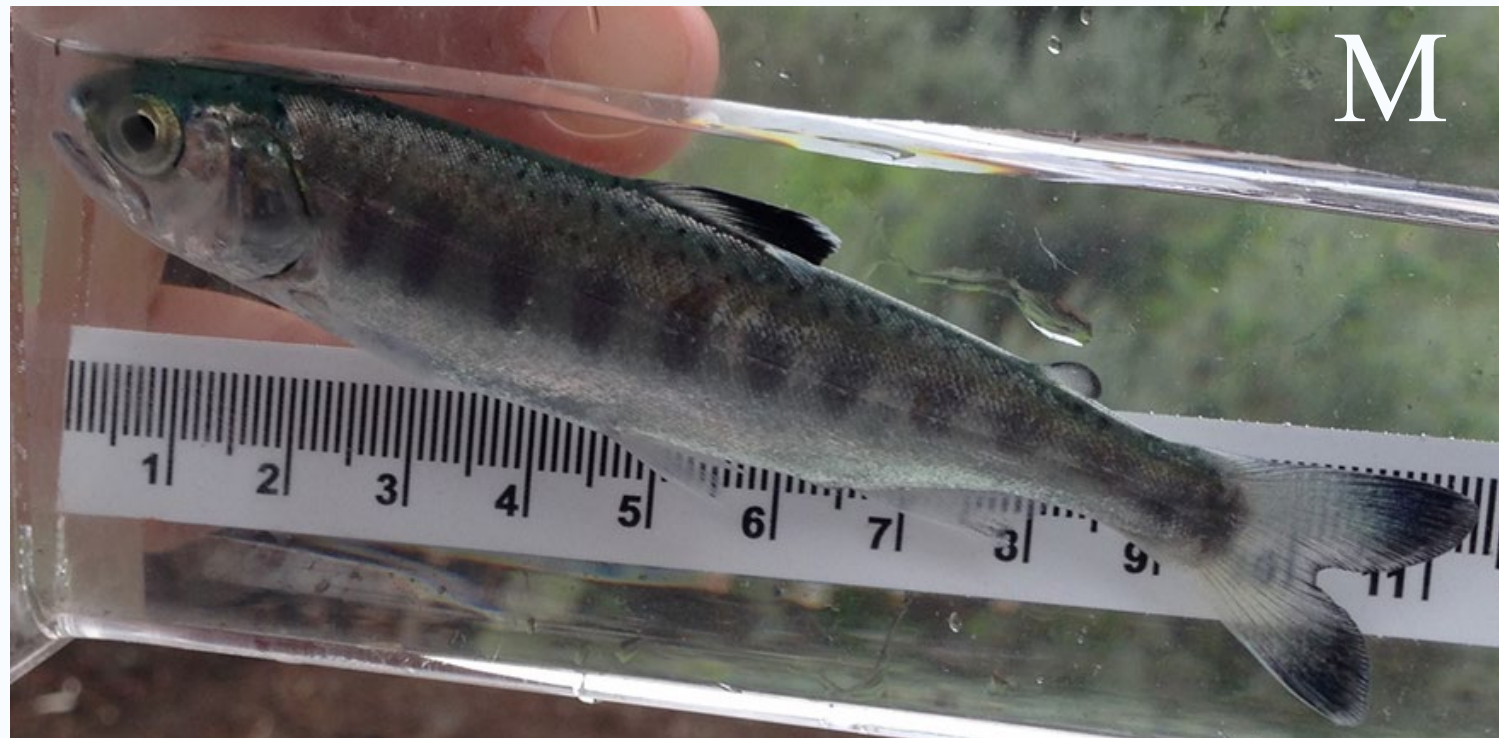
Identifying the Catch of the Day

PINK FRY VS. CHUM FRY VS. CHINOOK FRY



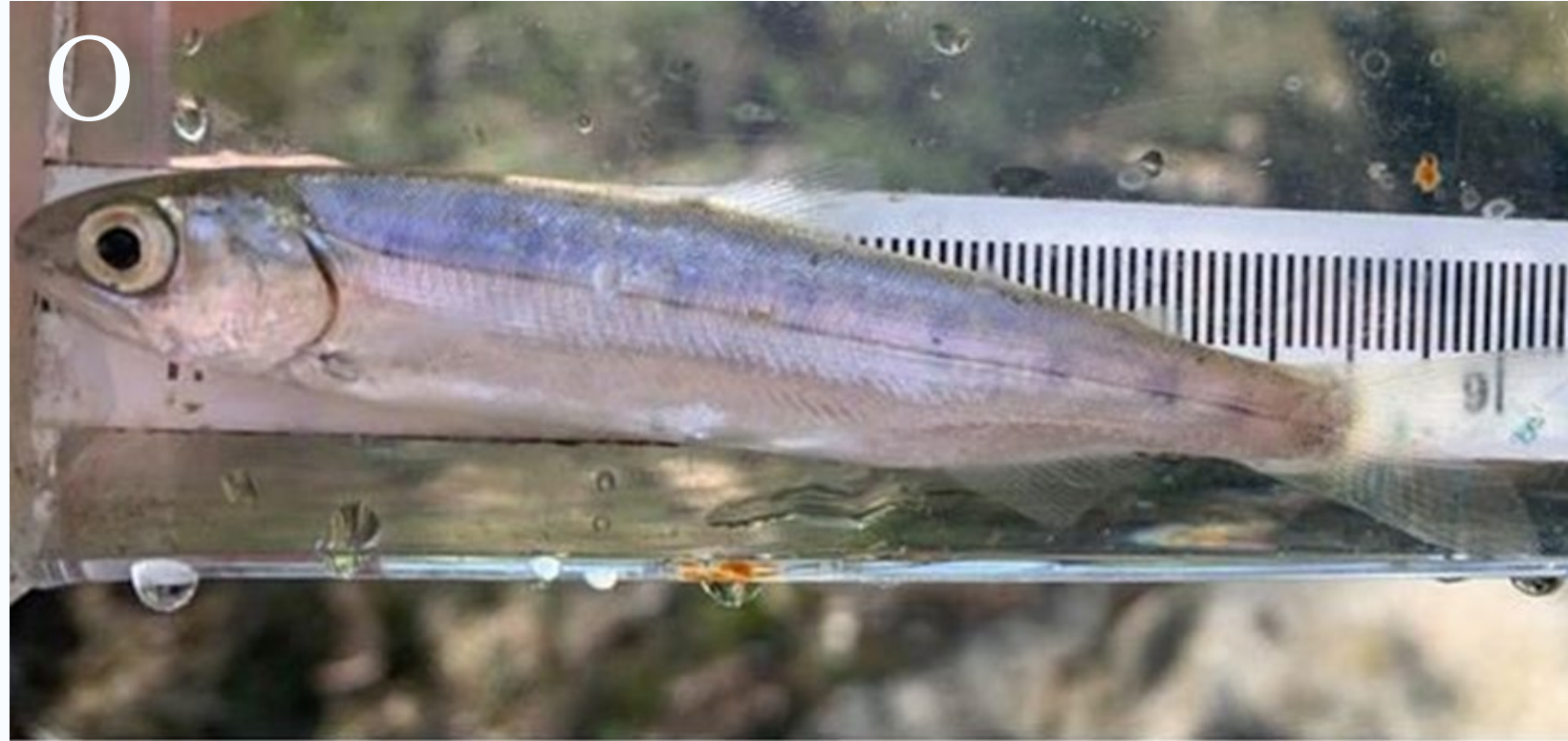
Identifying the Catch of the Day

COHO SMOLT VS. CHINOOK SMOLT



Identifying the Catch of the Day

A FEW OTHER FISH BUT NOT ALL THAT YOU MIGHT SEE!



Identifying the Catch of the Day

WOW! LOOK
AT THESE!
SOOOO COOL!



Identifying the Catch of the Day

A UNIQUE
FISH FROM
THE NORTH
ISLAND!

BONUS
POINTS!



Identifying the Catch of the Day

A FEW OF THE FISH WE **NEVER** WANT TO SEE IN BC WATERS!



Thank You!

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SALMONID ENHANCEMENT PROGRAM

Department of Fisheries
Community Advisor
Directory

<https://www.pac.dfo-mpo.gc.ca/sep-pmvs/contact-eng.html>



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