

# Spawner Survey Introduction



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Alex Neerman - Lower Columbia Crew Leader

# Training Objectives

- **Review Purpose of the Spawning Survey Program**
- **Describe field procedures**
  - Survey Location
  - Typical Survey
  - Fish ID





Nehalem/Ecola

USB

2017-18 OASIS Start Menu

2017-18 OASIS Surveys

Salmon & STW Surveys

Resurveys

In-Season Site Setup

Synchronize Data

End Previous Next

Powered by

Date: \_\_\_\_\_

Activity: CH CO CM

Dead

em	Jack	Unk	PHA	PHJ

and gravel counts)

### Survey Report

Date 9-28-70

River System Columbia

Flow	Vis.	Temperatures of	
		Water	Air
5-20	#1	—	—

Specimen	Hatch Counted	Live Fish		Dead Fish				Total Fish Obs.
		Adults	Jacks	Fem.	Male	Jacks	Unk.	
CH	1	6						6
CH	27	599	2	58	8		7	674(2)
CH	28	605	2	58	8		7	680(2)

scraped for the available spawning area. Most of the fish were stocked into the 1st 1/2 mile below the falls. Almost no spawning area. Fifty 2's could seed the whole stream.

Observers Bohn & Young

State Printline 32654

### Survey Report

Date Oct 3, 1961

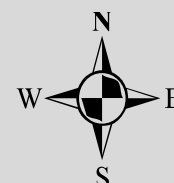
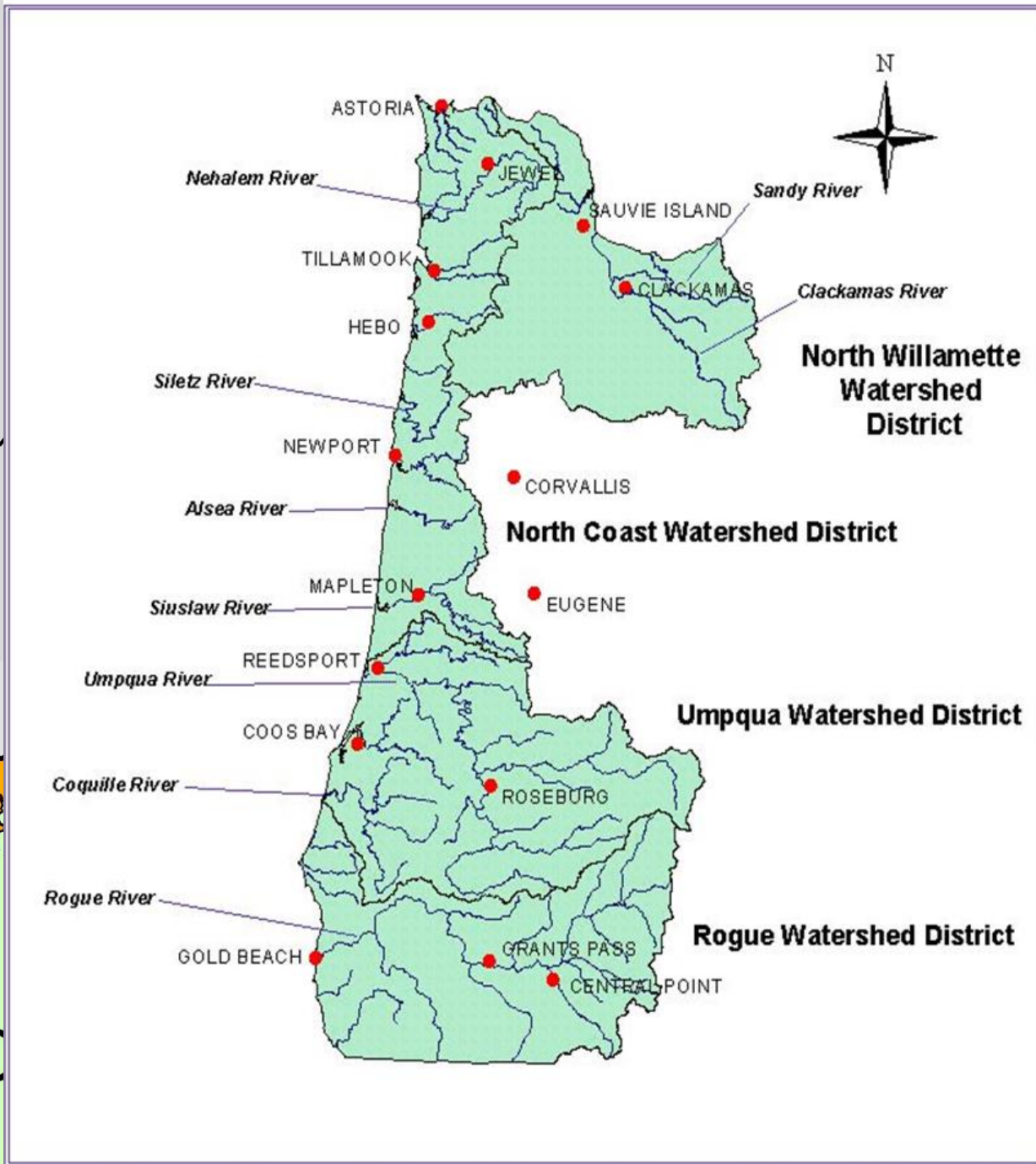
River System Cal. R.

Flow	Vis.	Temperatures of	
		Water	Air
10-15	#1	54°F	72°F

Dead Fish	Mile	Jacks	Unk.	Total Fish Obs.
1	0	0		10 (4)
1	0	0		9 (6)
				19 (6)

spawning and collection. Present for 2 to be made. Roman hose against stream during and. The local crew responsible and the several children taken there home. The stream but the low flows. 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## **The Oregon Plan Requires**

**Improved Monitoring to provide statistically  
rigorous data on the  
Status, Trend, and Distribution  
of Salmon Populations**

### **Three Main Projects**

**Habitat - Aquatic Inventories Project (AQI)**

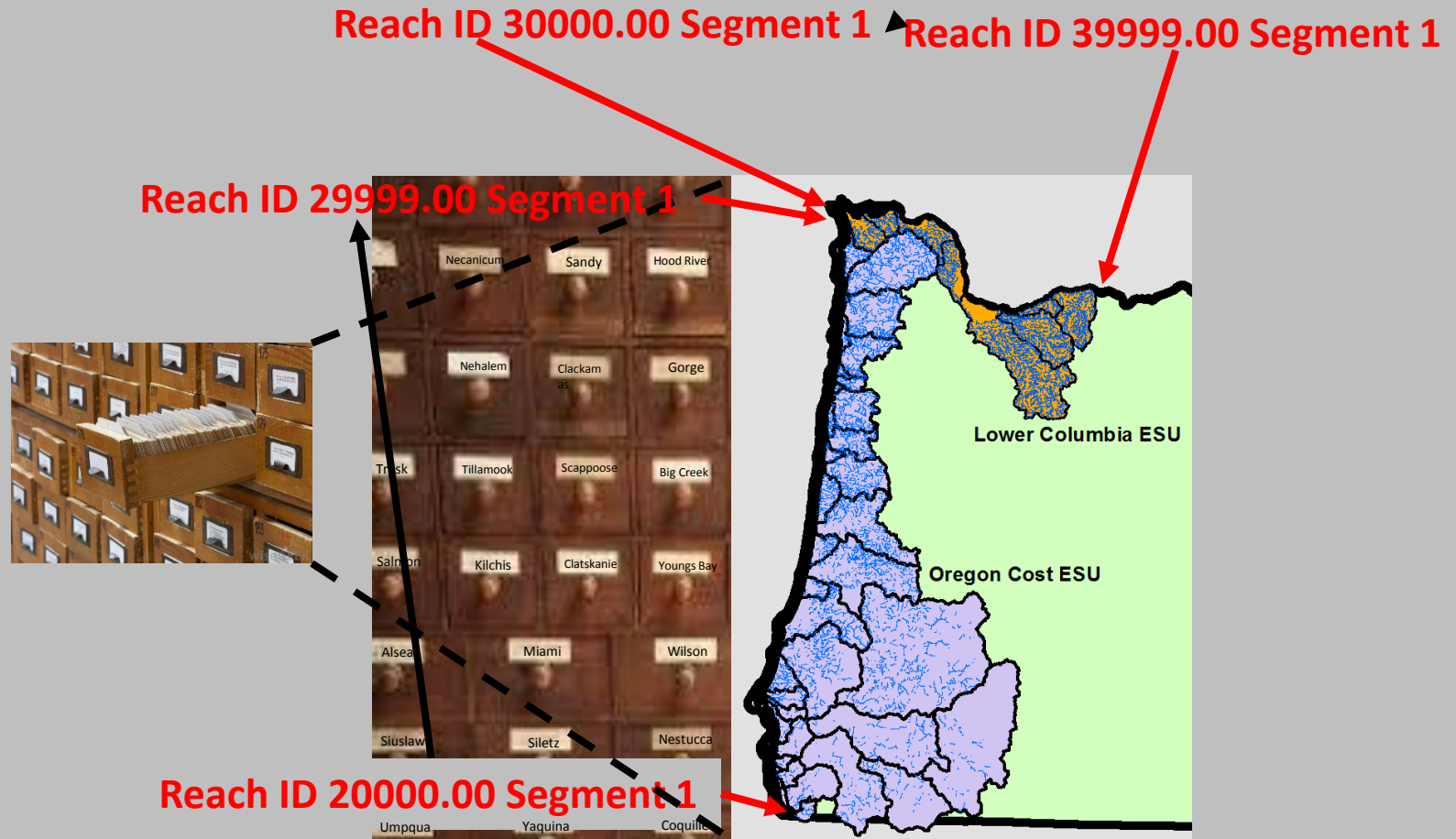
**Juveniles - Western Oregon Rearing Project (WORP)**

**Adults - Spawning Surveys Project (OASIS)**



**Survey  
Location**

# Survey Organization







ReachID	Seg	SurveyName	Year	Miles	Description	MiscComments
33395.00	1	Beaver Cr	2003	0.46	From I-205 in Portland take Exit 19 (Hwy 26 / Powell Boulevard). Drive East on Hwy 26 8 mi to the junction with Burnside. Continue straight onto SE Powell Valley. Drive 0.3 mi on Powell Valley to SE Kane Drive and turn left. Drive North on SE Kane Drive 1.2 mi to 17th Avenue and turn right. Drive 0.4 mi on 17th avenue to a bridge over Beaver Creek. Park near right field of the Mt. Hood Community College baseball field. Knock on the door of 26445 Cochrane Rd (Wayne and Kim Yamashita) to let them know you will be surveying. Walk downstream 150 meters to start sign on a left bank alder that is located 10 meters downstream from the remains of an old bridge. Survey upstream 0.2 mi to the boundary of the Asakawa property (located 130 meters upstream from 17th avenue / Cochrane Rd bridge). End sign is on a right bank alder. Exit via survey to Cochrane Rd / 17th Avenue bridge. Note** Current directions enter survey at mid-point above beaver dam. If beaver dam is absent, survey will begin at mouth of Kelly Creek.	A large Beaver Dam exists just upstream of the mouth of Kelly Creek. If this dam ever blows out - survey may be lengthened, extending downstream to the mouth of Kelly Creek. Singers (2035 Troutdale Rd) and Steueker (2205 Troutdale Rd) both denied, therefore shortening this segment considerably.
33395.00	2	BEAVER CR	2009		Never Surveyed. Multiple LO denials.	Denied at point. Landowner: Tamura
33395.30	1	Arrow Cr	0	0.65	Drive 9.8 mi on 212 to SE 282nd (Last light in town). Take left on 282nd drive 4.1 mi to bridge over Arrow Cr (this is the end point). Veer left on road which turns to SE Troutdale Rd and drive 0.6 mi to stop sign. House on left is start point (contact landowner). Survey upstream 0.65 mi to end point at bridge.	At the end of summer '05 all landowners but the last before the bridge had given the OK.
33395.70	1	Beaver Cr	2002	0.66	Take I-205 North from Clackamas office to Hwy 26 Exit (Division St.). Take Division approximately 8-9 mi to 28100 SE Division, the Cothrell residence. No start sign posted. 2003 surveyors need to get GPS coordinates for start and post sign if Cothrells don't mind. Survey upstream to the confluence of North and South Fork Beaver Creek. End sign is on a right bank alder 10 meters downstream of forks. Exit up left bank through Strebin property 200 meters to road. Contact the Burns prior to each survey - dogs- (503) 661-9694.	New reach break @ Arrow Creek (start point.) ACW is about 4.5 meters with nice spawning gravel. No fish seen. Some habitat up both forks above end point. 1.1 meter step at private bridge. 1.1 meter vertical drop with good jump pool. A likely barrier at low and moderate flows. May be passage barriers downstream survey - Stark Rd. : Fixed in Sept. 2002? Check on it October 2002.
33396.00	1	Beaver Cr, S Fk	2005	0.93	From mouth to forks (M Fk of S Fk of Beaver Cr). Was not fully setup in 2004 because Strebin at mouth could not be contacted.	

# Description of a Typical Survey



# The basic idea

- Make sure you are on the correct stream and segment (many surveys, but not all will have signs, use GPS)
- Find your start point and survey upstream to end point
- During the survey count all live and dead fish
- Count all Redds
- Collect all carcasses and take them back to the council office
- Identify species, sex, and take biological samples [scales, snouts]
- Zero data point is valuable
  - start and end of season [run timing]
  - No fish seen throughout season



# SALMON SPAWNING SURVEY

START  
REACH #Z6236.00 SEG.1 CHARLE CR LR 6/25/02



Oregon Department of  
Fish and Wildlife







# Without Polarized Sunglasses



# With Polarized Sunglasses





**Fish  
ID**

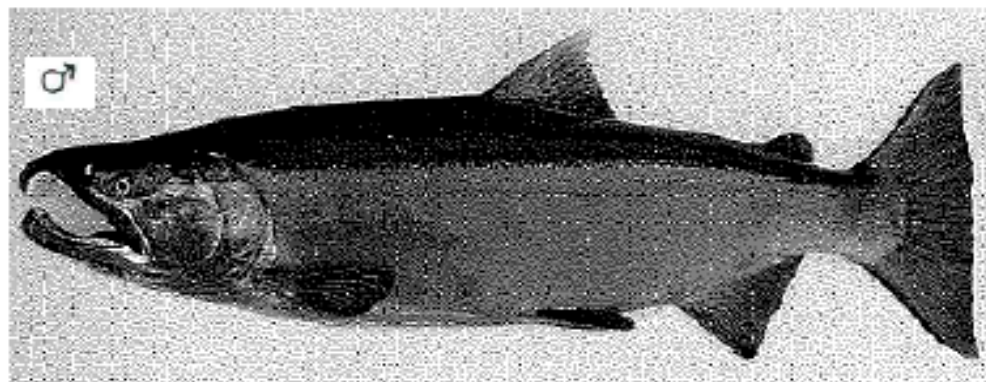


# **SALMON ID 101**

- Run Timing (coho vs. stw)
- Basin Location (chum vs. coho)
- Size (chinook vs pink)
- Behavior
- Body Morphology
- Coloration
- Markings (spotting, gums, fin rays)

# Salmon ID Card

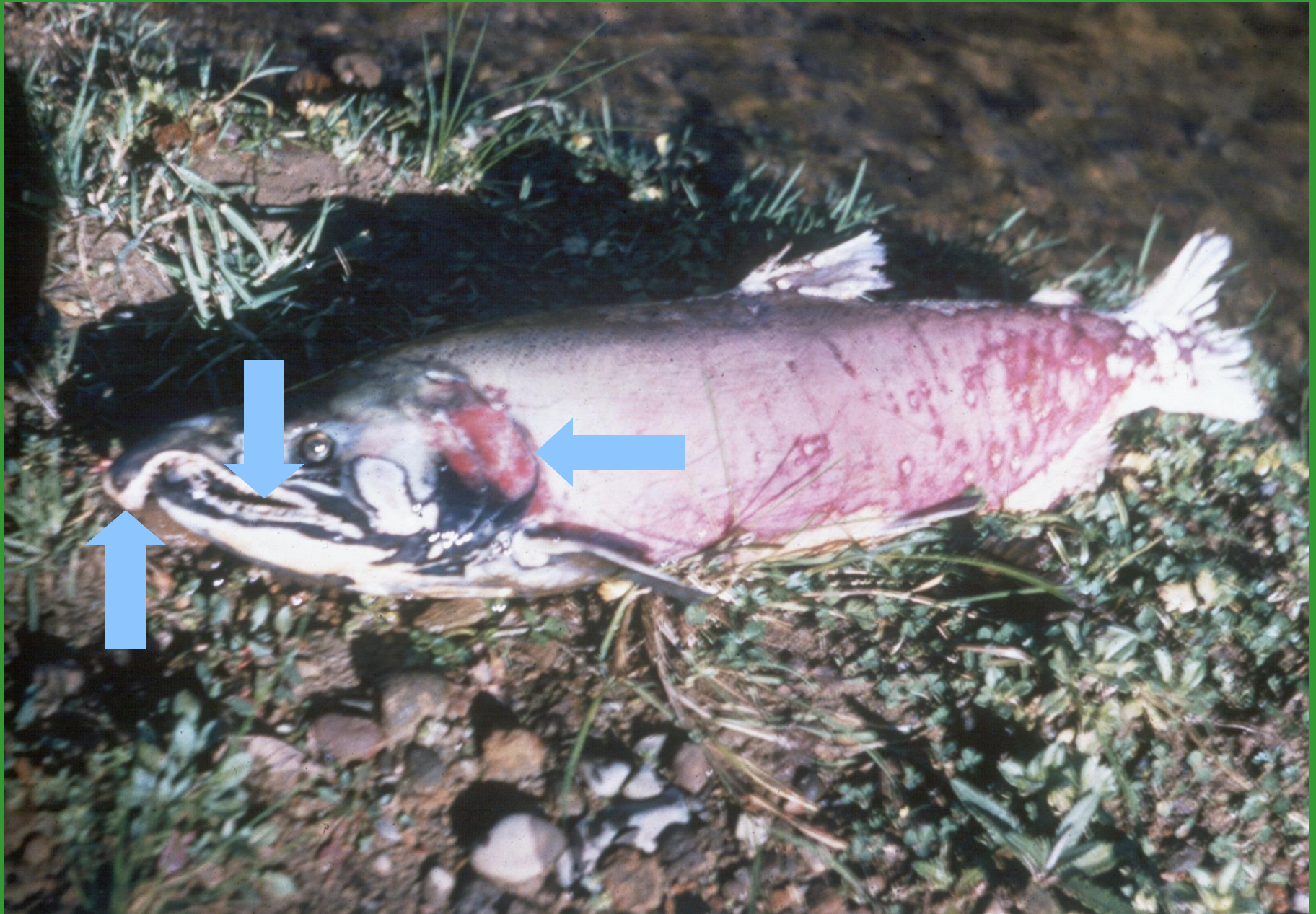
Coho Salmon



- Rosy red operculum ( gill plate)
- White spot above operculum (often only visible on live fish swimming in water). Not present on all fish, but not uncommon.
- Spots on back are generally smaller than pupil.
- No spots on lower lobe of tail & tail slightly "v" shaped.
- Tail has a discernible "ribbed" feel.
- Gums are white at base of teeth( can have splotches of black)



























































# Typical Salmon Redd

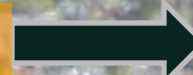


Pit



Mound

Direction of Flow



















Have Fun!!!

The End