

Salmon Watcher Program
Training Slideshow



23 Years
of Salmon
Watching!

Agenda

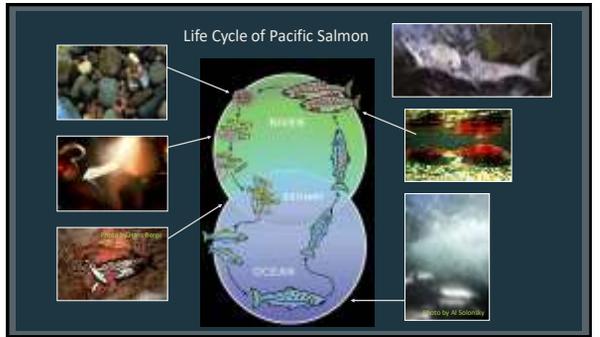
- Lake Washington History
- Salmon Life History and Identification
- What to expect in the field
- Things you can do to help salmon
- Data Collection & Tips

*You can follow along and takes notes
on the slideshow printout.*



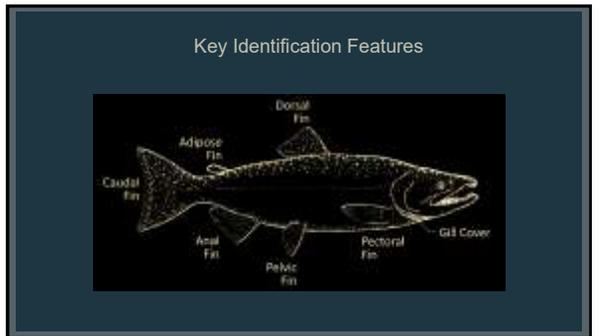
1902





Good Habitat

- Shade
- Hiding spaces
- Cold, clean water
- Erosion control
- Pools
- Complexity
- Food supply
- Clean gravel



Salmon Identification

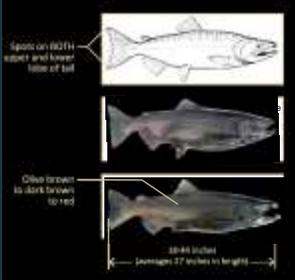


What not to say:
I saw a *red* fish!
It must be a....

What to Consider When Identifying Salmon

- Size
- Spots
- Color
- Behavior
- Location
- Time of year

Chinook ("King," "Tyee," "Blackmouth")



Spots on back and lower lobe of tail

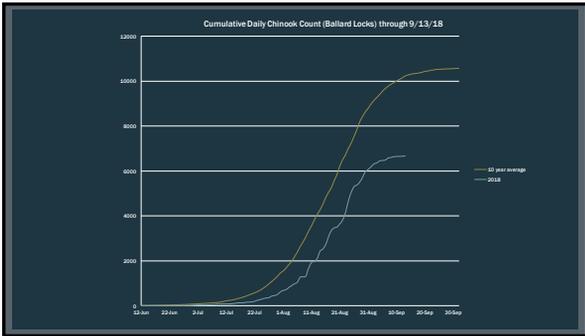
Olive for upper to dark brown to red

18-48 inches (average 27 inches in length)

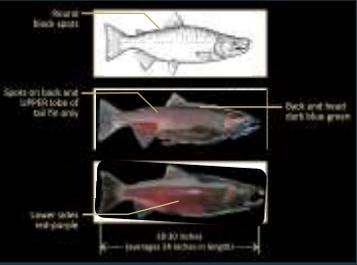
Chinook



Photo by Geoff Clayton



Coho ("silvers")



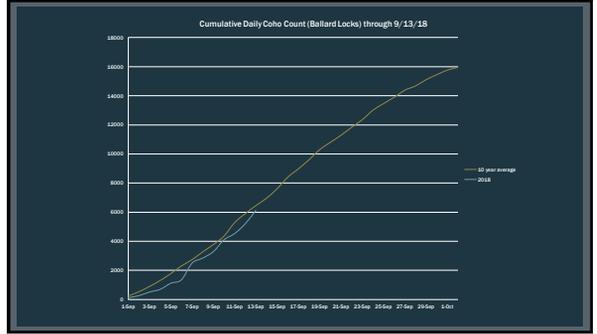
Red to black spots

Spots on back and upper lobe of tail the only

Dark and head dark blue green

Lower back half purple

18-30 inches (average 18 inches in length)



Sockeye ("Red")

Sex Obvious Sign: (Points to the dorsal fin)

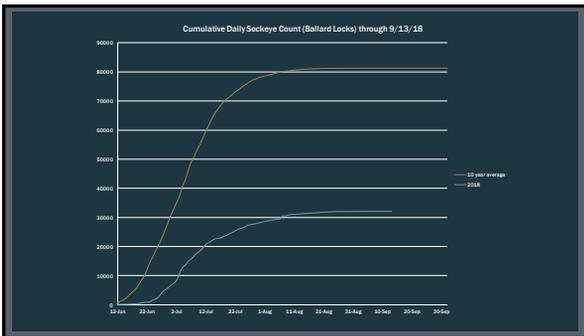
Possible dark band: (Points to the dark band on the side)

Female: Red body, green head

Male: Distinctive female run males, Distinctive hyper run males

Size: 20-30 inches (Average 23 inches in length)

Note: Sockeye will always have an adipose fin!



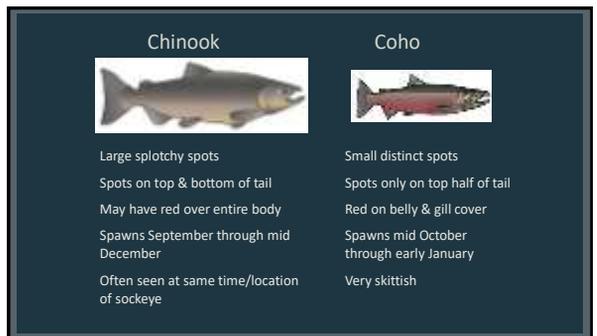
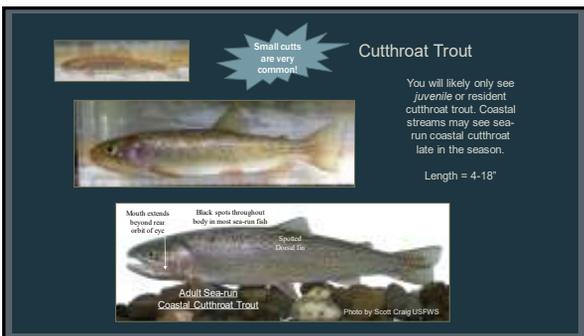
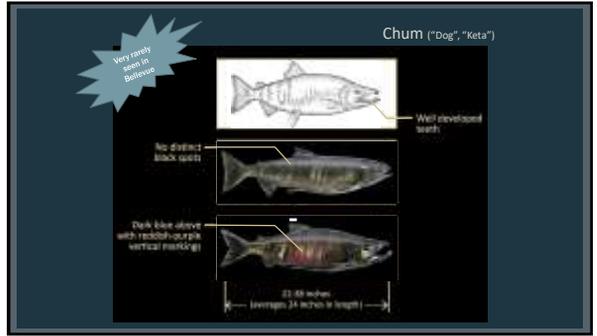
Kokanees ("Silver Trout" or "Little Sockeye")

Small dark spots on back: (Points to the dorsal fin area)

Colors are not as bright as sockeye: (Points to the body)

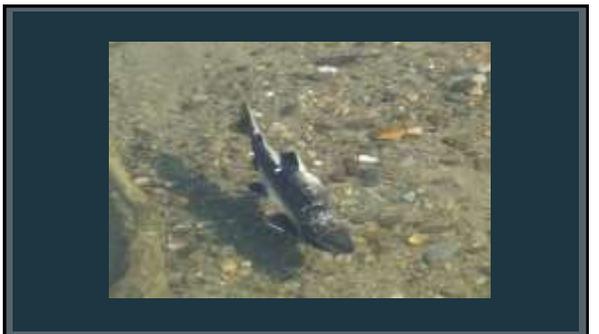
Female: 10-20 inches (Averages 15 inches in length)

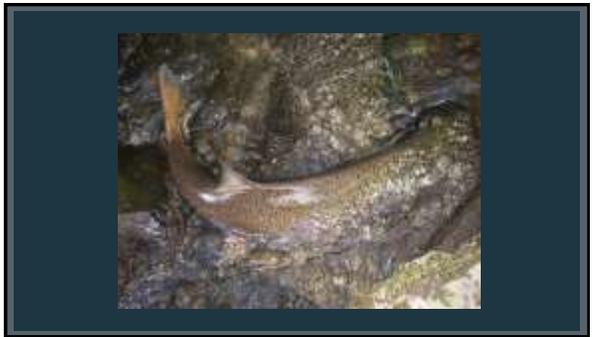
Male: Red Body, Green Head



Salmon
Review
Revue







In the field...

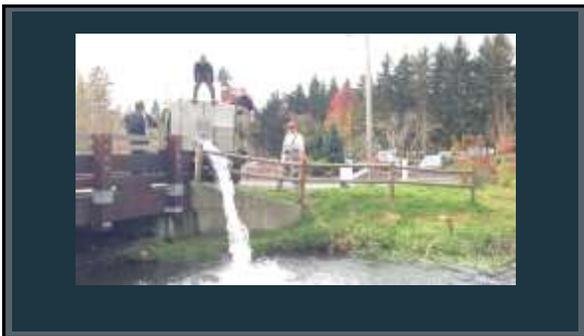


Tags?

If you see a salmon with a tag, live or dead, tell Laurie ASAP!
ldevereaux@bellevuewa.gov or 425-452-5200

Coho Pre-Spawn Mortality

Kelsey Creek, 2014
 Photo by Gina Afero, Volunteer



LIVE COHO RELEASE DATA

Kelsey Creek	# Coho released	# Live observed	# Days live observed	# Days mortalities observed	# Redds
2013	1150	291	20	39	113
2014	643	138	4	18*	0
*all observed mortalities had egg & sperm sacks intact (did not spawn)					
Coal Creek	# Coho released	# Live observed	# Days live observed	# Days mortalities observed	# Redds
2013	742	921	36	36	152
2014	1573	1025	36+	36+	173
All mortalities had spawned, live fish still present after official surveys ended					

ALERT!
THIS STREAM MAY CONTAIN INVASIVE NEW ZEALAND MUDSNAILS



80+ NZMS

- Are highly invasive and pose a serious threat to our aquatic ecosystems, including salmon.
- Can easily be transported to new streams by people, pets, and equipment.
- Can reproduce/clone very rapidly once in a stream.
- Are very small and very hard to detect, so it's best to assume these mudsnails are in all streams.

If you Salmon Watch at more than one site, please carefully review flyer in packet and diligently follow prevention and decontamination procedures.



Stormwater is not treated



Even biodegradable soap pollutes!

Car wash water contains:

- Petroleum hydrocarbons
- Heavy Metals
- Phosphorous and nitrogen containing detergents
- Surfactants
- Fine sediments



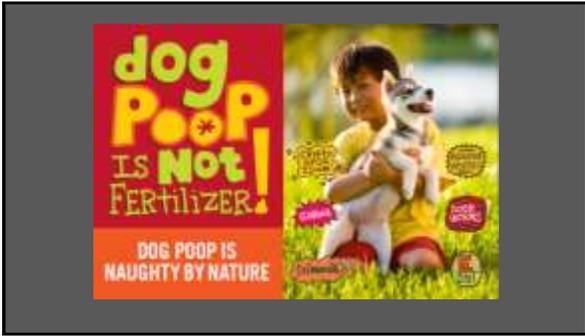
Use a Commercial Car Wash



Pet Waste

- American Veterinary Medical Association reports **37.4%** of WA households own dogs
- Average dog-owning household has **1.5** dogs
- Bellevue has approx **30,000** dogs
- At **0.25** pounds of solid waste per dog, that's **3.5** tons of raw sewage every day





Does your beautiful yard have an ugly secret?



In 1998, 23 pesticides in NW urban streams

- Five pesticides exceeded limits for aquatic life
- Most pesticides were ones commonly sold in retail stores

USGS

Practice Natural Yard Care



Waterwise Garden, Bellevue Botanical Garden

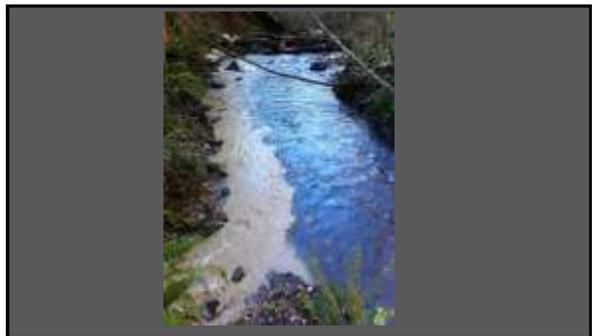
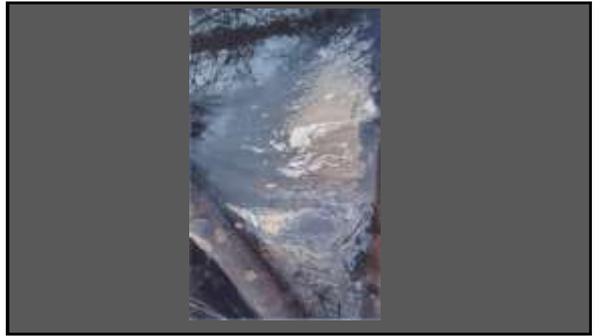
- Build healthy soil
- Plant right for your site
- Practice smart watering
- Think twice before using pesticides
- Practice natural lawn care

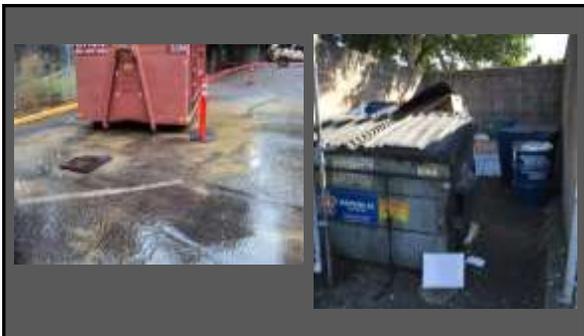
Report Pollution to 425-452-7840

- Location (cross streets, address)
- What is it (odors, color, placards)?
- How much (<5 gallons or >5 gallons)?
- Where is it coming from (pipe, vehicle)?
- Who is responsible (license #, house #, truck logo)?
- **PICTURES**

What to expect









NOW FOR THE DATA...

Training Packet

Data Sheets

Helpful Tips



Data Entry

New in 2017
Record site # by each entry.
Use one datasheet for multiple sites.

A screenshot of a data entry form. Red circles highlight specific fields at the top, and a red L-shaped box highlights a section of the table below. The table has multiple columns and rows for data entry.

Excel Spreadsheet Option

A screenshot of an Excel spreadsheet. A red vertical box highlights a column of data. To the right of the spreadsheet is a vertical list of time slots from 10:00 am to 11:00 pm. To the right of the list is a circular clock face showing the time as approximately 10:10.

Zeros are important data!

A screenshot of a data sheet. A red circle highlights a cell containing a zero. Above the data sheet is a 3D-style sign that says "ZEROS!" in red letters.

WHAT YOU SHOULD BRING



- Data sheets
- Pen or pencil
- Salmon ID materials
- Digital Camera /mobile
- First fish form
- Polarized glasses
 - Raingear
 - Clipboard
- A Buddy! (for fun & safety)
 - Orange vest (optional for safety)

IMPORTANT TIPS!

- Stay on public property at all times unless your coordinator has written permission from the property owner (or you are the property owner).
- View after a rain, as soon as the water clears
- Use polarized glasses
- Allow 15 solid minutes at a stationary viewing spot
- Be there before it gets too dark
- Wear dark clothes and move slowly – sudden movements or loud talking might frighten fish

SALMON WATCHING BASICS

When do we start watching?
Right now!!

How often do we watch?
Twice a week.

How long do we watch for?
15 minutes.

When do we stop watching?
End of December.

CHOOSING A SITE

Here's how it works:

- *BEFORE YOU GET UP*, please fill out the survey on the back of the agenda.
- Choose a site
- Fill out a waiver form
- Turn in your survey & waiver



Thank you for your contribution!
We couldn't do it without you.