

Section 6: Appendices

Fun facts about Salmon: print-out pages on each species for quick reference on your creek walks.

Salmon Anatomy Diagram: because we all need to know the basics!

Useful Phone Numbers

Fun Facts About Salmon

Coho (*Oncorhynchus kisutch*)

1. Coho in Lagunitas Creek spawn an average of 2100 eggs.
2. About 17% of coho eggs in Lagunitas Creek survive to emerge as alevins.
3. About 5-20% of coho at sea survive to return to freshwater.
4. Coho egg pockets are about 15-16 cm below the gravel.
5. The hooked nose on a male spawning coho is called a kype.
6. The largest coho caught in California was in Lagunitas Creek! At 22 pounds and 36 inches, it was caught in 1959.
7. Coho can leap as much as 6 feet vertically in their upstream migration.
8. In California, coho eggs usually hatch after 38 days (5 1/2 weeks). Hatching time is dependent on water temperature.
9. Coho in Central California are both State and Federally listed as an endangered species.
10. Coho tend to spawn in intermediate reaches of rivers.

Chinook (*Oncorhynchus tshawytscha*)

1. Chinook redds tend to be large, round and have well-defined edges.
2. About 38% of chinook overall survive to emerge as alevins.
3. In Lagunitas Creek, more chinook redds are found in the main stem of the creek than in the tributaries.
4. Chinook are distinguishable from coho by the black markings on their lower gums.
5. In Lagunitas Creek, chinook return to spawn only in fall. In some rivers, chinook may spawn in any season.
6. In Lagunitas Creek, chinook usually move out to sea in their first year.
7. Hybrids between Chinook and coho salmon have been found in the Klamath River.
8. The average chinook life span is 3-6 years.
9. Chinook are the least abundant of the North American Pacific salmon.
10. In the Yukon River, Chinook can travel up to 2000 miles to spawn.

Chum (*Oncorhynchus keta*)

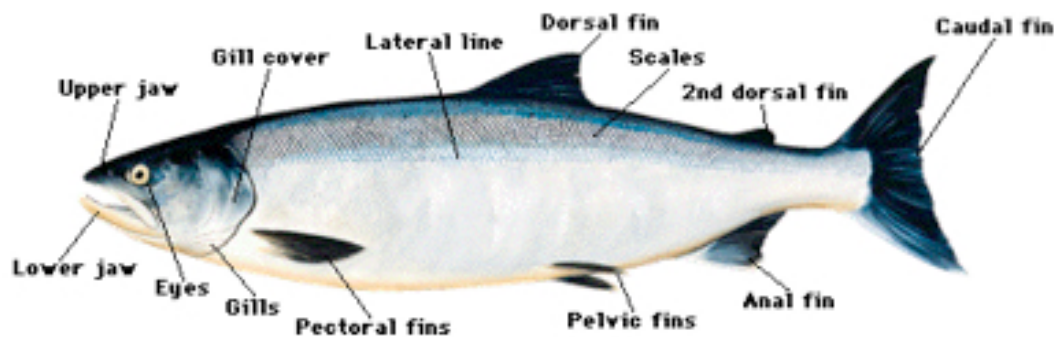
1. In Lagunitas Creek, spawning chum salmon are the least-abundant of the 4 salmonid species.
2. Chum have no black spots on their body and fins. Spawning chum have blotches and stripes in dark reds, blues and greens, giving them a calico appearance.
3. Chum fry are ready to outmigrate as soon as they emerge from the gravel, and go to sea at the smallest size of all salmonids!
4. Chum generally return to spawn at age 3-4 years.
5. Chum salmon flesh has a lower fat content, lighter color and least economic value of all the salmon species.
6. Because chum spend most of their lives in the ocean, they have a feeding advantage over other species of salmon who spend more time in fresh water.
7. An average chum spawns about 2800 eggs.
8. An average of 5 chum from each female survive to adulthood.
9. There are almost no reports of chum salmon jacks.
10. Natural hybrids between chum and pink salmon are occasionally found.

Steelhead (*Oncorhynchus mykiss*)

1. Steelhead use the upper reaches of Lagunitas Creek to spawn.
2. Steelhead redds are small, round and look like potholes in the creek bed.
3. Steelhead are a threatened species in Lagunitas Creek.
4. After spawning, steelhead return to the ocean. They do not stay to protect their redds.
5. Steelhead fry rear in faster-moving water than coho fry.
6. Steelhead fry require silt-free cobbles and rocks to hide behind in high flows.
7. Steelhead are a migratory rainbow trout. Some steelhead remain in the river throughout their lives, and are not anadromous.
8. Lagunitas Creek steelhead spawn in January through March,
9. Steelhead fry spend up to 2 years in the creek before outmigrating.
10. Female steelhead spawn approximately their weight in pounds X 1000 eggs. A 6-lb. female will spawn 6000 eggs.

Sources: Quinn, Behnke, SPAWN, Stillwater

Salmon Anatomy Diagram



Anal fin - Used for balance.

Caudal fin - Used to propel fish through the water with powerful sweeping movements.

Dorsal fins - Used for balance.

Gill Cover - Protects gills.

Gills - Aquatic respiration organs used to obtain oxygen from the water.

Lateral line - A line of sensory pores along the side of salmon by which currents, vibrations, pressure changes, and the movement of other bodies in the water are detected.

Pectoral fins - Used for steering.

Pelvic fins - Used for balance.

Salmon illustration courtesy of the US Fish and Wildlife Service, from www.washingtontourist.com/salmon/journey/one.html

Useful Phone Numbers:

SPAWN office (Paola Bouley): 415-488-1957 x 102

Megan Isadore: 415-488-1957

Samuel P. Taylor State Park Headquarters: 415-488-9897

CalTIP To Report a Poacher or Polluter

If you witness a poaching or polluting incident or any fish and wildlife violation, or have information about such a violation, immediately dial the toll free CalTIP number

1 (888) DFG-CALTIP, 24 hours a day, seven days a week.

Be prepared to give the fullest possible account of the incident including the name, address, age and description of the suspect, vehicle description, direction of travel, license number, type of violations and when and where it occurred. *Your identity will be protected.*

A warden or dispatcher will take your call. Information from the call is relayed to the Fish and Game region where the offense occurred and an investigation is undertaken locally. If the information supplied by the caller results in an arrest the caller becomes eligible for a reward. (*Rewards up to \$1,000 have been paid.*) All reward money is acquired through private donations; no state funds are used. The case is then reviewed by a volunteer citizen's group known as the CalTIP Citizen's Review Board.

<http://www.dfg.ca.gov/enforcement/caltip.html>