

Spring Creek Smolt Trap

Data Summary

What is a smolt?

A "smolt" is one of the life stages of a juvenile salmon. This life stage occurs when the juvenile salmon begins its migration from freshwater to the estuary and adjusts to living in saltwater. Different Pacific salmon species spend different amounts of time rearing in freshwater. For example, coho salmon spend one to two years rearing in freshwater after they emerge from the gravel as fry. They reach about 2-4 inches (50-100 millimeters) in length before they begin migration to the estuary as a smolt. The timing of this movement correlates with spring freshets (high water flow from snow melt or spring rains).

What is a smolt trap?

A smolt trap is a standard tool used to quantify how many fish are moving through a water system. The trap is designed to capture juvenile fish during their spring outmigration from freshwater down to the estuary. The trap is a stream-wide V-shaped corral that points downstream. The structure funnels fish into a holding box while allowing stream flow to continue downstream. The holding box is used so fish can be safely held onsite until they are identified, counted, and released. An upstream trap is also installed to allow upstream fish passage. The traps are checked multiple times each day.

Spring Creek Smolt Trap Data:

The City of Bellingham conducted smolt trapping activities on Spring Creek, a tributary to Whatcom Creek, during the annual spring outmigration period of 2005.

Table 1 shows the total number of fish, by species, caught during the 2005 smolt trapping season on Spring Creek. Cutthroat trout were the most abundant fish species moving downstream in Spring Creek during this smolt trapping event, with a total of 92 trout counted. Second most abundant were brown bullhead (catfish) with a total of 12 individuals, followed by coho salmon with 11 individuals counted.

Figure 1 shows the number of salmonids (salmon and trout species) identified and counted each day during the 2005 smolt trapping activities on Spring Creek.

For more information, please contact:

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Table 1. 2005 Spring Creek smolt trap counts by species.

Common Name	Species	2005 (Mar 5-Jun 5)
Coho	<i>Onchorynchus kisutch</i>	11
Cutthroat	<i>Onchorynchus clarkii</i>	92
Steelhead/ Rainbow	<i>Onchorynchus mykiss</i>	3
Brown Trout	<i>Salmo trutta</i>	-
Unknown Trout sp.	<i>Onchorynchus sp.</i>	2
Three-spine stickleback	<i>Gasterosteus aculeatus</i>	8
Bluegill	<i>Lepomis macrochirus</i>	2
Yellow Perch	<i>Perca flavescens</i>	2
Largemouth bass	<i>Micropterus salmoides</i>	1
Smallmouth bass	<i>Micropterus dolomieu</i>	2
Brown Bullhead	<i>Ameiurus nebulosus</i>	12
TOTAL		135

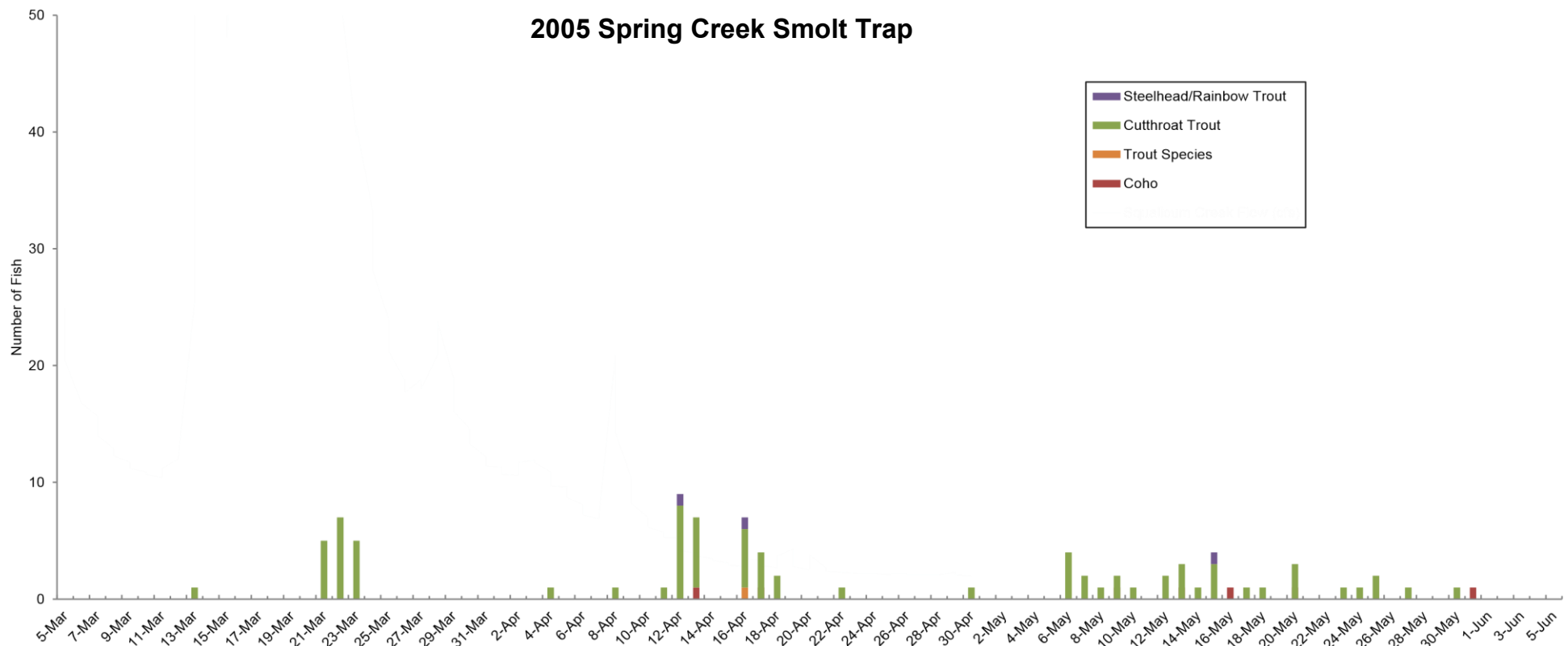


Figure 1. Daily salmonid counts during the 2005 outmigration at the smolt trap on Spring Creek in Bellingham, WA.