

CALIFORNIA STATE SCIENCE FAIR 2003 PROJECT SUMMARY

Name(s)

Travis T. Hinton

Project Number

S1903

Project Title

Monitoring Marine Mammal Predation on San Lorenzo River Steelhead

Abstract

Objectives/Goals

- -Problem Statement: Not enough adult steelhead are returning to the San Lorenzo River to maintain a healthy population.
- -Statement of Purpose: To determine the severity and frequency of marine mammal predation on the local San Lorenzo River steelhead population.
- -Investigative Question: Are predatory marine mammals selectively preying on a specific cross-section of the steelhead population (males, females, hatchery fish, and wild fish)?
- -Hypothesis: That over six percent of the local San Lorenzo River steelhead will have evidence of predatory marine mammal attack.

Methods/Materials

- -Materials:
- -Partnership with Monterey Bay Salmon and Trout project, National Marine Fisheries, and the Department of Fish and Game.
- -Necessary access to the local San Lorenzo Valley diversion dam: facilities include an inflatable dam, fish ladder, and fish trap.
- -Large "salmon" net
- -Holding tank
- -Waterproof camera
- -Clip board
- -Methods:
- -Set trap during spawning season
- -Check on a regular basis
- Step # 1: Net fish out of the trap one at a time
- Step # 2: Place in holding tank
- Step # 3: Determine the sex of the individual (A female will have a rounded nose, and a male will have an elongated nose)
- Step # 4: Measure in inches
- Step # 5: Note the color of the steelhead
- Step # 6: Determine origin (A wild steelhead has its adipose fin intact, a hatchery steelhead will have its adipose fin clipped)

Summary Statement

To determine the frequency and effect of marine mammal predation on San Lorenzo River steelhead

Help Received

My teacher, Terry Umsted provided necessary materials and supervision.