

11-29-2005

To: Whom it may concern
From: J. David Streig

Subject: Interpretation of Coho Salmon Records

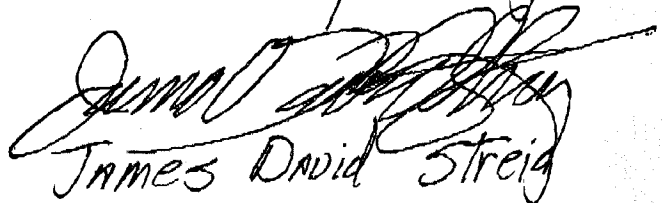
In late September 1991 I prepared a review summary document for and at the request of Mr. Keith Anderson, California Department of Fish and Game South Region 3 Fisheries Manager, which I titled "History of Fish Cultural Activities in Santa Cruz County with Reference to Scotts and Waddell Creeks." This report was compiled from the incomplete Egg taking data and Fry planting data that was found by Environmental Studies Intern Cathy Dages in 1987 in the California Department of Fish and Game Archives over a four month period that spring which she titled "Fish Hatchery Operations in Santa Cruz County: Historical References to the Big Creek and Brookdale Hatcheries."

I had shown draft data tables of Egg taking and Fry planting to Keith Anderson about a week before a Santa Cruz County Planning Department hearing being held by Dave Hope for preparing a draft petition to list Coho salmon in Santa Cruz County as Endangered. Keith asked me if I could take the Egg data numbers and back calculate the number of females spawned using Shapovalov & Taft (1954) estimates of female fecundity to

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provide numbers of spawned females since there was no historic population data. Keith said he had no staff available to prepare this before the meeting and asked me to compile the data and a brief Hatchery History for for him which I completed over the next three wites. The majority of the data showed that Coho were actually imported from other sources, but in the 21st Biennial Report of the Fish and Game Commissioners of the State of California for 1909-1910, the Scott Creek Station Report for 1909 said "The collections for the season were 2,182,000 steelhead eggs, of which 320,000 were sent to Sissow Hatchery, 200,000 sent to Marin County Hatchery, and 100,000 shipped to United States Bureau of Fisheries Station at Oregon City, Oregon; the remainder, except 200,000 hatched at the spawning station and returned to Scotts Creek, were hatched at Brookdale Hatchery which, together, with the salmon eggs collected made a grand total of 3,582,000 eggs of all kinds." Since the reports narrative did not say the eggs were collected somewhere else and was describing the Scotts Creek collecting we assumed they came from Scotts Creek and since they didn't report actual numbers we subtracted steelhead eggs from the Grand Total to conclude

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1,400,000 Salmon eggs were spawned, to identify the species we examined the planting report for the summer of 1909 showing 600,000 Coho salmon fry being reported in the tables as being planted in Santa Cruz County streams from Brookdale Hatchery, thus we assumed these were all Scotts Creek Coho which had to come from 518 females using Shapovalov & Tatt (1954) 2,700 eggs per coho female average fecundity found in their Waddell Creek studies.

There was no statement that any egg imports from other hatcheries occurred for this year, however from 1913 to 1941 records show large imports from northern hatcheries with subsequent reports of Coho spawning at Scotts Creek a couple of years after the plants. The report prepared by me was never intended to be a Scientific Document, but a review of the limited amount of Fish Cultural Information we found and an attempt to estimate Adult returns from egg data to be used by Keith Anderson of the California Department of Fish and Game to discuss turn of the century to 1940 Population information for Steelhead and Coho in Scotts Creek at the Santa Cruz County Hearing.

Sincerely,

James David Streig