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State of California

The Resources Agency

Memorandum

To: Stafford Lehr
Fishery Biologist
Mother Lode District

Date: June 24, 1997

From : Department of Fish and Game - Region 2

El Dorado Co.

Subject: Hangtown Creek Electrofishing Survey, April 24, 1997

An electrofishing survey was conducted on Hangtown Creek during April 24, 1997 as a demonstration for an environmental studies course conducted by Ms. Debra Power, Eldorado High School. Mr. Bill Somer and some members of the class assisted in the netting of fish. The high school class provided support from the stream bank, and help in processing the fish.

We electrofished a 277 foot long reach of stream located behind the Carrows Restaurant. The lower end of this reach was located just above the overpass bridge for Spring Street. We measured a water temperature of 15 ° C and conductivity of 150 micromhos/cm.

A total of 21 rainbow trout were captured in two electrofishing passes. We captured 16 trout in the first pass, and 5 in the second. Using a Seber-LeCren two sample population estimate, this stream reach is estimated to contain 23 trout. Expanding this estimate yields 419 trout/mile. The average fork length of these trout was 131 mm (range 39 mm to 188 mm). A frequency histogram is presented in Figure 1. The rainbow trout weighed an average of 22 grams (range 1 g to 45 g). Expanding the average weight and population estimate yields 11.71 lb trout/surface acre.

A variety of fish other than trout were captured during the survey (Table 1). Two green sunfish were capture with an average fork length of 92 mm (range 75 mm to 109 mm) and an average weight of eight grams (range 6 g to 10 g). Also, 42 Sacramento suckers and 52 minnows were captured.

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A handwritten signature in black ink, appearing to read "JL Hanson".

John Hanson
Scientific Aide
Wild Trout Management

A handwritten signature in black ink, appearing to read "William L. Somer".

William L. Somer
Associate Fishery Biologist
Wild Trout Management

cc: Pat O'Brien, R2

Ms. Debra Power
Eldorado Union High School
Placerville CA. 95667

TABLE 1. Summary sample statistics for fish captured during an electrofishing survey of Hangtown Creek, April 24, 1997.

	RAINBOW	GREEN SUNFISH	SACRAMENTO SUCKER	MINNOWS
N	21	2	42	52
MEAN FL (mm)	131	92	86	58
VARIANCE	1190.40	578.00	699.14	318.30
STANDARD DEV.	34.50	24.04	26.44	17.84
MIN FL (mm)	39	75	60	32
MAX FL (mm)	188	109	169	115
MEAN WT (g)	22	8	10	4
VARIANCE	129.12	8.00	115.52	20.89
STANDARD DEV.	11.36	2.83	10.75	4.57
MIN WT (g)	1	6	1	0.5
MAX WT(g)	45	10	48	19

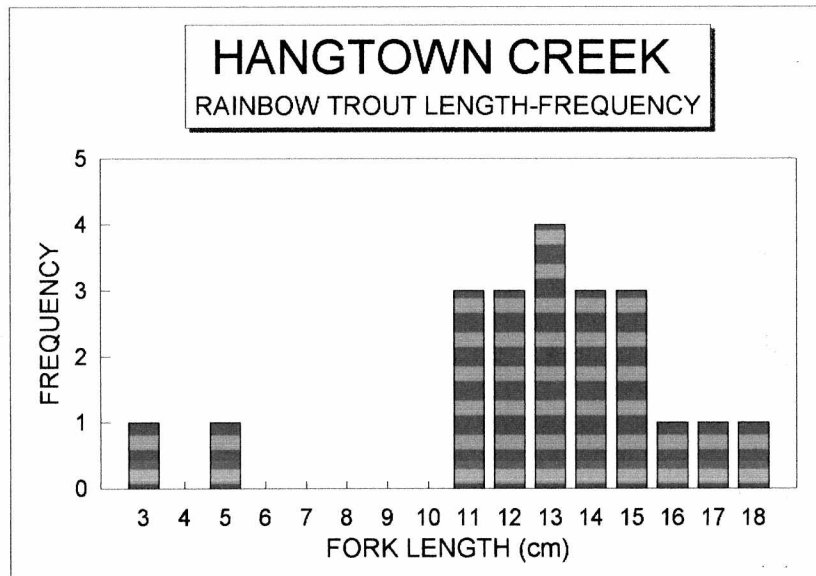


FIGURE 1. Fork length frequency histogram for all rainbow trout captured during an electrofishing survey of Hangtown Creek, April 24, 1997.