

REF 90384

State of California
The Resources Agency
Department of Fish and Game

A BRIEF CREEL CENSUS ON THE KLAMATH RIVER FROM JOHNSONS TO
THE SALMON RIVER FROM AUGUST THROUGH OCTOBER 1969^{1/}

by

Edward L. Miller
Region 1, Inland Fisheries

SUMMARY

A creel census was conducted on 16 days from August 30 through October 26, 1969 on the Klamath River from Johnsons to the mouth of the Salmon River. The 660 anglers interviewed had fished 2,162.5 hours to catch 359 fish for a catch per hour of 0.17. Half-pounder steelhead made up the majority of the catch. The anglers interviewed were from 41 California counties and six other states.

^{1/} Anadromous Fisheries Branch Administrative Report No. 71-15.
Submitted June, 1971

INTRODUCTION

A creel census was conducted on 16 days, from August 19 through October 20, 1968 on the Klamath River from John on upstream to the mouth of the Salmon River (Figure 1). The census was conducted to provide information for management and to evaluate the effects of damming future water development proposals. Lane (1959) reported on a creel census for the Klamath River from the Salmon River to Iron Gate Dam. However, current information was not available for the Klamath River downstream from the Salmon River. Another creel census, to be reported separately, was conducted on the lower Klamath River from Highway 101 to Starwin Flat.

METHODS

State Highway 96 and other roads paralleled the Klamath River in the area covered by this creel census. Anglers were contacted when they, or their vehicles, were seen. Most interviews were conducted while the anglers still were fishing.

The area of the creel census was divided into two sections: Johnson to Bluff Creek and Bluff Creek to the mouth of the Salmon River. The day was divided into two time periods: morning and evening.

To avoid censusing any given locality at the same hour each census day, a previously determined census course was followed. The direction of travel through each section was varied as well as the time period.

Censusing was started about 0800 or 1200 to check morning and evening fishing. Most anglers started fishing around 0600 or later. Only one census section could be covered during each census day.

The anglers were asked what time they had started fishing, how many fish they had caught, and their county of residence. Whenever possible their fish were measured and checked for marks.

Because of the travel time involved and difficulty in catching anglers, no attempt was made to secure a complete area count.

RESULTS

During the 16 days of creel census 100 anglers interviewed had fished 2,101.8 hours to catch 789 fish (Table 1). Daily angler success ranged from 1.06 to 0.36 fish per hour with an overall success rate of 0.37 fish per hour. The catch per angler at time of census was 0.74 fish. Since most anglers were still fishing at the time each catch per angler day would be somewhat greater.

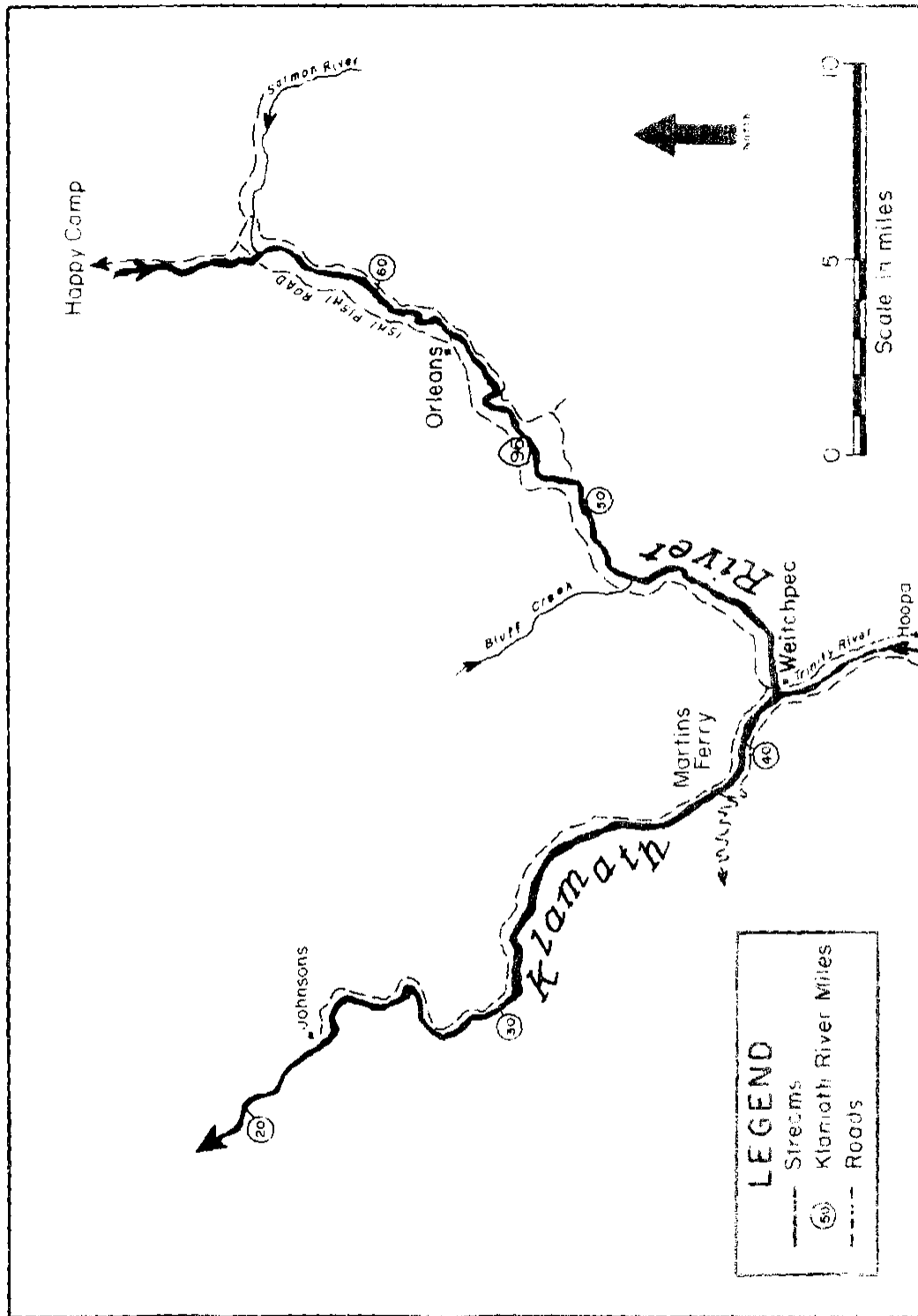


Figure 1. Portion of Klamath River covered by creel census.

TABLE I

 KLAMATH RIVER CREEK OF SECT.
 JOHNSONS TO MOUTH OF SALMON RIVER, 1960

Date	Section- direction- time*	Number anglers	hours fished	Salmonids caught **	Catch per hour	catch per angler	Mean TL (inches)	Number examined
8/30 Sat	B-U-pm	78	240.5	15	0.06	0.19	10.6	6
8/31 Sun	A-U-pm	56	204.0	20	0.10	0.36	12.5	13
9/12 Fri	A-U-am	24	64.0	23	0.36	0.96	12.5	6
9/13 Sat	A-U-am	32	78.0	7	0.09	0.22	11.6	2
9/14 Sun	B-U-pm	47	163.5	10	0.06	0.21	13.7	7
9/15 Mon	B-U-am	53	132.5	39	0.29	0.74	13.5	23
9/16 Tue	A-U-am	27	75.0	7	0.09	0.26	14.1	2
9/25 Thu	B-U-pm	41	149.0	9	0.06	0.22	10.4	3
9/26 Fri	B-U-pm	52	183.0	16	0.09	0.31	11.8	3
9/27 Sat	A-U-pm	41	156.0	37	0.24	0.90	12.1	16
9/28 Sun	B-U-pm	37	137.0	21	0.15	0.57	13.5	8
9/29 Mon	A-U-am	45	143.0	42	0.29	0.93	13.9	15
10/23 Thu	A-U-pm	24	93.0	32	0.34	1.33	16.4	16
10/24 Fri	B-U-pm	47	173.5	19	0.28	1.04	14.1	27
10/25 Sat	B-U-am	38	91.5	14	0.33	0.37	11.2	11
10/26 Sun	A-U-pm	18	77.0	18	0.23	2.00	11.2	6
		660	2,162.5	389	0.17	0.54	13.2	164

* A Johnsons to Bluff Creek.

B Bluff Creek to Salmon River.

U Census started on lower end of section.

A Census started on upper end of section.

am censused from about 0800 until 1500.

pm censused from about 1200 until dark.

** Includes six king salmon and 353 trout (yearlings plus half number plus steelhead).

The average fork length of the fish that were checked was 17.2 inches with dirty average sizes ranging from 13.0 to 24.0 inches. The trout included yearling rainbows, half-pounders and steelhead. They ranged in size from 5.8 to 23.6 inches (Figure 2). Kenner (1967) and Kenner and Burnhart (unpublished) defined half-pounders as fish 12 to 14.8 inches FL. Three of the six king salmon recovered were checked. Their average fork length was 17.3 inches with a range of 14.0 to 20.0 inches.

Table 2 presents data on the residence area of the anglers interviewed. The data are grouped into the geographical regions of the Department of Fish and Game. The percentages of the anglers residing in Region I through V respectively, were: 16.1%, 17.7%, 21.4%, 3.2% and 18.0%. Out of state residents comprised 2.0% of the anglers.

No marked fish were observed during this creel census.

DISCUSSION

Fishing during the period covered by this census can only be described as poor to fair. Many of the anglers interviewed stated that fishing had been much better in previous years. It was apparent from observations on the stream and from conversations with local people that many local anglers were waiting for fishing to improve before they would start fishing. This would account for the low percentage of local anglers interviewed.

Very few anglers started fishing before 0800 and many didn't start until mid-morning. If fishing had been better the number of anglers and the effort expended would have been greater.

Most of the fish checked were half-pounders. Yearling steelhead were kept by only a few anglers. King salmon made up only a small part of the catch.

No attempt was made to secure complete creel count data. The time needed to cover the river sections precluded the securing of complete data. In many areas it is impossible to sight anglers along the river.

RECOMMENDATION FOR FUTURE CREEL CENSUS

Use count data could best be secured by use of an overraft. The nature of the river precludes obtaining good use count data by conducting the census.

The use of a boat or rubber raft for creel counts is also not a viable one and would allow check-up on anglers that are not checked by any other way. However, because of the difficulty of access to boats and all anglers could be checked as access for boats is limited. In the interest of safety, two men would be required for censuses conducted from a boat or raft.

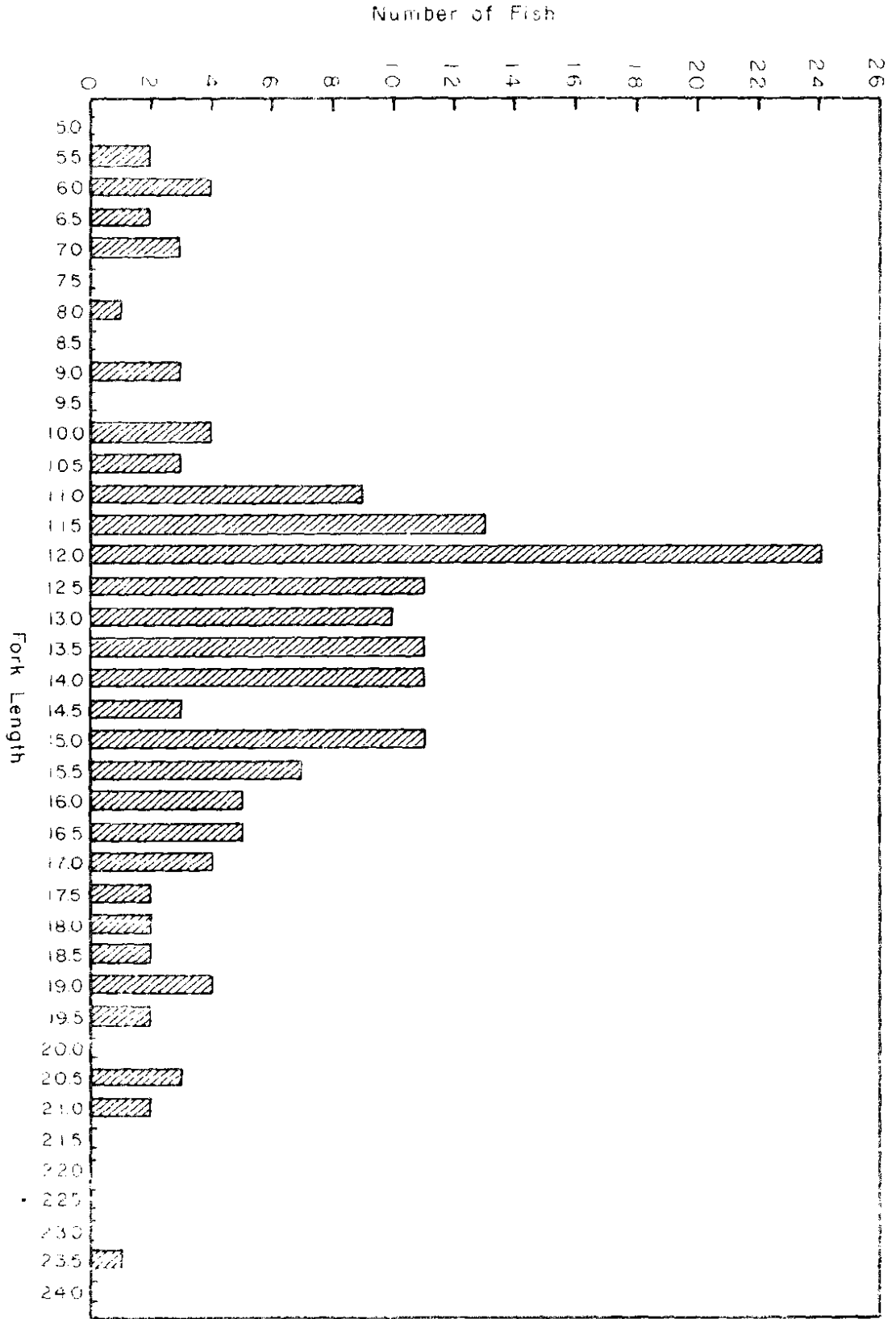


Figure 2. Fork lengths of trout measured during creel census.

TABLE 2

COUNTIES AND STATES OF ORIGIN FOR ANGLERS INTERVIEWED

Region I	Number	Percent
Humboldt	73	11.7
Siskiyou	11	1.7
Trinity	3	0.5
Shasta	17	2.6
Tehama	2	0.3
Lassen	4	0.6
TOTAL	<u>110</u>	<u>16.7*</u>

Region II	Number	Percent
Butte	7	1.1
Plumas	4	0.6
Colusa	4	0.6
Yuba	3	0.5
Yolo	7	1.1
Placer	5	0.6
Sacramento	62	9.4
Solano	11	1.7
San Joaquin	12	1.8
TOTAL	<u>115</u>	<u>17.4*</u>

* Computed from total interviewed from each region.

TABLE 2 (Continued)

Region III	Number	Percent
Mendocino	2	0.3
Lake	1	0.2
Sonoma	35	5.3
Napa	6	0.9
Marin	7	1.1
Contra Costa	34	5.2
Alameda	67	10.2
San Francisco	14	2.1
San Mateo	33	5.0
Santa Clara	49	7.4
Santa Cruz	11	1.7
Monterey	11	1.7
San Luis Obispo	4	0.6
TOTAL	<u>274</u>	<u>41.5*</u>

Region IV	Number	Percent
Stanislaus	6	0.9
Tuolumne	4	0.6
Mered	2	0.3
Presno	5	0.8
Kern	12	1.8
TOTAL	<u>29</u>	<u>4.4*</u>

* Computed from total interviewed from each region.

TABLE 2 (Continued)

Region V	Number	Percent
Inyo	1	0.2
Santa Barbara	4	0.6
Ventura	5	0.8
Los Angeles	66	10.0
San Bernadino	7	1.1
Orange	31	4.7
Riverside	3	0.5
San Diego	2	0.3
TOTAL	<u>119</u>	<u>18.0*</u>

States	Number	Percent
Oregon	1	0.2
Nevada	6	0.9
Washington	1	0.2
Colorado	1	0.2
Wyoming	3	0.5
Utah	1	0.2
TOTAL	<u>13</u>	<u>2.0*</u>

* Computed from total interviewed from each region.

LITERATURE CITED

Lance, Roger L. 1970. An estimate of angler pressure and sport fish harvested from the Klamath River between Iron Gate Dam and Dutch Creek, including data describing the size of anadromous fish spawning migrations. Calif. Dept. of Fish and Game Anad. Fish. Admin. Rept. No. 70-3. 17 p.

Kesner, William D. 1969. Characteristics of the fall-run steelhead trout (Salmo gairdnerii gairdnerii) of the Klamath River system with emphasis on the half-pounder. M. S. thesis. Humboldt State Coll. 79 p.

_____, and Roger Barnhart. (unpublished, accepted for publication). Characteristics of the fall-run steelhead trout (Salmo gairdnerii gairdnerii) of the Klamath River system with emphasis on the half-pounder. Calif. Fish and Game.