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STATE OF ALASKA

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Alaska Department of Fish and Game

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Sport Fish Division

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ANNUAL REPORT OF PROGRESS, 1961-1962

FEDERAL AID IN FISH RESTORATION PROJECT F-5-R-3

SPORT FISH INVESTIGATIONS OF ALASKA

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INTRODUCTION

This report of progress consists of the job completion reports from the State of Alaska Federal Aid in Fish Restoration Project F-5-R-3, "Sport Fish Investigations of Alaska."

The current project is composed of twenty separate studies and was designed to evaluate the various aspects of the State's recreational fishery resources. The information gathered will provide the necessary background data for better management practices and for the development of future studies. During the current segment, continued emphasis was placed on the overall inventory and cataloging of accessible waters, evaluation of catch data, and investigations on various species of fish.

As a result of several problems of immediate concern, several new studies were instigated during the report year. Data accumulated from these studies has helped solve some problems in projects already in progress.

The population of Alaska is increasing rapidly and this is being reflected in the ever increasing number of "No Trespassing" signs put up by individuals in the vicinity of population centers. Fortunately, much of Alaska's fishery waters are still in the public domain. The division's program of acquiring access to fishing waters continued at a much faster pace since being instigated in 1959. Emphasis is being placed on this job and the successful continuation of this activity will forstall many serious recreational use problems currently facing other states.

The enclosed progress reports are fragmentary in many respects and the interpretations contained therein are subject to re-evaluation as the work progresses.

JOB COMPLETION REPORT

RESEARCH PROJECT SEGMENT

State: ALASKAProject No.: F-5-R-3Name: Sport Fish Investigations
of AlaskaJob No.: 10-D-1Title: Creel Census of the Sport
Fishes in Lake Louise,
Cook Inlet DrainagePeriod Covered: May 26, 1961 to September 1, 1961

Abstract:

The creel census study at Lake Louise was accomplished with the cooperation of the U. S. Army and U. S. Air Force in continuation of a study initiated by the Bureau of Sport Fisheries and Wildlife. All data originated at the two military R&R camps, and does not include angling effort from the three lodges, public campground, and scattered summer homes.

Effort was primarily concentrated toward information indicating total number of fishermen, total number of fish, size class frequencies, and catch per unit of effort.

During the 1961 season, 685 anglers submitted complete census forms with a total of 2,558.75 hours fished, 282 lake trout, 296 grayling, and 6 whitefish. The overall catch per unit of effort was .258 fish per angling hour. An additional 30 fishermen filled out unusable census forms making the total number of anglers 715 for the season. Size class frequencies are given in Table 2.

Recommendations:

It is recommended that a more simplified, specialized creel census form replace the present form, which contains unnecessary wordage, and requests. It is desirable to obtain a higher percentage of properly completed forms.

It is recommended that the military be requested to continue the collection of census data for the evaluation of fish population trends and angling success in this important fishery.

Objectives:

To investigate and measure the sport fish population trends of the waters of Lake Louise.

To determine the expansion of angling pressures and their impact on the sport fish resources of the area.

To provide recommendations for future investigations and management of these waters.

Techniques:

During the 1961 season the Army and Air Force R&R camps continued their creel census program in cooperation with the Alaska Department of Fish and Game. The census forms were designed to collect information about the number of fishermen, and the hours of angling effort expended.

Forms were provided by the Department of Fish and Game to the camps, and the military made mandatory the completion of one form by each fisherman. The staff of each camp supervised the collection of data. Completed forms for the season were delivered to the Department of Fish and Game for compilation and evaluation. The census form used is shown in Figure 1.

Findings:

The 1961 season began May 26 and ended September 1. During this interval 685 persons returned complete census forms showing 2,558.75 angling hours, 282 lake trout, 296 grayling, and 6 whitefish taken. The overall catch per unit of effort was .258 fish per angling hour.

A total of 715 fishermen, including the 30 who failed to complete the census forms, fished at the Lake Louise military camps in 1961. Past records show that this number of anglers remains fairly stable from year to year. The number was 718 in 1960.

Figure 1. Creel Census Form Utilized at Lake Louise
Military Recreation Camps, 1961.

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FISH AND GAME CREEL CENSUS REPORT							
<p>IMPORTANT: Each individual fisherman will complete this form each fishing day, whether successful or not. If you have not caught any fish, it is just as important to complete this form as if you have caught fish, as the total amount of the fishing effort is needed.</p> <p>Record only actual fishing time in appropriate space provided. If you fish several times during the day, record only these hours as actual total fishing time.</p> <p>Record all weights and lengths of fish taken. Lengths will be measured from the tip of the snout to the fork in tail. Weights will be recorded in pounds and ounces. Lengths will be recorded in inches and nearest tenth of an inch. Record number and species of fish released.</p>							
1. LAKE OR STREAM				2. NAME OF CAMP OR SITE			
3. SUCCESSFUL <input type="checkbox"/> UNSUCCESSFUL <input type="checkbox"/>				4. DATE			
5. TIME ACTUALLY SPENT IN FISHING		TOTAL HOURS					
		FROM		A.M. / P.M.		TO	
FISH CAUGHT							
SPECIES	LENGTH	WEIGHT	RELSD	SPECIES	LENGTH	WEIGHT	RELSD
CT - CUTTHROAT RB - RAINBOW SH - STEELHEAD		KS - KING SALMON SS - SILVER SALMON RS - RED SALMON		WF - WHITEFISH GR - GRAYLING NP - NORTHERN PIKE		LT - LAKE TROUT DS - DOG / CHUM SALMON DV - DOLLY YARDEN	

TABLE 1.

CREEL CENSUS, LAKE LOUISE, 1961 - MILITARY R&R CAMPS

Fishing Period	5-26 6-9	6-10 6-23	6-24 7-7	7-8 7-21	7-22 8-4	8-5 8-18	8-19 9-1	Totals
<u>NUMBER:</u>								
Whitefish				4	1		1	6
Grayling		49		1	168	69	9	296
Lake Trout	30	118	83	23	7	20	1	282
Totals	30	167	83	28	176	89	11	584
Fishermen	92	76	75	39	104	203	96	685
Man Hours	358.5	296	271.5	134.5	355.5	751.5	391.25	2558.75
F./hr.	.084	.564	.306	.208	.495	.118	.028	.258
Species	LT	GR	WF					
Mean Length (inches)	22.2	11.5	12.7					
Mean Weight (pounds)	4.9	0.74	1.21					

TABLE 2.

SIZE CLASS FREQUENCY COMPARISONS OF THE LAKE TROUT, GRAYLING,
AND WHITEFISH OF LAKE LOUISE, BY FISHING PERIODS
MILITARY R&R CAMPS - 1961

Size in Inches	Lake Trout						Grayling					Whitefish			
	5-26 6-23	6-24 7-21	7-22 8-18	8-19 9-1	Totals	%	6-10 7-21	7-22 8-18	8-19 9-1	Total	%	7-8 7-21	7-22 8-4	8-19 9-1	%
6-8		1			1	0.8		6	1	7	17.5		1		16.7
10-12					0		3	11	1	15	37.5				
12-14	2	1	1		4	3.1	2	6	1	9	22.5	2		1	50.0
14-16	1	3	2		6	4.7	2	4		6	15.0	1			16.7
16-18	6	5	3		14	11.0	1	2		3	7.5	1			16.7
18-20	9	7	3	1	20	15.7									
20-22	6	9	4		19	15.0									
22-24	8	6	4		18	14.2									
24-26	3	5	2		10	7.9									
26-28	4	3	1		8	6.3									
28-30	4	6			10	7.9									
30-32	3	5			8	6.3									
32-34	1	4			5	3.9									
34-36	1	1			2	1.6									
36-38		2			2	1.6									
TOTAL					127					40					6

Angling effort increased 132.05 hours in 1961, as compared to 1960, resulting in a slight decline in catch per unit of effort from .288 fish per hour.

Tables 1 and 2 reveal creel census results of the 1961 season at the military camps. No significant trend is seen in angling pressure, catch per unit of effort, or size class frequencies of the game species as compared to previous years. The relatively small number of fish listed in Table 2 resulted from failure of a number of anglers to list the lengths of their fish.

An interesting trend was observed in the relative numbers of lake trout and grayling entering the catch in 1961, as compared with 1960. In 1960, the take consisted of 94.3% (646) lake trout and 5.7% (39) grayling. In 1961, 48.8% (282) of the catch consisted lake trout, and 51.2% (296) of grayling. The heavy angling pressure exerted for grayling during July and August, 1961, (Table 1), was explained by Mr. Raymond Beam, supervisor of the Army recreation program at that time. To retain fair angling success during the midsummer period when lake trout are difficult to catch, a program was initiated whereby men at the camps were transported by boat and airplane to areas of the Lake Louise system where grayling were abundant.

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