

P/FR/SK/47
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CALL LAKE CREEL CENSUS

CPLH c. 1 mm SMITHERS

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by

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INTRODUCTION

Call Lake is a small, barren lake situated approximately six kilometers east of Smithers, B.C. It is a shallow lake with no inlet or outlet streams. Call Lake was stocked in the spring of 1983 and 1984 with brook trout (2000 and 3000 respectively) to provide a winter fishery in the Smithers area. The lake was opened to the public December 1, 1984.

A creel census was conducted by the Fisheries Branch December 1984 through March 1985 to try and evaluate the success of this stocking program.

METHODS

A one hour creel survey was done on random days and at random times to obtain the creel information. This information was then split into week day and weekend (Holiday) categories. For each category the average number of anglers present per hour and the average number of fish killed per hour was determined. Assuming the angling, day to be six hours this information was extrapolated over the total number of angling hours available each month (Appendix 1). The total of all categories for the months checked gave us the total estimated number of fish killed and the total estimated number of angler days.

RESULTS

The data shows that the majority of the fish were harvested in the first month after the lake was opened. As the harvestable fish were

removed, angling success decreased as did the number of anglers (Table 1).

Table 1. Total number of anglers and numbers of fish harvested from Call Lake 1984/85 winter fishery.

Month	Anglers	No. of Fish Harvested
December	1416	1617
January	395	159
February	62	0
March	0	0
TOTAL	1873	1776

Since there were only 2000 fry planted in 1983, the data indicates that most fish were harvested. A few fish from the 1984 stocking were also caught but these were mostly released because of their size (<18 cm). The average length of the fish harvested was 36.4 cm (n=22). The fish were dark and in spawning condition.

DISCUSSION

One month seemed to be the length of time required for the public to take the harvestable fish. The fish were in spawning condition but the anglers were still pleased with them. The anglers all gave positive feed back towards this fishery so it seems to have been a success.

RECOMMENDATIONS

1. Maintain stocking at 3000 fry at 400/kg which is a slightly higher stocking level than the stocking calculations show (2000 @ 400/kg).
2. Sample the lake in the summer of 1985 to determine the condition of the 1984 stocking.

APPENDIX 1

Call Lake Creel (December)

Date of Check	Time	No. Anglers	Angling Hours	No. of Fish Harvested
<u>Week Days</u>				
Dec. 7	3:00-4:00	4	1.3	5
Dec. 11	11:00-12:00	6	3	0
	Ave/hr.	<u>5</u>		<u>2.5</u>
<u>Weekend Days</u>				
Dec. 2	12:00-1:00	5	10	20
	1:00-2:00	17	7.5	18
Dec. 8	12:00-1:00	13	19	33
	1:00-2:00	12	11	3
	Ave/hr.	<u>11.75</u>		<u>18.5</u>

Length of Angling Day = 6 hrs.

19 wk. days 114 total wk. day hours available

12 wk. end days 72 total wk.end hours available

wk. day hours x ave #ang/hr + #wk.end hours x ave #ang/hr = total

of anglers.

$$114 \times 5 + 72 \times 11.75 = 1416 \text{ anglers.}$$

#wk day hours x ave #fish/hr + #wkend hours x ave #fish/hr = total #
fish caught.

$$114 \times 2.5 + 72 \times 18.5 = 1617 \text{ fish.}$$

Call Lake Creel (January)

Date of Check	Time	No. Anglers	Angling Hours	No. of Fish Harvested
<u>Week Days</u>				
Jan. 18	2:00-3:00	0	0	0
Jan. 21	10:00-11:00	1	.33	3
Jan. 30	1:00-2:00	0	0	0
		_____		_____
	Ave/hr.	.33		1
<u>Weekend Days</u>				
Jan. 20	3:00-4:00	3	1.67	0
Jan. 26	1:00-2:00	10	10	1
		_____		_____
	Ave/hr.	6.5		.5

Length of Angling Day = 6 hrs.

22 wk days	132 total wk. day hours available
9 wk. end days	54 total wkend hours available

(Same calculation as December)

$$132 \times .33 + 54 \times 6.5 = 395 \text{ anglers.}$$

$$132 \times 1 + 54 \times .5 = 159 \text{ fish harvested.}$$

Call Lake Creel (February)

Date of Check	Time	No. Anglers	Angling Hours	No. of Fish Harvested
<u>Week Days</u>				
Feb. 8	2:00-3:00	0	0	0
Feb. 14	10:00-11:00	1	0	0
Feb. 19	1:00-2:00	1	2	0
Feb. 25	1:00-2:00	0	0	0
		<hr/>		<hr/>
		Ave/hr.	.25	0
<u>Weekend Days</u>				
Feb. 2	11:00-12:00	2	0	0
Feb. 16	12:00-1:00	0	0	0
Feb. 23	1:00-2:00	0	0	0
		<hr/>		<hr/>
		Ave/hr.	.67	0

Length of Angling Day = 6 hrs.

20 wk days	120 total wk. day hours available
8 wk. end days	48 total wkend hours available

(Same calculation as December)

$$120 \times .25 + 48 \times .67 = 62 \text{ anglers.}$$

$$120 \times 0 + 48 \times 0 = 0 \text{ fish harvested.}$$

Call Lake Creel (March)

Three checks made 0 anglers recorded

0 anglers 0 fish harvested.