



MANUSCRIPT REPORTS OF THE BIOLOGICAL STATIONS

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REPORT ON MARKING BROWN TROUT FRY AT COWICHAN LAKE
HATCHERY JULY 7th-15th AND AT QUALICUM
BEACH, SEPTEMBER 7-17th, 1932

by

G. C. Carl

1932

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FISHERIES RESEARCH BOARD
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Report on Marking Brown Trout Fry at Cowichan Lake Hatchery

July 7th - 15th.

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July 7th

No. of fry marked (adipose removed)		850
Mortality up to 5 P.M. July 8th	25	
" 9th	14	
" 10th	25	
" 11th	9	
" 12th	16	
" 13th	11	
" 14th	<u>11</u>	
	111	
Mortality for 1st day	2.9%	
Mortality for first 3 days	7.53% of original lot	

July 8th

No. of fry marked		1000
Mortality up to 5 P.M. July 9th	18	
" 10th	21	
" 11th	21	
" 12th	15	
" 13th	8	
" 14th	<u>16</u>	
	99	
Mortality for 1st day	1.8%	
Mortality for first 3 days	6.00% of original lot.	

July 9th

No. of fry marked

750

Mortality up to 5 P.M. July 10th	20
" 11th	4
" 12th	8
" 13th	9
" 14th	<u>4</u>
	45

Mortality for 1st day 2.66%

Mortality for first 3 days 4.26% of original lot

July 10th

No. of fry marked

1000

Mortality up to 5 P.M. July 11th	7
" 12th	8
" 13th	15
" 14th	<u>8</u>
	38

Mortality for 1st day .7%

Mortality for first 3 days 3.0% of original lot

July 11th

No. of fry marked

1000

All fish given 10 minute salt bath treatment in solution of 2 ounces NaCl per gallon, after marking.

Mortality up to 5 P.M. July 12th	3
" 13th	3
" 14th	<u>4</u>
	10

Mortality for 1st day .3%

Mortality for first 3 days 1.0%

July 13th

No. of fry marked

400

All fish given 30 minute salt bath treatment in solution of 2 ounces NaCl per gallon.

One treatment after marking and one treatment after 24 hours.

Mortality up to 5 P.M. July 14th	0
" 15th	0

July 8th

A lot of 100 fry were handled, unmarked and untreated with salt bath for comparison of mortality.

Mortality up to 5 P.M. July 9th	3
" 10th	3
" 11th	4
" 12th	2
" 13th	3
" 14th	<u>1</u>
	16

Mortality for 1st day 3.0%

Mortality for first 3 days 10.0% of original lot.

Total number of Brown Trout fry marked	5000
Total mortality of marked fry	325
% mortality	6.5%
Remaining	<u>4675</u>

The remaining lot of 4675 trout were planted near the Duncan water supply inlet, about 2 miles above the mouth of Cowichan River, on July 15th, 1932.

REPORT ON MARKING AND DISTRIBUTING BROWN TROUT FROM QUALICUM BEACH, B.C.

September 7 - 17, 1932.

by

G.C. Carl

Sept. 7th.

Number of fish marked	600
(Arrived 10:30 A.M. Started operations 1:00 P.M.)	

Sept. 8th.

Number of fish marked	1,200
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Sept. 9th

Number of fish marked	1,500
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Sept. 10th

Number of fish marked	1,000
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Sept. 12th

Number of fish marked	700
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Planted four cans (2,000 trout) in Cameron River in three

locations:

- | | |
|--|--------|
| (a) Two miles above Lake | 2 cans |
| (b) One and three-quarter miles above lake | 1 can |
| (c) One-quarter of a mile above Lake | 1 can |

Sept. 13th

Number of fish marked	700
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Planted four cans (2,000 trout) in Little Qualicum River and
tributaries one-quarter of a mile below outlet from Cameron Lake.

Sept. 14th

Number of fish marked	2,000
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Sept. 15th.

Number of fish marked	<u>1,000</u>
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Total number of trout marked	8,700
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Sept. 15th (cont'd)

Planted three cans (1,500 trout) in Little Qualicum River two and one-half miles above mouth below Ryder's Ranch. About one hundred mortality in transit.

Drained tank and seined creek above and below pond - forty brown trout captured.

Sept. 16th

A.M. - Planted one can (500 trout) in tributary of Whiskey Creek near Little's Ranch, and three cans (1,500 trout) in Little Qualicum River one-half mile above tide-water.

P.M. - Planted remaining two cans (1,000 trout) in Little Qualicum two miles above mouth below Ryder's Ranch.

About three hundred trout left to winter in the pond (all marked).

The Qualicum brown trout appeared to be much larger and in much better condition than those of a similar age at Cowichan Lake. This may partly be due to the fact that a supply of natural food such as amphipods, isopods, chironomids, etc., were present in the tank in fairly large quantity. Their larger size enabled them to be handled with much more ease and with much less mortality. As many as two thousand fish could be marked (adipose fin removed) in one day. Immediately after marking, all fish were given a fifteen- to thirty-minute treatment in a salt-bath composed of about two ounces NaCl per gallon of water. An accurate account of mortality of the different daily lots could not be obtained since all the marked fish were, of necessity, kept in one compartment. However, the total loss due to marking, while the fish were confined, was less than two per cent.

Total number of fish marked			8,700
Mortality after marking	about	150	
Number left in Pond	"	300	
Total number of fish planted	"	8,150	
Mortality in transit		<u>100</u>	8,700