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INSTITUTE FOR FISHERIES RESEARCH  
UNIVERSITY MUSEUMS  
UNIVERSITY OF MICHIGAN  
ANN ARBOR, MICHIGAN

Report 258

October 18, 1934

BRIEF SUMMARY OF THE TAGGING OPERATIONS CARRIED ON DURING JULY, AUGUST  
AND SEPTEMBER OF 1934

This preliminary report is offered at the present time to indicate that the tagging method is capable of yielding extensive results, indicating not only the movements but also the natural growth of trout.

Methods.—The trout tagged were obtained by seining with a forty foot seine, measured and tagged at the stream side. On being captured at a later date by the same procedure they were again measured. This enabled us to observe their movements and growth over a known period of time. Original measurements and all subsequent measurements are in our possession.

Trout tagged

a. North Branch of the Au Sable around Twin Bridges

1 Rainbow trout  
1058 Brook trout  
36 Brown trout  
2 Common shiner  
1097 = Total fish tagged

b. Pigeon River at the Ford

12 Brook trout  
3 Rainbow trout  
15 = Total fish tagged

Total for the summer — 1112

Days spent on tagging work—15

Trout recovered by seining

a. North Branch of the Au Sable

285 Brook trout — 27%  
4 Brown trout — 11%

b. Pigeon River \*\* No recoveries recorded (few tagged and no reseining attempted yet)

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Total fish tagged .....	1112
Total fish recovered by seining .....	289
Total fish recovered by fishermen .....	21
Grand total of fish recovered .....	310
Recovery percentage .....	28%

From these recoveries of tagged fish, I have been able to calculate the growth rate of the trout under natural conditions between the dates observed. A resume of the findings follow:

GROWTH RATE OF BROOK TROUT IN NORTH BRANCH OF AU SABLE

Total number of days between measurements for all specimens	
recovered .....	8040
Average number of days between measurements .....	28.2
Average growth for this same period .....	.22 inches
Average daily growth .....	.01 "

Additional information to be obtained from the data at hand will be included in a more detailed report to follow at a later date. The movements of the tagged fish will be analyzed in that report.

The gratifying returns from this tagging experiment may be attributed to two factors:

(1) Use of the new jaw tag being developed by the Institute. Incidentally the recovered fish were in fine physical condition, only a few showing a slight inflammation between the jaw. Since little wear in the jaw region was observed, it is considered unlikely that many of these tags will be lost from the fish.

(2) Reseining the stream when the fish were tagged.

The Institute is at present awaiting developments on a new type of tag and tagging pliers which was devised last spring. At present there is some difficulty in getting tags bent to the proper shape to fit the pliers. It is felt that this tag, should it prove successful, will be much more easily and much more speedily applied to the fish. We are now waiting further word from the manufacturer.

It is also hoped that an expedition to the North Branch can be made during the spawning season to attempt the recovery of tagged fish, and also to tag more. Winter trips are also planned.

As a result of this summer's tagging work (which was only a part of the activity of the stream party) the Institute believes that further field experiments along this line will be profitable, and recommends that such studies be continued.

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