

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

September 15, 1931

Report No. 91

MOVEMENT OF ADULT TROUT FROM BEAVER CREEK, CRAWFORD COUNTY, INTO  
SOUTH BRANCH OF AU SABLE RIVER, AS INDICATED BY TAGGING EXPERIMENTS

This partial report on the tagging experiments is submitted now in response to special request from the Department.

Because of the controversies over the opening of Beaver Creek to fishing, some attention was given to the stream in the migration investigations by the tagging method. The stream was seined for one day by McCrimmon of the Institute Staff, who caught and tagged 32 wild brown trout on May 13, 1930. Later Mr. Zalsman went in twice with a crew and seined and tagged 22 brook and 4 brown trout on July 9, 1930, and seined and tagged 29 brooks and 2 browns on August 12. The stream is difficult to seine because it is very brushy.

Record of Tagging Experiments on Trout in Beaver Creek, Crawford County

No. tagged	Size	Source	Date tagged	Where released	By whom	Recoveries to date reported
29 Brook	7-12"	wild fish	8/12/30	Sec. 25, 26 & 36 T25N, R3W.	Zalsman	1
2 Brown	10 1/4-17"	" "	"	"	"	0
25 Brook	12 1/2-19 1/2"	Grayling Hatchery	1/13/31	Sec. 25, 36 T. 25N, R3W	"	1
32 Brown	6-10 1/2"	wild fish	5/13/30	Sec. 31 T25N, R2W.	McCrimmon	0
22 Brook	6 1/2-11"	wild fish	7/9/30	Sec. 34, 35, 36 T25N, R3W	Zalsman	0
4 Brown	8 1/4-18"	" "	"	Sec. 36, T25N, R3W.	"	0
Total wild Brook trout 51	6 1/2-12"	" "	July & August 1930	Sec. 25-36 T25N, R3W		1 (2%)
Total hatchery brook trout 25	12 1/2-19 1/2"	Grayling Hatchery	Jan. 13, 1931	Sec. 25, 36 T25N, R3W.		1 (4%)
Total wild brown trout 38	6-18"	wild fish	May to Aug. 1931	Sec. 25-36, T. 25N., R3W., and Sec. 31, T. 25N., R2W.		0 (0%)

The one wild brook trout reported as retaken was found freshly dead at the waters edge of the South Branch of the Au Sable, 5 miles north of Roscommon, by Earl F. Dutton, on June 1,

1931, about 9 1/2 months after being tagged. Its death may have been due to abrasion of the tag which had nearly worn loose. It is almost certain that the fish had moved out of the creek before its death.

The one hatchery fish reported as recovered was caught by I. Shirey of Roscommon in the South Branch about 3/4 of a mile north of the mouth of Beaver Creek. It was measured as 15 3/4 inches long when released on January 13, 1931, and as 17 1/4 inches long when retaken on May 17.

The percentage of recaptures is low, but higher than the grand average for all tagged fish. We have to assume that many tagged fish are not reported, and that quite a number lose their tags; also that many of the tagged fish are never caught by fishermen.

While the information is too meager to yield very positive statements, we think it safe to assume that a very considerable proportion of the matured trout do move down out of Beaver Creek into the South Branch of the Au Sable.

We notice an interesting point in the data on wild fish tagged. In Range 2W., near the mouth of the creek, out of 32 trout seined all were brown trout, whereas in Range 3W., farther upstream, out of 57 trout seined 51 were brook trout. The stream above the range-line road is much brushier and less open than below, and is more strictly trout waters. The lower end of the stream contains many mud-minnows, dace, chubs, etc.

In our opinion it would not seriously lessen the value of the stream as a nursery for brook trout to open the lower section to fishing, namely that part in Range 2W. The range-line road would be a convenient as well as natural point to divide the stream. In this connection we would point out the disagreements in the maps as to the lower course of the stream. The Highway maps show a considerable stretch of stream and the mouth in Roscommon County. The L.E.S. map of Roscommon County shows none of the stream in that county, but the L.E.S. map of T.25N., R2W. in Crawford County indicates one loop of the stream as in Roscommon County. There would be no confusion, however, if the stream

were opened in both counties in Range 2 only.

To allow fishing in the lower part of Beaver Creek ought to reduce the number of brown trout in the stream - which should work to the advantage of the brook trout there.

In reference to the question of opening the whole stream, we would point out that the South Branch of the Au Sable is only moderately well supplied with good nursery feeders, and that the upper portion of the stream itself, for a considerable distance below St. Helens Lake, has a warm-stream fish fauna.

We would further mention what we assume is well known in Lansing, that general rumor has it that a considerable amount of poaching is now carried on in the lower end of the Beaver.

To sum up our suggestions: we believe that it would be advantageous from the fish standpoint to maintain the major and upper portion of Beaver Creek as a closed nursery, but to open up the lower portion, in Range 2 W.

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