Dr. Shetter Mr. C. F. Idema INSTITUTE FOR FISHERIES RESEARCH DIVISION OF FISHERIES MICHIGAN DEPARTMENT OF CONSERVATION COOPERATING WITH THE UNIVERSITY OF MICHIGAN

Original: Fish Division

cc: Education-Game

Mr. Arnold Lenz Inst. Fish. Research

ALBERT S. HAZZARD, PH.D. DIRECTOR

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ANGLING RESULTS ON KINNE CREEK, WINGLETON CLUB, 1945 TROUT SEASON

by

David S. Shetter

Through the continued courtesy and cooperation of Wingleton Club trout fishermen, angling records on Kinne Creek (a private stream tributary to the Pere Marquette River in Lake County) are available for the eighth consecutive season. The author extends his thanks to the club members for this data. The angling results will be discussed in the following pages.

Total Catch, 1945 (Table 1)

Club fishermen spent 44 angling days on Kinne Creek, during which time they expended 122.50 hours of fishing effort. The average length of the fishing day was 2.8 hours. A total catch of 115 trout was recorded in the Ice-house record book, made up of 33 brook trout, 69 brown trout, and 13 rainbow trout. The average catch per hour for the entire season was 0.94 legal trout. Compared with 1944, the angling pressure in 1945 on Kinne Creek was reduced by approximately 60 per cent, while the total catch fell off only 40 per cent. This is reflected in the increase in angling quality between 1944 (0.62 fish per hour) and 1945 (0.94 fish per hour).

Brook trout and brown trout diminished in the catch between 1944 and 1945 by slightly less than half, but the number of rainbow trout captured was almost twice as large as that taken in 1944.

Only one-third of the fishing was done during the first half of the season, and the fishing was not as good as during the latter half of the season, as judged by the catch per hour.

It should be pointed out that for the second consecutive year, no planting of hatchery fish has been made in Kinne Creek because of war-time transportation difficulties. This fact, plus the extremely light fishing pressure recorded, probably accounts for the second smallest total catch from Kinne Creek (the lowest catch previously listed was for 1936 when only 84 trout were taken). Despite the low catches in 1944 and 1945 (Table 2), the angling quality has been as good or better than on the average public trout stream. For those years where we have data on the total angling days spent on the stream (1938, 1941, 1944, 1945), it will be noted that the catch per angling day was not too much larger in 1938 and 1941 (when relatively heavy plantings of legal trout were introduced) compared with 1944 and 1945 (when no plantings were made).

Size of trout taken (Table 3)

During 1945, the size of the brook trout taken varied between 8 and 10 inches, and for the season they were of an average length of 8.50 inches. Brown trout ranged in size from 8 to 14 inches, and over the entire season averaged 9.83 inches in total length. The 13 rainbow trout measured from 8 to 9 inches long; their average length was 8.61 inches.

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The club has operated under an 8-inch size limit for a long period of time. As a result, probably a good many of fish planted, and also produced naturally, have not been utilized. A higher yield to the angler could be obtained under the legal 7-inch size limit, and the removal of the 7-to 8-inch trout would be of biological benefit to the stream. That it would increase the total catch is not to be doubted. Reference to earlier club records will show the difference in the season catches made under the 6-inch, 7-inch, and 8-inch size limits. Apparently there is a considerable loss of trout between the 6 and 8-inch size which might be partially salvaged if the 7-inch size were adopted.

A comparison of the average sizes of the various species of trout will be found in Table 4 for each year since 1939. During the past two years the average size of brook trout has been as large as any year in which brook trout were stocked except for 1940. Brown trout do not appear to have suffered in size during the two-year period of no stocking. The only season when they were noticeably larger than 1945 was in 1940, also a year in which no brown trout were planted. Rainbow trout plantings have influenced the average size of this species in the anglers' catch, since so few specimens of natural origin are present in Kinne Creek. During the years 1940-1943 when planted, the rainbow trout in the catches varied in average size between 9.3 and 9.8 inches; during the years of no planting (1938, 1939, 1944, 1945) the rainbow trout in the catches have ranged between 8.5 and 8.7 inches in average length.

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Recommendations

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1. If trout are obtainable in 1946, stock the following numbers of trout below the railroad grade: 100 brook trout, 150 brown trout, and 250 rainbow trout. These fish should be disease-free, and range in size from 7 1/2 to 9 inches. If gill-lice-free brook trout cannot be supplied to the club, plant 250 brown trout instead. If the club feels it can afford the transportation charges, half of the above mentioned fish should be planted about May 25 and the other half about June 28. The numbers of fish suggested are a slight modification of stocking intensities that have given the best results in previous years (see Table 2).

2. Reduce the size limit on all trout in the club stream to conform with the present state-wide limit of 7 inches so that the 7- to 8-inch fish may be utilized instead of losing that unknown portion of the trout population which appears to die between the sizes of 7 and 8 inches.

3. Make no plantings in that portion of Kinne Creek above the Railroad grade (Section C). Although this part of the stream is lightly fished, the data for 1944 and 1945 indicate that the fishing quality is good, ranging from 1.00 to 1.33 fish per hour, on all brook trout which are produced naturally.

4. Install stream improvement devices where they are considered necessary, particularly in Sections C and A. Both of these sections were in need of pool-creating structures when last seen by the author. If possible, have C. H. Clark (in charge of stream improvement work for the Fish Division) visit the stream and go over the stream with the Creek Committee. 5. Continue the recording of the catches and the hours spent fishing on the creek. We should have an accurate record of all fishing, even though some of it is unproductive, if changes in angling quality and the results of various stocking intensities are to be measured accurately.

INSTITUTE FOR FISHERIES RESEARCH

David S. Shetter Associate Aquatic Biologist

Report approved by A. S. Hazzard Report typed by E. F. Livingston

Month	Number of angling days	Total hours of fishing	Lega Brook	l trout Brown	caught Rainbow	Totals	Catch per hour
April	2	3.00	3	•••	•••	3	1.00
May	5	17.00	6	8	1	15	0.88
June	8	19.75	5	7	2	14	0.71
July	. 15	31.75	.7	24	2	33	1.03
August	6	21.00	4	13	5	22	1.05
September	8	30.00	8	17	3	28	0.93
Totals, averages	<u>4</u> 4	122.50	33	69 [.]	13	115	0•94

Table 1Angling results, 1945 trout season, on Kinne Creek,
Wingleton Club. (Data summarized from members' catches
recorded in Ice House record book.)

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Table 2Number of legal trout stocked, and angling results from
Kinne Creek, 1938 - 1945 inclusive

<u></u>	Angling	-	Jumber:		Numbon		egal trout	aquaht	Catch per angling
Year	days			Rainbow		Brown	Rainbow	Total	day
1938	251	1,500	•••	•••	346	370	<i>1</i> ₄	720	2.86
1939	••••	•••	994	2	92	279	3	3 7 4	•••
1940	•••	167	•••	250	92	96	88	276	•••
1941	100	302	201	203	162	145	82	394	3•94
1942	•••	50	200	250	1 <u>1</u> 43	229	- 1/1/4	516	• • •
1943	• • •	50	200	250	7 5	153	1 45	373	•••
1944	89	•••	•••	• • •	62	120	7	189	2.12
1945	<u>1</u> ,1,	•••	•••	•••	33	69	13	115	2.38

 $\sqrt{1}$ - Nine trout unidentified as to species.

Table 3

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Average size of trout (in inches) in anglers' catches, 1945 trout season, Kinne Creek, Wingleton Club. (Numbers of specimens are given in parentheses.)

Month	Spe	e ci es of	trout
	Brook	Brown	Rainbow
April	9•50 (3)	•••	•••
May	8.25	9.87	9.00
	(6)	(8)	(1)
June	8,90	9.64	8.25
	(5)	(7)	(2)
July	8.35	9.78	9.00
	(7)	(24)	(2)
August	8.33	9.65	8.40
	(4)	(13)	(5)
September	8•33	10.11	8.83
	(8)	(17)	(3)
Averages	8.50	9•83	8.61
	(33)	(69)	(13)

Table 4	Average	lengths	and s	ize ran	nges (ir	n inches) d	of trout in
	anglers'	catches	from	Kinne	Creek,	1939-1945	inclusive.

Year	Brook trout		Brown	1 trout	Rainbow trout		
	Av. size.	Range	Av. size	Range	Av. Size	Range	
1938	Sizes not	t recorded	• • • • • • • • • • •	•••••		• • • • • • • • • • •	
1939	7•9	7 - 11 1/4	9.1	7 - 16	8.5	8 - 9	
1940	8.6	8 - 12	10.4	8 - 15 1/2	8.7	8 - 9.25	
1941	8.3	7 - 12	9•9	8 - 16	9.8	8 3/4 - 1	
1942	8.1	7 - 11	9•4	8 - 20	9•4	8 - 13 1/3	
1943	8.5	7 - 12	9.8	8 - 20	9•3	8 - 1 4	
1944	8.5	7 1/2 - 10	1/2) 9.5	8 - 16	8.7	8 - 9 1/2	
1945	8.5	8 - 10	9.8	8 - 1) ₄	8.6	8 - 9	