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A PARTIAL CREEL CENSUS ON OPENING DAY FOR 1943 AND 1944 (JUNE 25)

OF SWAINS LAKE, JACKSON COUNTY

by

George N. Washburn

Starting in the fall of 1941 four plantings of rainbow trout have been made in Swains Lake. The first two plantings, consisting of 1,000 trout each, were of fingerling size having an average length of about 6 inches. The latter two plantings (made in April and December of 1944), consisting of 1,000 trout each, were of legal sized fish. Those made in the spring of 1944 ranged from 6 to 12 inches in length, averaging about 8-1/2 inches. These fish were marked for future identification by the removal of the anal fin. The December planting ranged from 7 to 12 inches in length, averaging about 8.2 inches. These fish were marked by the removal of the dorsal fin. This latter planting does not enter into any of the creel returns presented in this report and was inserted to complete the planting record to date.

In order to determine if the trout plantings in Swains Lake were successful or not, creel checks were made on the opening days of the 1943 and 1944 seasons. It was surmised that a large number of anglers would be present and some trout could be expected to be captured. Dr. C. J. D. Brown of the Institute staff collected the creel data on the opening day of the 1943 season and the writer obtained that for 1944. Only a partial

creel record was obtained for the two days and not all of the fishermen were contacted, but it is felt that a sufficient sample was taken to show the trend of results following introduction of trout in this water.

In 1943, 37 fishermen were interviewed and their catch recorded. These fishermen took a total of 127 fish in 65.5 hours, representing a catch of 1.7 fish per hour (See Table 1). On the opening day of 1944, 50 fishermen were contacted and found to have taken 141 fish in 189.25 hours or a calculated catch of 0.74 fish per hour. A large proportion (63%) of the fish taken on the two opening days were bluegills (See Table 1). Largemouth bass, rainbow trout, and perch were next in order. Collectively, a total of eight different species was reported as being taken on the two opening days.

It was noted that on both opening days two classes of fishermen were present - those fishing chiefly for pan fish and the other group (minority) fishing for trout. In 1943, 6 trout were recorded as being taken on the opening day by 8 trout fishermen in 15 hours of fishing, representing a catch of 0.4 trout per hour. On the opening day of the 1944 season, 27 trout were taken by 14 anglers primarily fishing for trout in 71 hours, making a calculated catch of 0.38 fish per hour.

Trout recorded for 1943 ranged from 14 to 17 inches total length which is considered a very good growth for two and three year old fish. The average length of these fish was computed at 16.3 inches. The trout taken in 1944 consisted of two groups, one composed of marked fish (spring, 1944 planting) and the others unmarked. Twenty trout, or 74 per cent of the total number checked on the opening day of the 1944 season, were marked fish. These fish had an average length of 13 inches. At the time of planting (April 19, 1944) the average length was 8.5 inches. Thus a growth of 4.5 inches had occurred in a period of about two months.

Table 1  
 Comparison of Fishing Results for the Opening Days  
 of the 1943 and 1944 Seasons

Specific Items	Years	
	1943	1944
Total number of fishermen checked	37	50
Total number of fish caught by above fishermen	131	141
Total hours fished	65.5	189.25
Catch per hour	1.7	0.74
Per cent of unsuccessful anglers	32.	20.
Species and numbers of each taken		
Bluegills	98	71
Largemouth bass	19	27
Rainbow trout	6	27
Perch	5	10
Bullheads	-	5
Pumpkinseeds	2	-
Smallmouth bass	-	1
Warmouth bass	1	-
Number of fishermen fishing chiefly for trout	8	14
Total number of trout taken	6	27
Total hours fished	15	71
Catch per hour of trout	0.4	0.38
Size range of trout	14" to 17"	10.5" to 21"
✓ <sup>+</sup> Marked trout recorded	---	20

✓<sup>+</sup>No trout were marked prior to 1944.

The remaining 7 trout checked on the opening day of the 1944 season, as mentioned above, were unmarked fish. Five of these fish, ranging in lengths of 16 to 21 inches, averaging 18.8 inches, were probably representatives of the 1941 and 1942 plantings. The remaining two, unmarked trout, had an average length of 10.5 inches, and it is doubtful as to the exact origin of these fish. In size they are more comparable to the fish of the 1944 planting, yet, being unmarked, undoubtedly are not representatives of this planting unless perfect regeneration of the clipped fin had occurred. Two other possibilities concerning the status of these two fish

are: First, they may have had a very slow growth and actually be residuals of the 1941 or 1942 plantings. Second, it is possible that these two fish are the results of natural reproduction occurring in the lake. Some of the trout from the 1941 planting could have matured and spawned in the spring of 1943; and if so, these two trout could be yearling fish from the 1943 spawning. The latter is plausible as it is known that rainbow trout do attempt to spawn in Swains Lake. According to local residents, nests are constructed in the gravel bottom in shallow water on the wind-swept shores. Although this would be remarkable growth for fish only a year old, it is not impossible considering the known increase in size of fish planted there in April 1944.

The catch per hour of all fish for the two seasons (opening days) were markedly different (See Table 1). Anglers were only half as successful on the opening day of 1944. It should be borne in mind, however, that this is not conclusive evidence that fishing in general was poorer in 1944 as only a small sample of fish was collected which would have very little bearing on the total season's catch. The same would hold true for the results of trout fishing - the catch per hour for the two opening days remained about the same, 0.4 and 0.38 respectively.

According to Mr. Roy Lamoreaux, District Supervisor of Field Administration at Jackson, Michigan, the trout fishing during the past season in Swains Lake was good, some anglers reporting seasonal catches of 30 to 40 fish. This type of information is highly desirable in determining the results of such experimental plantings.

In conclusion (based on creel evidence), it is thought that the stocking of rainbow trout in Swains Lake is a successful management project. Anglers are able to catch these fish at a rate comparable to other State waters containing this species and further, the growth and survival of these fish in Swains Lake is excellent.

Recommendations

As a follow-up on the management policy, observations should be made on Swains Lake during the rainbow trout spawning season to determine if successful spawning is occurring.

It would be desirable to obtain a complete creel record for the opening day of the 1945 season.

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