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ADDRESS UNIVERSITY MUSEUMS ANNEX ANN ARBOR, MICHIGAN

REPORT NO. 1060

A PARTIAL CREEL CENSUS ON OPENING DAY (JUNE 25, 1946) OF SWAINS LAKE, JACKSON COUNTY

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#### Kiyoshi G. Fukano

As in the previous three years a partial creel census covering all types of fishing on Swains Lake was conducted; this year Dr. W. C. Beckman, K. G. Fukano, A. G. Johnston, and H. E. Predmore obtained the data. The clerks interviewed the anglers as they reached shore after completing a fishing trip. Lacking a boat, the clerks were located at various places where it was thought that most of the anglers would leave the lake. In order to facilitate comparison with previous epening day censuses this report will follow the pattern of Institute Report Nos. 1002 and 1011, which report sampling conducted in 1943, 1944, and 1945.

The census began at 6:30 A.M. and continued throughout the day until 7:00 P.M. To determine the percentage of anglers contacted an hourly boat count was made, and it was calculated that 54 per cent of the anglers were interviewed. The clerks interviewed 105 anglers who had fished 418 hours and had taken 323 legal fish, a catch per hour of 0.77. The anglers, who were contacted, caught ten species of fish. Bluegills were taken in greatest numbers (177) and rainbow trout were second in abundance in the catch (93). The other eight species and the numbers taken are as follows:

Yellow perch	27	Black crappie	4
Largemouth bass	9	Bluegill x P'seed	1
Pumpkinseed	5	Warmouth bass	1
Rock bass	5	Dogfish	1

In this report no attempt will be made to separate trout anglers from other anglers since it is impossible to do so in the field. Many of the anglers fishing for trout were "still fishing" with cane poles and worms as bait. This was the first time the writer experienced trout fishermen using cane poles. However, trout anglers trolling over deep water had better success than those "still fishing" for trout just off the "dropoff."

On the 1946 opening day 93 trout were taken, ranging in length from 12.8 to 18.6 inches and averaging 13.8 inches. At least three and possibly four different plantings of trout were represented in the catch. These were as follows: Right pectoral fin clipped trout planted December, 1945, dorsal fin clipped fish planted December, 1944, anal fin clipped trout planted April, 1944, and possibly unmarked fingerling trout planted in the fall of 1941 and 1942. In Table 1 the 1946 census is tabulated according to return from the different plantings.

The percentage composition of the 1946 trout recoveries follows a pattern which is to be expected with the last planting comprising the bulk of the catch. Trout planted in December, 1945 represented 65.6 per cent of the catch. These fish averaged 12.8 inches in length. The December, 1944 planting constituted 20.4 per cent of the trout taken and these averaged 15.3 inches. Trout planted in the spring of 1944 accounted for 11.8 per cent of the catch, averaging 16.9 inches in length.

-2-

One unmarked trout was recorded by H. E. Predmore, who examined it carefully but failed to observe any regeneration of the fins. This fish was about 15 inches long. In size it was comparable to the fish of the 1944 winter planting, however, being unmarked, it is not a representative of this plant unless perfect regeneration of the clipped fin had occurred. Two other possibilities concerning the status of this fish are: (1) It may have had a very slow growth and be a residual of the 1941 or 1942 plant. (2) It may have been a result of natural reproduction of the 1941 or 1942 planting. This is possible as rainbow trout attempt to spawn on the gravel bottomed, wind swept shore of Swains Lake according to local residents and varified by Institute personnel.

One trout was listed as mark unknown since the angler was contacted for the first time after his second fishing trip for the day. He stated that the trout was fin-clipped but did not remember the specific fin which was missing.

Weights on 25 trout were recorded and the weighted average was 16.9 ounces. This represents a removal of approximately 1.4 pounds of trout per acre of water by the anglers contacted on the opening day.

Many of the anglers praised the Fish Division for planting rainbow trout in Swains Lake. A party of three fishermen caught their bag limit of 15 trout (l4 right pectoral fin-clipped and 1 dorsal fin-clipped) in 2 1/2 boat hours. Another party of three anglers took 14 trout (9 right pecteral fin-clipped, 4 dorsal fin-clipped, and 1 unmarked trout) in 5 1/2 boat hours. Two anglers fishing together caught 10 trout (9 right pectoral fin-clipped and 1 dorsal fin-clipped) in 2 boat hours. All of these usually successful anglers began their fishing about dawn.

Several parties of anglers stated that they would like to have Swains

-3-

Lake open for trout fishing the last Saturday in April with almost the same regulations as the Special Trout Ponds. (Fishing exclusively with artificial flies between the period 1 hour before day break and 1 hour after sunset and have a bag limit of two trout per day.) The one exception would be the use of a boat on Swains Lake. On the 25th of June open the trout fishing to bait and trolling enthusiast with the present bag limit. Of course to follow this suggestion is impossible since there is already an experimental lake, Big Portage Lake, in Jackson County. This statement was written illustrating the enthusiasm of creating trout lakes in Southern Michigan.

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A summary of the opening day creel census on Swains Lake is given in Table 2. It is interesting to note that each year there has been an increased interest in the trout fishing in this lake. One of the boat livery ewners stated that during the open season he now rents about four times the number he formerly did because of the trout fishermen.

> INSTITUTE FOR FISHERIES RESEARCH by Kiyoshi G. Fukano

Report approved by A. S. Hazzard Report typed by M. A. Klaphaak

## Table 1

Growth and number of recoveries for trout planted in 1941-1942, April and December 1944,

and December 1945, represented in the catch for the opening day, June 25, 1946

Stocking record Length Identification					Growth since planting			
Date	(average)	Number	mark	Recoveries	Size range in inches	Per cent of catch	Per year	Total
Fall, 1941	4 <b>" - 6"</b>	1,000	None )	• • • • • • •		· · · · · · · · ·		. <u>.</u>
Fall, 1942	4" - 6"	1,000	) None )	1	• • •	1.1	• • •	•••
April, 1944	8.5 <sup>#</sup>	1,000	Anal fin removed	11	Max18.6 Min15.9 Av16.9	11.8	3•9 <sup>#</sup>	8.4 <b>"</b>
Dec., 1944	8•5 <b>"</b>	1,000	Dorsal fin removed	19	Max16.0 Min14.7 Av15.3	20.4	4.8 <sup>#</sup>	7.2"
Dec., 1945	9.2 <sup>#</sup>	1,021	Right pectoral fin removed	61	Max15.3 Min10.6 Av12.8	65.6	•••	3.4"

### Table 2

Summary of all the opening day creel	censuses	on Swair	s Lake
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		Not marked Anal fin clipped		Dorsal fin clipped		Right pectoral fin clipped		· · ·	
	Recoveried of Fall, 1941 Fall, 1942 Plantings	Size range in inches	Recoveries of April, 1944 planting	Size range in inches	Recoveries of Dec., 1944 planting	Size range in inches	Recoveries of Dec., 1945 planting	Size range in inches	Total number of trout taken
1943	6	Max17" Min14" Av16.3"	•••	•••	•••	•••	•••	•••	6
1944	7	Max21" Min16" Av 18.8"	20	Max Min10.5" Av13.0"	•••	•••	•••	•••	27
1945	10	Max20.9" Min15.6" Av18.8"	Ца	Max18.0" Min13.5" Av15.8"	32	Max12.6" Min 8.8" Av11.7"	•••	•••	83
1946	1 🕈	Approx. 15"	11	Max18.6" Min15.9" Av16.9"	19	Max.=16.0" Min.=14.7" Av. =15.3"	61	Max15.3" Min10.6" Av12.8"	93 <sup>t±</sup>
<b>Fotal</b>	24		72		51		61		209**

+ No regeneration of fin observed, see text for possible explanation.

++ Add 1 marked trout, but angler failed to remember the fin which was clipped.

# Table 3

Residence of anglers contacted

State or County	Number
Jackson	75
Calhoun	20
Washtenaw	4
Hillsdale	2
Lenawee	2
Ingham	1
Ohic	1

June 25, 1946

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