

Original: Fish Division
cc: Education-Game
Institute for Fisheries Research
Mr. Lievens

INSTITUTE FOR FISHERIES RESEARCH Mr. Claude Lydell
Holland Fish and Game Club
DIVISION OF FISHERIES
MICHIGAN DEPARTMENT OF CONSERVATION
COOPERATING WITH THE
UNIVERSITY OF MICHIGAN

ALBERT S. HAZZARD, PH.D.
DIRECTOR

ADDRESS
UNIVERSITY MUSEUMS ANNEX
ANN ARBOR, MICHIGAN

July 30, 1946

REPORT NO. 1058

GENERAL CREEL CENSUS AND CARP SEINING ACTIVITIES

ON LAKE MACATAWA, 1942-1945

by

Stanley Lievens

The following is submitted as supplementary to Report No. 833
(A Fisheries Survey of Lake Macatawa, Ottawa County, 1942)

Creel census

In the management proposals of the Lake Macatawa report it was suggested all stocking be discontinued until such a time as a need becomes apparent. All stocking was ceased on this recommendation. It was further recommended that the local conservation officer take a goodly number of creel census records for a three to five year period so as to observe the trend of fishing. The local conservation officer cooperated with the Department's request and submitted reports covering an average of 419 hours of fishing a year for the past few years. The data taken for 1942, 1943, 1944, and 1945 are presented below in Table 1.

This table indicates that the catch per hour of all fish combined is increasing, black bass are on the decline, bluegills are maintaining themselves with some retrogression possible, crappies are increasing, and the white bass are increasing. Yellow perch fishing has shown the greatest improvement during this period and this species is primarily responsible for the marked rise in the catch per hour of all fish.

Table 1

CREEL CENSUS

Catch per hour	1942	1943	1944	1945
All fish	1.18	1.90	7.86	4.38
Smallmouth black bass	...	...	...	...
Largemouth black bass	0.06	0.01	...	...
Bluegill	0.33	0.29	0.28	0.12
Common sunfish	...	...	...	...
Rock bass	...	...	...	...
Crappie	0.35	0.84	0.72	0.75
Perch	0.44	0.74	6.83	3.16
Walleye	...	...	...	...
Bullhead	...	...	...	...
Channel cat	...	...	...	...
Northern pike	...	...	...	...
White bass	...	...	...	0.34
Percentage of successful fishermen	64%	78%	98%	86%
Hours fished	102.2	196.8	305	628.5
Percentage of unsuccessful fishermen	36%	22%	2%	14%
Hours fished	57.7	33.05	7.0	87.0
Number of fish per fisherman	1.85	4.10	18.7	13.94

During the more intensive creel census of 1943-1945, records for the ice fishing months and the month of May were taken whereas before no records were taken in December and January (except in 1935 which showed excellent perch catches) and few in May. Although the total number of records was high, a break in the records suggests that the apparent scarcity of bass, and probably of bluegills, is not fairly represented. In reviewing the creel census cards it was noted no census was taken in late June and during the month of July in 1943, 1944, and 1945. In previous years the bass records were taken during this period with only two exceptions.

This period generally shows the best bass and bluegill fishing of the year on most lakes. The crappie show decided gains; this too may be misleading. The crappie records for 1943, 1944, and 1945 are very numerous in the winter months and for the month of May. In earlier years few to no records were taken either during the ice season or during May. (May should be about the time crappies are congregating over the spawning beds, hence a possible explanation for large catches.) White bass showed up in the creel census in worthy numbers for the first time in 1945. All the records were obtained in a one-month period (late May and early June) and most of the fish were caught at night by artificial light. The night records may account for their appearing in 1945 and not other years. It is possible that creel censuses were not taken in previous years at night, thus missing this fine fishing for the records. The census reports since 1942 are in sufficient quantity to give the general trend of fishing except for the short gap of records in the last half of June and for the month of July.

Carp fishing

The data on the carp seining for the years 1942, 1943, and 1944 are submitted in table form (Table 2). No carp seining was done in 1945 although a permit was issued by the Conservation Department.

In comparing the 1942, 1943, and 1944 records, no reliable assumptions can be made. There is some evidence substantiating the original comparison; that where carp catches were low, game fish abundance was high, and where carp catches were high, game fish abundance was low. There is an indication that the carp are on an upward trend though it is possible that they reached their peak during 1944.

Table 2

CARP FISHING IN LAKE MACATAWA

Year	Number of hauls	CARP		BLACK BASS		OTHER GAME FISH		OBNOXIOUS AND COARSE FISH		
		Total number pounds	Average number pounds per haul	Total number	Average number per haul	Total number	Average number per haul	Total number	Average number per haul	
1942	13	19,236	1,479	507	39	685	63	329	25	(Also 1,457 pounds of sheepshead)
1943	16	21,195	1,324	150	9.37	1,591	99.43	46	2.8	(Also 3,175 pounds of sheepshead)
1944	7	24,410	3,487	64	9.1	387	55.2	6	0.85	(Also 5,275 pounds of sheepshead)

Stocking

The 1942 stocking report was not entered in the original paper. For completeness, it is given below.

1942

Smallmouth black bass	1,000 (4)
Largemouth black bass	8,000 (3)
Walleye	...
Bluegills	5,000 (4)

INSTITUTE FOR FISHERIES RESEARCH

by Stanley Lievense

Report approved by A. S. Hazzard

Report typed by M. A. Klaphaak