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A SUMMARY OF THE GENERAL CREEL CENSUS FOR THE CONNECTING
WATERS BETWEEN LAKE HURON AND LAKE ERIE,
1930-1940 INCLUSIVE

bу

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The connecting waters between Lake Huron and Lake Erie consist of the St. Clair River, Lake St. Clair and the Detroit River. In this report the waters of the St. Clair River include the St. Clair River south of the International Toll Bridge at Port Huron and the main outlet in Big Muscamoot Bay, the North Channel between Dickinson Island and the mainland, and the Middle Channel between Dickinson Island and Harsens Island west of the International boundary line; Lake St. Clair includes all water on the Michigan side of the International boundary line between the several mouths of the St. Clair River and the upper end of the Detroit River; and the Detroit River includes those waters from Peach Island to the mouth of the Huron River.

Although the general creel census was inaugurated in 1927 at the request of Commissioner Harold Titus, the first records from the connecting waters between Lake Huron and Lake Erie were secured by the conservation officers in 1928. These records were of a few hours

fishing in the Detroit River, but the number of anglers was not included in the data. Similarly in 1929, when data on angling were secured from the St. Clair River, Lake St. Clair and the Detroit River, the number of anglers was not included. For this reason the records for 1928 and 1929 have been omitted in this report.

Table I shows the number of fishermen, the number of anglers who caught no fish, the total number of hours spent fishing, the number of legal fish taken and the catch per hour for each of the three divisions of the connecting waters and for the total for each year during which creel census records were taken since 1927. The records for 1928 and 1929 have been mentioned previously. During 1930, records were obtained from only 18 fishermen. These few anglers cannot be considered as representative of the entire season. Also, there were no reports from the Detroit River.

During 1936 and 1937 no creel census records were obtained and, during 1935 and 1938, as in 1930, so few records were obtained that the data are not representative. The data for the other years seems, superficially, to be sufficient for a representative sample. There are several reasons, however, why they are not. In 1931, there were no records taken during March or July (Table II), and the waters were only visited a total of 1½ times during the entire season. The same is true in 1932 except that there were no records taken during February, March and September. During 1933, there were no records from the St. Clair River and only a few from Lake St. Clair.

Table II shows the number of days each month of the year on which the conservation officers took creel census on the connecting waters between Lake Huron and Lake Erie and the number of men contacted each month the lake was visited since 1930. This table shows some of the errors commonly made in gathering the data for the general creel census. For instance, in 1939 the officers gathered data on 8 different days during July but in these 8 days (16.3 per cent of the total days for 1939) they interviewed 555 anglers (70.3 per cent of the total for 1939). A figure that is not shown on the table is that 549 of the 555 anglers contacted in July, 1939, were interviewed during the week-end of July 4. As a result we find that nearly 70 per cent of all the records from the connecting waters between take Huron and take Erie were taken over a period of not more than 4 days. The same thing is true of the records for 1940.

Considering the waters of the St. Clair River as a unit, the data show that the 1,181 fish reported in 1932 were all yellow perch, whereas in 1934 there were no perch included in the census, the total catch consisting of 93 walleyes, 2 northern pike and 7 other individuals of various species. Again in 1939, of the total 414 fish recorded in the census of the fishing in the St. Clair River, 409 were walleyes, 3 were northern pike and only 2 were yellow perch. These records certainly are not representative of the entire river for the fishing seasons mentioned.

Since 1937, a rather intensive general census has been conducted by the Department of Conservation on the connecting waters between Lake Superior and Lake Huron (Institute Report No. 668). The data were gathered by the conservation officers, and an attempt was made to gather these data throughout the entire season and so record the catch of all interviewed fishermen whether they were successful or not. The numbers of records thus obtained were as few as 240 in 1937, but the records were so well scattered over the season that they are believed to be representative.

This census has shown that the catch per hour hasn't varied to any great extent during the five-year period 1937 through 1941. The catch per hour for each year was: 1.7 in 1937, 1.8 in 1938, 1.6 in 1939, 1.9 in 1940 and 1.1; in 1941. In contrast to these rather consistent figures, it will be noted that the catch per hour in the connecting waters between Lake Huron and Lake Erie varied from 0.35 to 6.40. It is therefore impossible to make any significant comparison with the fishing in other connecting waters of the Great Lakes, or with that from inland waters.

Summary and Suggestions

- The general creel census, although it has been in operation for 13 years on the connecting waters between Lake Huron and Lake Erie, does not give a representative picture of the fishing in these waters.
- The number of records taken during this census were not, in any instance, evenly spread over the fishing season.
- 3. The records apparently favor different kinds of fishing for various years.
- 4. An intensive general census has been in operation since 1937 on the connecting waters between Lake Superior and Lake Huron, and the data collected have been reasonably good.

In light of these facts, an intensive general census is feasible for the connecting waters between Lake Huron and Lake Erie, in which the officers might take the census, but in doing so would be urged to have the records be representative of the whole season and include all the waters under consideration. During the next few years when travel is at a premium, these waters will probably be more heavily fished than before, and a good series of records could be secured by boat if funds and personnel can be devoted to this purpose.

INSTITUTE FOR FISHERIES RESEARCH

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Table I

Year	Number of fishermen	Number taking no fish	Total hours fished	Legal fish taken	Average catch per hour	Number of fishermen	Number taking no fish	Total hours fished	Legal fish taken	Average catch per hour
LAKE ST. CLAIR						ST. CLAIR RIVER				
1930 1931 1932 1933	7 18 3 17	6 2 8	22.00 59.00 12.00 54.00	96 65 1 68	4.26 1.10 0.08	11 16 40	3	17.50 71.50 181.00	12 70 1,181	0.69 0.98 6.52
1934		O	•		1.30	41	5	142.00	102	0.72
1938 1939 1940	8 ԱԱ3 22	28 <u>1,</u> 20	37.00 1,659.00 67.50	54 585 2	1 • L‡6 0 • 35 0 • 03	26 8	93	1,090.50	414	0.38
TOTALS	518	320	1,910.50	871	0.46	376	101	1,502.50	1,779	1.18
DETROIT RIVER						ALL WATERS				
1930 1931 1932 1933 1934 1935 1938 1939 1940	41 101 267 98 4 79 219	22 42 81 32 3 34 100	158.00 286.50 1,037.50 265.00 12.50 338.50 766.50	186 161 722 367 80 96 290	1.18 0.56 0.70 1.38 6.40 0.25 0.38	18 75 1144 2814 139 14 8 790 2141	3 28 141 89 37 3 1411 120	39.50 288.50 479.50 1,091.50 407.00 12.50 37.00 3,088.00 831.00	108 321 1,342 790 469 80 54 1,095	2.73 1.11 2.80 0.72 1.15 6.40 1.46 0.35 0.35
TOTALS	806	31/4	2,864.50	1,902	0.66	1,702	735	6,277.50	4,551	0.72

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Table II

Year	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Total
		Number of days					ng waters		
			betwee	en Lake Huror	and Lake	Erie			
1930	• • •	• • •	•••		1	3	•••	•••	4
1931	2	•••	1),		7	ì	3	$\vec{\eta}_{\downarrow}$
1932			2	4 4	3 2	2	2	-	12
1933	• • •	1	4	ξ	3	4		•••	17
1934	• • •	_	3	5 8	1	2	3	• • •	17
1935	• • •	• • •) 1	1	_)	• • •	1
1938	• • •	• • •	_	2	• • •	• • •	• • •	1	3
1939	• • •	• • •	• • •	12	26	8	3	_	2 3 49 8
1940	• • •	• • •	1		2 0	2	_	•••	49
1940	• • •	• • •	_	• • •	2	2	• • •	•••	O
TOTAL	2	1	12	36	41	21	9	4	126
PER CENT									
TOTAL	1.6	0.8	9•5	28.6	32.5	16.7	17.1	3.2	
		Number of angle	ers in	terviewed by	officers o	on connecti	ng waters		
			between Lake Huron and Lake Erie						
1930	• • •	• • •	,	• • •	2	16	• • •	•••	18
1931	5	• • •	4	23	32	•••	2	9	75
1932	•••	• • •	17	94	10	10	13	•••	$1\dot{\mu}$
1933	•••	3	108	2 6	39	108		•••	284
1934			20	55	íí	14	3 9	•••	139
1935	•••	***	3	ĺ	•••	• • •	•••	•••	Ĺ
1938		•••	•••	_ 5	•••	•••	•••	3	4 8
1939	• • •	• • •	• • •	5 57	151	555	27		790
1940	• • •	• • •	11	•••	96	$13l_{+}$	- 1	•••	2/1
-> -									,
TOTAL	5	3	163	261	341	837	81	12	1,703
PER CENT									
TOTAL	0.3	0.2	9.6	15.3	20.0	49.2	4.7	0.7	