Original: Fish Division cc: Education-Game

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May 11, 1953

INSTITUTE FOR FISHERIES RESEARCH

DIVISION OF FISHERIES

MICHIGAN DEPARTMENT OF CONSERVATION

COOPERATING WITH THE

UNIVERSITY OF MICHIGAN

Report No. 1370

ADDRESS UNIVERSITY MUSEUMS ANNEX ANN ARBOR, MICHIGAN

CREEL CENSUS DATA ON WHITMORE LAKE, WASHTENAW AND LIVINGSTON COUNTIES

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Kenneth E. Christensen

A study of Whitmore Lake was begun in 1946 with the purpose of determining the effect of year-round fishing for perch, crappies, rock bass and other species of fish not protected by a statutory closed season. One of the methods of evaluating changes in fishing quality which might occur due to this change in fishing regulations was a yearround creel census. From this census, data concerning the species of fish caught, the number of each species in the catch, and the total angling effort were determined, as well as other important information.

The creel census was conducted by technicians of the Institute for Fisheries Research. The census clerk contacted several hundred anglers each year to obtain the necessary data. The work periods were scheduled so as to give uniform coverage to all daylight fishing hours. Periodic counts were made of the number of anglers fishing each hour, and from these counts an estimate of the entire fishery was calculated (see attached Table 1).

Whitmore Lake contains a good population of fish growing at a better than average rate of growth. The important pan fish are bluegills, perch, sunfish and crappies in that order. There is a large population

of predator species, including largemouth bass, pike and bowfin. Bass are the most abundant of these predator fish. The reason for the rapid growth of the pan fishes is, in part, that this population of large predatory species keeps the number of pan fishes down to a level where they are not seriously depleting their food supply. We feel that the pike are a necessary part of this predator group and that any action which will reduce the number of pike or eliminate them will have a detrimental effect on other species of fish, from an angling viewpoint. If Whitmore Lake is to continue as a popular fishing lake pike spawning grounds should be preserved.

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Table 1. Creel census data, Whitmore Lake, Washtenaw and Livingston counties

1946 - 1952

Anglers	Hours	Fish		
		F 10H	per hour	
1946 19,280 1947 25,430		43,630	.64	
			.90 .84	
		96.250	1.01	
6,260	21,810	18,550	.85	
13,630	48,240	43,440	.90 .81	
7,540	28,660	23,190	.81	
18,200	63.020	54.160	.86	
	25,430 28,720 26,550	25,430 77,230 28,720 101,340 26,550 95,530 6,260 21,810 13,630 48,240 7,540 28,660	25,430 77,230 69,310 28,720 101,340 84,770 26,550 95,530 96,250 6,260 21,810 18,550 13,630 48,240 43,440 7,540 28,660 23,190	

	Catch By Species						
Year	Pan fish		Bass		Pike		
	Total	Per 100 hrs.	Total	Per 100 hrs.	Total	Per 100 hrs.	
1946	39,987	58.5	2,024	3.0	1,619	2.4	
1947 1948	66,164	85.7	2,029	2.6	1,117	1.4	
1948	79,763	78.7	3,3 92	3•3	1,615	1.6	
1949	92,455	96.8	2,949	3.1	846	•9	
1950	17,908	82.1	296	1.4	346	1.6	
1951	41,444	86.0	1,307	2.7	689	1.4	
1952	21,923	76.4	751	2.6	517	1.8	
7-year	51,380	81.6	1,820	2•9	960	1.5	
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