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TWO YEARS OF FISHING IN LAKES WITH
LIBERALIZED REGULATIONS

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After two years of intensive creel census on twelve experimental regulation lakes, the evidence obtained to date shows no general decline in fishing quality although year-around fishing is permitted for certain species. Most of the extra open season allowed by the special regulations falls during the spring when other southern lakes are closed to fishing. As a result, a 16 percent increase in fishing has occurred. Because of their "experimental" classification many anglers, who would normally fish in other lakes, have been attracted to these waters. In 1947, thirty-seven percent more anglers fished the test lakes than in 1946. Summer fishing in 1947 showed no over-all decline in angling quality. Out of the twelve lakes fishing improved in six, remained the same in five, and became somewhat poor in one as compared to 1946.

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For the anglers who are unfamiliar with the experimental lakes program, the reasons for proposing liberalized fishing laws¹ are:

(1) Experimental evidence shows that in most lakes only a small proportion of the available legal gamefish are ever harvested by hook and line angling. (2) Many lakes contain large numbers of stunted (abnormally slow-growing) under-sized fish which seldom attain legal length in their life span. Such lakes contain too many small breeders with the result that the available food supply is inadequate for normal growth. (3) Intensive unrestricted fishing on experimental lakes in other states has demonstrated that anglers were able to remove only half the catchable fish leaving ample numbers of breeder fish.

In view of these facts the legislature, in 1945, granted the Conservation Commission authority to designate a maximum of 20 lakes and 10 streams (but no more than one lake and one stream per county) as experimental waters to test the effect of liberalizing the fish laws.

The following is a summary of part of the information obtained in a creel census of 12 experimental lakes. The census involved an enumeration of the fishermen on about 30 percent of all days during which the results from 10 to 90 percent of all fishing trips were recorded in a system of stratified random sampling. The table accompanying this article summarizes the data for the individual lakes according to three periods: spring, summer, and fall. The spring period includes all data collected March through June 24. The summer period extends from June 25 through September 15, and the fall records from September 16 to about the first week in November.

On Lobdell, Pontiac, Whitmore, Craig, Duck and Fine lakes, regulations have been slightly relaxed to permit year-around fishing for perch,

¹ See Michigan Conservation, 1945, Vol. 14, No. 9, pp. 6-9; No. 10, pp. 6-9; 1946, Vol. 15, No. 5, pp. 5, 13-14.

crappies, rock bass, and non-game fish. A short closed season, March 15 to May 15, is in effect on northern pike and walleyed pike. Bass fishing is illegal from January 1 through June 24. The closed season on bluegills and sunfish extends from February 28 through June 24. Regulations on these lakes are exactly the same as those which have prevailed on most non-trout lakes north of highway M - 46 since 1946.

In 1946, the combined estimated total anglers who fished the above six lakes during the spring period numbered 9,200. They harvested 14,630 fish. The following spring 8,950 individuals caught 11,263 fish. In the summer of 1946 these lakes accommodated 69,400 sportsmen who caught 224,500 fish. The number of anglers increased to 100,000 in the summer of 1947, and 403,900 fish wound up on the angler's stringers. A total of 7,160 anglers fished in the fall of 1946. They took home 18,900 fish. In the fall of the following year 13,850 fishermen tried their luck and caught 39,000 fish.

Fishing quality based on catch per hour varied considerably among the six lakes for the three seasons during 1946 and 1947. The changes from 1946 to 1947 were as follows: In the spring period fishing success declined in Craig, Fine and Pontiac lakes. Angling was about the same on Lobdell and Whitmore lakes. Duck Lake showed an improvement. Angling was much better in the summer period. In this season the catch per hour increased on Craig, Pontiac and Whitmore lakes. Fishing was about the same as in 1946 on Duck, Fine, and Lobdell lakes. No decrease in catch per hour from 1946 occurred during the summer. The fall fishing showed a decline in catch per hour on Duck and Pontiac lakes in 1947. It remained the same for Whitmore Lake and improved on Craig, Fine and Lobdell lakes.

Combined figures show that 208,560 anglers fished in the two years and 712,193 fish were caught during the ice-free seasons from these six lakes.

There are no size or season restrictions on bluegills, sunfish, perch, rock bass, and crappies at Bear and Saddle lakes, but creel limits are in force on these species of six inches or longer. Regulations remain unchanged for species other than those mentioned above.

Results on Bear Lake for combined spring, summer and fall angling were as follows: A total of 3,350 anglers caught 8,090 legal and 3,040 under-sized fish in 1946; and the next year 4,280 fishermen caught 7,400 legal and 3,220 under-sized fish. About one-fourth of the total fishing trips were made in the spring period. Approximately 12 percent of all legal fish caught in both years were taken prior to June 25. As compared with 1946, the catch per hour declined in the spring period, but was improved during the summer and fall seasons.

In 1946, Saddle Lake was fished by 6,920 anglers. In return for their efforts they caught 28,300 legal-sized and 27,600 under-sized panfish. In the succeeding year fishing pressure increased to 13,600 anglers who took out of the lake 41,400 legal panfish plus 52,360 under-sized. More than a third of both years' fishing occurred prior to June 25. Of the total legal-sized fish caught (69,700) in the two years, nearly half were taken before June 25. The catch per hour figures indicate that in 1947, as compared with 1946, spring fishing improved, summer fishing remained the same, and fall angling suffered a slight decrease in catch per hour.

Big Portage, Fife, Minnewaukon, and Sugarloaf lakes are open to fishing for bluegills and sunfish at all times. Ordinary closed seasons are in force for other species.

Results from the 1946 creel census of these lakes show that 23,290 anglers took 56,140 fish during the ice-free seasons. In 1947, fishing pressure changed very little on these lakes and 24,680 anglers were rewarded with an increased catch of 64,800 fish. About one-fourth of all fishing was done in the spring period and slightly more than one-quarter of all the fish creeled were taken prior to June 25.

Comparing 1947 with 1946 spring period angling on these four lakes, the catch per hour dropped on one, remained even on two, and rose on one. Fishing quality in the summer period improved on two lakes, remained the same and declined for each of the two remaining. Fall fishing declined on one lake and improved on the other three.

The extra fishing allowed by the liberalized regulations on these twelve lakes made it possible for 39,480 anglers to take 93,993 legal-sized and 50,820 under-sized fish. In addition 35,400 under-sized fish were taken during the ordinary fishing season. It is too early to reach any definite conclusions as to the effects of more liberal fishing regulations, but the evidence to date suggests that removing some of ^{the} present restrictions at least on panfish has not had any harmful effects on the summer fishing and has provided some additional sport at a time of year when there is little other angling available.

Two Years Creel Census Results on Twelve Experimental Lakes

Lake	Period	Total anglers		Total legal-size fish caught		Total under-size fish caught		Catch per hour	
		1946	1947	1946	1947	1946	1947	1946	1947
Craig (Branch Co.)	Spring	400	500	240	23	...	...	0.1	0.02
	Summer	4,700	3,400	10,200	9,400	...	...	0.7	0.9
	Fall	470	850	1,100	4,000	...	...	0.8	1.4
Duck (Calhoun Co.)	Spring	1,900	900	4,100	3,300	...	...	0.7	1.3
	Summer	12,900	17,800	34,300	50,600	...	...	1.0	1.0
	Fall	2,900	2,400	7,400	3,700	...	...	1.0	0.6
Fine (Barry Co.)	Spring	1,400	450	2,200	500	...	...	0.7	0.4
	Summer	12,100	11,800	61,000	46,900	...	...	1.8	1.7
	Fall	1,200	1,400	3,800	4,900	...	...	1.2	1.4
Lobdell (Genesee Co.)	Spring	1,900	1,800	3,200	3,900	...	...	0.6	0.7
	Summer	11,100	19,100	36,600	67,300	...	...	0.8	0.9
	Fall	610	2,700	1,200	10,800	...	...	0.7	1.4
Pontiac (Oakland Co.)	Spring	2,400	3,600	4,200	2,800	...	...	0.4	0.2
	Summer	14,100	32,700	47,900	185,000	...	...	0.7	1.4
	Fall	980	4,200	3,200	11,200	...	...	0.8	0.6
Whitmore (Livingston Co.)	Spring	1,200	1,700	690	740	...	...	0.2	0.2
	Summer	14,500	15,200	34,500	44,700	...	...	0.7	1.0
	Fall	1,000	2,300	2,200	4,400	...	...	0.6	0.6
Bear (Hillsdale Co.)	Spring	630	1,100	1,300	500	1,040	520	0.8	0.4
	Summer	2,400	2,600	5,900	5,700	1,900	2,500	0.9	1.1
	Fall	320	580	890	1,200	100	200	0.6	0.8
Saddle (Van Buren Co.)	Spring	3,000	4,400	14,100	18,900	17,900	31,360	2.5	3.0
	Summer	3,500	8,100	12,800	21,900	8,700	19,500	2.0	1.9
	Fall	420	1,100	1,400	600	1,000	1,500	2.1	0.9
Big Portage (Jackson Co.)	Spring	1,200	1,500	1,900	1,600	...	...	0.4	0.3
	Summer	1,500	2,900	2,500	5,600	...	...	0.6	0.7
	Fall	220	580	420	1,500	...	...	0.6	0.9
Fife (Gr. Traverse Co.)	Spring	1,500	900	1,800	2,200	...	...	0.4	0.7
	Summer	9,200	8,400	15,900	20,900	...	...	0.5	0.8
	Fall	360	1,200	820	2,700	...	...	0.7	0.9
Minnewaukon (St. Joseph Co.)	Spring	1,500	1,900	8,200	8,200	...	...	1.9	1.6
	Summer	2,300	3,000	11,100	9,700	...	...	1.8	1.3
	Fall	270	680	1,100	1,900	...	...	1.5	1.1
Sugarleaf (Washtenaw Co.)	Spring	2,600	1,100	6,600	2,800	...	...	0.7	0.8
	Summer	2,300	2,100	4,500	6,400	...	...	0.7	1.0
	Fall	340	420	1,300	1,300	...	...	1.4	1.8
Total		119,320	163,360	350,560	567,763	30,640	55,580	...	...