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REPORT NO. 570

CISCO NETTING ON BIRCH LAKE, CASS COUNTY

DURING THE SEASON OF 1939

by

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Birch Lake, Cass County, is one of a group of lakes in southern Michigan for which a cisco netting season from November 15 to December 10 inclusive is provided by legislative act (Act 247, P. A. 1919). Each licensee for a fee of \$1.00 is permitted to set between the hours of sunset and sunrise one gill net not exceeding ten rods in length with mesh not less than 2 1/2 inches nor more than 4 1/4 inches stretched measure.

Inasmuch as experimental plantings of brook, rainbow and lake trout had been made in Birch Lake in 1937 and 1938, it was considered desirable to determine to what extent trout would be caught during the netting season. To assist the local conservation officer, Herbert W. Lees, the writer was assigned to Birch Lake to check as many of the net lifts as possible and to learn as much as he could about this method of taking ciscoes and the catches made. Following are the observations.

Nets were numerous and set close together--many were across others; however, there was very little dissension among the fishermen.

Nets were set in from 8 feet to 30 feet of water. One end was fastened to a stake or can float at the break or drop-off and the net was run directly out into the lake. The early part of the season the cisco traveled in schools and were caught in deep water. At the peak of the run, they were caught in 10 to 15 feet of water. Later they were less concentrated and were out in deeper water. Toward the last of the season the nets that got the most cisco were set in about 60 feet of water.

During the early part of the season, the ciscoes were mostly males, ripe but not spent. The percentage of females gradually increased until the peak of the run was on, then began to decrease. At the last of the season the males were all spent; the females which were taken were all ripe, very few were spent.

The largest lift was from 5 nets totaling 750 cisco taken December 1. One net had 164 cisco in the mesh which was 8 feet deep and 165 feet long. When the run was at its height, many lifted their nets two or three times during the night. Some lifted in the night and did not reset. The nets that were most successful were not lifted until just before sunrise. During the early part of the season cisco ran very early; later no difference was reported.

The catch of protected fish, especially perch, was greater during moonlight nights and late lifts and in deep sets.

The report on the kind of trout taken is not too reliable, as many of the fishermen could not tell the species they had caught. Mr. Schmidt of Niles, Michigan, who has a very good knowledge of the different species, reports two trout taken in one net, a shallow set (about 9 feet) on November 24--one, a rainbow, measuring 23 inches, was in a very good condition and color; the other, a male brook trout 14 inches long, had a good color but was very slender and spent. Mr. Harvey reported having three rainbow averaging 18 inches in his nets early in the season. Two

of them fell out as net was being lifted; the other he measured. All were in very good condition. Many of the other trout were reported in the nets, but according to the fishermen fell out as the fish came to the surface of the water.

At different times the nets were tangled and would have one or two threads broken. One fisherman reported his stake, to which the net was fastened, was shaking vigorously just as he untied the cord. He had no fish other than cisco, but a small hole was in the net.

The trout taken on December 10 and indicated in the table as preserved was dead in the net.

There may have been some trout taken or observed that were not reported because some of the fishermen are afraid they may lose the privilege of netting cisco.

This report is probably not over two-thirds accurate as to the amount of cisco taken, but ^{it is believed that} most of the trout were reported, as very nearly all of the netters were contacted some time during the season.

Date	7 a.m.		No. Nets	Fish Caught										Trout Taken
	Temperature			Cisco	Perch	Rock Bass	Large-	Small-	Blue-gills	Gar Pike	Suckers	Sun-fish	Bull-heads	
	Air	Water					mouth Bass	mouth Bass						
Nov. 24	...	38	5	57	3	...	...	...	...	...	...	...	...	1 Rainbow 23", good condition 1 Brook, male, 14", spent, good color, thin
Nov. 25	28	36	17	282	2	2	...	...	2	...	...	...	...	...
Nov. 26	22	35	13	369	16	5	1	...	...	...	...	...	...	...
Nov. 27	23	34	23	435	4	6	1	...	1	...	...	...	...	...
Nov. 28	26	34	16	684	4	1	1	...	...	...	...	...	...	...
Nov. 29	26	35	36	1029	7	1	1	...	1	...	1	...	...	...
Nov. 30	34	36	35	1233	...	1	...	...	...	...	...	...	...	1 Brown, 10", good condition
Nov. ?														3 Trout, Rainbow 18", Mr. Harvey
Dec. 1	38	36	73	2409	2	1	...	...	...	...	1	...	...	1 Rainbow, 4 lb., good condition 1 Rainbow, poor, 11 1/2", preserved
Dec. 2	39	37	67	1901	5	2	1	...	...	...	...	...	...	1 Rainbow, 14" 1 Brook, 10" ?
Dec. 3	37	37	39	1739	1	1	...	1	...	...	...	...	...	1 Rainbow, 2 1/2 lbs.
Dec. 4	...	...	35	1676	1	...	...	...	...	1	...	...	...	...
Dec. 5	28	34	32	1190	1	...	1	...	...	1	...	...	...	1 Rainbow ? , 5 lbs.
Dec. 6	31	34	40	1150	4	4	6	...	...	1	...	...	...	1 Rainbow, 4 lbs., good condition
Dec. 7	38	34	60	1729	3	1	...	2	...	...	...	...	...	...
Dec. 8	32	34	40	624	1	1	...	2	...	1	...	...	...	1 Trout ? , 24", good condition
Dec. 9	32	34	124	2609	6	...	...	...	...	...	...	1	...	...
Dec. 10	45	36	85	1378	4	1	...	...	...	...	1	...	...	1 Rainbow, 22". Preserved.
Dec. 10	p.m.	...	26	256	...	1	...	...	...	...	...	...	...	This trout was taken in 9 feet of water. Another large fish got out of net as it was being lifted. It was thought it was a trout of about the same size. There was a very heavy wind; sky was cloudy.
Total	...	...	766	20750	64	28	12	5	4	4	1	2	1	