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EXPERIMENTAL SPEARING ON PORTAGE LAKE, WASHTENAW COUNTY,  
SWAINS LAKE, JACKSON COUNTY, AND BIRCH LAKE, CASS COUNTY  
DURING THE CISCO SPEARING SEASON OF 1943

by

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Since trout have been successfully introduced into certain southern Michigan cisco lakes, there has been growing concern about their welfare during the cisco spearing season.

An attempt was made during the cisco spearing season of 1943 to determine how vulnerable trout are under these circumstances. Only four nights of spearing was attempted and this is hardly sufficient to make specific recommendations. However, these observations do show that trout can be speared and probably are taken from these lakes accidentally or otherwise.

Spearing operations were conducted as follows: Portage Lake, Washtenaw County, November 30, air temperature 28°-31°F., water temperature 32°F., spearing done by Conservation Officer Karl Brushaber and Mr. Clifford Krohn; Swains Lake, Jackson County, December 2, air temperature 32°-36°F., water temperature 32°F., spearing done by Conservation Officer William Lemieux, State Park Superintendent Sherm Carey, and W. F. Carbine; Birch Lake, Cass County, December 2, 3, air temperature 36°-38°F., water temperature 39°-40°F., spearing done by George Washburn and Rhyner Scholma.

Open flame gasoline jacklights were used on Portage and Swains Lake and a sealed beam spotlight was the source of light at Birch Lake.

Spearing parties were instructed to attempt to spear all of the fish they could see regardless of size or species in order to get some information on the ease with which the various game fish could be taken.

All spearing was done over the shallow areas and no fish were speared in water with a depth of more than 8 feet. Most of the fish taken were in water between 2 and 5 feet in depth.

The following table shows the species and number of fish taken as well as those seen and not speared.

Lake	Man-hours	Species	Size range,* total length, inches	Number speared	Number missed	Approximate number seen out of range of spear
Portage	4	Rainbow trout	9	...	1	...
		Cisco	8 1/4 - 14 1/2	13	38	150
		Rock bass	8	1	...	...
		Largemouth bass	13	1	...	...
		Warmouth bass	8	1	...	...
		Yellow bullhead	9 1/2	1	...	...
		Redhorse sucker	13 - 16	14	3	...
		Hog sucker	10 - 13	2	2	1
		Garpike	...	...	1	...
Swains	5 1/2	Rainbow trout	15 1/2 - 17 1/2	5	6	3
		Cisco	16 1/2	2	1	0
		Yellow perch	9 1/2 - 11 1/2	3	5	10
		Rock bass	6	3	...	2
		Largemouth bass	7 3/4 - 11	2	1	3
		Green sunfish	7 3/4	1	...	...
		Bullhead	8 1/2	1	...	...
		Dogfish	(8 1/2 lbs.)	1	1	1
		Bullfrogs	(large)	3	1	20
Birch	3 1/2	Rainbow trout	18	...	2	...
		Cisco	10 - 11 1/4	1	24	200
		Common sucker	18	...	1	...

\* Size estimated on fish not actually speared.

Rainbow trout were observed in all three of these lakes and 5 were actually speared in Swains Lake. There can be no doubt that trout are present in the shallow water during the cisco spearing season. On Swains Lake most of the trout seen were in water less than 4 feet in depth, and two were speared in water no greater than 18 inches in depth. The cisco

in Portage Lake were seen mostly in the shallow water, but it was difficult to see anything over the deep water where there was no reflection from the bottom.

Aside from cisco, trout, yellow perch and suckers, there were very few other fish in the areas chosen for spearing. No bluegills or sunfish were speared and only one or two were seen and could not be positively identified. Mr. Cliff Krohn, who devotes much time to spearing, reported that he has seen large numbers of bass in the shallow water during the cisco spawning season at Portage Lake.

On the basis of these few observations, it would appear that trout could be as easily speared as cisco during the cisco spawning season, and while the careful and more conscientious fisherman would probably recognize and avoid most of the trout, some would be the victims of accident or mis-identification. On the other hand, the careless or unscrupulous fisherman might inflict rather serious damage on the relatively small population of large trout placed in these lakes. Further observations should be made on this problem. In the mean time special effort should be made by the conservation officers to prevent the spearing of trout in the few small lakes already stocked.

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