Original: Fish Division cc: Conservation Officer Lees

Mr. Jay Marks
Dr. Shetter

## INSTITUTE FOR FISHERIES RESEARCH

DIVISION OF FISHERIES

## MICHIGAN DEPARTMENT OF CONSERVATION COOPERATING WITH THE UNIVERSITY OF MICHIGAN

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RESULTS OF GILL-NETTING FOR TROUT IN BIRCH LAKE, CASS COUNTY

Early in December a letter was received from 0. K. Harvey, who lives on the shore of Pirch Lake, that a 13-inch lake trout had been captured in the course of the cisco netting. Dr. Hazzard requested Walter Crowe and the author to proceed to Eirch Lake and attempt to obtain trout by gill netting in order to check on growth rate and food habits of these particular trout, all of which have been hatchery-reared. Fingerling lake trout were planted last December 1 (1937), and rainbow and brook trout of legal size were released before the opening of the 1938 bass season.

We arrived at Birch Lake about 4 p.m. on December 14 and arranged the gill nets which were set by 6:00 p.m. (Air 30, water 42, strong N.Y. wind.) Four nets were set, three of which were graded experimental gill nets each approximately 125 feet long, and the fourth net was a fine meshed net (about 15" stretched measure) of the same length.

Nets were lifted at 8:30 a.m. December 15 ( $14\frac{1}{2}$  hour set). Five ciscoes were taken, all in the  $2\frac{1}{2}$  inch mesh, from about 30-40 feet of water. (Air 23, water 34, no wind, clear, ice at edge of lake.)

The four nets were then joined together in pairs and reset in deeper water (15 to 30 feet); setting was completed at 11:20 a.m. This set was run at 5:00 p.m. and one cisco taken.

On December 16 the nets were lifted at 9:30 a.m. (22 hr. set) and 25 cisco were taken from the east gang; while 18 cisco and 2 undersized perch were captured in the west gang. An ample series of the ciscoes were preserved. No trout of any kind were taken in any of the net sets.

The cutlet of the lake was examined, but there was no evidence of trout spawning in the creek and no fish were seen.

According to the testimony of Conservation Officer Herbert Lees, very few if any of the planted lake, brook or rainbow trout were taken during the cisco netting season. Questioning Mr. Harvey and his son who reported the capture of a lake trout, failed to identify with any certainty their reported "lake trout." It is possible this fish may have been a brook trout on which the red spots were lacking or were indistinct.

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