

Original: Fish Division

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Institute for Fisheries Research

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INSTITUTE FOR FISHERIES RESEARCH

DIVISION OF FISHERIES

MICHIGAN DEPARTMENT OF CONSERVATION

COOPERATING WITH THE

UNIVERSITY OF MICHIGAN

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MANAGEMENT CHECK ON HEMLOCK LAKE, CASS COUNTY

by

A. S. Hazzard

On October 27, 1944, L. A. Krumholz assisted the writer in setting four experimental gill nets in Hemlock Lake, Cass County. The nets were spaced at fairly regular intervals around the shore in water from seven to fifteen feet in depth. The sets were made about 4 p.m. that day and lifted at 9 a.m. the next morning. The surface water temperature at the time of setting was 56°F. The following fish were caught (total lengths in millimeters - 25.4 mm. = 1 inch):

- 1 Perch (236)
- 1 Largemouth bass (147)
- 7 Warmouth bass (97-138)
- 5 Bluegill (96-182)
- 1 Pumpkinseed (92)
- 1 Black crappie (174)
- 3 Lake chub suckers (255-282)
- 3 Brown bullhead (268-350)
- 1 Golden shiner (208)

The purpose of this check was to determine the success of the experimental plantings of rainbow trout made in this lake. These were as follows: 1942 - 1,000 8-mos, total weight 138 pounds, planted 12/3; 1943 - 1,000 8-mos., length 4 - 6 inches, total weight 25 pounds, planted 11/19.

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Apparently none of these fish survived. A local farmer who rents boats said that fishing had been good the past two years but that he had not heard of any trout being caught. If any number had survived, it seems that at least a few would have been taken in the netting.

It is recommended that no further plantings of any kind of fish be made for two years. Starting in the spring of 1947 another planting of 1,000 rainbow trout should be made. These fish should be from 6 to 8 inches in length. In checking the survey cards for this lake, it was found that there was an abundance of oxygen in the thermocline on July 8. It would therefore appear that conditions should favor trout. The failure of the first two plantings may have resulted from the relatively small size (at least of the 1943 fish) or perhaps was due to the time of year when the planting was made. Spring plantings of rainbow trout in lakes containing warm-water fish appear to be much more successful than fall plantings (according to recent figures from Birch Lake).

The reason for suggesting a two year wait is so that the results of spring planting may not be confused with possible survival of the fall plantings of 1942 and 1943.

A new management card is being submitted for Hemlock Lake.

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A. S. Hazzard, Director

Report typed by V. M. Andres