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DIVISION OF FISHERIES MICHIGAN DEPARTMENT OF CONSERVATION COOPERATING WITH THE UNIVERSITY OF MICHIGAN

INSTITUTE FOR FISHERIES RESEARCH

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EXAMINATION OF BROOK TROUT FINGERLINGS

AT ODEN HATCHERY ON JULY 9, 1946

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Leonard N. Allison

Mr. H. L. Thompson, District Fisheries Supervisor at the State Fish Hatchery, Oden, requested examination of fingerling brook trout in several ponds where a light mortality had appeared. A treatment with copper sulfate given several days earlier had failed to stop the loss.

The sick fish exhibited characteristic behavior. They could be seen to swim slowly near the surface of the water for a short time then begin to whirl and sink to the bottom where they died immediately. The sick and dead fish were in good condition and apparently died quickly as they could be found the entire length of the pond and did not accumulate at the screen at the foot of the pond, as they do when sickness is prolonged.

Microscopical examination showed the gills to be in good condition. The only symptom of a pathological nature was the condition of the stomach and intestines. The latter were distended and filled with a gray fluid. No causative organisms were found.

Since the fish appeared to have a gastrie disturbance, it was recommended that two tablespoonsful of mineral oil be added to the dist for one day and repeated two days later.

ALBERT S. HAZZARD. PH.D DIRECTOR The mortality apparently was not caused entirely by diet because it occurred in only two ponds whereas brock trout fingerlings in other ponds were not affected. Ponds 11 and 13 were affected and not ponds 12 and 14. Ponds 11 and 12 are parallel as are ponds 13 and 14. Water flows from pond 11 into pend 13 and from pend 12 into pend 14. Water supply from the B raceway system enters the A system at the head of this group and most of it passes through pends 12 and 14. At eight o'clock A.M. the temperature of pends 11 and 13 was 56° F. and of pends 12 and 14 was 52° F. This difference of four degrees in temperature would be important in some diseases of fish.

## INSTITUTE FOR FISHERIES RESEARCH

by Leonard N. Allison

Report approved by A. S. Hazzard Report typed by M. A. Klaphaak -2-