INSTITUTE FOR FISHERIES RESEARCH UNIVERSITY MUSEUMS UNIVERSITY OF MICHIGAN ANN ARBOR, MICHIGAN

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Report No. 80

ON THE CAUSE OF DEATH OF GOLDEN SHINERS

A half-pint jar containing several medium sized preserved golden shiners has been received from Mr. W. H. Echlin, Conservation Officer, Hersey, Michigan.

In his letter of June 26th Mr. Echlin states regarding these fish: "Today I am forwarding by express charges collect, one sample bait taken from a small lake, and placed in the Hersey River, but a few rods below the McIntyre, water power grist mill, on 6/24th, ins; and found sick and many dead, all dead next a.m."

Mr. Echlin does not state how these fish were confined in the Hersey River, but from the statements made it seems that these fish were taken from a lake, transported to the river and confined there in some kind of a container until they all died.

In the remaining part of the letter he states, "Same date, the enclosed sample of the waters taken about 1/2 mile down stream from the filtering plant and the Creasoting Plant, at Reed City, this County.

"There are suspected Pollution from the Village of Reed City, by the people at Hersey, and Mr. Milo Blanchard, who placed the bait in container is desirious of obtaining the cause. Others are anxious about Sanitary conditions of the Hersey river."

This indicates that pollution is suspected as the possible cause for the death of the fish.

According to Dr. Hubbs this species of shiner is one of the hardiest of the minnows. Examination of the specimens shows that they are all fungused to some extent and large areas of scales are removed. This condition might have been the

cause for the death of the fish. The fungus infestation may have resulted from any one of innumerable causes, among which sudden changes of the amount of oxygen in the water, sudden change of water temperature, and injury are suspected.

On the other hand, we have no reason to state that these fish had not been killed by some pollution in the river. The minnow test of pollution is applied as a routine practice in the pollution investigations in New York state. The fungus on the fish might have developed after death due to some other cause.

Water for analysis cannot be taken and kept any length of time so that there would be no point in analyzing the sample submitted.

CC to Echlin

INSTITUTE FOR FISHERIES Wendell H. Krull Fish Pathologist

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