

May 2, 1932

Report 141

EXAMINATION OF FISH FROM MOUTH OF RIVER ROUGE

(SENT TO THE INSTITUTE BY MR. T. J. POWERS)

On April 26, 1932, thirteen fish, in fresh conditions, were received for examination. The fish were: 1 pike (Seox lucius) 20-3/4 inches long, 1 wall-eye (Stizostedion vitreum) 12-1/2 inches long, and 11 perch (Perca flavescens) 8 to 9 inches long.

These fish were reported to have been easily captured, apparently having been affected by pollution of the water in the River Rouge, near its mouth.

The fish showed no injury, external or internal. The gills were free of debris and were bright red. Examination of the fish gives no clue to the nature of the substance which affected these fish.

The fish were mostly ones that were in breeding condition. The wall-eye was a male, apparently immature, but the others were adults with reproductive organs in breeding condition. The pike (Esox) was a male. One of the perch was a female, distended with nearly ripe eggs. The other perch were males, several of them stripping milt at slight pressure.

Together with any pollution data which the Stream Control Commission may have for the mouth of the River Rouge, this record of breeding fish in this river is interesting. Obviously, these were Lake Erie fish, and the record of ascent of a polluted stream by these fish (two of them important commercial species, and the other one, Esox, of importance as a game fish) is of considerable significance even though no definite information about the nature of the polluting

substance can be derived from examination of the fish.

INSTITUTE FOR FISHERIES RESEARCH

John E. Greeley
Assistant to Director

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Supplement to Report 141

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In further reference to the death of fishes at the mouth of the polluted River Rouge, we received the following letter from Conservation Officer Fred A. Eckhout, dated October 30:

"I have shipped to you express collect this afternoon, one box of fish. These shad were taken at the mouth of the River Rouge, and I believe that the cause of these fish dying the way they are is the same as last year.

"The people in this neighborhood have been picking these fish up by the bushel basket, not only shad but perch, saugers and yellow pickerel.

"I have notified the office in Lansing who will turn it over to pollution division for investigation. If at all possible, I would like to know what is causing this."

The fishes referred to are gizzard shad (Dorosoma cepedianum), which for a year or so has become very abundant in the waters of southeastern Michigan. The specimens were received in good condition, and gave no evidence of death due to disease or injury. Under the circumstances we consider it almost certain that the death was due to pollution, though it is not possible to say whether the pollution was of the oxygen-consuming or the poison type. The gizzard shad is susceptible to changes in water conditions, and heavy mortality is experienced by this species rather frequently.

INSTITUTE FOR FISHERIES RESEARCH

(Signed by) Carl L. Hubbs
Director