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

May 11, 1932

Report 144

ON A SUCKER FROM THE PERE MARQUETTE RIVER, TAKEN ON THE SPAWNING
BEDS OF RAINBOW TROUT

Under date of May 5, the following information and request for report was received, from F. A. Westerman, Fish Division:

"Under separate cover we are shipping you by prepaid express, a sucker preserved in formaldehyde which Chairman, W. H. Loutit brought to the office yesterday, which he advises me was speared on the Pere Marquette River a few days ago.

"Mr. Loutit requests information on two points -

1. Whether the fish was ⁱⁿ a spawning condition or approaching a spawning season,
2. What the stomach contents are.

"He states that the fish was taken on a bed where spawning rainbows were observed. I should be glad to have you report your findings to Mr. Loutit at Grand Haven, sending us a copy of same."

The sucker was received on May 6 and was examined May 11, after my return from a trip to Washington. It was an example of the common sucker, about 18 inches long over all, and representing the race characteristic of the Great Lakes and the larger rivers of the state.

The fish was a mature female. From the size of the eggs, from the fact that some eggs were loose in the jar, and from the enlarged size of the whole ovaries which nearly filled the body cavity, I judge that the fish was either actually in spawning condition, or within a few days thereof.

The gut was fairly well filled behind the rudimentary stomach region. The total quantity of food, measured volumetrically when moist, was 12.3 cc. This shows that female suckers continue to eat when fully ripe, and gives a fair sample of the food, considering the fact that only one specimen was obtained.

An especial search was made through the entire food mass to locate any trout eggs

or remains of them. None were found, not even a trace of anything which could be identified as an egg shell. Therefore, this specimen gives no indication that suckers feed on trout spawn in Michigan streams. This negative evidence is in harmony with other evidence obtained by us to date.

The stomach contents of this sucker consisted, so far as identifiable, of at least 90% insect larvae and pupae (midges, caddis flies, crane flies, mayflies, etc.). A few small clams (Pisidium) were included as well as some sucker eggs and a considerable amount of sand. The insect larvae varied in size from mayflies in an early instar less than 1/8 inch long to crane fly larvae 1 1/2 inches long.

These food items are also eaten by trout. There can be no doubt that suckers and trout compete for food in trout streams.

Whether the benefit suckers furnish trout, in providing fry and fingerlings for trout to eat, offsets this damage can not be answered until a large number of specimens have been studied.

This examination was made and report prepared by the undersigned.

INSTITUTE FOR FISHERIES RESEARCH

Carl L. Hubbs

Carl L. Hubbs
Director.

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FISH DIVISION