

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

RECEIVED
FEB 28 1931
FISH DIVISION

February 26, 1931

Report No. 52

REPORT ON DEATH OF BLUEGILLS IN HANNA LAKE,
KENT CO.

Five bluegills were received fresh February 24, 1931, in good state of preservation for all examinations except the bacteriological. The fish were adults, 6 1/2 to 7 1/2 inches long. The conditions under which the fish were living and died are thus described by Conservation Officer E. H. Wolff who went in the specimens.

"I am today sending you a few specimens of blue gills which I wish you would examine. Will try and give you what information I can about this lake.

"Hanna Lake Sec. 26, Gaines Twnsh'p, Kent Co. About 50 acres. Has spring brook inlet which is small. Outlet does not freeze over and is about 6 ft. wide, 1 ft. deep. The ice on lake is about 10 in. thick. They have cut quite a bit from this lake this year. At the inlet and outlet there are blue gills and speckled bass dead in large numbers. But I saw black bass, Suckers, pike, shiners apparently in good health.

"For the benefit of farmers and those living near this lake wish you would give your opinion on the cause. There are lots of water lilies and other plant life. Lake has mostly mud bottom.

"Any other information you may need I will try to obtain."

Wendell H. Krull, fish pathologist of the Institute examined the fish and reports as follows:

"There were no external lesions on the fish. The gills appeared normal for the state of preservation. No parasites were found in the flesh. A few larval tapeworms

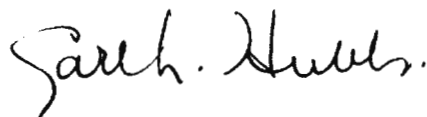
were found in the liver of several specimens. A few trematode cysts (Strigeidae) were present in the heart musculature. A few adult tapeworms were found in the intestine.

"The fish apparently were in splendid physical condition. All available space in the body cavity was filled with fat."

Mr. Krull found no reason for thinking that death was due to disease or to dynamiting. Since Mr. Wolff described the lake as having an abundance of vegetation and a mud bottom, we must suspect the cause of the death to be "winter freezing", that is, suffocation due to the consumption of the dissolved oxygen by the slow decomposition of organic matter in the water over the late winter.

Since Mr. Wolff saw a number of fish swimming about normally, we suspect that the crisis has passed (The dead bluegills may have been killed many days previously). If the death of fish in the lake continues and appears serious, the Institute requests to be notified at once.

INSTITUTE FOR FISHERIES RESEARCH



Carl L. Hubbs

Director

CC to E. H. Wolff, Conservation Officer