

copy to: W. H. Echlin

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

RECEIVED

OCT 22 1930

FISH DIVISION

October 20, 1930

Report No. 31

REPORT ON SIX BROOK TROUT COLLECTED BY MR. W. H. ECHLIN FROM A SMALL
FEEDER STREAM TO MUSKEGON RIVER, HERSEY TOWNSHIP, OSCEOLA COUNTY

On August 2nd, the Institute received the following information regarding the shipment of brook trout for examination as to cause of death: "On the 29th inst. I forwarded by express, charges collect, one can containing six speckled trout to Dr. Carl L. Hubbs, Ann Arbor. These trout were found dead and several more in a small feeder stream to Muskegon River, Hersey Township. I am unable to know what would cause them to die and would like to have the report of findings." This information came from the Department as an extract from a letter of Conservation Officer Echlin of Hersey.

Fish Pathologist W. H. Krull reports: "The six trout in preserving fluid were in a perfect state of preservation when examined indicating that they all died about the same time.

"The size of the trout ranged from 175 mm. to 240 mm. All specimens were females.

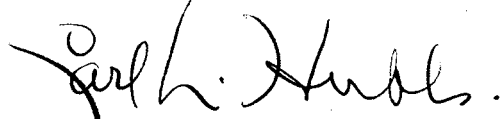
"A complete examination of all six specimens shows no disease as a cause for death. All of them were full of food and there was an abundance of fat around the visceral organs. Swim bladders were intact in all specimens.

"Conditions of the stream from which these fish were taken are not known but the lack of water and the exceedingly high temperatures which have prevailed this summer have

been hard on trout and other fish. From information at hand we conclude that cause of death is an environmental factor rather than disease^m.

The report has been held up pending further word as to conditions in the stream. No such word has been received, so the report is now sent in.

INSTITUTE FOR FISHERIES RESEARCH

A handwritten signature in cursive script that reads "Carl L. Hubbs." The signature is written in dark ink and is positioned above the typed name and title.

Carl L. Hubbs
Director