

*copy to: E. H. Martindale 12-3-36
Homer Murphy 6-18-30
Frank M. Nakara 1-10-35*

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

June 14, 1930

Report No. 15

DEATH OF TROUT IN SILVER CREEK, ALLEGAN COUNTY

On June 2, Harry Plotts, Conservation Officer of Allegan, sent four trout to the Department of Conservation with the following explanation-

"Am sending you today by express 4 trout sent of the 50 I found dead on Silver Creek in Gun Plains township, these fish all died in three days. Am also sending you a sample of the water from same creek. Please give me report as soon as possible if there is anything I can do".

On June 3, Mr. Plotts provided the following further details-

"The trout I sent in to department were from Silver Creek. On the O. D. Bean farm in Section 26. Gun Plains township. They were all found about 1/2 way from mouth to the head waters of the Creek, all in about 1/2 miles and through Muck and Onion fields.

"The small trout were effected as well as large.

"I was there to-day and I find no trout that has died in last few days at all. I will keep very close watch of stream for a few weeks and if any more start to die, I will notify you at once."

The water sample was sent to the Department of Health for analysis, and the four trout arrived on ice in a good state of preservation. We request copy of report on the water analysis, although usually a water condition responsible for death of fishes must be determined by analyses in the field.

The four trout, three brook and one brown, were in external appearance normal

and of satisfactory weight. The gills and flesh also appeared normal. Whether a bacterial disease might have existed could not be determined, because examination for bacteria must be made on the live or very freshly dead fish. The gills, however, did not show an appearance suggestive of any advanced stage of gill disease. Mr. Krull, fish pathologist, considers it improbable that a bacterial disease was the cause of the death.

These trout were carefully gone over in the Parasitology Laboratory of the University, and found to be free of parasites. We conclude that parasitic worms therefore did not cause the death.

It appears probable that the death of these trout was due either to (1) water conditions or to (2) dynamiting.

In favor of the first view, we note Mr. Flott's statement that the fish died in the creek where it flows through muck and onion fields. Any considerable disturbance of the muck bottom or a freshet washing the muck from the fields into the stream, would remove the dissolved oxygen and kill the fish.

In favor of the second view, that dynamite may have caused the death of the trout in Silver Creek, we note that the airbladders of three of the four trout were broken, and the fish were too fresh to expect this to have resulted from decomposition.

In conclusion: our examination points to the possibility of dynamiting being the cause of the death of trout in Silver Creek, Allegan County on June 2, 1930. We are not certain that this was the cause, and consider the removal of dissolved ^{oxygen} ~~oxygen~~ by inwash of muck or disturbance of creek bottom to be a possible cause of the death.

Carl L. Hubbs.
Carl L. Hubbs
Director

Copy to Mr. Harry Plotts
Conservation Officer
Allegan, Michigan

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On June 3, Mr. Plotts provided the following further details:

"The trout I sent in to Department were from Silver Creek, on the O.D.Bean farm in Section 26, Gun Plains Township. They were all found about half way from mouth to the head waters of the creek, all in about 1/2 miles and through muck and onion fields.

The small trout were affected as well as large.

I was there today and I find no trout that has died in last few days at all. I will keep very close watch of stream for a few weeks and if any more start to die I will notify you at once."

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Carl L. Hubbs,
Director- Fisheries Institute.