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DIVISION OF FISHERIES

MICHIGAN DEPARTMENT OF CONSERVATION

COOPERATING WITH THE

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TEMPERATURES AND OTHER OBSERVATIONS ON HOUGHTON CREEK

(TRIB. TO CASS RIVER), T. 11N., R. 8 and 9E.,

TUSCOLA COUNTY, AUGUST 10, 1945

by

Gerald P. Cooper

Stream examined at five stations, by I. A. Rodeheffer and G. P. Cooper. Weather on August 8, 9, and 10 was uniformly clear sky, bright sun and mid-day air temperatures in the high seventies and low eighties.

An interest on the part of the Tuscola County Conservation Club in trout plantings in Houghton Creek is indicated in correspondence by Harry Summers and M. K. Summers and inter-office correspondence between Messrs. Westerman, De Boer, and Stewart. A map of Tuscola County was supplied by Mr. Harry Summers showing that portion of Houghton Creek, in T. 11N., R. 9E., Sec. 20 and 21, which he believed to be potentially good trout water. We interviewed Mr. Summers after examining the stream.

The locations of our five stations examined, numbered consecutively downstream, were as follows:

Station 1. T. 11N., R. 9E., in the S.E. corner of Section 15.

Station 2. T. 11N., R. 9E., in the N.W. corner of Section 21, just above gravel-washing pit.

Station 3. T. 11N., R. 9E., in the N.E. corner of Section 20, just below gravel-washing pit.

Station 4. T. 11N., R. 9E., in the west central part of Section 17.

Station 5. T. 11N., R. 8E., in the N.E. corner of Section 12.

The temperatures and other records at these five stations were as follows:

Station	Time	Air ° F.	Water ° F.	Flow	Turbidity	Other observations
1	5:30 P.M.	82	66	25 g.p.m.	clear	3-5' wide, heavy cover, too small to provide trout fishing.
2	5:00 P.M.	82	71	1 c.f.s.	clear	5-8' wide, stream has been dredged, fair habitat for fish.
3	5:15 P.M.	82	74	1 1/2 c.f.s.	very turbid	stream dredged, poor habitat for fish.
4	4:30 P.M.	83	73	2 c.f.s.	slightly turbid	4-8' wide; pools, cover and shade fair
5	4:20 P.M.	83	70	3 c.f.s.	slightly turbid	8-25' wide, pools and cover good.

On the west side of the Leix road, in the N.E. corner of Section 20 (Stations 2 and 3) there was a gravel-washing unit in operation. This unit was excavating gravel from a pond located on the course of Houghton Creek, and was using pond water in its washing operations. The pond was about five acres in area. Houghton Creek as it entered the pond was clear water. Where it left the pond the water was very turbid, quite milky in appearance and foamy on the surface.

In the N.E. corner of Section 12 the stream runs through a gravel pit region and through sparsely wooded pastures. In the pasture area the stream banks are badly eroded.

From the water temperatures obtained on August 10, 1945 at prevailing air temperatures in the low eighties, it is concluded that during exceptionally hot weather (air temperatures in the nineties) the water temperatures at stations 2 to 5 would be in the high seventies, or over eighty in some instances.

The stream in section 15 (T. 11N., R. 9W.) and above is cold enough to support trout but is too small to provide trout fishing. In Sections

21 and 20 it is partly dredged, very turbid below the gravel operations, and too warm for trout. In Section 17 and below, it is judged to be no better than marginal trout water. Most of the stream, except the headwaters, is badly abused from the standpoint of good trout waters, by dredging, gravel operations, and pasturing.

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