

Original: Fish Division

cc: Education-Game

Mr. Milton Adams

Mr. Stanley Shust

Mr. Fred Owens

INSTITUTE FOR FISHERIES RESEARCH Mr. Henry E. Jacobson, Munising

Institute for Fisheries Res.

DIVISION OF FISHERIES

MICHIGAN DEPARTMENT OF CONSERVATION

COOPERATING WITH THE

UNIVERSITY OF MICHIGAN

ALBERT S. HAZZARD, PH.D.
DIRECTOR

gsk

November 20, 1944

ADDRESS
UNIVERSITY MUSEUMS ANNEX
ANN ARBOR, MICHIGAN

REPORT NO. 968

INVESTIGATION OF MUNISING TROUT CLUB PONDS

by

A. S. Hazzard

At the request of Milton P. Adams, Executive Secretary and Engineer of the State Stream Control Commission, a brief investigation was made of the ponds on the headwaters of Wagner Creek in the vicinity of Wetmore. This investigation was made on September 7, 1944 by Mr. Stanley Shust, State Regional Fisheries Supervisor, Mr. Fred Owens, Foreman of the Marquette State Fish Hatchery, and the writer. We were accompanied by Mr. Henry E. Jacobson, Secretary, and several other members of the Munising Trout Club.

A loss of trout and a decline in trout fishing following the construction of Federal/^{Forest} Highway No. 13 was reported by the Munising Trout Club, which owns the ponds. It is claimed that the heavy road fill at the head of the upper pond caused the pond bottom to rise, thereby decreasing the depth of the pond greatly at this point. Also that this fill sealed off the flow of a number of springs entering the pond and that the culvert under the road fill periodically plugs with sand and prevents the direct flow of the inlet stream into the pond. Both the Munising Trout Club and a Mr. Schmidt, who owns a small pond immediately downstream from the Club ponds, claim that the flow of Wagner Creek has been diminished because of the highway fill and that as a result their fishing has been adversely affected. A heavy loss of brook trout, presumably from disease and parasites,

is said to have occurred both in the Club ponds and in Mr. Schmidt's pond this past summer. The loss was especially severe in Schmidt's pond, where the owner reported the death of sixty or more ten- to twelve-inch brook trout. Mr. Jacobson stated that they had noted some loss of trout in their ponds the preceding year and that Mr. Russell Robertson, then in charge of the state hatchery at Marquette, had examined the fish and stated that death was due to furunculosis. He also pointed out the presence of gill lice. Mr. Jacobson stated that the Club had that year for the first time purchased and planted brook trout in their ponds. These fish were secured from Lindahl Bros. of Iron River. Up to the time of this planting gill lice were not present on brook trout in these ponds and no disease had been observed.

The ponds referred to are located on upper Wagner Creek in Section 13 of T. 46 N., R. 19 W., Alger County, close to the village of Wetmore. They are said to have been built about forty years ago, presumably in connection with lumbering operations. The Club has three ponds of several acres each extending from Federal Highway No. 13 to the railroad fill just west of the Wetmore railway station. Mr. Schmidt's pond of about three acres is immediately below the railroad fill. There are no screens in any of the ponds at present. Mr. Schmidt has a metal pipe at his dam which he claims functions as a fish ladder, but it would seem that the installation of several step pools at the dam would be more permanent and efficient. The head of his dam is about three feet and the flow at the low water stage (when examined) was estimated at from 3 to 4 c.f.s.

The source of the east pond of the Club is Wagner Creek, which is said to originate in large springs two or three hundred yards above the highway culvert. The flow at this point was estimated at about $1\frac{1}{2}$ c.f.s. but because of the strong west wind blowing at the time water was backed up almost to the top of the culvert so that little current was evident below

the fill.

It is evident that considerable spring water must be added in passage through the ponds as the flow at the outlet of Schmidt's pond appeared to be at least double that at the upper culvert. Since the weather was unseasonably cold, no water temperatures were taken since they would have no significance. Considering the volume of spring water, it is unlikely that this would be a factor, but it is planned to make a check on temperatures next year when in this vicinity.

The Munising Trout Club maintains a membership of 15 and took about 200 trout from their ponds this past year. Their limit is 10 fish per day 8 inches or larger. Most of the fishing is with artificial flies. Fishing is said to have been poorer this year than ever before. The Club has controlled the ponds for about ten years. Up till about three or four years ago the annual catch was estimated to have been from 12 to 15 hundred trout. Apparently no planting was done prior to 1943.

While it is conceivable that construction of the highway fill may have decreased the depth of the upper end of the upper pond and may have affected the flow of the water, this may be difficult to prove. Also if the flow has been decreased dilution of domestic wastes presumed to enter the ponds from several dwellings on the outskirts of Wetmore would be less. Reports of contamination described by Mr. Jacobson in his letter to Mr. Adams dated August 10 indicate that some sewage reaches the stream. While this renders the water unsafe for human consumption, it is doubtful if there is sufficient pollution at this point to affect the fish carrying capacity. Further, if the flow has been markedly decreased, water temperatures might be raised to a point where trout might suffer, especially in the lower ponds.

Considering the evidence available, it seems likely that planting diseased and parasitized fish was responsible for the fish losses reported and the decline in fishing at least during the past two years. The gill louse cannot be eliminated short of complete destruction of the entire trout population in the stream system and the same is probably true of furunculosis although epidemics of this disease in natural waters in this country are usually of short duration, and while the disease may persist heavy losses do not occur every year. The danger of planting diseased or parasitized fish is emphasized by this investigation.

INSTITUTE FOR FISHERIES RESEARCH

By A. S. Hazzard

Report typed by V. M. Andres