

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

October 21, 1930

Report No. 33

RECEIVED

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FISH DIVISION

PROGRESS REPORT ON RESNAGGING INVESTIGATIONS

(Subsequent to Report 22)

I

It is a pleasure to report a very successful beginning on our resnagging investigations. This has been made possible by the cooperation of the Department and the Institute in the work on the Little Manistee. Two hundred barriers of various types, designed to shed light on the most practical and effective types to install under different conditions of stream and available material, were installed. These were carefully listed, annotated and copper-tagged for later identification as the effects of the barriers on the stream and on the fish supply ~~was~~ observed from year to year. Records were also made of the snags put in by Dr. Metzelaar, and these and a considerable number of natural barriers were carefully annotated and tagged. Altogether 500 barriers on the Little Manistee were so treated.

Some study of the barriers was made during the course of the work. Certain types set at certain angles seemed to produce maximum scouring of the bottom. It was observed that several desirable changes could be made in the stream by a single barrier properly placed: (1) a deep hole against the bank below the barrier; (2) a riffle in the tail run between barrier and hole; (3) a well-covered hole below the snag; (4) a sand and silt bar below the snag, which we expect will often permit a weed bed to form. When we consider how trout tend to live in and near a hole, how they feed

on the gravel riffles (about 8 times as productive of food as bare sand), how the young feed in weed beds and find shelter there (weed beds are about 20 times as productive of food as bare sand), we can hold high hopes for the probable success of the resnagging work. However, it is very important that we maintain a critical attitude toward the work until the evidence is well in hand.

II

Some correspondence has been had with Mr. Edw. D. Magoon of Muskegon, regarding some resnagging which the folks up that way, especially at Honor, plan to do in the Platte. We hope that something can be done there this fall, and would urge the Department to look favorably on the proposal, because we wish to have barriers under observation on several streams during the next three or more years.

Mr. Magoon states that it is expected that Officer Joslyn of Honor will participate in the resnagging if it is done. Perhaps you will care to inform Mr. Joslyn of our interest in the problem, and of the need for keeping an accurate record of the number, location and type of barriers put in.

Probably one of our men would be able to check over the work and number the barriers after the work is completed or well along.

III

Our man assigned this problem, Mr. Clarence Tarzwell, is now studying the Huron River to determine what we may be able to do with a bass stream of moderate size and current and hard bottom: a tougher proposition than modifying a trout stream.

IV

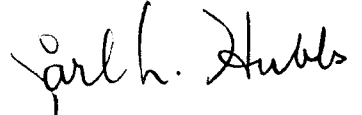
Arrangements are being made to have some resnagging work done next year on the Black and its East Branch, on the Black River Ranch. This work will be done at private expense. An especial advantage will be the opportunity to do this work on closely controlled property, where a full and detailed record of trout catch is promised, by the

actual portion of the stream fished. An airplane map of the stream, which the Ranch has had made, will also be of much advantage.

V

It is our hope also to place next year some experimental barriers in a fairly large, swift, shallow, stony stream. The ideal place for that work would probably be on the Pigeon River State Forest. Some discussions with Mr. Lovejoy indicate the probability that we will be on that stream also some time next summer.

INSTITUTE FOR FISHERIES RESEARCH



Carl L. Hubbs
Director

October 21, 1930

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Progress Report On Resnagging Investigations

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(s) Carl L. Hubbs

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