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

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Report 22

PRELIMINARY REPORT ON RESNAGGING INVESTIGATIONS

FOR THE SUMMER OF 1930

The memorandum of Mr. Westerman regarding re-snagging in the Little Manistee
River is at hand. I have meant for some time to discuss this matter with you. Like
so many of these suggestions, that of resnagging is promising but unproven, as
to efficacy or practicability. That is the sort of question we want to go into in
our Institute work. Of course the actual large-scale resnagging is not our
business, but we wish to keep any resnagging that is being done under close observation
so as to carefully test the measure of success obtained per dollar of effort.

Offhand, on the basis of our general knowledge of trout habits, we all believe that resmagging of many Michigan streams is desirable, needed and feasible. However that is an offhand guess, which we want to be able to replace with real solid evidence.

From our standpoint, we urge that some stream of fair size in Michigan be thoroughly resnagged this summer, and that our man assigned this problem. Charence Tarzwell, keep the operations under observation—under the immediate field direction of Dr. Greeley.

Chairman Loutit has we know, also urged that such resnagging be done on the Pigeon. It would be much more convenient for us if this work is done on the Little Manistee, or better yet in the Pere Marquette system. However, the Little

Manistee, is within reach, and we could eliminate some of the Pere Marquette territory in order to keep tab on the Little Manistee. We ought to go into the stream before snagging is done to check quantitatively on the abundance of trout before resnagging so as to measure the effect of resnagging on the trout population. You see what we want to do, is to make out of this actual resnagging operation an experiment, without materially interfering with the progress of the work and without materially increasing the cost.

We would appreciate the opportunity of having Knowles or Whitman, or whoever does the work, put in perhaps a fourth of the Earriers according to our suggestions, so as to get a better check on the proper and practical type of construction.

Our idea of the proper course to follow now would be then (1) to have portions of a stream, likely the Little Manistee, resnagged by the Department under the supervision of one of the officers who has had practical experience in such work before, (2) to make an estimate of the abundance of trout in the stream before the barriers are put in, or during this work, both in the stretches to be resnagged and in those to be left open, (3) to make an accurate map and description of the barriers put in; (4) to return at intervals to see what barriers hold, what they do to the stream bottom, and how they affect the trout population; also whether large holes allow pike to work into the thout waters.

As a "control" on the effect of resnagging, it is of very high importance that some stretches of the stream, as similar as possible to those resnagged, be left open. It would be possible to select such areas I suppose where material for resnagging would be more difficult or expensive to get into the stream. We think there would be no particular difficulty in agreeing on such areas to be left unsnagged, but we would like to have our men consulted in making the decision.

We need hardly mention, I suppose, the importance of keeping an accurate check on the full expense incurred in the resnagging operations.

As the summer is well advanced, and since Dr. Greeley's time in the field will be limited, we urge that this work be undertaken very soon .

Carl L. Hubbs