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FISH DIVISION Report 143

REPORT ON CHECKING OF THE IMPROVEMENT WORK IN THE EAST BRANCH
OF THE BLACK RIVER

By Clarence Tarzwell

On April 15th I examined the improvement work which had been done in the East Branch of the Black River during the summer of 1931. This was merely a hurried survey to determine the effect of the winter floods and the ice if there had been any.

The past winter was a poor one from the standpoint of testing the resistance of the improvements to ice action. It was very open and there was little ice.

There were, however, several high floods, both natural and artificial. The barriers were therefore subjected to good flood tests.

I began at the upper dam and walked down through the improved sections. As a whole the devices are in good shape. They have held well and have done good work. Pools have been made where there were nown before and mud flats have started behind the wings. Plant beds should start on these.

Those below the upper dam have converted that shallow section into a good stretch for trout. In places 2 1/2 feet of gravel has been removed to form nice pools where before there was only flat shallow stretches.

Farther below in the sand section the barriers have uncovered stretches of gravel and piled the sand in bars below. This should materially help the food conditions and make the section more suitable for trout. In my insect counts last summer I found this section to be very barren of trout food. In fact there was absolutely

nothing except close to the banks. Since sand can be removed more easily than gravel 4 ft. pools in this section are not uncommon.

All the barriers in this section between the two dams have remained in place although some of them have been damaged. These should be repaired. Those in need of repair in this section are numbers 588, 597, 616, 622 and 624. All the barriers have formed pools, but the following have formed pools 4 ft. deep or more-585,595, 597 and 598.

Most of the improvement devices are located in the section between the lower dam and the Farm. In the upper part of the section the bottom is very hard and the pools that have been formed are not so deep. Some digging has been done and some deep holes have formed. In the hard bottom it takes longer to form pools. The current has been accelerated however and the stream has been generally improved. Farther down where the bottom is not so hard, good pools have formed. Dark material has collected below the barriers where the water is still. Besides offering a favorable home for certain insects this region forms a suitable place for plants.

Of the constructions put in by Mr. Webster one has formed an excellent pool.

Another has been used by beaver for the constructions of dam. The water has gone under it and has a hole dug about 5 ft. deep. Another is damaged and one stump has gone out.

Of those which I constructed in this section only two have been damaged and only one has gone out. The one that went out was constructed of stumps. These have floated down and caught on the barriers below. This makes the river rather unsightly and they should be removed to another place. Many have caught on the V-type number 557 and have blacked the channel. These should be removed before the barrier is damaged.

I did not check all the constructions below the Farm since the water is too deep in that section.

As a whole the river looks very much better. Considering that only one

barrier went out I believe the work can be considered as successful, from the standpoint of permanence.

Some fish have spawned last fall as I saw a number of fry while walking the river. They were along the sides and in the spring feeders.

This was just a hurried survey to see the work of the winter. In June I would like to go over the whole improvement work carefully and measure depths and take other data. I should be glad to supervise the repairing of the barriers at that time if it is not done before.

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