

In reference to the Miramichi hatchery, I claim it would be unfair to condemn it yet, as sufficient time has not elapsed to provide an increase for the fishery. That establishment was opened in 1873, yet nothing was accomplished until the spring of 1877, when 400,000 fry were turned out in a number of rivers in the vicinity. These were four years old last spring, and would weigh five or six pounds, not more, I am certain, as the fully matured fish in that river average but ten pounds. Now the fishermen there use nets of 6 or 6½ inch mesh, intended to catch fish weighing ten pounds or over, and any fisherman knows that the chances of taking a five pound fish in these nets are not greater than 1 in 20; therefore, I contend that if a large proportion of 400,000 fry, turned out in the spring of 1877, had lived and returned to that river last season, the catch by the fishermen would not have shown the extent of the increase, as the result of the labour of 1877, nor can next year's catch be expected to show any very marked increase.

Having thus far attempted to show what I consider just cause why the expected increase of salmon has not taken place in the other Provinces, I beg to offer some statements in connection with my operations in Nova Scotia, and I am happy to say I can state indisputable facts showing a considerable increase of salmon at the very first moment when such increase could have been expected.

To fully enable you to understand the case, I must first inform you that River Philip, in Cumberland County, is the chief point for the collection of ova; to obtain ova I must secure the spawning fish while ascending the river; for this purpose nets are set in a large pool at the foot of a dam. This dam is an impassible barrier to salmon, and is situated about 1½ miles above the head of the tide. Now every salmon that enters that river, if it escapes poachers nets below, will first run up this pool and lie there until its ova are matured, when it will drop down to the rapids below and deposit its ova, as the nets are set as soon as the first run enters the river, and continue set until the close of the season. Very few salmon escape them, and such has been the case every season since 1875, consequently the natural reproduction in that river has been almost entirely stopped by these operations, and any increase of salmon that may have taken place in River Philip must have been caused by means other than that of natural reproduction. The first hatching at this establishment took place in the spring of 1876, when 140,000 fry were placed in River Philip; these would be five years old last spring, and should have returned to the river last fall to deposit ova. The catch of spawning fish for the preceding six years averaged 100 per year, while the number caught last season 232, or an increase of 132 over the average; of this number over 100 were young fish of from 8 to 12 pounds in weight; or fish of five years old, showing that the increase was almost entirely in young fish, and for the reasons given above could have come from no other cause than from the planting of young fry in that river in 1876. In addition to those captured, large quantities of smaller salmon, probably three or four year old fish, were seen in the river.

The above statements can be substantiated by numbers living in the vicinity, and a large increase is looked for next season by all concerned. I have no doubt as great an increase has taken place in other rivers which I have restocked, but not having as favourable opportunities for testing the matter, as offered itself in River Philip, I am unable to speak positively regarding them.

In conclusion, I beg to state that in Nova Scotia fish-breeding in the course of two or three years will begin to show itself upon the fisheries; but before we can accomplish all that may be desired in that respect, more hatcheries will be necessary, and the work carried out on a much larger scale than the present.

I have the honor to be, Sir,

Your obedient servant,

A. B. WILMOT,

*Officer in charge, Bedford Hatchery.*