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March 8th 1906.

Mr John P. Babcock,

Victoria, B.C.

Dear Mr Babcock:-

I am in receipt of your favor of the 7th inst., and enclose herewith the table you asked for showing the proportion of sockeye pack obtained on the Fraser and on Puget Sound respectively. If it does not cover what you desire I will be pleased to further supplement it if possible.

While I have the figures to show that the appliances for taking the fish have increased very materially since 1892, and especially since 1894, my studies have led me to the conclusion that such increase has but very little surpassed the increase that has occurred in the number of fish available. In other words in proportion to the supply the fishing of the earlier years was as much of a drain, but just at the time that this would have become noticeable, the hatchery came to the rescue and by enormously increasing the supply gave rise to the erroneous opinion that the supply had always been big.

My opinion is that the percentage of hatchery raised fry that attain to maturity and return to their native stream, is much larger than people have credited. In 1900 for the first time since 1885 there was no hatchery output, and this considered in conjunction with the falling off in the 1904 pack, I look upon as confirmation of my theory. I would not have it thought that to the hatchery output of any one year do I look for all of the pack of the fourth year following, but I do consider that practically all of our packs since 1898, and perhaps since 1894, can be credited directly or indirectly, to artificial propagation.

If for example, a stream originally is good for say, 100,000 fish annually on an average, and you supplement the natural production by planting 1,000,000 fry. Of the run returning to that particular district we will assume that all but 250,000 perish either by natural destructive agencies or by commercial fishing. Allowing that of this number as many as 50,000 were taken for use in the hatcheries, there would still remain for natural spawning purposes an increase in number over the original quantity of 100%. In consequence four years later you would have to figure on the original number, plus the hatchery output, and plus the progeny of the increased supply of natural spawners for which the first season's hatchery operations had been responsible. It is to these three sources of supply that I attribute the large runs of the Fraser since 1894, and as all the hatchery fry were liberated in the Harrison Lake district, I look for no increase in any other district - closed seasons or no closed seasons - until such time as those other districts are like the Harrison built up by artificial means. To my mind the only way this is to be done is by establishing egg-taking stations in the Harrison district, and supplying the take to hatcheries located in the depleted sections.

Roughly speaking the above is my idea of the question, and as you can readily understand it requires more than a bare outline to enable one to fully grasp the idea. The data on which I founded my conclusions is a very convincing argument, and it is this I hope to go into with you when you visit this city next.

Very sincerely

Henry Doyle

