

in lieu of the temporary appliance used there last season, would extend the field of operations from this hatchery very materially, and would enable me to reach some very fine streams and lakes in those counties.

I may be permitted to say that the work of artificial fish-culture, as prosecuted in this Province, and although very satisfactory results have already been produced by it, is on too limited a scale to sufficiently affect and further materially the increase of fish.

There can be no doubt existing in the mind of any unprejudiced person who has studied the salmon fishery statistics for the last twenty years that our present supply of salmon is largely maintained through artificial culture. The continual decline in that fishery from 1870 to 1881 shows that unaided the natural production of salmon was insufficient to prevent the continuous decline in the annual catch, and it is also apparent that had no means been introduced to augment the production of young fry that this gradual depletion would have continued until the supply was entirely exhausted.

The beneficial effects of fish-culture began to appear in 1882, and, as is shown by the returns, a constantly increasing catch is reported up to 1887, since which date no further increase has taken place. This may be considered as an evidence that, with the present hatching and producing capacity of the appliances now in use in this Province, the full capacity of our hatchery has been reached, and that without additional efforts are put forth and more hatcheries erected no particular increase in the present annual catch can be expected.

Collection of Ova.

In undertaking this part of my work this season, and guided by my experience of past years, I decided to utilize the Musquodoboit River, in Halifax County, and the West River, in Pictou County, and applied to your Department for permission to do so. On the Musquodoboit River I had in part the necessary appliances for prosecuting the work, and my experience of past years on that stream led me to expect a good catch of spawning fish; but unfortunately for me, heavy freshets set in in August, and enabled the greater portion of the run to enter the river at that time, and previous to my commencing operations.

It has been my practice to commence fishing on this stream each year on or about the 1st of September, and when favourable conditions were met with large catches were made. This season the conditions were unfavourable, and resulted in securing but 57 salmon, as against a catch last year of 270.

On the West River, also, unfavourable conditions were experienced, and the catch was but 10 fish, as against 67 last year.

An attempt was made to secure a portion of my supply from Wallace River, and very good success was obtained in securing the spawning fish; but unfortunately, through the acts of some interested persons living upon this river, I was not permitted to collect the ova. The fish were caught at and below Rhinduss' dam, which crosses this river at the head of tide, and were retained in a tank or creel moored in the pond. In this tank were confined 54 of the largest salmon I have ever taken in this Province, and from which I expected to secure 500,000 ova. The particulars of the raid made upon the works, and the destruction of the appliances, and carrying away of the fish, having been already reported to the Department, it will be unnecessary to repeat them here. The loss of these fish occurred at the end of the fishing season, and I was consequently unable to make good this loss by further fishing.

The result of my efforts to obtain a stock of ova for this season's operations was most unsatisfactory and discouraging, and leads me to the conclusion that some more certain means must be adopted in future for this purpose. Whatever system may be introduced, its most essential principle must be the prosecution of the work on such a basis that it will no longer be subject to the ignorant prejudices and depredations of the fishermen living along the streams upon which we operate. But two plans present themselves to me at present—either buy the fish from the net