

brought to the front for sale, having been caught through the ice.

The above may be considered by many as too glowing an account of the abundance of our fish in years past; the statements are however, quite within the mark, and I feel confident that there are hundreds of people who will corroborate every statement made.

Now let us contrast the past with the present. To see a salmon in any of our creeks now-a-days is considered quite a wonder, though there are two small creeks to my knowledge about eighteen miles equidistant from Port Hope, where some few salmon still come to deposit their ova, and which might yet be made the nucleus to propagate largely from. Our white-fish are almost exterminated; our salmon trout are becoming scarce; the maskinonge and bass are fast disappearing in our back lakes; in fact all of our valuable fish in this section of the Province are being rapidly destroyed, and will in a short time become extinct. Is not this indeed a sorry picture to look upon, so far as our fish and fisheries are concerned? Has not the time arrived when some effort should be made either by Government or the Fisheries Department to protect and reproduce in our waters these valuable fish, which but a few years ago were so plentiful? It certainly has, and no time should be lost by the proper authorities in endeavouring to carry out so desirable an object.

Do we not find in Great Britain that where rivers and waters had almost become barren of fish, that by proper culture they are now being replenished, and are becoming great sources of wealth. In France, we find an example worthy to be followed by every other country in the science of Pisciculture. She has so encouraged the artificial propagation of fish of all kinds, that her lakes, rivers, and streams, at one time almost depopulated, have now become replete with a cheap and wholesome food for her inhabitants. From the above facts, which are undeniable, why should we as Canadians remain longer dormant on so important a work. Agriculture receives aid and encouragement to produce wealth from our lands, why should not water culture receive similar aid in order to produce wealth from our waters."

Mr. F. W. G. Austin, of Quebec, in the same Journal, refers to the pleasing fact of Mr. Wilmot's success in hatching so large a per centage of young salmon, but asks:—

"In the present state of our fishery laws, how are these young fish to get to the sea, and back again as grilse? They are certain to be destroyed by the brush weirs on their way down to the salt water; and even should they escape these engines in their descent they run a double risk of being destroyed on their way back again, either from these weirs or from the stake nets planted on the shores of the St. Lawrence. These nets are of the most formidable kind, and are planted on both shores, from high to below low water mark, in the very course of the fish. It is these engines which have aided in destroying the salmon fisheries of the Province, and which nearly destroyed the same fisheries in England, Ireland, and Scotland, where they are now abolished by statute, and until our land is assimilated to that of England on this subject,

the rearing of salmon or migratory fish is an utter impossibility, as any one holding a few acres of beach in the tidal portion of the shore of the St. Lawrence can stop, by the standing weirs and nets, all the fish produced in the rivers above him. This subject has given rise to more controversy than any other connected with the fisheries. Representations upon this very topic were made to the Commissioner of the Crown Lands while his last Fishery Act was held over for suggestions to improve the measure. I addressed him a pamphlet myself, pointing out the incongruity of affecting to develop the fisheries, and at the same time destroying the fish by the fixed nets, which prevented them from returning in sufficient numbers to their breeding grounds and native rivers. The language of British economists is emphatic on this head; Sir William Jardine asserts *'that these engines are opposed to the whole aim and spirit of the fishing laws.'* Sir Humphrey Davy gives his opinion in the following terms:—As all salmon and salmon-trout return to their native rivers, so 'stake net' fishing ought to be abolished * * Salmon do not go far out into the sea, and always return along the coast, scenting out, as it were, their own river." Major King also alludes to the necessity of the complete removal from the shores of the St. Lawrence of all standing weirs and nets, as they hitherto, greatly impeded fish ascending and descending the river.—(page 260.)

The ova of salmon are only fecundated after leaving the parent fish, and this fecundation may be affected not only by the milt of the full grown male, but also by that of the grilse and the parr. About one half of the ova hatched become smelts and descend to the sea during the first year of their hatching, they remain in their nursery until the third year before they are ready to migrate. Salmon ova are never hatched in the sea, nor parr live in the salt water before assuming the smelt stage. All the smelts that have migrated to the sea, do not return the same year to their native river as grilse, one half return the next year as small salmon. It appears to be the law of these fish to descend to and return from the sea by double or divided migrations. The course of the salmon to and from the sea is always along the coast or shore where they find their food, and at the same time avoid more powerful enemies.—(Brown's Natural History of the Salmon.)

The report of the "Fish and Game Protection Club" for Lower Canada, recently submitted, shows the importance of the salmon fisheries, and the destructive nature of the "stake nets" and other obstructions. The report says:—

"The salmon fisheries protected by successive Commissioners of Crown Lands for the last nine years, yielded in 1865, with the use of 41,032 fathoms of fixed nets, salmon valued at \$22,971.

The diminutive rivers of Britain, from which these engines were excluded a few years ago, produced at the close of last season a supply of the same fish, valued at \$3,942,000.

Although these figures prove at a glance the practical nature of the views long advocated by this Club, your Committee wish to show the effect of Canadian stake nets upon the rivers of Canada, derived from the returns lodged at the close of each