

with a small spring of water conducted through his dwelling-house, the object at the time being to obtain practical knowledge concerning the habits of the salmon and their modes of reproduction.

The first experiment tried was by collecting a few hundred eggs from the bed of a creek, where a few odd salmon were yet found to enter. These ova were transferred to the cellar of the house, where a small stream of water was made to pass through a trough in which gravel was placed, to represent as nearly as possible the bed of the natural stream. The experiments proving satisfactory, were continued the following years, and were brought to the notice of the Commissioner of Crown Lands, under whose jurisdiction the fisheries interests of the country were managed. By this means, aided by the active co-operation of Mr. Whitcher, the chief officer of the Fisheries branch, artificial fish-culture became recognized as deserving of some public aid to assist in enlarging the experiments already begun by private enterprise.

This novel work was then pursued more extensively, and in 1869 additional aid was granted, and the results of the experiments proved to be of a very satisfactory character. This year the Government appointed a special Commission to investigate and report upon the work of artificial fish culture as carried on at Newcastle in Ontario. Mr. Whitcher, Commissioner of Fisheries, and Mr. Venning, Inspector Fisheries for New Brunswick and Nova Scotia, were commissioned to visit the establishment, and after a minute inspection and close investigation into all matters connected with the industry, reported favorably, as will be seen by reference to their report published in the Marine and Fisheries Report for the year 1869 (page 66, Fisheries appendices). Messrs. Whitcher and Venning, having dealt with the subject intelligently and in a practical manner, concluded their remarks as follows:—“We cannot close this brief report without bearing cheerful witness to the untiring zeal, practical intelligence and ingenious industry which has enabled Mr. Wilmot to surmount difficulties and brave discouragements necessarily attending the experiments which he has so persistently pursued to a successful conclusion; and we beg leave respectfully to commend his interesting and useful labors—promising extensive benefit to our fishery interests—to such substantial recognition on the part of the Government as they deserve.”

From this period artificial fish-breeding made rapid progress, being vigorously applied in a practical way under the directions of the Fisheries Department to other portions of the Dominion. In 1873, two establishments were built, one on the Miramichi River, in New Brunswick, the other on the Restigouche River, for the joint interests of the Provinces of New Brunswick and Quebec. This latter institution was largely supplemented with funds for its construction by the Salmon Angling Lessees of the Restigouche River and its tributaries. In 1874 two more nurseries were erected at Gaspé and Tadoussac, in Quebec; and in 1875 a salmon hatchery was established at Bedford, in Nova Scotia; and a whitefish nursery at Sandwich, in Ontario. During 1879 two more fish-breeding nurseries were erected, one on the Dunk River, in Prince Edward Island, the other on the St. John River, New Brunswick; thus making in all nine institutions established for the artificial propagation of fish since the public recognition of this new industry in Canada in 1868.

The establishments at Tadoussac, Gaspé, Restigouche, Miramichi, Bedford, Dunk River, P.E.I., and St. John River, N.B., are at present used wholly for the breeding of salmon. The hatchery at Sandwich, in Ontario, has thus far been devoted expressly to the rearing of whitefish; but experiments are now going on for the first time with the view of propagating the large pickerel or doré of the great lakes. Several millions of these eggs have already been placed in the incubators at Sandwich, in order to test the practicability of producing this fish by the methods of artificial breeding. The Newcastle nursery in Ontario, being the original or experimental establishment, is devoted to the rearing of all such fish as may be considered of importance to the commercial interests of the country.

The origin of the Newcastle establishment was for instituting experiments in the artificial propagation of salmon, with the view to their practical application after-