

tried during the past season to grow these fish in a pond connected with this hatchery. So far it has proved fairly well; some speckled and California trout have now been in it about a year and have thriven very well, but, from the high temperature of the water in the summer months, it is a question, as the trout grow older, whether they will obtain a sufficiently healthy development to produce sound, fruitful eggs. Another year will solve the question.

The several fish ponds, since their deepening and cleansing, give marked evidence of their greater purity of water and adaptability for growing certain kinds of fish, like bass and carp, and some of them may prove suitable for the growth of trout, as the latter, in some instances, have, during the past season, reached some ten inches in length. The ponds are well adapted for rearing black bass, as a very large number of fry were bred in them the past summer and a fair stock of adult bass are in them at present.

The main dam, enclosing the water supply for the hatchery as well as the race-way, is in a very safe condition; its present appearance for strength and durability would indicate no expenditure being required upon it for some time to come.

The supplies of ova collected last autumn for the wants of this parent institution and for sending quota of eyed eggs from it to the Maritime Province hatcheries are considerably short of other years, the gross number amounting to some 5,800,000 as against 9,000,000 and upward in 1887. The severity of the weather experienced in collecting eggs at Pigeon Island in Lake Ontario and in the Georgian Bay, together with a reduced number of parent fish being captured at these points, caused this short crop of eggs. A diary of the proceedings at Wiarton in collecting eggs will be found in the Newcastle report, and will also show the comparative falling off, as between 2,940 mother fish in 1887 and only 1,690 in 1888, a decrease of 1,250 females to get eggs from in 1888.

It is most desirable that some first-class fishing station should be taken possession of by the Department for the exclusive purpose of capturing parent fish to stock the hatcheries with full supplies of eggs. The experience of the last year has shown that a fishing station occupied by pound-nets during the whole (open) season will have so thinned out the numbers of mother fish that would otherwise be found on the spawning grounds during the (close) season of November that such a fishing station is made inadequate to supply the necessary quota of eggs for the now extended operations at Newcastle, or by which this hatchery can possibly transfer to the Maritime Province nurseries the quantities of eyed eggs necessary to fill their wants. This want will be felt in a larger degree the coming season, and as this demand for introducing the more important commercial fishes, inhabitants of the great lake region of the west, into the numerous fresh water areas of the Lower Provinces, is greatly on the increase, it is essentially necessary that timely efforts should be put forth to accomplish this most desirable end.

In view of this growing demand for supplies of salmon-trout eggs, and finding that the Colpoys Bay fishery had proved to be too limited to furnish adequate numbers of ova, Mr. Charles Wilmot, whose special work has been, for years past, to collect these eggs, was directed to look out for more capacious limits on which salmon-trout congregate for spawning purposes, and he reports that extensive breeding grounds of these fish are to be found around Hay, White Cloud and Griffith Islands, just outside the entrance to Colpoys Bay. The fisheries about these islands are occupied, more or less, by the Indians and are regulated by the Indian Department at Ottawa, with which satisfactory arrangements, no doubt, could be made. Chief McGregor, of the Indian tribe on the above-named islands, has already expressed his willingness to allow the work of gathering fish-eggs to be carried out there.

The condition of the eggs in this hatchery has given great anxiety and caused much additional labor and attention to be given to them, by reason of the unusually open and rainy weather which has prevailed from the time of laying them down, and all through the month of December, causing large quantities of sedimentary matter to settle upon the eggs, which is very injurious to the ova. This must be removed, and in the constant cleansing of the eggs from this filthy matter, numbers