

caught until about the middle of the month; between that and the middle of October a number were taken, and everything promised an abundant supply, as salmon were very plentiful below the nets. The fall rains were very heavy and the rise of the river was so great that all the nets were swept away at the very time when the fish were passing up in large numbers. Several attempts were made to replace the nets and keep them in position, but without success, owing to the great force of water, and the vast quantity of leaves and drift stuff brought against them by the freshet. Mr. Hogan then abandoned his set nets and resorted to the sweep net; by unremitting exertions of himself and the men employed, they succeeded, during the last two weeks of October, in taking 141 salmon, which were placed in the pond without the loss of a single fish. The men continued their work, day and night with the sweep net, and took twenty more female fish, and a large number of males, which unfortunately had deposited their spawn and milt, and consequently were of no service. These were liberated when taken, and the men were dismissed from further labours. The fish in the pond were conveyed to the reception house, and on the 30th October Mr. Sheasgreen informed me by telegraph that they were ready for manipulation. On the 1st November I went to Newcastle to superintend the spawning and laying down the impregnated ova in the hatching troughs. At my request Mr. Mowat of Restigouche House met me in Newcastle to give his advice and assistance in these operations, and on the 2nd November we proceeded to the hatching house, which we found clean, neat and orderly; the floors had been repaired, the hatching troughs and trays thoroughly cleaned and re-varnished, the walls whitewashed and everything about the establishment was in a most satisfactory state, reflecting great credit on Mr. Sheasgreen. We found in the reception house sixty-five female and seventy-five male fish, all in good condition, with ova and milt fully developed and ready for depositing. Mr. Sheasgreen, assisted by Mr. Mowat, at once proceeded to manipulate the fish. The females yielded, on an average, about 10,000 ova each, and the preponderance of males gave an abundant supply of milt. The manipulation of the fish and the laying down of the ova was concluded without any appreciable loss, the number of dead eggs not amounting to one in a thousand; in all my experience I have never seen so small a loss in so large a number of manipulated fish.

About 610,000 impregnated ova were laid down, occupying about two-thirds of the space in the hatching troughs. Being very anxious to have the space filled, and learning that salmon were plentiful in River Philip, where Mr. A. B. Wilmot was engaged in getting his stock for the Bedford house, on the 11th November I went to Oxford in the hope of obtaining a further supply of ova. The continuous rains caused a very heavy freshet in the river, which broke down the dam at Oxford, allowing the fish to pass up the river out of their reach, just as my men had got their nets in fishing order. After two days unsuccessful work I dismissed the men. Mr. Wilmot promising to use every exertion to get more ova after the freshet subsided. In this hope I was disappointed, for although a number of fish were taken by Mr. Wilmot's men, they had all deposited their spawn and milt, and further efforts were abandoned.

I regret much that the sudden and heavy freshet prevented Mr. Hogan from getting a larger supply of parent fish, but as every possible exertion was made to secure a large stock, no blame can attach to him or to the men employed in this difficult and laborious work.

The freshet in the stream which supplies the hatching house continued several weeks after the eggs were laid down, and caused the water to become very impure. About the 25th November Mr. Sheasgreen informed me that the quantity of sediment deposited on the ova was so great as to threaten their destruction. I immediately asked and obtained your permission to place filters in connection with the main tank to remove this source of danger. On the 27th I went to Newcastle for this purpose, and on reaching the hatching house I found the ova covered with so heavy a deposit of black sediment that they were scarcely visible in the trays; but I also found to my great gratification, that so far the loss had been almost inappreciable, not more than 1,500 dead eggs having been removed since the ova was laid down. On carefully