

Marine and Fisheries—Fisheries Branch.

The fry were invariably planted in a sound, healthy condition, and on the same grounds as selected in former years, and in the sections of the rivers where observation showed to be the best adapted for the purpose of placing young fry.

I received instructions, late in 1897, to assist D. G. Smith, Esq., provincial commissioner of fisheries, to procure a limited supply of trout ova. As previously reported, we succeeded in placing 30,000 ova in this hatchery. These were successfully hatched, with very little loss. Mr. Smith performed the work of distributing these fry himself, and was very successful in his undertaking. He planted small lots on waters emptying into the St. John and Miramichi Rivers. This gentleman made quite an improvement in the way of carrying fish by rail, by inventing a can with an aerating device attached, which is a great benefit, where the fry are liable to delay for any length of time. Formerly, when the fry were detained at any of the stations, it was necessary to keep the cans in motion in order to keep the water aerated, but this is now performed by having a tube and small air pump attached. I was so much impressed with the improvement that I had several new ones manufactured, and found them very convenient during this year's distribution.

Repairs.

After the distribution of fry was completed, the hatchery was cleaned, and all appliances put in good working order. The supply pipes and tanks were overhauled and repaired where it was found necessary. The hatching troughs and trays were also thoroughly varnished. Later on, a building 14 by 40 feet was erected to serve the purpose of a coal and store house, the old one having completely rotted away. The fences about the property and the road leading to the house were also repaired. The retaining dam and pond, which were damaged by the spring ice freshet, were put in condition to serve for this season, but it will be necessary to make further repairs upon the sluice and gateways of the dam before it can be used another season, as the woodwork is getting very much decayed, and will not stand the pressure of a large head of water. The amount required for this purpose will not exceed \$75. In all other particulars the outfit of this hatchery is in good working order. The total expenditure for repairs this season amounted to about \$165.

Capture of Parent Salmon.

When all necessary repairing had been completed, and arrangements made, the work of procuring this season's supply of parent salmon was commenced. The nets were operated on the same rivers and in the same manner as in former years, viz., one set net on the Little South-west Miramichi, and another on the North-west Miramichi. A seine was also operated in the pools on the latter river, and by this means the greater number of parent fish were taken. The water was very low all the season, and the fish did not enter the set nets at all. The net on the Little South-west, where good fishing was always heretofore obtained, having nearly proved a failure this season. However, a good supply of fish was obtained. The first were taken on September 14th, and from that date until the operations were concluded, on October 21st, the total number of 404 was netted. Of this number, 367 were taken on the North-west Miramichi, and the remaining 37 were netted on the Little South-west Miramichi. The total number consisted of 265 females and 139 males. The cost of procuring this number of fish was about \$500, including guarding and miscellaneous expenditure, showing the average cost of each fish to be less than \$1.25. Before spawning set in, 20 of the females and 7 of the males were liberated, as they were beginning to show signs of a slight fungoid growth. It was considered better to liberate them as soon as any signs of the disease began to show, as they might extend the disorder to others in the inclosure. After the above-mentioned numbers were liberated, there remained a balance of 245 females and 132 males, from which to collect this year's supply of ova.

During the year, some of the fishermen and others who visited the hatchery, have expressed the opinion that although they are in accord with the manner in which the hatchery is operated, it would be an improvement in the right direction if we obtained