H.—15.

was fully two weeks earlier than in any previous season, and another unusual feature is the large number of unripe fish which have been taken. If the salmon continue running for another ten days at the rate they have been doing the collection of eggs taken from fish netted in the Hakataramea River alone will exceed half a million. From my own observations and from reports from the Tekapo and Pukaki Rivers it would seem that there is an exceptionally heavy run of fish in the Waitaki and all the tributaries this season.

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Salmon have been caught freely by anglers at the mouths of the Waitaki, Rangitata, and Rakaia Rivers this season, and information is to hand to the effect that large numbers have been caught by hook and line off the Timaru Breakwater. Last spawning season a large number spawned in the Rangitata River and its tributaries. All this goes to show that the salmon are fast making their way into the large snow-fed rivers north of the Waitaki. One of the reasons why the Waitaki River was chosen in the first instance for the salmon was because of the northerly set of the ocean current along the east coast, so that by stocking the Waitaki all the rivers north of that would in time be stocked by the fish being carried northward.

Collection of Brown-trout Eggs.—The weather and river conditions were again favourable for this work, and we were successful in collecting a large quantity. The number of eggs taken totalled 1,579,000. The number supplied to acclimatization societies was 1,490,000.

Introduction of Atlantic Salmon.—If persevered with on systematic lines, as was done with the quinnat salmon, I am convinced that we would be successful in acclimatizing this valuable There is no better river in the Dominion for the Atlantic salmon than the Waiau in Southland, and on its headwaters the Department has a hatchery capable of dealing with a million eggs at one time, and unless this hatchery is made use of the shed and the boxes and fittings will soon be beyond repair.

While it is, of course, impossible at the present time to get a supply of salmon-eggs from England, yet I think inquiry should be made about obtaining them from eastern Canada, and from statements made by Professor Prince when he was in the Dominion two years ago I am of the opinion that any fresh eggs required by the New Zealand Government would be supplied, and, if not actually free of cost, the charge would only be sufficient to defray the cost of collecting. I would recommend that the question of obtaining a shipment of salmon-eggs from Canada this season should be considered by the Government.

I have, &c., L. F. Ayson,

The Secretary, Marine Department, Wellington.

Chief Inspector of Fisheries.

The Chairman, Marine Fish-hatchery Board, to the Segretary, Marine Department.

Marine Fish-hatchery and Biological Station,

Portobello, Dunedin, 30th April, 1916.

The work done at the Marine Fish-hatchery during the past year has been mainly routine, owing largely to the fact that the care and attention required to feed and keep in order and condition the stock of turbot and lobsters at the station has made most constant demands on the time of both Messrs. Anderton and Adams. The following is Mr. Anderton's report to the Board :-

"31st March, 1916.

"To the Chairman, Marine Fish-hatchery Board.

SIR,-

"I have the honour to present the following report of operations at the Marine Fish-hatchery during the year ending 31st March, 1916.

"Turbot.—The turbot have continued to thrive, and have increased greatly in size. The largest now measure 18 in. in length, an increase of about 2 in. for the year. All are in the very pink of condition, and are entirely free from any signs of fungoid disease. The new concrete tank has considerably lessened the congestion in the tanks, but it will soon become necessary to provide further accommodation, or else to liberate a number of the larger fish. now attained such a size that the liberation of a number in a suitable locality might at any time be considered advisable. Two only have died during the year. Ling has again been used exclusively for feeding purposes, and has proved satisfactory in every way. None have as yet spawned, but there are now signs of the development in the ovaries noticeable in a few of the largest females.

"Lobsters.-Two lobsters have died during the year, one male and one female, and the stock now stands at forty-two adults. The hatching of the lobster larvæ has again been very good indeed. The first larvæ were hatched on the 19th December, and hatching was continued till the 8th February, a month longer than is usual. The number of larvæ produced by the seventeen females this season is estimated at 132,000. Most of the stock have now moulted, and many of the females are again egg-bearing.

"No crab-larvæ have been hatched this season.

"The duties as Inspector of Fisheries have taken up a good deal of the assistant's time in collecting fees, attending to the registration and licensing of the boats, attending markets, visiting outlying ports, and in adjusting several matters that have cropped up, chiefly in connection with netting at the mouths of rivers. A visit is paid by him at least once a week to the Dunedin market, and a log kept of the quantities and prices of the fish sold.