

apart, and nail on to the rails top and bottom. When the water is deep it may be necessary to put on an intermediate rail and nail the slats to the top and bottom rail only. When the bottom is soft, place manuka scrub on the bottom in front and behind the rack to prevent scouring out.

The netting-ground below the rack should be cleared of all obstructions. The best net to use is a purse seine. Captain C. A. Nielsen, Port Ahuriri, Napier, is the best maker of these nets that I know of in the Dominion.

All well-conditioned fish must be carefully handled and passed up-stream. If men skilled in handling fish are employed the handling of the healthy fish can be reduced to a minimum, otherwise a considerable number are liable to be injured.

Proper arrangements should be made for the disposal of the ill-conditioned and diseased fish killed. As the number of fish killed will be considerable, the question of converting them into fertilizer should be considered, as this would be the most economical and cleanly way of disposing of them. The whole work of netting, sorting, and killing fish should be carried out with as little publicity as possible, and only those employed or connected with the work should be allowed to be present.

It is difficult to form anything like a correct estimate of the cost of carrying out this work the first season, but, roughly, I estimate that to do the work thoroughly it will take about £450, made up as follows: Material and construction of racks at the mouth of all streams flowing into Lake Rotorua, about £180; wages of four men throughout the season—say, from the 1st April to the end of August—about £250; two purse seine nets, £20: total, £450.

No. 2: With regard to the second recommendation—so far the investigation of the life-history of the parasite has not been followed up, and until this is understood it will be impossible to carry out effective preventive measures. The latest information with regard to this matter is that, besides the trout, shag, and toetoe, the fresh-water crayfish and fresh-water mussel are also affected with the worm.

No. 3: So far the fish-cultural work has not been carried out in a skilful manner, and at present the Tourist Department's officers who supervise this work can only be said to possess an amateur knowledge of fishery-work.

No. 4: The introduction of fresh natural feed is most important, and if undertaken systematically will undoubtedly be successful, and I think a great deal can be done to improve the indigenous natural feed by protecting the fresh-water crayfish in properly constructed enclosures in suitable localities round the shores of the lake.

No. 5: It is very probable indeed that the introduction of fresh blood at intervals will assist in the permanent improvement of the fish. Supplies of rainbow eggs could easily be obtained from the State Fish Commission for California.

No. 6: Until the proper balance of trout and the natural food-supply in the lakes can be maintained, this would be the most economical means of disposing of the surplus well-conditioned fish. It can be done without interfering with the angling, and if undertaken by the Department it could be carried out profitably and without risk of abuse.

No. 7: The stripping of fish by amateurs is liable to prove injurious to the fisheries, as a considerable number of the fish handled are sure to be injured. Where amateurs are employed to do this work, I should recommend all the fish they strip should be killed. Only qualified fish-culturists who have a knowledge of the anatomy of the fish should be employed to do this work.

No. 8: Taking trout-eggs in large numbers from the Rotorua fishery during the next few years will benefit the fishery. There are several places in the Dominion, such as the rivers in South Westland, which it would be profitable for the Government to have stocked with fish. It would be beneficial to the Rotorua fishery to have the eggs taken away and profitable to the country to have the other rivers stocked.

No. 9: When at Rotorua I found that the common way by anglers of disposing of all the ill-conditioned and diseased fish killed by them was to throw them back into the water. I saw numbers of dead and decaying fish in the streams and various places in the lake. This is a most objectionable practice, and should be put a stop to at once, as the decaying fish is liable to produce other diseases among the fish in the lake.

Every one of the recommendations which I have made in this report is quite practicable, and I consider they are all necessary for the effective and healthy working of this fishery. I consider it is a national work to restore this fishery to a healthy condition, and no expense should be spared to have this done. The good name of the whole of the fresh-water fisheries in the Dominion is at stake. I am aware that already sportsmen returning to England, Europe, and America have spread the report that a great many of the fish in the Auckland District are in poor condition and diseased, and random statements made by some of these sportsmen and tourists have been applied to the whole of our fresh-water fisheries.

I have, &c.,

L. F. ATSON,

Chief Inspector of Fisheries.

The Secretary, Marine Department, Wellington.

SIR,—

Auckland, 22nd March, 1910.

I have the honour to supply the following supplementary report on the trout fisheries of the Rotorua and Taupo districts.

In my report of the 14th instant I omitted to deal specially with Taupo Lake, and in connection with that fishery I now wish to make the following remarks and recommendations. There would seem to be no doubt but that that lake is getting overstocked with trout, and reports this season indicate that the fish are commencing to deteriorate, as a considerable number of ill-con-