

and quail being shot, though the quail are decreasing in numbers. The native game that was open for shooting during the season was limited to grey duck, black teal, and black swan. Very fair shooting was obtained in the favoured places frequented by the ducks. The limit of twenty-five head per gun per day was reached by quite a number of shooters on the opening day in the Rangitaiki Swamp. The native game was not so plentiful in the Rotorua and Wairoa (Hawke's Bay) Counties, nor about Lake Taupo.

Fishing and Liberation of Fry.—The district upheld its unrivalled fame for the trout-fishing, and the popularity of the sport was shown by the great number of anglers' licenses inspected which were issued by outside acclimatization societies. Large catches of good fishing-trout were recorded from all parts, and the decrease in the number of thin, flabby, and diseased trout was a pleasing feature. General satisfaction was everywhere expressed by the anglers at the discontinuance of the netting operations in the open season, particularly at Lake Taupo.

Since the opening of the present season in November, catches of fish up to 10 lb. in weight have been general, and in Lake Okataina specimens up to 14 lb. have been taken, and many anglers have caught twenty-five to sixty fish in a day, of which the greater number were in good condition. A consignment of 50,000 brown-trout ova was received from the Hakataramea Salmon-station, Otago, hatched out by the ranger, and distributed in the rivers of the Whakatane County. From the trout-hatchery 50,000 rainbow ova were received and taken by motor to Whakatane, where, as eyed ova, they were laid down in artificial hatching-redds in suitable places. Five boxes of rainbow ova, containing 250,000 eggs, were also received from the Government hatchery, for hatching out at Lake Waikaremoana, where they were transported, and the work of hatching and liberating carried out by this Department's ranger.

In addition to the above, the ranger stripped some 400 good rainbow-trout pens at the Mokau Falls when hatching out ova at Lake Waikaremoana, and procured 368,400 ova, which hatched out in good order for fish running so late in the year. Almost the whole of these fry were liberated in the rivers and streams of the Wairoa County, and 26,000 ova were sent to the Ruakituri River, where they were hatched out and distributed by Mr. W. Richards, assisted by Mr. C. Mills. A further consignment next season should complete the stocking of the waters around Ruakituri for some years.

Pheasants: Rearing and Liberations.—During the year one new pheasant-pen was erected by the ranger, and the pen erected last year was divided up for the stocking of breeding-pheasants—some seventeen hens and three cock birds. The results were satisfactory. Some of the birds have already been liberated, and the balance not required for next year's stock pen will be distributed in small lots all over the district, both as fresh-blood stock and (in view of the statutory close season in 1922) as an augmentation of the existing birds. It is proposed to further extend the pheasantry for larger operations next year.

Scientific Investigations.—A considerable amount of time was given by the ranger and assistant to assisting Mr. W. J. Phillips, of the staff of the Dominion Museum, in his scientific investigations of the trout of the thermal region of Rotorua Acclimatization District.

Bath Buildings: Balneologist's Report.

In all the departments under my control there has during the past year been a marked increase in the revenue; particularly has this been so in the receipts from sanatorium patients, consultation fees, and baths. The returns from massage fees are apparently less than those of last year, yet the actual number of treatments given was greatly in excess of the previous year; this is explained by the fact that the fees for sanatorium treatments are included in the returns from that institution (approximately 17,000 treatments were given to sanatorium patients during the year), whereas in the previous annual returns these were, by transfer credits from the Defence and Health Departments, included in the massage receipts.

The year generally has been an exceptionally busy one, and the resources of our establishment taxed to their utmost; especially has this been felt in the massage department, where great difficulty was experienced in fitting in the increasing numbers of patients.

As anticipated in my last annual report, a great number of overseas patients have visited Rotorua and received treatment; and, with the continued social and industrial unrest in Britain, one expects an increasing popularity for our spa.

Owing to the present financial stress the strictest economy has been exercised, and demands on expenditure withheld at every possible point; this, naturally, has hampered the expansion of our activities and made the work difficult both for myself and staff.

Throughout the season the sanatorium has been unable to cope with the applications for admission, but much useful work was done in the institution for the more helpless type of case.

Notwithstanding the harassments due to lack of accommodation in the main bath-house, I should like to place on record my appreciation of the work done by my staff, whose zeal, efficiency, and cheerfulness have so materially helped me to carry out the work of this spa during the past year.

In conclusion I should like to enter a plea for the serious consideration of expanding our spa work in New Zealand. It has been admitted by the world's leading hydrologists that our mineral waters are without rival; and I need not point out that with the increasing number of nervous disorders and an accumulating prevalence of fibrositis (so-called rheumatic affections) everything should be done to make our spa the most valuable and efficient in existence; moreover, since 1914, with the knowledge gained by war experience, hydrotherapy has become an exact science capable of effecting cures that were previously considered impossible. Therefore, *pari passu* with the expansion of the work of the Health Department, I would urge that the work of our spas is as valuable as that of any branch of medical science; and, in view of the means in hand, spa work in New Zealand should be considered in the light of a national necessity.