

(7) *Scientific Operations.*

A laboratory has now been attached to the Rotorua office and a special officer detailed for scientific work, which is now in progress. During the year it was possible to analyse the returns of numbers of fish which have been reported by the Department's rangers for some years back, and valuable data has been obtained.

Very little mortality amongst toitoi was found, due probably to the fact that very long periods of high temperatures were not experienced. Many post-mortem examinations of trout were made, and there seems to be no occasion for any alarm as to the prevalence of the nematode worm.

(8) *Game Farm.*

The grounds are being gradually improved and beautified. Recently several ponds have been formed in addition to the stream being backed up. These ponds when completed and surrounded by ferns and native shrubs will add greatly to the lay-out of the grounds. In addition, the ponds and slack waters will provide havens for fry which will be liberated there during the winter.

The total number of pheasants reared during the season was 1,099, as well as 309 mallard ducks.

(9) *Game Liberations.*

The total number of pheasants liberated during the year was 646, while 295 mallard ducks were released in suitable places. Some pheasants will be held for liberation after the shooting season.

(10) *Bird-life generally.*

Some of the mallard ducks released last year at Hamurana and Rerewhakaitu nested, and broods of up to eleven were seen. During the spring dry and warm weather was experienced, and reports from various parts of the district indicated that the natural production of pheasants was greater than the previous year.

Quail for a time were not as plentiful as last season, but showed up later in quite good coveys. At Rotomahana, Hamurana, the lagoons at Wairoa, and in the Bay of Plenty, grey ducks are still to be seen in fair numbers. Black swans appeared to have increased at Waikaremoana and Hamurana, the level of the lake at the former locality being very low during the spring and summer months, in consequence of which more nests than usual were seen during September and October. Black teal are not increasing, and where several years back two hundred and fifty to three hundred could always be seen at Hamurana not more than a dozen are now there. Rotomahana is the only lake where many congregate. Godwits did not appear to be plentiful, and very few were shot during the open season. It is most interesting to report that about forty grey teal have been seen on Rotomahana, and several pairs at Rerewhakaitu.

Native birds are doing well in the Urewera and in the bush on the western side of Waikaremoana. The following are fairly plentiful: Pigeon, tui, kaka, and korimako (bell-bird). To the north-east of the lake and in the vicinity of the Government Hostel pigeons are very tame. Korimako, popokotea (white head), miromiro (tomtit), and riroriro (grey warbler) are numerous. On the higher country and in the bush adjacent to the track to Waikareiti, tititi-pounamu are in good numbers. On the Huiarau Range this bird is also to be found in fair numbers. A nest was discovered under a bank on the road at a point about 1,100 ft. above sea-level. Most of the birds enumerated above are to be seen in most of the bush country through the district. The kiwi was again heard at Waikaremoana, and the kakariki (parakeet) was seen near the Waikareiti Track. The ruru is scarce. In one area the kokako (crow) was located on several occasions. The poaka (pied stilt) did not show up in large numbers.

(11) *Opossums.*

An open season was declared, but only three licenses and two permits were issued. The number of skins stamped in the district was 675.

(12) *Ranging.*

The ranging organization has been reviewed from time to time during the year. The provision of an outboard motor for use on lakes in the vicinity of Rotorua and a launch for Lake Taupo has provided better facilities for rangers reaching the more remote waters. During the winter the opportunity was taken to send two members of the deer destruction staff to Rotorua to undertake ranging. There had been numerous reports as to poaching of native pigeons and tuis, and it was evident that special methods would have to be adopted if offenders were to be traced. These proved effective, and as a result numerous breaches were detected and proceedings taken. It is hoped that these will have a salutary effect, but the position will be closely watched. In all, convictions during the year amounted to forty, fourteen of which were for breaches of the Animals Protection and Game Act, involving fines of £69, and sixteen for breaches of Rotorua and Taupo fishing regulations, for which £71 in fines was imposed.

XIV. WAR GRAVES.

Seven hundred and twenty-one (721) notifications of deaths of returned soldiers were received during the year; of these, 109 were accepted as war graves, the cause of death being attributed to disabilities sustained or aggravated by war service.

Temporary crosses were placed on 379 graves, and headstones to the number of 106 were ordered.