

(3) *Tagging of Trout.*

During the winter 594 rainbow trout were tagged at the barriers at the Tongariro River Hatchery. In the Waimana River a small number of trout were tagged, but none bearing tags have been reported. The following is a table of tagged fish which were either rehandled at the hatchery stream or caught and reported by anglers:—

Tagged.				Returned.			
Tag No.	Weight.	Length.	Date.	Weight.	Length.	Locality.	Date.
	lb. oz.	In.		lb. oz.	In.		
2396	3 11	21½	25/8/38	4 2	22	Mission Bay ..	1/12/38
2407	3 12	23½	27/9/38	3 8	24	Whangamata	27/1/39
2457	2 1	19	27/9/38	2 8	19	Kowhai Flat ..	27/11/38
2492	4 3	22½	27/8/38	*	..	Motuopa Bay	Xmas, 1938
2533	3 9	20½	23/8/37	4 11	22	Hatchery ..	15/8/38
2534	3 10	22½	23/8/37	3 8	23	Waitahanui Bay	21/2/38
2542	4 2	22½	23/8/37	6 8	23	Mouth Amoho Stream	21/2/38
2588	3 13	21½	23/8/37	*	..	Delta ..	11/2/38
2604	5 5	22½	13/8/37	4 8	*	Four-mile Bay	23/12/37
2615	4 12	22½	13/9/37	5 0	*	Rangatira Point	1/1/38
2660	4 6	25	13/9/37	5 6	25	Hatchery ..	12/8/38
2691	4 4	23	13/9/37	4 0	23	Jerusalem Bay	14/11/37

* No particulars.

(4) *Facilities for Anglers.*

Owing to the low state of the Tongariro River during the past year the road and track were not damaged by floods. Tracks were kept clear in the vicinity of Lake Taupo, and a new road to Rangitira Point was commenced so that cars can now go as far as Acacia Bay without any difficulty. The Information Bureau, Taupo, was again opened for a short time each day to give anglers the opportunity of obtaining information regarding fishing.

(5) *Food-supplies for Trout.*

In all the Rotorua lakes there was an exceptionally large hatch of smelts. The endeavour to establish the smelt in Lake Taupo was continued and shoals of these fish have been seen in various parts of the lake. Owing to exceptional weather conditions both koura and smelt were very difficult to net until the end of January. However, 14,400 koura and 110,000 smelts were successfully transported to Lake Taupo and planted in suitable localities between Acacia Bay and Tokaanu Wharf. Observations proved that the smelt has been established in Lake Okaro, and a small consignment was planted in Ngaheva. An experiment is being conducted in the Tongariro Hatchery Dam with a view to breeding koura.

(6) *Black Shags and Hawks.*

One thousand four hundred and twenty-seven shags and 265 hawks were presented for payment. In addition to these numbers, 209 shags and 72 hawks were destroyed by departmental rangers.

(7) *Scientific Operations.*

Throughout the summer lower temperatures than last year prevailed. Consequently the mortality among the toi-toi and molluscs was negligible. Post-mortem examinations of many trout were made, and it was found that comparatively few were affected with the nematode worm. This does not, however, apply to trout examined from Lake Waikaremoana, where numbers of fish contained the parasite.

(8) *Fish-hatcheries.*

The new hatcheries at Ngongotaha and at Lake Waikaremoana were put into operation and in both cases proved most successful. A concrete flume was built at the Tongariro River Hatchery to replace the old wooden structure, which was unsafe.

(9) *Game-farm.*

The game-farm was improved in appearance during the year. Large numbers of native shrubs and ferns were planted, and it is intended to secure further quantities of these for planting next season. The breeding-pens were increased, thus allowing for a larger number of stock birds to be held.

Over three hundred pheasants' eggs were given out to applicants, but unfortunately this experiment did not prove successful and very few birds were reared. From the early pheasants reared most of the stock birds for next breeding season have been selected.

(10) *Game Liberations.*

Pheasants numbering 1,214 were liberated from the farm between 1st April, 1938, and 31st March, 1939; 310 mallard ducks reared on the farm were liberated at Lake Rerewhakitau.

(11) *Bird-life generally.*

Weather conditions during the early summer were not very conducive to the natural reproduction of game birds.

Notwithstanding the bad seasonal conditions, the Department, so far as its district was concerned, was able to hold its own by the liberation of pheasants from the farm.

There is an abundance of evidence that the grey duck are becoming year by year more scarce than ever in the history of that game-bird. The depletion of the ranks of the grey duck is due to the constant shooting over the years, by the operation of more and better shooters, and the draining of