

observations of the southern sky. For many purposes an Observatory as far south as possible is desirable; here the Dominion can offer a selection of sites at least as far south as 45°, which is farther south than any other British Observatory. Definite proposals have recently been received from President R. C. Maclaurin, President of the Massachusetts Institute of Technology, covering a programme from Professor Edward C. Pickering, Director of the Harvard College Observatory, for the systematic photographing of the stars of the entire Southern Hemisphere, so that their positions may be accurately determined.

Astronomical Tables.—The Astronomical Tables for 1917 were calculated and distributed before the end of 1916.

New Zealand Time-service Arrangements.—Notice No. 4, relating to the time-signal at Lyttelton by time-ball; Notice No. 5, relating to the position of the Observatory and general time-service arrangements; and Notice No. 6, relating to the time-signal at Auckland by electric lights, were published in the *Gazette* and distributed.

Azimuth and Level of the Transit Instruments.—Observations during the year show considerable variations in the azimuth and level of the transit instrument. The variations appear to be periodic, but further observations are necessary before this point can be decided.

Rates of Clocks.—The observed rates of the clocks for this year again provide evidence for the necessity of better timepieces. Experience has proved that the clocks can rarely be depended on for more than two days to give the time with the accuracy required for rating purposes.

Position of Observatory.—The adopted position of the transit instrument at the Hector Observatory is longitude 11 h. 39 m. 4·27 s. east of Greenwich, latitude 41° 17' 3·8" south, and height 418 ft. above 1909 mean sea-level.

C. E. ADAMS,
Government Astronomer.

The Under-Secretary, Department of Internal Affairs, Wellington.

VII. REPORT OF THE CONSERVATOR OF FISH AND GAME.

Rotorua, 30th April, 1917.

I HAVE the honour to submit my annual report of the work that has been carried out during the past year in connection with the fresh-water fisheries in the Rotorua and Taupo districts for the period ending 31st March.

During the past year the same policy has been carried out in dealing with the trout: the poor and ill-conditioned fish have been taken during the close season—July to October—and the marketing of fish was carried on from November to March.

In July a start was made to take the ill-conditioned fish from the Taupo Lake and rivers, but on account of the continual floods in the rivers during the period a somewhat less number were taken than last season.

The same operations were started in the Rotorua Lake and rivers, but on account of the fish showing a marked improvement in their condition only the very poor ones were taken, and others that were suitable for marketing purposes were again liberated.

The following numbers of fish were destroyed during the period from July to October: Taupo Lake—5,161 fish, weighing 6 tons 18 cwt. 0 qr. 27 lb.; Rotorua Lake—4,051 fish, weighing 3 tons 12 cwt. 1 qr. 10 lb.; total, 9,213 fish, weighing 10 tons 10 cwt. 2 qr. 9 lb.

MARKETING.

Rotorua.—The marketing of cured and fresh trout started on the 1st November. As previously arranged another launch and staff, consisting of two men, were stationed at Rotoiti for the purpose of netting that lake, and large supplies have been received at the depot from there.

The supply of trout has also been kept up from Lake Rotorua, and a wonderful improvement has been made in the fish through the Department's policy, and the general opinion is that the fish have greatly improved in condition. The parasite is found to be gradually getting less in the fish. A large supply of fish has been sent for sale to the Auckland City Market; up to the present they have received some 11½ tons. Consignments have been sent daily to the Railway Department for use on the dining-cars. 3,302 parcels of fish were sold to visitors and others. Most of these had to be packed ready for forwarding. 271 parcels were consigned by rail to various people, and fourteen local boardinghouses have received daily supplies.

Tokaanu Depot.—The number of fish forwarded from Tokaanu Depot does not come up to last year's output, partly on account of the difficulty in getting suitable men to do the work, and the difficulty in getting the fish carted to the railway-station; but as the new Waimarino Road may be open for traffic by next season this difficulty, it is anticipated, will be overcome.

Fresh and Smoked Trout sold during the Period 1st November to 31st March: Actual Number of Fish, and Weight of Fish sold cleaned.

—					Number.	Weight.				Value.		
						Tons.	cwt.	qr.	lb.	£	s.	d.
Rotorua	..	..	..	..	34,252	24	19	0	19	999	1	11
Taupo	..	..	..	..	8,743	10	4	2	8	443	3	6
Totals	..	..	..	..	42,995	35	3	2	27	1,442	5	5