

Government Meteorological Observatory.

METEOROLOGICAL Observations at Kelburn, Wellington, for the Month of July, 1934. Observations taken at 9 a.m.

Altitude of Observatory, 415 ft.

Date.	Pressure in Inches, at Sea-level and Standard Gravity.	Temperature (° F.) from Observations at 9 a.m.								Wind.		Rainfall, in Points: (100 Points = 1 Inch).	Bright Sunshine: Hours and Tenths.	Weather (Symbols) at 9 a.m.
		In Screen.					Minimum on Grass.	Solar Radiation: Maximum.	Beaufort Scale.		Anemometer. Run in 24 Hours.			
		At 9 a.m.			Maxi- mum.	Mini- mum.			Direction.	Force.				
		Dry.	Wet.	Humid- ity.										
1	29.620	43.5	37.2	50	51.0	35.4	31.8	109.0	SSW	2	142	1	8.2	b
2	29.493	39.0	38.2	93	43.0	35.1	26.3	67.4	Calm	..	51	86	0.0	op
3	29.530	39.8	39.5	97	45.6	37.6	35.1	99.2	Calm	..	122	204	1.0	e
4	29.865	42.3	39.4	75	44.5	36.0	34.2	85.1	SSE	6	464	6	1.8	opq
5	30.143	39.1	37.3	83	49.9	33.1	25.2	95.8	NNE	1	107	Trace	6.4	bx
6	30.197	47.7	44.5	76	49.5	38.1	35.0	65.2	N	3	133	..	0.0	o
7	30.169	44.3	41.0	73	53.8	40.4	34.8	97.8	Calm	..	163	87	0.5	of
8	29.803	50.1	49.2	94	54.3	43.3	43.0	69.3	Calm	..	74	19	0.0	or
9	29.896	53.5	52.2	91	55.7	49.0	48.5	87.0	NW	5	264	22	1.0	oiq
10	30.028	47.5	47.3	98	52.0	45.3	40.1	71.8	Calm	..	91	2	0.0	odf
11	29.885	49.3	48.7	96	56.0	46.8	45.3	90.9	N	2	136	8	1.3	o
12	29.632	55.5	53.9	89	56.4	48.3	47.8	95.7	NW	8	316	3	3.6	o
13	29.905	51.5	44.6	54	56.0	46.5	37.7	99.7	N	2	347	..	5.6	b
14	30.271	44.0	42.0	84	55.3	38.6	29.2	99.7	Calm	..	158	..	8.4	bf
15	30.081	53.4	50.3	79	56.1	43.0	41.1	102.1	NW	6	223	Trace	7.5	o
16	29.640	49.3	48.1	91	50.8	50.3	47.9	71.1	S	1	516	119	0.3	og
17	29.958	40.0	38.0	82	43.0	37.0	35.2	90.0	S	5	244	11	4.1	eq
18	30.059	42.2	39.4	76	47.0	37.0	35.9	100.0	SSW	1	293	9	5.8	b
19	30.119	43.1	42.2	92	45.9	40.0	34.9	77.1	SE	2	106	2	0.4	op
20	29.953	42.8	40.8	83	53.0	35.0	28.2	98.0	Calm	..	66	3	6.4	b
21	29.429	53.0	49.0	73	60.0	41.8	40.2	106.8	Calm	..	94	6	2.7	o
22	29.595	43.7	41.9	86	50.5	40.6	32.0	94.0	S	3	225	11	2.5	o
23	29.807	47.3	42.8	66	54.3	35.1	29.5	100.7	NNW	5	192	1	8.6	b
24	29.962	45.2	39.0	52	51.1	34.6	29.0	98.0	SSE	4	216	..	7.8	b
25	30.026	49.4	46.0	75	55.9	40.8	33.9	99.0	NNE	2	89	..	7.8	b
26	29.891	49.2	45.4	73	52.6	42.3	34.1	99.9	N	3	131	Trace	2.4	o
27	30.093	44.5	39.2	59	45.6	41.0	39.2	83.0	SE	5	269	4	1.7	ophq
28	30.088	43.2	39.6	70	45.9	37.0	32.1	88.0	SE	3	176	Trace	1.4	o
29	30.095	45.1	41.0	67	48.0	39.2	36.0	90.0	SSE	4	217	6	3.7	bc
30	30.316	46.3	43.0	75	49.6	41.0	39.1	98.4	SE	4	289	Trace	7.8	c
31	30.344	45.8	44.4	89	52.4	38.3	30.1	92.0	N	3	101	..	2.5	o
Means, &c.	29.932	46.1	43.4	79	51.1	40.2	35.9	91.0	..	2.6	194	610	111.2	..

Mean earth temperature at 1 ft., 45.7°; and at 3 ft., 48.1°. Number of rain days, 20.

DIRECTION OF WIND.

Gale (force 8 or more).	Forces 4 to 7.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
1	9	8	6½	1	..	5½	5½	1	..	3½

NOTE.—A cold and wet month, with mean temperature 1.3° below normal. Total bright sunshine 111.2 hours, 38 per cent. of the possible; four sunless days. Precipitation was 30 per cent. above the average. There were only six days on which at least a trace of rain was not recorded. Except for two gales, a southerly on the 3rd and a north-westerly on the morning of the 12th, the month was remarkably free from strong winds. Hail occurred on the 3rd, 4th, 17th, 22nd, and 27th; and fog on the 7th, 10th, and 14th. Mean dew-point at 9 a.m., 39.8°; mean vapour pressure, 0.245 in.

NOTES ON THE WEATHER FOR JULY, 1934.

General.—During July there was a predominance of southerly winds, but except for those on the 4th, 17th, and 27th they were usually not severe. The month, however, was a cold one, and consequently there was little growth in pasture and supplementary feeding of stock had to be resorted to in many cases. Where early lambing has taken place there was some mortality but, on the whole, stock has kept in good condition.

Rainfall.—Rainfall distribution during the month was somewhat irregular. The greater portion of the country experienced less than the average amount, the largest deficit being in Canterbury where, at places, less than half the normal fell. North Auckland, Otago and Southland, and districts about Cook Strait, on the other hand, had considerably more than the average.

Temperatures were everywhere below the average. In the North Island the mean difference was 1.5° below, the recording station showing the greatest difference being Taihape, where it was 2.2° below. The South Island mean was 1.9° below average, Christchurch and Hanmer Springs having the largest departures, with 2.8° and 3.8° respectively. The low mean temperatures are accounted for by the prevalence of southerly winds and the unusually cold night temperatures in the clear weather accompanying them. Frosts were frequent, some inland places in the South Island experiencing the most severe ever recorded.

Sunshine.—Fortunately there was more sunshine than the average at most places, New Plymouth being the only one with a deficiency. Blenheim had the highest total, viz., 195.9 hours, while Nelson had 191.6 and Tauranga 163.7 hours.

Pressure and Weather Systems.—The storm systems during July were somewhat similar in type to those ruling in June, with a tendency for the areas of lowest pressure to pass over the North Island.

The disturbance which was responsible for the widespread snowfall at the end of the previous month was on the 1st July still located east of New Zealand. By the morning of the 2nd a secondary depression had formed west of Cook Strait, and during the night of the 2nd it passed over the North Island. The southerly, consequently, continued to be severe during the following two days, much snow falling in both the North and South Islands.

On the 7th a cyclonic depression which had during the previous two days been centred off the New South Wales coast was covering the greater part of the Tasman Sea. Its effects were already being felt from Canterbury northwards, strong north-east to east winds being accompanied by widespread rains. Very heavy rain fell in the North Auckland district on the night of the 7th, totals of over 5 in. being recorded at some places for the twenty-four hours preceding 9 a.m. on the 8th. As a result there was some heavy flooding. The storm had disappeared eastwards by the morning of the 9th, and, owing to the development of an intense depression over south-eastern Australia, the southerly in its rear was quite a mild one.