

Government Meteorological Observatory.

METEOROLOGICAL Observations at Kelburn, Wellington, for the Month of July, 1928. 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.			
		At 9 a.m.			Maxim.	Minim.			Direction.	Force.				
		Dry.	Wet.	Humidity.										
1	29-876	48-9	45-9	78	57-2	40-5	33-6	104-0	Calm	..	156	7	7-7	b
2	30-170	46-9	44-1	79	49-0	44-1	38-1	95-1	SE	5	99	Trace	2-4	o
3	30-296	44-2	42-1	83	52-0	40-9	34-7	98-0	N	2	131	..	3-5	o
4	30-036	51-5	49-4	85	55-0	43-1	43-0	90-0	NW	7	376	4	0-1	o
5	29-880	54-8	49-0	63	57-2	49-8	43-1	111-1	NW	5	411	1	4-0	b
6	30-143	49-1	46-1	78	53-2	43-9	38-2	96-7	Calm	..	265	..	7-7	b
7	30-079	42-0	40-0	83	52-8	37-0	30-8	81-0	Calm	..	24	139	0-6	c
8	29-793	50-7	50-4	98	53-2	43-1	39-4	56-0	Calm	..	21	121	..	orf
9	29-386	53-1	52-8	98	55-0	49-2	48-8	93-2	NW	7	169	44	0-2	op
10	29-698	51-7	48-1	75	58-4	44-0	40-1	102-8	SE	1	262	..	8-6	b
11	29-723	50-9	46-8	71	52-8	47-0	41-3	102-1	SE	3	211	..	7-7	b
12	29-917	51-6	47-5	72	55-0	39-6	31-9	97-8	NW	3	108	11	3-6	b
13	29-573	53-8	50-7	79	58-8	50-0	49-0	102-0	NW	6	507	..	7-0	b
14	29-919	49-2	43-1	56	57-1	39-0	32-0	101-7	NW	2	234	..	8-7	b
15	30-252	49-9	44-3	61	52-2	45-6	43-2	98-3	SE	4	251	21	1-1	o
16	30-428	46-1	43-3	78	48-0	43-1	41-9	92-3	SSE	3	317	..	0-7	c
17	30-435	47-1	42-4	64	49-1	42-0	38-1	99-0	SE	3	143	..	1-4	bc
18	30-292	45-0	42-1	77	49-3	38-2	30-1	98-5	SE	1	79	1	4-5	b
19	30-176	44-9	42-6	82	50-9	37-5	30-6	103-4	Calm	..	71	..	7-7	bef
20	30-098	46-0	43-0	77	54-8	37-5	31-6	104-7	NNE	1	72	..	5-3	c
21	29-861	46-9	42-2	64	53-9	43-0	39-2	86-8	NNE	3	108	..	0-3	o
22	29-714	51-5	47-7	74	59-2	45-8	46-6	116-0	N	1	59	..	4-8	o
23	29-813	52-0	48-8	78	58-8	48-1	45-1	110-2	SE	1	44	..	4-8	o
24	29-937	52-0	48-0	73	54-6	45-1	40-1	95-0	ESE	2	84	..	4-2	bc
25	29-995	50-2	46-2	72	56-0	44-7	38-4	97-0	SE	1	36	..	3-6	bc
26	29-949	48-9	47-2	87	52-8	43-3	38-0	102-6	SE	1	25	..	5-7	of
27	29-931	44-8	44-0	94	53-1	40-1	36-0	93-0	Calm	..	45	Trace	1-8	of
28	30-045	48-2	43-9	68	50-5	40-0	34-1	99-1	SE	3	52	..	4-0	bc
29	29-949	44-5	40-7	70	48-4	39-0	33-8	93-0	SSE	4	122	..	1-7	c
30	29-880	45-3	43-0	82	49-7	42-1	40-0	90-7	SE	2	190	..	1-2	o
31	29-862	44-8	43-1	86	53-1	39-0	33-0	106-4	Calm	..	65	3	7-5	o
Means, &c.	29-971	48-6	45-4	77	53-6	42-8	38-2	97-3	..	2-3	152	352	122-1	..

Mean earth temperature at 1 ft., 47-2°; and at 3 ft., 49-8°. Number of rain days, 10.

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.
..	7	7	3	1	½	1½	1	..	..	6

NOTE.—The first half of the month was rather wet and stormy, while the latter half was remarkable for fine and mild conditions. At Karori Reservoir, near Kelburn, rainfall was 29 per cent. below the normal. Total bright sunshine, 122-1 hours, 41 per cent. of the possible, and one sunless day. A frost was recorded on the 18th, and fog was in evidence on four mornings. Mean dew-point at 9 a.m., 41-5°; and mean vapour pressure, 0-261 in.

SUMMARY FOR THE MONTH OF JULY, 1928.

There was a marked contrast as regards rainfall between the weather experienced during the month in the Auckland Province and that enjoyed by the remainder of the Dominion.

Except for part of the Bay of Plenty district the rainfall was considerably below normal over most of the northern province, and there were heavy floods in North Auckland and the Waikato and Waihou valleys.

Approximately average falls were received over much of northern Taranaki, Nelson, and Marlborough, and in parts of central and southern Otago and Southland the registrations were in excess of the average. In all other districts south of Auckland the month was a dry one. The shortage of rain was very pronounced in Canterbury, especially North Canterbury.

In the first half of the month there were some fairly general rainfalls, and the weather was at times stormy, but thereafter fine weather was the rule in all the central and southern provinces. In contrast with June, temperatures were everywhere remarkably mild. As a result there were not a few signs of spring amongst insect, bird, and plant life. Frosts were numerous in the South Island, but seldom severe, and there was marked absence of snowfall except at very high levels. Sunshine was more abundant than usual. The absence of westerly winds was no less marked than in the preceding months of the year.

There was a certain amount of growth of grass in many parts, and supplies of feed are generally good. Stock are in good condition, and lambing is proceeding satisfactorily in the earlier districts.

The rainfall of the month was associated chiefly with three cyclonic storms. The first of these moved from the Tasman Sea towards the Auckland Peninsula on the 7th, and moving thereafter in a more southerly direction crossed the South Island on the night of the 8th. General rain fell between the 7th and the 9th, with heavy falls in many parts. In North Auckland, where the precipitation was heaviest, there was heavy flooding in the rivers. Gales were caused in many places by this storm.

The second of the cyclones mentioned moved slowly from the North Tasman Sea and away eastward across the Auckland Peninsula between the 22nd and the 25th. On this occasion the heaviest rains fell in the Waihou and Waikato river valleys, and serious floods reached their culminating point on the 24th or 25th. In parts of the Waihou watershed the flood was a record one. At Waihi on the four days ending at 9 a.m. on the 25th a total rainfall of 19-80 inches was recorded. This storm produced comparatively little effect south of New Plymouth and Gisborne.

The third cyclone followed a somewhat similar track between the 29th and the 31st. It was of smaller area than the preceding ones, and its effects still more restricted. There were some heavy rainfalls, however, in the Thames, Coromandel, and East Cape districts, and rivers were kept in a flooded state till the end of the month.

Though each of these storms was responsible for gales in places, they were not as a rule prolonged, and comparatively little damage was done by them.

In the South Island the prevailing winds were from the south-west, and in exposed positions they were occasionally strong.

EDWARD KIDSON, Director.