

Government Meteorological Observatory

METEOROLOGICAL Observations at Kelburn, Wellington, for the Month of July, 1941. Observations taken at 9 a.m.

Altitude of Observatory, 415 ft.

Date.	Pressure in Millibars, 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.	Beaufort Scale.		Anemometer.			
		At 9 a.m.			Maximum.	Minimum.		Direction.	Force.				
		Dry.	Wet.	Relative Humidity, Per Cent.									
1	1023.3	41.7	39.9	85	50.9	35.6	30.0	Calm	..	134	..	8.3	b
2	1021.7	45.4	42.9	80	51.3	36.8	34.1	NNW	2	95	..	1.6	o
3	1020.9	46.9	44.0	78	50.8	44.5	39.7	NNE	3	190	Trace	6.2	b
4	1019.4	49.4	46.8	81	52.5	44.7	41.8	NNW	4	195	12	0.4	o
5	1021.0	51.3	49.6	88	55.0	47.7	47.4	NNW	5	303	6	0.0	o
6	1014.0	55.0	51.9	79	56.1	49.9	49.4	NW	6	356	27	0.0	ou
7	1015.4	53.2	50.8	84	57.0	51.0	48.8	NNW	5	422	..	3.5	b
8	1014.9	52.2	50.2	86	55.1	48.8	45.0	N	2	185	48	2.4	c
9	1011.6	45.5	45.2	97	48.8	44.8	43.1	N	1	137	161	0.0	or
10	1007.4	45.3	44.3	92	47.0	42.8	41.0	SSW	2	77	88	0.0	o
11	1015.1	45.1	42.1	76	47.6	43.0	41.4	S	6	264	7	2.9	cjp
12	1021.6	44.9	41.9	76	46.8	41.1	39.3	S	2	283	6	0.0	o
13	1021.3	42.0	41.9	98	47.2	38.9	39.4	Calm	..	107	..	4.1	o
14	1018.3	44.8	43.0	86	50.9	39.0	31.8	NNW	1	54	..	6.2	bc
15	1021.0	41.5	41.0	96	48.6	36.1	29.3	Calm	..	31	4	8.3	b
16	1026.7	44.2	41.6	79	47.8	40.2	36.2	SW	2	144	..	6.2	b
17	1031.9	36.8	36.4	96	47.6	34.5	26.0	Calm	..	50	..	2.2	cf
18	1039.3	43.9	42.4	88	51.8	36.0	28.0	Calm	..	39	..	8.1	b
19	1038.9	42.0	40.4	86	52.3	35.0	27.9	Calm	..	45	..	8.6	b
20	1034.6	45.0	43.0	84	50.2	39.0	30.5	NNW	3	126	..	2.7	c
21	1027.1	47.9	46.2	87	52.7	44.2	42.6	NNW	4	181	..	2.2	o
22	1025.6	46.3	45.9	97	56.4	40.9	32.9	Calm	..	72	..	7.7	b
23	1024.6	49.3	45.2	70	56.3	42.5	39.8	N	1	137	40	2.4	c
24	1017.0	46.7	46.5	98	54.6	44.8	44.2	Calm	..	43	29	0.0	orf
25	1005.6	53.0	52.5	97	59.8	45.4	46.0	NW	3	99	102	0.9	o
26	1002.4	53.2	52.8	97	55.0	51.2	51.4	W	2	287	17	0.3	omr
27	1010.0	50.0	49.7	98	51.3	48.2	46.1	S	1	261	31	0.0	oir
28	1018.1	44.5	42.8	86	47.8	41.9	40.1	SSW	7	363	25	1.1	opq
29	1019.6	41.6	40.0	86	48.8	40.0	37.6	SSE	5	338	3	2.3	or
30	1011.5	42.2	39.6	78	46.1	39.4	35.5	SW	3	191	..	5.9	bc
31	1011.0	44.7	39.7	60	48.8	41.0	38.4	SW	3	197	56	2.8	e
Means, &c. . .	1019.7	46.3	44.5	86	51.4	42.2	38.9	..	2.4	174	662	97.3	..

Mean earth temperature at 1 ft., 46.2°; and at 3 ft., 43.2°. Number of rain days, 17. Total rainfall, 36 per cent. above normal. Sunshine, 33 per cent. of the possible. There were seven days without any bright sunshine being recorded. Mean dew-point at 9 a.m., 42.3°; mean vapour pressure, 8.9 mb.

NOTE.—The month was remarkable for the number of mild days. Five frosts were registered at Kelburn, that of the 17th being very white. Thunder was heard on the morning of the 9th. Two fogs were experienced, that of the 24th persisting all day.

DIRECTION OF WIND.

Gale (force 8 or more).	Forces 4 to 7.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calm.
..	8	7	½	..	½	4½	4	1	5½	8

NOTES ON THE WEATHER FOR JULY, 1941.

General Notes.—The weather in July was very favourable, with an absence of stormy conditions frequently associated with this month. As there was little wind, series of sharp frosts were experienced in all parts of the country. Early lambs and calves are seen in increasing numbers and these, as well as all classes of stock, are faring well, with adequate fodder reserves available for the rest of the winter. Except in a few places where the ground has been frozen, cultivation in preparation for spring sowings has progressed satisfactorily, while autumn-sown crops are making good growth.

Rainfall over most of the country was below average. The deficiencies were most prominent on the Canterbury Plains, about Banks Peninsula, and in the Foveaux Strait region, and in these localities the falls were generally one-third to one-half the normal. Several restricted areas received moderate excesses, the chief of these being the Bay of Plenty district and small areas centred near Auckland, Hawera, Napier, Wellington, and Nelson.

Temperatures.—Mean temperatures were very close to normal values, there being little significance in the trend of the departures. Several mild days compensated for frequent frosty nights. Practically no snow reached lower levels, and a good deal of the snow-covering has melted from the ranges.

Sunshine figures were also little different from normal, but showed a tendency for slight surpluses, the Auckland value, however, being appreciably above average.

Weather Sequence.—At first conditions were fine generally, but as an anticyclone moved eastward from New Zealand rain developed on the 3rd in northern and western districts and became more widespread, reaching districts east of the ranges between the 5th and 7th. At this time the heaviest rain fell in Auckland and Westland. From the 8th to the 10th New Zealand was covered by an extensive but shallow low-pressure system, which caused little wind but considerable fog and drizzle. On the 9th some heavy rain fell in the Central Provinces.

From the 10th onward southerly winds predominated, bringing showery conditions, mainly to eastern districts, but as an anticyclone extended from the Tasman Sea the weather became fair to fine almost generally. When this system became almost stationary over New Zealand from the 16th to the 20th and intensified, barometers reached an unusually high level, while brilliantly fine weather resulted. With the eastward movement of the anticyclone fresh north-easterlies brought occasional rain to the Auckland Peninsula. Rain and drizzle extended from the north on the 23rd and covered most of the country within the next two days. At the same time there were widespread fogs in Wellington and along the east coast of the South Island.

An extensive trough of low pressure was over the country on the 26th and was followed by a change to cold southerly winds, which later reached gale force along the east coast and also in Taranaki, where minor damage resulted. The rain accompanying the wind change persisted intermittently between Kaikoura and East Cape, but otherwise an improvement quickly followed. On the 30th the low-pressure system which was then to the east formed a deep centre near Chatham Islands and kept the southerlies fresh in many places.

M. A. F. BARNETT, Director.