

Government Meteorological Observatory.

METEOROLOGICAL Observations at Kelburn, Wellington, for the Month of May, 1940. 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.						Beaufort Scale.	Anemo-meter.				
		At 9 a.m.			Maximum.	Minimum.	Minimum on Grass.						
		Dry.	Wet.	Humidity.				Dry.	Dry.	Direction.			
1	1018.2	51.1	48.9	85	58.5	48.0	46.2	Calm	..	47	Trace	2.5	oz
2	1020.7	52.1	51.2	94	58.0	48.7	39.0	Calm	..	118	2	0.3	idoz
3	1022.2	58.0	52.7	68	63.9	47.2	41.0	NNW	2	31	1	7.8	e
4	1011.1	59.0	55.8	81	63.5	54.7	46.4	NNW	4	133	30	0.4	oir
5	1002.1	52.8	51.4	90	53.4	51.9	51.4	S	4	233	78	0.0	or
6	1003.3	47.0	43.0	70	50.2	42.2	37.9	SE	4	221	Trace	6.6	o
7	999.5	48.2	45.0	76	52.5	42.0	31.6	SE	5	139	Trace	4.5	o
8	996.3	50.0	47.3	81	51.0	45.7	42.4	S	1	221	24	2.6	oujip
9	997.8	49.9	49.8	98	50.9	43.8	31.0	SSE	5	75	139	0.0	odr
10	1002.2	48.6	46.8	86	50.2	46.8	46.0	S	7	413	3	0.0	oir
11	1011.2	50.1	45.3	66	52.9	46.1	42.9	S	4	401	..	6.3	bc
12	1013.7	45.8	44.8	92	56.6	40.5	34.7	Calm	..	104	..	5.7	bc
13	1007.9	50.8	48.0	80	58.8	43.0	32.2	NNE	2	42	5	9.0	bw
14	1012.0	46.6	45.3	91	48.7	42.1	32.6	SSE	3	87	Trace	3.1	or
15	1013.2	48.7	46.7	85	56.2	37.8	30.0	N	3	69	..	4.6	o
16	1009.3	56.2	52.2	75	60.8	45.2	36.1	N	3	86	..	7.8	o
17	1012.6	54.5	51.7	81	57.2	50.0	44.8	NW	5	144	Trace	2.0	oq
18	1009.1	53.8	51.8	87	54.8	51.6	49.7	NW	4	386	45	0.0	oip
19	993.3	52.8	52.5	98	53.2	49.0	48.7	NE	1	260	53	0.0	op
20	996.2	44.2	40.2	68	47.2	42.2	40.8	SSE	5	302	Trace	5.1	o
21	992.7	45.4	43.5	85	51.4	42.1	39.8	Calm	..	129	..	1.6	o
22	994.4	50.4	47.0	76	53.0	44.3	38.5	NW	2	112	95	2.1	b
23	996.7	45.8	45.4	97	54.1	41.2	38.3	S	1	31	42	2.8	o
24	1008.4	48.3	47.9	97	53.7	43.7	43.0	S	4	126	Trace	0.6	op
25	1011.1	53.7	51.0	82	58.4	43.0	35.1	N	1	155	4	7.5	c
26	996.0	52.9	51.9	93	53.1	50.8	46.4	NNW	6	317	22	1.4	or
27	1000.0	45.4	45.3	99	46.4	45.2	40.4	S	2	297	30	0.0	op
28	1015.6	43.7	40.0	70	46.0	41.1	38.3	S	3	318	40	5.0	oip
29	1024.3	45.4	42.5	76	49.2	39.1	39.0	SSW	5	338	..	6.2	o
30	1025.0	44.9	42.5	80	50.1	38.4	31.3	Calm	..	95	..	8.2	b
31	1020.2	45.3	43.4	84	52.2	38.4	31.1	NE	3	51	Trace	6.3	oz
Means, &c. ...	1007.6	49.7	47.4	84	53.7	44.7	39.6	..	2.9	177	613	110.0	..

Mean earth temperature at 1 ft., 50.5°; and at 3 ft., 53.6°. Number of rain days, 16. Total rainfall, 50 per cent. above normal. Sunshine, 36 per cent. of the possible. Mean dewpoint at 9 a.m., 44.8°; mean vapour pressure, 0.296 in.

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.
..	13	5	2½	..	3½	10	½	..	4½	5

NOTE.—A thunderstorm, lasting about twenty minutes, was experienced on the 9th. Light hail showers were frequent during the 28th.

NOTES ON THE WEATHER FOR MAY, 1940.

General Notes.—During May, as in the months preceding, temperatures were cold. Skies were dull and rain fell frequently in most parts, but there was a fortunate lack of continued strong winds. Although there were several gales they did not persist for any considerable time. The ground is now well soaked and, while some pasture growth has been maintained in the north, it has almost ceased in the south. Widespread frosts at the close of the month will have checked the growth still further. Animals are in a healthy condition, but some stock were lost in the Otago floods.

Rainfall.—In spite of the large number of rain days, the total falls were somewhat below normal in several regions—viz., the Waikato, King-country, North Taranaki, and Poverty Bay, as well as in Nelson and Westland provinces. Rainfall was in excess in most other districts, the percentage excesses being greatest in Canterbury and Otago, where many stations had over double the normal amount, chiefly as the result of the continuous rains from the 4th to the 8th, when many floods occurred. Thunderstorms were numerous, some being accompanied by sharp hail-showers.

Temperatures.—The milder spells were brief and the colder more prolonged. Mean temperatures from Canterbury northwards were about 2° below normal, while southwards the departures were smaller. There were numerous frosts, and on several occasions considerable amounts of snow fell on the ranges.

Sunshine.—Some stations, such as Auckland and Napier, had values noticeably above the average, but most places had less sunshine than is usual in May. The southern half of the South Island suffered most in this respect.

Weather Sequences.—An anticyclone over New Zealand gave three days of fair, mild weather, but on the evening of the 3rd a vigorous depression approaching from the Central Tasmah Sea caused rain in Westland, and heavy rains began to extend from the north over most of the North Island. Some very large falls were recorded in the far north, while in southern Taranaki the precipitation rate was intense. The main depression moved in the direction of Chatham Islands, but on the 8th a secondary disturbance developed into a cyclone which travelled eastwards from Poverty Bay. Meanwhile southerly winds continued to prevail and rain fell steadily in Canterbury, Otago, and Southland, where rivers were running high with considerable damage from flooding, and resultant dislocation of traffic. The floods were severest in the Taieri Valley.

Then the anticyclone which had remained over south-eastern Australia began to advance towards New Zealand, but by this time it had lost most of its intensity. However, about the 12th when it passed over the North Island there was a general improvement except in the far south where the weather was cold and changeable.

By the 15th the situation was more of the westerly type. On the 18th an extensive depression reached the Dominion and it did not move clear of the Chatham Islands until the 25th. A secondary depression developed off the west coast of the North Island on the 22nd and helped to keep conditions unsettled. During the week considerable rain fell at first in the west and later in the east. Southerlies again predominated with cold temperatures and hard frosts. Conditions improved fairly generally by the 24th and on the next day there was an extensive belt of high pressure across the North Tasman Sea to beyond the North Island.

A complex depression crossing the country on the 26th resulted in another unsettled spell when snow fell on the ranges, strong southerly gales being experienced on the east coast. From the 28th onward the arrival of a new anticyclone produced better weather but nights were very frosty in both Islands. On the last day of the month pressure was falling in the south and scattered rains occurred in the west and in the far north and south. Elsewhere it was fair and rather milder.

M. A. F. BARNETT, Director.