

Government Meteorological Observatory.

METEOROLOGICAL Observations at Kelburn, Wellington, for the Month of March, 1939. 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.	Anemometer.				
		At 9 a.m.			Maximum.	Minimum.	Minimum on Grass.	Direction.			Force.			
		Dry.	Wet.	Humidity.					Dry.	Dry.				
1	1027.4	57.5	57.0	97	65.9	56.5	56.2	SSE	4	147	Trace	5.6	omd	
2	1025.0	65.9	57.9	59	72.9	50.5	41.6	NW	2	116	..	12.0	b	
3	1025.6	61.9	58.8	82	70.6	55.5	48.9	NW	3	178	..	9.2	c	
4	1028.5	60.3	57.2	81	65.4	56.5	52.9	S	2	129	..	4.3	o	
5	1026.6	65.4	60.6	74	75.7	54.9	52.6	Calm	..	93	..	10.4	bcz	
6	1022.9	66.3	59.4	64	72.9	58.7	50.8	NNE	2	121	..	10.9	bc	
7	1021.8	66.3	61.7	75	72.8	59.4	57.1	NNW	4	243	..	9.5	c	
8	1020.8	64.6	60.9	80	70.9	58.2	54.9	NNW	3	194	2	0.9	o	
9	1029.2	54.2	50.1	73	58.0	52.1	50.6	SE	4	209	13	0.0	oir	
10	1017.8	58.0	57.6	98	60.0	49.7	50.0	NW	3	83	75	0.0	or	
11	1017.0	57.2	56.8	98	58.4	55.6	56.0	S	3	304	6	0.1	od	
12	1027.3	56.8	50.9	64	59.0	50.4	49.0	SSE	4	239	..	6.2	o	
13	1027.1	58.9	52.7	63	69.7	47.0	38.8	ENE	1	97	..	9.5	bc	
14	1026.9	59.7	56.8	83	66.7	51.9	45.6	NNE	3	45	..	3.2	o	
15	1028.6	65.2	60.1	73	71.9	55.2	49.8	NW	2	101	Trace	11.1	bc	
16	1028.7	58.0	56.8	93	67.5	55.2	46.1	Calm	..	54	..	4.1	o	
17	1025.2	60.2	57.7	85	63.8	54.8	47.2	NNW	3	83	..	1.0	o	
18	1024.6	62.2	58.4	78	73.0	54.6	44.7	Calm	..	101	Trace	10.4	bc	
19	1018.6	60.9	58.8	87	65.9	56.7	53.5	NNE	3	108	..	1.3	o	
20	1018.3	65.9	60.3	70	71.7	57.2	54.1	NW	3	160	Trace	6.5	c	
21	1020.0	58.0	55.6	85	62.0	55.2	55.2	S	5	185	Trace	3.2	o	
22	1027.8	58.7	49.2	45	61.1	51.0	46.4	SE	3	219	..	10.2	cy	
23	1021.0	59.0	53.2	66	68.8	44.1	33.9	NE	1	93	..	10.9	b	
24	1017.4	65.4	59.9	71	71.9	52.6	46.0	NNW	1	131	..	9.6	bc	
25	1020.3	58.3	56.1	87	62.4	55.0	46.1	S	3	73	3	1.9	o	
26	1020.4	62.4	58.8	79	70.4	49.9	41.9	NE	1	100	..	10.8	b	
27	1017.2	62.9	57.7	71	70.0	56.5	53.7	NNW	3	79	..	8.5	o	
28	1008.1	59.3	55.6	78	63.6	56.9	52.8	NE	3	146	Trace	4.8	o	
29	1009.0	52.5	48.6	74	57.1	51.8	45.2	SSE	5	190	Trace	2.8	o	
30	1019.2	57.1	51.7	67	62.8	43.8	36.0	NNW	3	163	..	7.1	bcz	
31	1012.2	60.3	55.5	72	65.7	54.8	52.1	NW	5	284	6	9.7	bcq	
Means, &c.	1022.0	60.6	56.5	77	66.7	53.6	48.7	..	2.6	144	105	195.7	..	

NOTE.—Pressure was remarkably high during the month.

Mean earth temperature at 1 ft., 63.4°; and at 3 ft., 62.8°. Number of rain days, 6. Total rainfall, 67 per cent. below normal. Sunshine, 51 per cent. of the possible. Mean dewpoint at 9 a.m., 53.5°; mean vapour pressure, 0.410 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.
..	7	4½	5	½	3½	5½	9	3

NOTES ON THE WEATHER FOR MARCH, 1939.

General.—March was a mild month with little wind and about the average amount of sunshine. Droughty conditions prevailed throughout the greater part of the month in most districts. Owing to the preceding two months having been dry, conditions are now serious. In many places there is a shortage of water and, except in a few areas, pastures have been depleted and little growth is taking place. Small crops have done very poorly and in many cases autumn sowings have been impossible. The problem of winter feed for stock is causing grave anxiety, especially since even if rain comes soon it will, in many cases, be too late for much growth to be produced. Though they are beginning to feel the pinch, the condition of stock is not generally bad; lambs are, in many cases, still doing well. The milk yield has declined seriously. The drought appears to be most acute in the Auckland, Marlborough, and Nelson Provinces. Parts of Canterbury, Otago, and Southland, and the high levels in the North Island, have not fared badly. White butterflies have become rather plentiful, but conditions have been unfavourable for most pests.

Rainfall.—According to present reports, rainfall was well below average in all districts. Probably in no previous month has the shortage of rainfall been so universal. The North Island received approximately only a quarter of the average fall. Numbers of places reported the driest March on record, and at Kaipara Heads there was no rain at all. Parts of the South Taranaki Bight area fared better than the remainder of the North Island. South of Nelson and Marlborough the rain shortage ranged, generally, between 20 and 50 per cent.

Temperatures.—Temperatures were everywhere above normal. The departures were not large, the average being under 1½ degrees. Conditions were very uniform and there was an absence of extreme temperatures. There were few frosts, and such as occurred were light.

Sunshine.—The distribution of sunshine was rather variable, some places having considerably more and some considerably less than normal. On the whole it was a fairly average month. Nelson had 244.6, Napier 235.4, and Blenheim 227.8 hours.

Storm Systems.—The month was characterized by almost continuous high pressures and anticyclonic conditions. In only a very few years previously has the average pressure for March been so high. Disturbances which were quite vigorous over Australia or the Tasman Sea became in every case very feeble before reaching New Zealand. When fronts crossed the Dominion they were generally oriented in an approximately west to east direction, which is the least favourable for rain. Southerly wind changes swept northward over the country on several occasions without producing rains of any consequence. Fogs were again rather numerous.

The only depression to produce very widespread rain was one which began as a small but deep cyclone on the south coast of Queensland on the 6th. After moving on to the Central Tasman Sea by the 8th it gradually filled up but by the 12th it had produced general rain. The amount recorded was surprising and most of it far in advance of the centre of the depression. There were many heavy falls south of Nelson and Marlborough in the South Island, and in Wellington, also, there were some good totals. Elsewhere they were mainly light. These rains came at a critical period and, for the time being, the drought appeared to be broken.