

Government Meteorological Observatory.

METEOROLOGICAL observations at Kelburn, Wellington, for the month of October, 1939. Observations taken at 9 a.m.

Altitude of Observatory, 415 ft.

Date.	Pressure in Millibars, at Sealevel 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.			Maxi-mum.	Mini-mum.		Direction.	Force.		Run in 24 Hours.			
		Dry.	Wet.	Humid-ity.										
1	1020.7	53.5	50.2	78	57.7	46.2	42.8	NNE	5	148	..	9.2	c	
2	1031.8	53.2	48.2	67	56.8	46.2	41.7	SE	3	198	..	11.2	b	
3	1032.8	56.8	51.2	66	59.0	41.3	32.1	SSE	2	110	..	10.9	bz	
4	1032.0	55.1	49.7	65	65.0	39.5	35.1	ENE	1	128	..	11.5	bz	
5	1030.1	58.6	53.0	67	62.1	45.6	38.6	NNE	2	94	..	8.2	bz	
6	1027.6	57.2	50.6	60	63.7	44.8	38.4	ESE	1	122	..	8.7	bz	
7	1021.0	54.8	49.2	65	63.7	46.5	38.6	NE	1	74	3	1.7	oz	
8	1011.7	62.8	55.0	58	66.3	51.7	49.0	NNW	4	133	22	4.1	o	
9	1012.4	60.8	56.6	76	62.5	51.3	48.9	NW	2	193	..	7.5	c	
10	1014.6	56.0	53.0	81	66.8	47.1	46.0	NE	2	131	..	8.8	cz	
11	1011.4	54.9	49.8	68	60.1	49.2	46.4	NNW	3	146	Trace	6.3	o	
12	1011.4	48.9	48.5	97	52.3	48.0	47.7	SSE	3	191	29	0.0	od	
13	1015.6	47.2	45.3	86	51.1	43.6	43.5	SSE	5	277	21	3.7	oir	
14	1015.5	46.8	44.7	84	51.0	41.3	40.3	SSE	5	266	4	3.4	op	
15	1017.0	49.2	45.6	74	58.8	44.4	42.1	SSE	2	186	..	7.1	c	
16	1016.0	58.8	52.5	63	60.0	48.4	44.2	NNW	3	116	45	6.2	c	
17	1004.5	56.8	55.4	91	59.8	49.4	48.3	NNW	7	305	..	7.9	oq	
18	1002.1	55.6	50.2	45	58.3	49.7	47.1	NW	6	461	..	11.1	bq	
19	1009.4	58.3	51.6	60	65.8	44.8	36.8	Calm	..	237	..	9.3	o	
20	1010.0	57.6	50.3	57	61.2	46.7	41.4	NNE	3	111	4	9.6	b	
21	1017.8	48.9	43.8	63	53.1	43.2	42.3	S	4	275	..	2.5	ojp	
22	1017.4	51.4	46.3	71	56.8	39.9	30.0	SSE	3	125	..	11.1	b	
23	1019.2	56.1	50.1	63	61.1	39.4	31.5	N	2	114	..	12.2	o	
24	1017.5	56.4	51.3	68	61.0	48.2	44.0	N	3	159	..	4.9	o	
25	1013.2	55.8	54.0	88	58.8	52.4	50.4	NW	6	358	18	2.9	oq	
26	1009.2	51.2	50.7	97	58.6	50.2	51.2	NW	4	379	59	0.8	or	
27	1015.3	45.0	42.8	82	55.4	39.8	39.7	W	2	133	Trace	1.8	or	
28	1017.6	50.8	46.9	73	55.3	44.2	41.2	SSE	4	235	2	7.7	o	
29	1016.2	51.9	47.4	70	58.0	45.9	44.5	SSE	2	111	4	4.1	o	
30	1003.9	45.2	43.0	81	51.6	41.1	40.0	SSW	7	267	69	6.3	oq	
31	1013.3	47.6	45.4	85	56.8	41.3	40.1	S	4	544	Trace	8.7	op	
Means, &c. . .	1016.4	53.7	49.4	72	59.0	45.5	42.1	..	3.2	204	280	209.4	..	

Mean earth temperature at 1 ft., 55.7°; and at 3 ft., 54.0°. Number of rain days, 12. Total rainfall, 20 per cent. below normal. Sunshine, 51 per cent. of the possible. Mean dew-point at 9 a.m., 44.7°; mean vapour pressure, 0.295 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.
..	12	5½	4	1	5½	6½	½	1	6	1

NOTE.—The month was uneventful until the 30th, when a southerly gale freshened towards evening and blew with much violence until the early hours of the 31st. It was accompanied by heavy rain, hail, and heavy seas. Snow fell on the Tararuas on the 26th and 30th.

NOTES ON THE WEATHER FOR OCTOBER, 1939.

*General.*—On the whole October has been a pleasant and sunny month. It has been rather cool, however, especially at night, and much drier than usual, but fortunately with the absence of drying winds. Conditions have favoured grass growth, but pastures are still rather backward. The lambing season has been satisfactory and the weather, except for the gale at the end of the month, has enabled a good start to be made with shearing. Cattle are healthy with an increasing milk yield, which has not yet reached the rate of production of last year. Crops and cultivation are well ahead, and orchards are making good progress.

*Rainfall.*—The earlier part of the month was very dry, particularly in the south, but afterwards most districts had beneficial falls. Except in some northern and eastern areas of the Auckland Province, rainfall totals have been below average, and indeed below 50 per cent. of the average over almost half the country. The rains have barely sufficed for present requirements, so that there is a need in most farming districts for early warm rains.

*Temperatures.*—On the average, mean temperatures have been about a degree below the normal for October. The greatest departures have occurred in eastern districts where sea breezes have helped to keep the temperatures down. Nights have been cool generally and frosts have been fairly frequent, some of the sharpest following the cold south-westerly at the close of the month. The hail accompanying this wind was severest in Hawke's Bay where, however, the damage to fruit crops was fairly localized.

*Sunshine.*—Sunshine averages were well exceeded in Otago, Southland, and in most western districts, while some slight deficits were recorded at several stations on the east coast.

*Thunderstorm.*—A severe thunderstorm, accompanied by heavy rain and hail, affected the Hawke's Bay Province on the 12th. Fortunately the worst hail showers did not extend to a very wide area of orchards.

On the same day a small tornado was reported at Thornton, near Whakatane.

*Pressure Systems.*—For the first week anticyclonic conditions prevailed, the weather being fine and mild, but an almost stationary disturbance in the far north brought cloudy weather to the Auckland Peninsula and, finally, stormy easterly wind and rain to the entire province. During the 7th a rapidly moving depression came across the South Tasman Sea and resulted in a southerly change on the 8th and 9th. At this time rain was fairly general, with some good falls on the east coast. As shallow depressions passed between the 11th and 13th, the weather remained rather unsettled and central provinces had heavy rain and some thunderstorms, the rain extending later to the north. Thereafter, there was a general fine spell, but a more extensive disturbance, with one of its centres to the south, caused freshening northerlies with rain in Westland and the far south and later generally, except in Canterbury and Marlborough. Then the northern centre crossed the North Island and brought heavy rain to the Auckland Province. By the 19th the situation was of the westerly type but the depressions associated with it were not very active, and only moderate falls were experienced in the west.