

Government Meteorological Observatory.

METEOROLOGICAL Observations at Kelburn, Wellington, for the Month of April, 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.					Minimum on Grass.	Beaufort Scale.		Anemometer.				
		At 9 a.m.			Maxi-mum.	Mini-mum.		Direction.	Force.					
		Dry.	Wet.	Humid-ity.	Dry.	Dry.					Run in 24 Hours.			
1	1010.6	59.6	57.0	84	61.1	55.7	55.5	NW	7	249	28	0.0	oq	
2	1010.9	56.1	53.8	86	63.2	49.7	48.0	SE	2	314	..	9.7	bc	
3	1016.6	50.0	47.2	80	53.5	45.9	39.9	ESE	4	122	Trace	6.2	o	
4	1023.8	51.3	47.4	73	59.6	39.8	30.9	NE	1	146	..	10.3	bz	
5	1020.9	55.5	52.5	81	61.4	49.5	46.5	NNE	4	150	2	7.1	o	
6	1012.4	57.2	55.4	88	61.9	53.9	52.0	NNW	7	360	2	3.3	oq	
7	1017.4	58.1	53.8	74	66.8	52.2	47.2	Calm	..	231	..	7.6	bc	
8	1023.8	54.8	49.8	68	61.6	43.6	36.8	Calm	..	85	Trace	9.1	bz	
9	1014.2	57.0	53.7	79	58.0	52.2	49.4	N	5	168	205	0.2	oid	
10	1008.7	52.2	51.4	90	53.2	50.8	50.5	SW	5	298	34	0.0	ou	
11	1017.4	49.6	47.2	82	53.9	45.8	43.4	S	4	323	Trace	4.3	op	
12	1018.2	48.6	44.9	73	54.8	42.2	36.1	S	1	144	17	5.2	ou	
13	1022.8	51.7	45.4	58	54.8	47.7	46.1	SSE	5	231	6	6.4	oip	
14	1021.8	53.3	51.7	88	59.5	47.8	44.7	S	3	188	8	8.4	bc	
15	1014.5	51.2	50.8	97	57.1	47.2	41.5	N	2	82	12	0.0	orz	
16	1009.4	56.2	52.9	79	61.1	50.0	50.8	NNE	2	145	..	7.7	e	
17	1004.6	54.6	52.7	88	58.3	51.9	49.3	NNE	1	127	21	0.0	o	
18	1000.3	52.4	51.5	94	55.4	48.8	46.3	S	4	73	96	0.1	op	
19	1011.7	52.1	49.4	81	54.2	50.1	49.6	S	5	381	..	1.4	o	
20	1020.5	50.0	45.9	71	53.4	48.0	45.1	SSE	3	238	2	0.8	o	
21	1023.0	50.8	47.6	78	54.5	45.9	44.2	S	3	153	19	2.8	o	
22	1029.9	52.4	47.1	65	55.4	46.2	40.1	SSE	4	193	..	8.3	o	
23	1030.0	46.2	44.3	85	58.8	39.4	30.5	Calm	..	80	..	9.3	o	
24	1024.9	53.9	49.9	74	58.0	42.0	37.3	NNE	3	65	..	9.0	b	
25	1021.8	56.2	52.0	74	64.8	48.0	42.5	NNW	1	128	..	8.3	c	
26	1012.4	58.2	53.9	74	61.4	52.2	47.6	NW	6	258	73	5.1	b	
27	1017.7	48.5	45.0	75	51.6	41.9	41.4	SSE	3	270	3	5.0	o	
28	1010.8	48.0	46.5	88	50.8	41.4	37.0	S	5	110	30	1.8	op	
29	1021.8	47.8	46.5	90	55.1	43.2	41.2	S	4	386	..	4.9	op	
30	1020.0	51.5	49.6	87	56.2	46.5	43.7	Calm	..	62	..	0.2	o	
Means, &c. . .	1017.1	52.9	49.9	80	57.6	47.3	43.8	..	3.1	192	558	142.5	..	

Mean earth temperature at 1 ft., 56.0°; and at 3 ft., 58.4°. Number of rain days, 16. Total rainfall, 53 per cent. above normal. Sunshine, 43 per cent. of the possible. Mean dew-point at 9 a.m., 46.8°; mean vapour pressure, 0.319 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.
..	14	5	3	½	3½	10	1	..	3	4

NOTE.—The first snow of the season fell on the Tararua on the 3rd. Very light hail accompanied a southerly gale on the night of the 28th.

NOTES ON THE WEATHER FOR APRIL, 1940.

General Notes.—April was unseasonable throughout the Dominion, with unusually cold temperatures prevailing. Frequent southerly winds made conditions very unpleasant at times, particularly on the east coast. Rains sustained reasonable growth in the North Island, but cold night temperatures tended to counterbalance the full value of the showers. In the south the position is rather varied, but about mid-Canterbury it seems to be worst, with many of the root crops too badly affected previously by drought and insect pests to make much recovery. In other districts, however, grass is still making fair growth, and the turnip and other crops are very satisfactory. Cultivation has proceeded well and the rains have helped on the germination and early growth of autumn-sown oats and wheat. There is an absence of disease and stock are in good condition to face the winter.

Rainfall.—There were many rain days through the month, but totals were generally not excessive. Most of the rain came as showers and these were mainly light. This showery type of weather made the month's rainfall distribution very patchy, but for the major portion of the North Island as well as Westland and Otago the tendency was to be drier than normal. Most of the excesses occurred between Canterbury and East Cape.

Temperatures were below normal in all districts, the departures averaging 3° F. to 4° F. At several stations the average temperature reached record low values, so that for the whole country the month was comparable with the coldest of Aprils. Frosts were frequent, some being quite sharp and damaging vegetable crops.

Sunshine.—While sunshine figures were good in Auckland and Westland, they were close to the average in Canterbury and below average elsewhere, with the greatest deficits occurring in Hawke's Bay.

Weather Sequence.—At the commencement of the month, rain which had already developed in the far south extended northwards with the advance of a south-westerly change behind a trough of low pressure. Temperatures were cool and snow fell in the southern ranges. Meanwhile an anticyclone had been moving from the west and was over New Zealand on the 4th. The nights were clear and frosty. Weak depressions passing in the south resulted in intermittent rain in the Alps and in western districts, while northerly to westerly winds became strong, especially in the central areas. On the 7th a fresh south-westerly change brought cold and showery weather to most of the country. With a high-pressure system over the North Island during the 8th and 9th, skies were rather cloudy and some occasional rain occurred, the heavier falls being in the central provinces. On the 10th a disturbance with lowest pressure to the south passed across New Zealand. South-westerly winds predominated and the weather was cloudy with fairly general intermittent rain.

As a new anticyclone extended towards New Zealand on the 11th conditions were cold and wet in eastern areas where strong southerly winds prevailed. While the high-pressure system was centred in the south a disturbance formed over the North Island with fresh westerlies to the north and moderate to strong south-easterlies to the south. Eastern districts had a continuance of unsettled weather, the larger falls being in the Hawke's Bay - Poverty Bay region, but conditions improved on the 14th.

Another complex depression from the Tasman Sea affected the country from the 15th-17th, when northerlies prevailed and most places had some rain or drizzle which was heavier in the west. Before the trough had moved off New Zealand on the 18th a cyclonic disturbance developed in the north and moved south-eastward. Strong westerly winds blew over the Auckland Peninsula and fresh south-easterlies elsewhere. An extensive anticyclone over South Australia then moved slowly towards New Zealand. Conditions were cool and unsettled, while southerlies increased to gale force about and north of Cook Strait and squally weather prevailed on the east coast. There followed a considerable improvement which was almost general by the 22nd when the anticyclone was over New Zealand, and here it remained almost stationary for several days.