

Government Meteorological Observatory.

METEOROLOGICAL Observations at Kelburn, Wellington, for the Month of September, 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 (Symbol) at 9 a.m.
		In Screen.						Beaufort Scale.	Anemometer.				
		At 9 a.m.			Maximum.	Minimum.	Minimum on Grass.			Direction.			
		Dry.	Wet.	Humidity.				Dry.	Dry.				
1	1010.2	49.0	49.0	100	53.9	47.2	46.7	S	2	80	4	0.0	omdf
2	1005.7	53.9	51.8	86	59.2	46.2	47.4	NNE	2	75	..	8.0	o
3	1008.0	55.0	50.4	70	62.1	48.0	43.7	NNW	4	250	13	4.6	b
4	1023.0	45.3	43.3	84	49.0	42.0	41.0	SE	1	164	33	0.0	or
5	1017.0	47.7	47.3	97	57.0	43.5	43.1	Calm	..	20	3	3.1	orf
6	1017.0	50.3	50.1	99	53.7	44.7	41.2	SSE	3	46	15	1.0	oid
7	1018.8	52.6	51.7	94	54.8	46.9	44.2	Calm	..	75	33	0.2	oirjf
8	1019.2	54.7	51.9	81	60.7	48.3	45.6	Calm	..	77	1	4.0	c
9	1014.8	54.1	51.1	80	61.0	42.5	37.1	Calm	..	34	1	10.1	b
10	1008.8	50.1	49.8	98	51.4	49.1	47.8	NNW	3	212	144	0.0	od
11	1021.9	49.3	45.0	69	51.4	45.1	43.4	S	6	347	..	9.3	czq
12	1029.4	47.4	43.5	70	50.9	43.0	38.8	S	4	224	Trace	7.6	o
13	1028.9	49.6	48.4	92	53.1	42.9	42.9	ESE	2	93	..	7.1	c
14	1021.3	51.8	48.0	72	54.7	40.9	35.0	NE	2	145	..	5.4	c
15	1009.6	52.9	49.9	80	54.8	48.0	46.1	NNW	6	229	62	2.0	c
16	1007.4	42.1	40.9	90	47.5	40.4	40.0	SSW	6	266	32	0.0	oir
17	1012.9	47.7	41.9	57	55.0	42.6	37.2	S	3	203	..	10.0	b
18	1014.0	52.7	48.9	73	62.8	42.1	34.1	NNE	1	77	..	10.1	bc
19	1018.2	53.6	50.3	78	59.2	44.3	38.9	NNE	4	105	..	6.5	o
20	1018.4	59.0	55.2	77	61.5	50.7	48.3	NW	5	297	..	4.9	o
21	1025.2	53.0	48.2	68	53.2	47.1	44.8	SSE	4	290	..	8.2	bz
22	1026.3	52.5	49.4	78	57.5	39.8	33.0	N	4	118	..	8.6	oz
23	1018.8	57.1	53.5	78	61.0	47.7	44.9	NNW	4	296	..	7.0	o
24	1022.5	57.5	54.5	81	62.9	48.3	44.2	NNW	4	218	..	7.5	o
25	1019.7	55.9	53.4	84	63.7	51.8	48.9	ENE	3	118	..	8.1	o
26	1015.2	55.8	51.8	75	62.1	50.0	48.0	N	5	170	Trace	10.2	b
27	1015.3	55.2	53.5	89	61.0	50.0	44.4	N	2	127	4	5.3	oir
28	1011.5	58.4	54.0	73	62.0	51.1	48.5	N	3	330	1	5.8	bc
29	1014.0	51.8	50.3	89	57.1	47.2	45.5	NW	5	75	16	0.2	oir
30	1006.8	56.3	55.0	91	58.0	51.2	51.2	NW	8	429	53	0.2	o
Means, &c. . .	1016.7	52.4	49.7	82	57.1	46.1	43.2	..	3	173	415	155.0	..

Mean earth temperature at 1 ft., 52.0°; and at 3 ft., 51.0°. Number of rain days, 15. Total rainfall, 30 per cent. above normal. Sunshine, 44 per cent. of the possible; four days without any bright sunshine recorded. 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.
1	13	8	3	1	2½	5½	½	..	5½	4

NOTE.—The month was remarkable for the absence of strong winds. A north-west gale blew for a few hours on the 30th. Fogs were experienced on four occasions. Snow fell on the Orongorongos on the 16th and lay till the next day.

NOTES ON THE WEATHER FOR SEPTEMBER, 1940.

General Notes.—September was a mild spring month, with considerable cloud and frequent scattered falls of rain while once again there was an absence of sustained windy weather. Warm soil and grass temperatures, assisted by favourable atmospheric conditions, have produced an early season as evidenced by the prolific blooms on shrubs and bright displays of spring flowers. Lambing was above average and very few losses attributable to wet weather have been reported. The main dairying districts are in an excellent state, but, while there is a general abundance of feed, in some areas the pastures are in need of more sunshine. Apart from cases of milk fever in the North Island, stock generally is in an excellent condition.

Rainfall.—The rainfall totals exceeded normal in eastern districts from Napier southwards to about Oamaru, percentage excesses being appreciably larger in the Canterbury Province where a number of stations had over double their usual fall, chiefly as the result of continuous rain on the 5th and 6th. A small area around New Plymouth had a slight surplus, but over practically the whole of the remainder of the country the totals showed deficits. These were, on the whole, most marked over the Auckland Province, where falls between 50 per cent. and 70 per cent. of the average were common. Some isolated thunderstorms occurred in the North Island during the first half of the month.

Temperatures.—Mean temperatures were, with few exceptions, above normal, the departures ranging for the most part between 0° and 2°. There were few hard frosts, and although on several occasions snow fell on the ranges, no significant fall was experienced on the lower levels.

Sunshine.—It was a poor month for sunshine in Hawke's Bay and the South Island, but especially so in Canterbury. On the other hand the Auckland Province enjoyed a surplus, the city averaging seven hours per day.

Weather Sequence.—Conditions were slightly disturbed over the New Zealand region during the first two days, but the main depression travelled northwards on the 3rd and 4th accompanied by cold southerly winds and showers. The weather cleared in the south as pressure rose rapidly, an anticyclone building up to the east of the South Island, while a secondary depression formed to the west of the North Island. North-easterly winds predominated until the 7th, there being dull and unsettled weather in central and eastern districts, and after two days' steady rain rivers were running very high in Canterbury.

The pressure systems began to move eastward on the 8th, and with the advance of a low-pressure trough on to southern New Zealand, north-westerly winds freshened and scattered rain set in in the west. Between the 9th and the 12th a southerly change traversed the Dominion, and although the rain was of the scattered type some falls were substantial, especially about the Wellington Province. Conditions improved from the south on the 12th and fine anticyclonic weather prevailed a further two days, but the high-pressure centre shifted north-eastward and weakened, while a rapidly-moving depression to the south brought southerlies once more. Moderate rainfalls were experienced in many parts of the country, some snow falling on the hills. A secondary disturbance developing near Taranaki on the 15th caused an increase in the southerly winds in central districts.