

Government Meteorological Observatory.

METEOROLOGICAL Observations at Kelburn, Wellington, for the Month of September, 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.					Minimum on Grass.	Beaufort Scale.		Anemometer.				
		At 9 a.m.			Maxim.	Minim.		Direction.	Force.					
		Dry.	Wet.	Humidity.							Dry.			
1	1000.3	50.2	44.8	62	56.8	45.1	41.3	SSE	3	199	37	6.8	b	
2	1005.0	46.5	44.8	86	53.8	37.4	30.8	Calm	..	82	Trace	8.4	c	
3	1004.1	52.7	49.7	80	54.8	42.5	36.2	NW	5	131	7	3.5	o	
4	993.3	48.8	46.4	82	53.0	47.0	46.1	NW	4	407	6	2.3	o	
5	996.5	50.3	43.3	51	58.5	43.0	42.0	NNW	4	327	..	10.1	b	
6	1008.8	49.6	43.6	69	55.5	45.8	43.0	NW	5	268	23	2.7	o	
7	1013.0	49.7	45.4	70	59.1	43.1	38.8	SE	1	234	7	5.7	b	
8	1015.5	49.0	46.1	79	58.3	38.0	36.8	NW	3	135	..	6.3	o	
9	1018.7	54.3	51.5	81	57.8	42.0	34.3	NE	3	81	..	7.9	o	
10	1015.5	55.1	51.9	79	58.3	47.8	44.3	NW	6	266	Trace	8.9	bc	
11	1014.3	55.4	53.7	89	57.7	49.9	47.2	NNW	4	382	3	4.9	o	
12	1009.8	53.0	50.7	84	56.2	50.1	49.4	NNW	6	454	63	3.0	oq	
13	997.2	45.0	45.0	100	45.7	44.4	45.0	S	2	327	126	0.0	or	
14	1004.2	47.3	41.6	57	50.5	39.2	36.5	SSW	2	229	..	7.9	c	
15	1012.0	52.8	47.4	70	57.2	38.5	30.2	NNW	2	98	Trace	8.3	c	
16	1021.4	49.0	44.8	70	53.1	37.8	29.7	ENE	1	105	..	9.4	b	
17	1023.3	48.8	44.2	67	51.2	42.4	37.8	SSE	3	161	..	10.8	c	
18	1023.5	53.1	49.3	74	56.3	36.1	27.8	NE	2	83	..	10.4	b	
19	1017.5	52.0	49.7	84	57.3	47.0	46.6	NW	6	182	Trace	1.7	o	
20	1017.7	56.6	53.3	79	60.6	49.2	47.2	NW	2	301	3	9.7	bc	
21	1013.0	53.8	53.3	96	57.1	49.5	47.0	NNW	4	306	Trace	1.8	ojp	
22	1018.2	55.0	53.1	87	58.2	52.8	51.4	NW	2	403	9	0.5	o	
23	1020.6	53.4	50.0	77	61.8	46.8	46.8	Calm	..	134	..	7.0	o	
24	1016.1	53.1	51.4	88	56.8	46.1	42.4	S	3	188	2	0.8	o	
25	1015.5	48.7	46.4	83	56.1	45.4	44.5	S	2	294	Trace	3.0	o	
26	1013.1	51.8	46.7	66	52.8	43.1	34.3	S	2	101	Trace	0.9	o	
27	1021.0	48.7	43.7	64	55.0	43.9	42.9	ESE	4	247	..	0.5	o	
28	1017.2	55.0	50.0	68	60.0	40.3	36.3	N	3	106	..	9.8	bc	
29	1015.8	56.0	52.2	76	59.8	47.7	43.3	N	3	189	Trace	8.6	c	
30	1019.7	52.4	48.7	75	58.7	46.2	41.2	SSE	3	224	..	10.8	o	
Means, &c. ..	1012.7	51.6	48.1	76	56.3	44.3	40.5	..	3	221	286	172.4	..	

Mean earth temperature at 1 ft., 52.1°; and at 3 ft., 50.4°. Number of rain days, 11. Total rainfall, 11 per cent. below normal. Sunshine, 49 per cent. of the possible. Mean dew-point at 9 a.m., 44.1°; mean vapour pressure, 0.289 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.
..	10	4½	2½	1	3	6	½	..	10½	2

NOTE.—Thunderstorms, accompanied by heavy rain and hail, occurred on the 1st and 7th, the former lasting for over an hour. Snow fell on the Orongorongo and Wainui ranges on the 13th.

NOTES ON THE WEATHER FOR SEPTEMBER, 1939.

General.—September has been a normal month in most respects. Stock are doing well, the cold snap towards the middle of the month not having serious consequences. From mid-Canterbury southwards pasture growth is backward. Northwards, however, growth has been better, especially during the last days of the month, and reports indicate good progress, also, in wheat and oat crops and that spring cultivation is well ahead. In the North Island, Auckland and Taranaki have had the ground rather too wet, but sunnier weather has improved matters and pastures have freshened. Milk yields have not yet come up to the normal. Warm rains in the latter half of the month were of great benefit to the Hawke's Bay district both as regards pasture and orchard.

Rainfall.—Rainfall has been under average in the north-eastern half of the South Island where a number of stations received less than half the usual fall, but in Westland and Central Otago the average has been considerably exceeded. Most North Island totals are smaller than usual but slight excesses have been recorded in parts of North Auckland, of northern Hawke's Bay, and of the Manawatu District.

Temperatures.—Mean temperatures have departed very little from normal. The east of the North Island has tended to be slightly above and the west slightly below. In Westland and Canterbury temperatures generally were about one degree cooler than average. A considerable number of frosts occurred but they were of only moderate intensity. Snow fell during two short periods, chiefly in the south.

Sunshine.—September has been a sunny month for most of the country from Christchurch northwards, while to the south the figures almost reached the average. Blenheim recorded 220.4, Nelson 218.5, and Napier 209.4 hours.

Thunderstorms.—Thunderstorms occurred on several days, the most widespread being on the 4th and 5th. Pressure Systems.—For the first eight days pressure remained high in the north, the westerly-type of weather prevailing. Apart from scattered showers there was much fine weather. Some heavy rain fell in western areas, however, and between the 3rd and the 5th was more widespread, flooding occurring in the Levin area. Cooler temperatures followed the more general south-westerly winds on the 6th and 7th. A break from the westerly type occurred on the 8th when the spreading of the northern anticyclone over the whole Dominion caused more settled weather and lighter winds.

After the 10th, shallow depressions in the south gave southerly winds at times with showers. Scattered rains occurred in the west up to Taranaki. The complex depression, which on the 12th had centres near Norfolk Island and the South Island, had more widespread effects. Heavy rain developed in Otago and Westland, followed by the chief cold snap of the month when snow fell in Southland, Central Otago, and on the higher levels in Canterbury. Conditions became unsettled generally by the 14th. The strong westerly to south-westerly winds interfered with shipping in the far north and in the Hauraki Gulf. Fortunately this stormy spell was brief, for on the 15th an anticyclone advanced on to northern New Zealand where pressure kept high for several days, while weak depressions passed in the south. Apart from isolated showers fair to fine weather was general.

The south and west of the South Island experienced some considerable falls on the 21st and 22nd and then, following a very mild spell, a cool southerly change advanced up the east coast accompanied by snowfalls in Otago and the Alps and rain up to Cook Strait, but the weather soon improved.