

Government Meteorological Observatory.

METEOROLOGICAL Observations at Kelburn, Wellington, for the Month of September, 1938. Observations taken at 9 a.m.

Altitude of Observatory, 415 ft.

Date.	Pressure in Inches, 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 Parts.	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.			
1	29.607	49.9	49.4	97	50.1	46.6	44.4	NNE	2	221	49	0.0	od	
2	29.776	48.4	46.4	85	48.4	45.6	45.1	SSE	5	197	34	0.8	oir	
3	29.861	46.6	46.4	98	51.7	42.0	41.2	SSE	6	449	94	1.5	or	
4	30.186	43.4	41.3	82	47.0	40.6	39.5	SSE	6	338	16	5.6	op	
5	30.151	45.4	44.7	94	47.4	41.9	39.1	SSE	5	265	3	2.0	oir	
6	30.139	46.2	43.4	78	55.4	42.7	37.1	SSE	1	108	..	4.8	o	
7	30.012	53.3	49.0	71	55.6	45.0	44.4	NW	6	157	83	4.5	c	
8	30.050	47.4	47.2	98	47.8	46.0	46.0	S	3	214	64	0.0	or	
9	30.295	44.0	43.7	98	47.2	42.3	42.0	SSE	5	325	44	0.0	od	
10	30.204	47.2	47.0	98	50.8	42.9	43.2	SSE	3	277	Trace	0.5	oid	
11	29.971	50.0	47.8	84	59.0	41.8	33.7	Calm	..	77	..	9.7	o	
12	29.894	53.0	48.4	69	59.1	48.2	44.2	NW	6	204	..	7.5	b	
13	29.938	56.3	52.7	77	56.9	50.4	45.6	NW	4	314	..	0.0	o	
14	29.906	56.7	54.5	86	58.7	53.2	50.9	NW	8	539	1	1.2	o	
15	30.186	58.0	49.4	49	62.4	49.1	39.1	SSE	2	490	4	9.4	bcy	
16	30.021	58.4	50.5	54	58.8	41.0	41.9	NNW	3	112	70	1.0	oir	
17	29.604	53.7	52.7	93	58.4	49.9	47.6	NW	6	309	111	3.2	oir	
18	29.321	44.1	41.8	81	51.0	41.6	40.5	SSW	6	381	11	3.5	oir	
19	29.805	51.0	48.0	79	57.5	37.5	30.0	NNW	2	172	..	10.7	b	
20	29.909	53.0	48.0	67	57.4	47.1	43.1	NW	6	359	Trace	9.1	bcq	
21	30.033	55.6	51.6	75	60.0	50.0	48.0	NW	4	414	Trace	4.1	c	
22	30.192	55.0	50.0	68	57.0	45.7	41.4	NE	2	83	..	6.0	b	
23	30.157	57.0	52.4	71	62.3	43.2	33.4	NW	3	53	..	11.2	b	
24	30.174	56.3	52.3	75	59.9	45.6	36.2	NE	2	74	..	10.7	b	
25	30.183	53.0	50.0	80	57.9	44.7	35.0	E	1	55	..	10.2	b	
26	30.257	53.8	49.7	73	55.2	43.4	31.8	SSE	4	70	1	3.0	o	
27	30.269	51.0	47.9	78	56.6	46.7	42.0	S	3	144	..	9.7	bc	
28	30.168	53.0	49.6	77	57.9	43.0	32.0	N	4	69	9	8.7	c	
29	30.210	50.1	49.9	99	58.6	48.9	47.2	S	2	156	Trace	0.0	oir	
30	30.266	58.0	54.8	80	62.6	43.5	38.9	NNW	4	111	Trace	4.4	c	
Means, &c.	30.025	51.6	48.7	80	55.6	45.0	40.8	..	3.8	225	594	143.0	..	

Mean earth temperature at 1 ft., 52.1°; and at 3 ft., 51.2°. Number of rain days, 15. Total rainfall, 86 per cent. above normal, being the wettest September since 1905. Sunshine, 44 per cent. of the possible. Mean dew-point at 9 a.m., 45.6°. Mean vapour pressure, 0.305 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	15	3	2½	1	4½	8	½	..	9½	1

NOTE.—There were boisterous north-west gales on the night of the 13th and during the 14th. Air services were disorganized on the latter date. Fresh snow fell on the Tararuas on the 18th.

NOTES ON THE WEATHER FOR SEPTEMBER, 1938.

General.—Dull, cold, and wet weather prevailed during the first few days of September, but from the 10th onwards, and especially after the 18th, there was a marked improvement. Temperatures became mild, there was little rain in most districts, and the atmosphere was dry. Some perfect spring days were experienced. The soil, which had in many places been waterlogged, dried out. For the farmer, the month was generally a very good one. Stock, particularly lambs, did well and agricultural work was carried out under favourable conditions. The percentage of lambs, particularly in the North Island, has not been so good as during the immediately preceding years, but this has been due to earlier troubles. In the Bay of Plenty area the season is still backward and feed rather scarce. Large parts of Otago and Southland, also, continue to experience a shortage of rainfall which is adversely affecting crops and pastures. Elsewhere feed is generally abundant. The white butterfly is already reported from as far south as Timaru.

Rainfall.—In the North Island rainfall was much above average in the Wellington Province but considerably below it almost everywhere else. In the South Island there were heavy rains in eastern districts from Dunedin northwards during the first three days and another good fall occurred on the 17th. These brought the totals for most of Canterbury and the eastern parts of North Otago above the average, but there was little rain during the rest of the month. Nelson, also, had more than the average, but over the remainder of the Island the month was a dry one. In Central Otago totals were extremely light.

Temperature.—The mean temperature was practically everywhere slightly above normal. There was no severe cold though the first few days were unpleasant. There was snow on the high levels, especially in the South Island, on the 2nd and 3rd, while on the 18th falls were widespread in the central portion of the Dominion. On the latter occasion snow lay on the ground about some of the higher parts of the Main Trunk Railway. On the whole, however, the ranges lost a large portion of their winter snow. Frosts though fairly frequent, especially in the South Island, were shallow and caused little damage.

Sunshine.—Though the latter part of the month was sunny, the total amount of bright sunshine was generally below average. The reverse was, however, the case in the Auckland, Westland, Otago, and Southland Provinces. The distribution was more uniform than usual. Hamilton East had 203.2 and Tauranga 195.9 hours. Totals of 183.7, 184.1, and 185.5 hours for Hokitika, Dunedin, and Invercargill, respectively, were unusually high for those places.

Storm Systems.—A depression was located over the middle portion of the Dominion on the 1st and gradually moved away to the north and east during the next two days. Though the depression itself was not very deep, its effect was increased by the advance of an anticyclone on to the southern part of the South Island. A southerly gale of an unusual type resulted. This was very boisterous about Cook Strait and on the east coast of the South Island. Except in the northern half of the North Island and western and southern districts of the South, there was heavy rain. About Oamaru some local flooding occurred. Snow fell on the ranges.

The next period of unsettled weather was from the 6th to the 9th when a series of depressions crossed the central and northern portions of the Dominion. Rain was again widespread with many heavy falls, especially in Taranaki and Wellington. Some violent thunderstorms were reported on the 8th, and in the northern Wairarapa there was very severe flooding.

A fine and mild spell followed, but from the 12th to the 18th there were frequent westerly depressions. There was rain in districts with a westerly aspect on most days, while that of the 17th was practically general. On this day there were many thunder and hail storms also. Westerly gales blew in many places between the 13th and 15th. A westerly gale of unusual violence for those areas blew again in the central and western portions of the North Island on the 18th, while farther south there was a southerly gale.

During the remainder of the month anticyclonic conditions prevailed and disturbances were of only slight intensity.

EDWARD KIDSON, Director.