

Government Meteorological Observatory.

METEOROLOGICAL Observations at Kelburn, Wellington, for the Month of September, 1935. 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 Tenths.	Weather (Symbols) at 9 a.m.
		In Screen.					Minimum on Grass.	Beaufort Scale.		Anemometer.				
		At 9 a.m.			Maximum.	Minimum.		Direction.	Force.					
		Dry.	Wet.	Humidity.						Dry.	Dry.			
1	30.134	42.3	39.5	76	46.0	34.2	32.2	S	4	288	19	4.5	ophq	
2	30.210	44.0	40.0	68	47.8	37.2	31.2	ESE	3	188	Trace	8.1	c	
3	30.258	47.7	43.2	67	48.8	38.1	32.2	SSE	4	122	5	7.6	bc	
4	30.358	46.2	43.8	81	48.1	39.5	35.9	SE	5	190	6	2.9	bcp	
5	30.344	48.1	46.0	84	54.0	43.0	38.0	SE	2	157	Trace	3.1	o	
6	30.269	49.8	46.0	73	53.8	40.2	31.7	Calm	..	64	..	7.4	bc	
7	30.128	51.0	45.8	64	59.0	39.8	29.8	NE	1	17	..	9.9	b	
8	29.876	53.5	47.2	58	60.1	41.5	31.5	Calm	..	73	12	9.1	b	
9	29.518	48.6	47.3	91	49.6	46.1	38.3	S	3	51	67	0.5	o	
10	29.482	45.3	44.8	96	46.0	44.8	44.2	S	8	261	50	0.0	or	
11	29.978	42.4	39.2	72	47.8	39.4	39.2	S	6	563	32	0.4	oq	
12	30.195	47.8	42.7	62	48.2	40.0	37.8	SSE	6	352	19	3.5	oqp	
13	30.249	45.8	43.2	80	48.5	41.0	39.4	S	4	310	Trace	5.4	o	
14	30.193	45.4	42.8	79	56.2	36.0	27.8	NE	1	92	..	8.2	o	
15	30.136	49.5	44.5	65	53.1	39.4	29.3	Calm	..	60	5	9.7	bw	
16	29.965	44.0	43.0	92	46.1	41.3	38.2	SSE	2	124	202	0.0	or	
17	29.573	44.7	44.0	95	53.7	41.8	41.0	SSW	4	287	43	5.2	od	
18	29.169	52.2	50.6	89	55.5	43.7	43.0	NW	6	245	Trace	5.2	oq	
19	29.501	53.3	48.7	70	56.0	49.1	46.7	NW	6	508	..	10.4	bq	
20	29.762	51.7	46.9	68	57.9	45.5	41.5	NW	6	375	Trace	11.0	bq	
21	29.962	51.7	48.0	75	53.0	41.7	32.2	SSE	4	167	..	10.9	cjp	
22	30.213	50.4	44.2	57	52.5	39.4	28.6	E	2	93	..	11.2	b	
23	30.399	49.2	44.9	69	57.3	37.1	27.8	NE	1	74	..	9.8	bz	
24	30.431	51.0	46.6	69	55.9	42.6	31.0	E	2	105	..	7.0	o	
25	30.353	53.8	48.0	62	59.9	44.2	33.9	E	1	120	..	6.5	o	
26	30.381	56.3	50.0	61	63.1	41.1	31.7	N	1	33	Trace	10.7	b	
27	30.538	49.9	48.0	87	53.6	44.0	35.9	S	3	109	..	3.0	o	
28	30.535	53.2	49.5	75	59.7	44.3	38.0	E	1	105	..	8.7	bc	
29	30.495	49.2	47.4	87	62.6	42.0	34.2	Calm	..	34	1	8.1	ow	
30	30.267	55.0	50.9	73	58.2	47.1	40.1	NNW	5	180	19	6.5	o	
Means, &c.	30.096	49.1	45.6	75	53.7	41.5	35.4	..	3.0	178	480	194.5	..	

Mean earth temperature at 1 ft., 48.7°; and at 3 ft., 49.1°. Number of rain days, 13.

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	12	1½	3	4½	4½	8½	½	..	3½	4	

NOTE.—A cold and wet month, with mean temperature 3.1° below normal. Sunshine, however, was abundant, averaging 6.5 hours per day, being 55 per cent. of the possible for September. Precipitation was 50 per cent. above the average. This is the first time since March that the rainfall has been above average. Frequent hail squalls were experienced on the 1st, and on that day there was also a heavy fall of snow on the Tararuas, and they remained snowcapped throughout the month.

NOTES ON THE WEATHER FOR SEPTEMBER, 1935.

General.—After a comparatively mild winter and indications of an early spring in the preceding month the weather in September, at least during the first half, reverted to a cold and rather stormy type in most districts. Low temperatures, on account of cold southerly or easterly winds prevailing as well as extreme dryness in many parts, had the effect of retarding growth of vegetation. In the western and southern areas of the South Island conditions were particularly dry, and farmers have had to face a serious shortage of feed, with the result that there has been some loss of stock. There was also considerable mortality amongst lambs in the Gisborne, Hawke's Bay, and Marlborough provinces owing to the cold wet spells experienced. In most parts of the country, however, owing to a favourable winter, stock kept in good condition. In North Canterbury and Marlborough some heavy rains on the 9th relieved the situation, which had become serious owing to a prolonged period of dryness. South Canterbury did not benefit to the same extent, and good rains are badly needed in that district.

Rainfall.—Rainfall was very much above the average in the northern portion of the Auckland Peninsula, some places having more than double. At Russell a total of 12.42 in. was recorded against the average for September of 3.89 in. The eastern districts of the North Island south of East Cape also had a considerable excess, but the remainder of the North Island received less than the normal falls. In the South Island, Marlborough was the only district where more than the usual amount fell. In North Canterbury the totals closely approached the average, but all other districts experienced a very dry month, the deficiencies being greatest on the West Coast.

Temperatures.—Temperatures were everywhere below the average. In the North Island the mean difference was 1.9° below, the climatological station showing the greatest difference being Wellington, where it was lower by 3.1°. The South Island mean was 3.3° below, Hammer Springs and Timaru having the greatest departures with 5.2° and 4° respectively. These low mean temperatures, as before mentioned, are accounted for by the prevalence of southerly and easterly winds. Frosts, also, were frequent in the South Island and at inland places in the North.

Sunshine.—There was less sunshine than the normal in the far northern and east coast districts of the North Island, but in most parts of the country the average amount was exceeded. The greatest difference above was on the west coast of the South Island, where it was the sunniest September ever experienced. From the reports so far received, Hokitika had the highest total—viz., 254.9 hours, while Nelson had 239.9 and Lake Tekapo 233 hours.

Pressure Systems.—In the beginning of the month an anticyclone covered New Zealand but the centre was situated in the south while a cyclone was passing in the north. Consequently, a cold south-easterly wind blew up the east coast accompanied by rain and hail squalls in the area between Banks Peninsula and East Cape. Snow also fell on much of the high country on the 1st, parts of inland Hawke's Bay experiencing a particularly heavy fall. Some of the low country in the Wairarapa also had snow at this time. Conditions about Cook Strait were extremely unpleasant, Karori and other parts of Wellington City having one of the heaviest falls of hail in recent years. Over the greater portion of the Dominion, however, fine weather prevailed, although temperatures were cold everywhere. Scattered rain continued to fall in the northern and east coast parts of the North Island until the 5th, but by the 6th the northern depression had practically filled up and on the latter day the weather was fine generally with milder temperatures.

On the morning of the 7th another cyclone, which had closely followed the track of the former, was situated just west of the Auckland Peninsula, and rain developed in the Auckland Province, some heavy falls and thunderstorms occurring on the 8th. During the afternoon a tornado swept inland at Northcote and considerably damaged some pleasure craft. A slight depression in the south at the same time brought rain also to far southern parts, but the weather was mild and pleasant over most of the Dominion. During the night of the 8th, however, the northern depression became more intense, and by the 9th had completely enveloped the Dominion, its centre then being north of Cook Strait. Rain became widespread with many heavy falls, and southerly winds strengthened. In the night the centre moved to a position east of Cook Strait and the southerly wind rose to strong gale force in many places, especially along the east coast and about Cook Strait. The rainfall associated with this disturbance was particularly heavy in the North Canterbury and Kaikoura districts, where