

Government Meteorological Observatory.

METEOROLOGICAL Observations at Kelburn, Wellington, for the Month of September, 1928. 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.	Solar Radiation: Maximum.	Beaufort Scale.		Anemometer.				
		At 9 a.m.			Maxim.	Minim.			Direction.	Force.					
		Dry.	Wet.	Humidity.							Dry.	Dry.			
1	29-807	51.1	44.0	52	55.2	38.0	30.1	120.0	NW	6	145	..	3-8	c	
2	29-931	52.0	49.3	81	55.2	48.2	45.0	105.0	NNE	6	420	41	2-8	c	
3	29-771	55.0	51.9	79	57.8	48.2	47.7	116.0	NW	6	497	..	6-5	b	
4	29-657	51.1	50.0	92	51.4	50.0	47.8	67.2	SSE	5	252	4	..	o	
5	29-660	48.3	44.2	69	51.6	45.4	44.0	107.8	SSE	5	361	..	4-2	o	
6	29-650	49.4	46.0	75	56.1	42.2	37.1	106.0	E	1	126	30	1-0	of	
7	29-200	49.0	48.2	95	55.1	48.0	47.8	114.2	NW	7	240	..	6-1	o	
8	29-589	50.2	44.8	62	54.9	46.2	41.6	117.9	NW	6	387	4	5-5	bc	
9	29-464	48.1	40.2	43	53.0	42.8	38.2	110.9	NW	5	476	..	10-2	b	
10	29-863	49.2	40.1	37	51.8	39.8	34.1	111.0	S	5	235	..	10.0	b	
11	29-890	50.1	44.5	61	54.2	41.0	35.0	127.2	NW	6	208	64	4-0	o	
12	29-758	48.2	48.1	99	54.8	46.0	45.0	104.8	SE	2	363	19	0-8	or	
13	29-901	54.8	50.2	70	59.2	41.1	34.0	117.0	N	1	106	..	10.9	b	
14	29-791	52.4	50.0	83	56.1	49.0	45.0	114.3	NW	7	284	59	3-7	o	
15	29-561	52.6	50.2	84	56.0	53.1	46.9	118.0	NW	2	457	17	6-3	c	
16	29-454	50.0	46.9	77	54.2	41.9	36.4	122.0	N	7	238	1	3-1	o	
17	29-429	51.5	47.9	75	58.0	46.2	43.0	122.0	S	1	333	10	5-6	c	
18	29-671	49.8	44.4	62	55.0	38.1	31.8	110.8	NW	6	93	15	1-7	o	
19	29-496	55.0	51.1	75	59.2	48.0	41.8	118.8	NW	5	410	..	7-9	bc	
20	29-605	54.7	51.0	76	62.8	42.1	35.8	118.9	NW	5	331	..	8-1	bc	
21	29-728	51.8	47.2	69	56.8	44.3	35.2	103.7	NW	4	159	17	1-1	o	
22	29-274	51.9	50.7	92	55.9	51.1	50.0	116.2	SSE	3	623	29	0.9	omr	
23	29-846	51.6	47.2	70	55.1	38.5	32.2	118.9	NW	3	93	17	6.9	b	
24	28-986	54.8	49.8	68	54.8	46.2	45.1	118.8	NW	7	487	4	9-1	bc	
25	29-052	56.1	47.3	46	58.3	49.0	44.8	127.6	NW	4	488	..	9.2	bc	
26	29-466	54.1	45.2	44	56.8	40.7	34.1	122.2	NW	5	254	..	9.6	b	
27	29-589	45.8	40.2	57	53.8	43.4	40.8	123.2	SSE	3	343	..	5.9	c	
28	29-850	53.3	47.4	61	54.0	40.4	31.8	128.0	SE	1	119	..	9.4	b	
29	30-249	53.4	48.2	66	56.1	41.4	36.0	118.6	NW	3	177	..	10.5	bc	
30	30-266	53.0	49.4	76	56.1	48.9	46.0	118.2	NNW	6	275	..	9.7	b	
Means, &c.	29-648	51.6	47.2	70	55.8	44.6	40.1	114.8	..	4.4	299	331	174.5	..	

Mean earth temperature at 1 ft. 50.1°; and at 3 ft. 50.3°. Number of rain days, 15.

DIRECTION OF WIND.

Gale (force 8 or more).	Forces 4 to 7.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
..	20	..	3	½	-1	4	4	17½

NOTE.—A stormy month generally, with strong north-west winds prevailing. Precipitation at Karori Reservoir, near Kelburn, was 5 per cent. above the mean of previous years. Total bright sunshine, 174.5 hours, 49 per cent. of the possible, and one sunless day. A frost was recorded on the grass on the morning of the 1st, and a fog was in evidence on the 6th. Hail fell on the 8th and 22nd, and thunder was experienced on the same days. Mean dew-point at 9 a.m., 42°; and mean vapour pressure, 0.266 in.

SUMMARY FOR THE MONTH OF SEPTEMBER, 1928.

During September the rainfall for the month exceeded the normal in nearly all parts of the North Island, except at a few places in the Gisborne and Napier districts and at Russell. In the South Island it was below normal in the eastern districts, but all the western half of the Island and the Nelson and Marlborough Provinces had an excess. The fall was more than double the average in places with a westerly aspect in the North Island and also in south-west Otago. Parts of Otago and Hawke's Bay are in need of rain, but generally the soil is in good condition for the coming period of growth.

On account of the prevalence of strong westerly winds the temperature range was not large, and the mean was usually about the average or slightly below. There were, however, occasions when rather severe frosts occurred in the inland and eastern districts. On the 23rd, for instance, a short-lived cold snap caused damage to apricots in Central Otago.

Growth was rather backward both as regards grass and crops, but on the whole there was ample feed for stock, and the latter kept in good condition.

In most parts of the Dominion the month was a stormy one on account of the numerous depressions of the westerly type which were in evidence. September, which is the first spring month, is one during which the latter is the normal type of pressure system, but this year they have been not only unusually frequent but also of much more than ordinary intensity. The only northern cyclone which affected the Dominion was the one which appeared to the north-west of New Zealand on the 3rd. By the morning of the 4th its centre had reached Cape Maria Van Diemen, and during the night of the 4th it crossed the Auckland Peninsula. Rain fell over most of the North Island on the 4th and 5th, and the falls were heavy at places in the northern and East Coast districts. On the 6th a secondary developed in the northern portion of the cyclone, which had by then moved to the south-east of New Zealand. But the secondary soon became merged in a very intense depression which advanced over the Tasman and which covered the New Zealand area on the 7th. During the 7th and 8th stormy conditions with strong north to west winds to gales were experienced, and heavy rain fell in most districts. The gale was particularly severe in Hawke's Bay, where considerable damage, especially to power lines, was done. By the 9th winds had backed to south-westerly, still with gale force at many places, but except in the western and southern districts, conditions were improving, and by the 10th mainly fair to fine weather prevailed while a weak anticyclone was crossing the Dominion.

After this date and until the 28th low-pressure disturbances of the westerly type prevailed, and they were frequently of a very intense character. As a result, winds were generally strong northerlies or westerlies, and gales were of almost