## Government Meteorological Observatory.

ETEOROLOGICAL Observations at Kelburn, Wellington, for the month of September, 1929. Observations taken at Altitude of Observatory, 415 ft.

			Pressure, in Inches at Sea-level and Standard Gravity.	Temperature (* F.) from Observations at 9 a.m.						Wind.			(100	Hours	at		
	Date.			In Screen.				3rass.	 g	Beaufort Scale.		Anemo- meter.	Points Inch)		(Symbols)		
				At 9 a.m.			Maxi- mum.	Mini- mum.	in on (	adiatio mum.	ą,		3. 3.	# #	Bright Sunshine and Tenths.	_	
				Dry.	Wet.	Humid- ity.	Dry.	Dry.	Minimum on Grass.	Solar Radiation Maximum.	Direction.	Force.	Run in Hours.	Rainfall, Points	Bright and	Weather 9 a.m	
ı				30.137	51.7	47.0	68	56.2	46.2	42.1	114.0	NW	5	258	Trace	6.4	o
$^2$				29.684	53.8	$50 \cdot 1$	76	55.0	50.2	48.0	88.2	N	8	596	98	0.6	oq
3				29.503	47.2	46.2	92	47.8	45.5	45.5	86.5	S	4	511	19	1.1	od
4				29.761	47.0	43.2	71	56.3	35.7	29.1	110.6	NE	3	246	1	8.9	e
5	• •			29.941	48.0	44.7	76	54.0	38.0	33.2	112.2	NE	1	170		9.9	bz
3				29.956	52.2	47.8	70	57.4	41.1	30.2	113.1	NE	1	112		10.2	bz
7				30.013	53·1	49.0	72	56.3	47.2	44.0	121.5	NW	4	268	Trace	9.0	e
}			••	29.946	53.5	51.9	89	55.3	50.6	47.4	106.2	NNW	8	508	17	0.1	0
)				29.592	54.8	49.4	66	57·1	49.6	48.2	113.7	NNW	. 7	633	2	9.3	b
)				29.887	49.6	45.2	69	56.6	40.7	35.1	113.8	SW	1	249	]4	8.2	b
l				30.315	40.0	37.9	81	50.0	37.7	35.0	116.5	SSE	4	207		7.4	pł
2				30.325	49.8	44.8	65	52.7	35.7	26.8	110.0	NNE	3	148		8.9	b
3				29.971	49.0	44.0	64	$53 \cdot 4$	45.8	41.5	113.0	NW	7	336		8.2	О
Ł				29.888	50.8	45.7	64	55.8	41.5	33.0	118.7	NE	1	234	• • •	7.3	bo
<b>,</b>				29.993	50.7	47.0	74	60.6	39.3	30.2	116.5	E	1	88		10.7	b
ì				29.621	53.3	48.5	68	53.9	46.2	43.0	99.5	NW	7	243	34	3.0	c
•				29.759	49.2	46.0	77	55.5	38.1	29.2	115.0	N	4	195	3	9.7	c
3	٠			29.527	55.2	53.4	88	59.0	48.6	45.2	117.9	N	8	474		4.3	0
)	•••			29.853	51.4	44.6	53	55.2	40.0	34.0	114.0	N	3	269	2	11.0	b
)				29.899	47.1	46.6	96	47.7	46.3	44.8	104.0	SSE	2	331	71	0.0	oc
				30.319	46.5	40.3	54	49.2	38.9	36.9	120.6	SE	4	298	••	8.5	bo
,				30.360	48.4	42.7	58	56.0	34.0	25.1	115.5	E	1	108		11.1	by
3				30.301	53.1	47.4	62	$56 \cdot 6$	39.5	31.8	117.5	N	2	97		11.4	b
Į			• •	30.159	53.6	47.7	62	57.9	45.1	40.5	121.8	NW	4	154	]	11.1	b
í				29.865	53.9	50.0	75	56.2	47.2	42.0	109.6	N	6	240	11	1.2	0
;				29.734	53.5	50.6	81	58.8	48.3	46.9	116.8	NNE	3	368	44	1.7	0
,				29.756	42.0	40.0	83	45.0	40.3	40.0	100.1	SSE	7	215	13	1.6	О
3				30.143	44.3	40.2	67	48.3	36.6	35.0	115.8	SE	5	406		5.3	0
)				30.247	47.5	42.7	64	52.9	35.7	26.0	117.3	SE	1	115		9.3	be
)			• •	30.007	50.2	47.4	80	56.8	40.5	31.8	120.3	NNE	2	74		7.8	c
	Means,	&c.		29.949	50.0	46.0	$-{72}$	54.5	42.3	37.4	112.0		3.9	272	329	203.2	

Mean earth temperature at 1 ft., 49.3°; and at 3 ft., 49.6°. Number of rain days, 13.

## DIRECTION OF WIND.

Gale (force	Forces									
8 or more).	4 to 7.	$\mathbf{Calm}.$	N.	N.E.	E.	S.E.	s.	s.w.	$\mathbf{w}.$	N.W.
3 [	13		81	5 <del>1</del>	2	41/2	$2\frac{1}{2}$	1		6

Note.—September was a cold month, with mean temperature some three degrees below the average. Total bright sunshine, 203·2 hours, 57 per cent. of the possible, and one sunless day. The rainfall was 15 per cent. above the mean at Karori Reservoir, near Kelburn. Frost was recorded on the grass on seven mornings, lightning was seen on the 10th, and hail fell on the 3rd, 11th, 27th, and 28th. Mean dew-point, 41·1°; and mean vapour pressure, 0·257 in.

## SUMMARY FOR THE MONTH OF SEPTEMBER, 1929.

Summary for the Month of September, 1929.

This year we have experienced the coldest September for a considerable time. All parts of the country report low average temperatures, and frosts were unusually numerous. Although cold, the month was a sunny one, there being numbers of beautifully fine days. Rainfall was, on the whole, below average. This was almost generally the case over the North Island, except about Wellington. In the South Island, both east and west coasts experienced a dry month, but Stewart Island, Southland, and much of the central portions of the Island had more than the normal fell. The low temperatures gave a distinct setback to growing vegetation, and feed is rather short in most districts. Parts of the North Island escaped the severity of the storms and are in good condition. There have been losses of lambs in the Wellington Province and parts of the South Island, especially the foothills of Canterbury.

The storms recorded during the month were in no case responsible for any very heavy rains except at a few isolated places. Snow, however, fell frequently, especially in the high country of the South Island. In the interior of Canterbury it has been one of the worst seasons on record for snow, but no very severe losses of stock are reported.

The tendency for storms to take on cyclonic form was again in evidence during the month. Subtropical waters to the north and north-east have been unusually frequently disturbed by storms of this type.

On the 1st a deep depression of the southern or westerly type was approaching the Dominion. A small cyclonic centre developed in its northern portion, and this crossed Canterbury on the afternoon of the 2nd. Heavy north-westerly gales blew in the Cook Strait region and over the South Island. The greatest severity was felt in Canterbury, and much damage was done to plantations in the Ashburton County. Cold southerlies followed, gale force again being reached in places. Snowfalls were recorded in Canterbury and Otago.

Following a fine spell, another south

experienced.