Government Meteorological Observatory.

TETEOROLOGICAL Observations at Kelburn, Wellington, for the Month of November, 1940. Observations taken at Altitude of Observatory, 415 ft.

	Date.			e, in Millibars, at evel and Standard ity.	Temperature (° F.) from Observations at 9 a.m.						Wind.			(100	Hours	at
					In Screen.				rass.	Beaufort Scale.		Anemo- meter.	Points Inch.)		(Symbols)	
					At 9 a.m.			Maxi- mum.	Mini- mum.	no m	ď.		8. 24 8.	# T	t Sunshine : Tenths.	
				Pressure, in Sea-level a Gravity.	Dry.	Wet.	Humid- ity.	Dry.	Dry.	Minimum on Grass.	Direction.	Force.	Run in Hours.	Rainfall, Points	Bright and 7	Weather 9 a.m.
1				1020 · 3	57.6	51.2	62	64.2	44.8	38.2	E	2	130	Trace	11.9	bz
2				1009.0	$54 \cdot 2$	50.3	75	59.9	47.8	44.8	N	5	184	11	1.0	0
3				$995 \cdot 3$	54.5	53.7	94	56.5	49.5	47.1	N	1	176	87	0.0	odr
4				$995 \cdot 2$	$49 \cdot 0$	48.7	98	57.8	47.1	46.6	S	5	149	18	0.0	or
5				1002 • 4	58.0	53.8	75	61.4	46.8	42.0	NNW	3	224	1	7.9	e
6				996.7	57.6	51.6	64	59.4	50 · 1	47.8	NW	5	338		10.5	ojp
7				991.4	55.0	49.7	66	56.5	47.3	43.9	NNW	4	307	39	4.0	ojp
3				989 - 2	47.6	44.7	79	50.0	42.1	41.7	S	7	307	44	0.5	op
)				1008 • 4	48.0	43.9	69	54.8	44.1	42.6	$\tilde{\mathbf{s}}$	5	452		8.3	e
) .				1007.5	54.3	50.2	73	62.6	42.0	37.2	$\tilde{\mathbf{N}}$	3	114	2	2.8	0
	• •	• •	• •	1004 9	$62 \cdot 0$	57.7	76	66.1	50.1	49.9	NW	2	137	_	9.8	c
2	• • •	• •	• •	1013.6	65.0	59.5	70	$72 \cdot 2$	51.4	46.8	NW	1	82	• • •	11.3	b
	• •	• •	• •	1015.5	62.6	58.0	74	66.1	53.4	51.2	WNW	3	125	• • •	6.6	
Ļ	• •	• •	• • .	1010.7	59.3	56.5	83	63.3	55.4	$52 \cdot 4$	NNW	5	$\frac{120}{270}$	/D	3.7	e ·
í	• •	• •	• •	1009.4	62.6	53.8	53		47.5	41.7	NW	3	$\begin{array}{c} 270 \\ 278 \end{array}$	Trace	10.6	0
	• •	• •	• •					67.5						66		b
	• •	• •	• •	1014.0	58.1	54.1	76	61.5	45.8	43.6	N	4	93	• • •	10.3	e
	• •	• •	• •	1006.7	57.9	53.2	72	$62 \cdot 9$	49.8	47.6	NNE	1	162	70	0.9	0
•	• •	• •	• •	997.6	50.3	50.0	98	59.6	48.0	48.8	SSE	3	152	5	1.4	or
)	• •	• •	• •	996.9	58.9	$52 \cdot 3$	61	61.5	48.7	46.3	NNW	5	139	23	11.3	bc
)		• •	• •	997.3	46.2	45.0	91	$53 \cdot 5$	43.1	41.8	, S	3	300	2	$0.\overline{0}$	oir
	• •	• •	• •	$1005 \cdot 3$	52.8	$46 \cdot 7$	59	$56 \cdot 7$	$44 \cdot 3$	$43 \cdot 7$	S	4	346	6	$4 \cdot 7$	c
,			• •	1006.0	49.4	48.8	96	$57 \cdot 0$	43.5	$37 \cdot 9$	S	2	106	12	$2 \cdot 0$	od
3				$1010 \cdot 0$	47.8	$47 \cdot 2$	95	$52 \cdot 7$	$46 \cdot 3$	43.8	S	3	57	4	0.1	\mathbf{or}
Ę				1018 • 4	49.8	47.6	84	$58 \cdot 4$	45.0	42.5	S	2	209		$6 \cdot 9$	0
5				$1024 \cdot 0$	58.4	$53 \cdot 0$	68	$66 \cdot 8$	46.1	41.8	S	2	111		11.3	b
;				$1024 \cdot 2$	64.4	$56 \cdot 7$	50	$69 \cdot 1$	47.6	42.0	NW	1	64	Trace	14.0	b
7				$1026 \cdot 2$	53.5	$52 \cdot 2$	91	$62 \cdot 8$	51.0	$45 \cdot 4$	SSE	3	122		$7 \cdot 7$	0
3				$1025 \cdot 9$	57.7	54.4	80	$69 \cdot 8$	$50 \cdot 2$	45.3	Calm		95		$9 \cdot 2$	0
)				1022 · 8	60.5	$57 \cdot 1$	80	$64 \cdot 9$	$54 \cdot 1$	52.0	NW	6	150		4.0	ou
Ó	•			1019.5	$64 \cdot 9$	58.8	67	68.4	55 · 1	$52 \cdot 9$	NNE	4	363	1	$9 \cdot 4$	c
	Means,	&c		1008.8	55.9	52.0	76	61.5	47.9	45.0		3.2	191	391	183.0	

Mean earth temperature at 1 ft., 59·2°; and at 3 ft., 57·1°. Number of rain days, 16. Total rainfall, 31 per cent. ve normal. Sunshine, 42 per cent. of the possible. Two days without any bright sunshine recorded. Mean dewabove normal. Sunshine, 42 per cent. of the possible. point at 9 a.m., 48·1°; mean vapour pressure, 0·336 in.

DIRECTION OF WIND.

Gale (force	Forces	N.	N.E.	Е.	S.E.	s.	s.w.	W.	N.W.	Calm.
8 or more).	4 to 7.									
	12	7	1 2	$1\frac{1}{2}$	1	10	1 1	$\frac{1}{2}$	83	1.

Note.—A thunderstorm, accompanied by heavy rain and some hail, was experienced on the evening of the 15th. Lightning was also observed on the night of the 7th. On the afternoon and evening of the 8th frequent hail-showers occurred. Snow was unusually low down on the ranges after this cold spell.

NOTES ON THE WEATHER FOR NOVEMBER, 1940.

General Notes.—November was cool and rather unseasonable, but the weather considerably improved towards the end of the month. Showers caused some delays in shearing operations but on the whole the rain was welcomed by farmers, especially on the east coast of the South Island where falls were just sufficient to bring relief to the cereal crops at a critical time. Most types of crops promise good harvests and haymaking has started earlier than usual. The feed position is most satisfactory and stock are well advanced and healthy.

Rainfall.—The total for the month was unusually excessive in central Hawke's Bay, chiefly as the result of torrential rain on the 3rd. A surplus was recorded over the rest of the North Island with the exception of the south-western portion of the Auckland-Province. Rainfall was lighter than usual over the major part of the South Island, but moderate excesses occurred in North Otago and about the southern sounds region. There was a good deal of thunderstorm activity throughout the month, the main displays being just after the middle of the month.

Temperatures.—Mean temperatures were below normal in many cases by 1° or 2°, but several days were very hot. Snow

Temperatures.—Mean temperatures were below normal in many cases by 1° or 2°, but several days were very hot. Snow fell on the southern ranges on several occasions and hail was of fairly widespread occurrence. Temperatures were, however, on a much warmer level during the last part of the month.

Sunshine.—The duration of bright sunshine was under average in the Central Districts, but was considerably above over the northern half of the North Island as well as in Westland, Otago, and Southland.

Weather Sequence.—An extensive depression approaching during the 2nd caused a deterioration from the prevailing anti-cyclonic conditions and later brought light rain to most districts. One low-pressure centre which deepened over Hawke's Bay was responsible for very heavy rain in that region as well as for numerous south-westerly gales in central and northern districts. There was an improvement on the 5th before a new and deep depression advanced from the west. On this depression, a cyclonic centre developed off New Plymouth and moved across the North Island on the 7th. While in the far south conditions remained fine, elsewhere it was unsettled with rain at times and with snow on the ranges. Gales were experienced and there were thunderstorms accompanied by hail-showers.

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Although conditions had improved generally by the 9th, another fairly extensive disturbance gave scattered but mainly light rain on the 10th and 11th, but under the influence of an anticyclone located to the north, the weather soon became fine and warm again. On the 13th a depression began to cross the South Island, steady rain developing in Westland. Scattered moderate falls later occurred over the rest of the South Island and scattered showers fell in western areas of the North Island.

The southern and eastern coasts of the latter had thunderstorms with brief torrential downpours on the evening of the 15th.

The 16th was fine, but a depression near Lord Howe Island was developing into a cyclone which was the cause of wide-spread heavy rain setting in over the North Island on the 17th. With pressure low to the south-east and high to the west; south-westerly winds prevailed from the 19th to the 23td. Conditions were cold and changeable and all districts had showery intervals, and Canterbury and Otago, in particular, received much-needed rain. At this period further snow fell on the ranges and some frosts occurred in the south.

An anticyclone, building up from the south, covered the Dominion on the 24th so that fine and warmer weather persisted for several days, but at the close of the month a disturbance affected the South Island where there was some light rain and a drop in temperatures.

M. A. F. BARNETT, Director.