Government Meteorological Observatory.

METEOROLOGICAL Observations at Kelburn, Wellington, for the Month of February, 1942. Observations taken at 9 a.m. Altitude of Observatory, 415 ft.

Millibars, at and Standard			Temperature (° F.) from Observations at 9 a.m.					Wind,			(100	Hours	s, at		
			filliba d Sta	In Screen.					rass.	Beaufort Scale.		Anemo- meter.	Points: Inch).	1 8	(Symbols,
	Date.		Pressure in N Sea-level an Gravity.	At 9 a.m.		Maxi- mum.	Mini- mum.	n on G	ď		n in rs.	1 S 1	Sunshi enths.		
				Dry.	Wet.	Relative Humidity, Per Cent.	Dry.	Dry.	Minimum on Grass.	Direction.	Force.	Miles Run in 24 Hours.	Rainfall Points	Bright Sunshine: and Tenths.	Weather 9 a.m.
ı			1001 0	59.8	58.8	94	65.0	57.2	50.6	NW	5	280	18	5.7	od
2			$995 \cdot 1$	58.9	$57 \cdot 9$	94	$63 \cdot 2$	$52 \cdot 9$	51.8	NNW	6	282	Trace	$9 \cdot 0$	opq
3		•,•	$999 \cdot 0$	60.0	53.3	62	$63 \cdot 9$	54·1	$52 \cdot 9$	WNW	6	391	3	8.8	b
Ę			1000 · 3	61.7	57.8	78	63.0	53 · 8	$51 \cdot 9$	NW	6	452	48	9.6	e
5	•• • • •	•. •	999.4	53.0	52.2	94	61.9	51.2	51.0	NW	2	339	116	3.9	0
,	•••	• •	1015.7	54.4	47.8	57	59.7	46.9	45.2	S	4	413	• • •	12.5	С
	••	• •	$1022 \cdot 7$	58.7	55.0	78	67.9	46 2	40.3	NNW	3	139		9.6	С
			1017 · 2	57.8	54.3	79	64 0	53 3	50.4	NW	4	197	3	3.9	0
	• • • • • • • • • • • • • • • • • • • •	• •	1023 · 1	55·1 60·8	53·4 53·6	89	61 2	52 1	50.0	SE	3	212	1	7.2	op
)	•••	• •,	1027 · 3	62.0	55.4	60	63 · 4	52.3	48.8	SSE	4	202	• • •	12.5	b
	• • • • • • • • • • • • • • • • • • • •	• •	$1028 \cdot 3$ $1025 \cdot 3$	65.9	58.9	63 64	$71 \cdot 7$ $70 \cdot 7$	$46 \cdot 2 \\ 53 \cdot 0$	40.8	ESE NW	$\frac{1}{2}$	$\frac{95}{43}$		$\begin{array}{c} 13\cdot 1 \\ 13\cdot 2 \end{array}$	b b
;	•••	• •	$1025 \cdot 3$ $1025 \cdot 2$	66.8	58.9	60	68.6	53.1	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	ESE	3	$\frac{43}{133}$		$\frac{13 \cdot 2}{9 \cdot 0}$	b b
	•••		1023.2	66.6	60.8	70	59.8	53.9	$\frac{40.1}{47.3}$	SE	2	100	Trace	6.9	bejr
		• • •	$1021 \cdot 9 \\ 1016 \cdot 2$	65.5	60.0	70	73.8	$53 \cdot 9$	46 6	ENE	1	$\frac{100}{92}$		10.9	b
	••	• •	1018.0	$63 \cdot 1$	59.1	78	68.1	55.9	52.7	SE	4	$\frac{32}{142}$	7	$5 \cdot 2$	be
	••	• • •	1013 · 7	61.8	61.1	96	69.0	56.3	55 6	SSE	3	180	1	9.7	0
	• • • • • • • • • • • • • • • • • • • •	• • •	1013 9	$62 \cdot 9$	61.9	94	68.5	55.5	53.7	SE	3	66	"1	6.9	. 0
,	•••	• • • • • • • • • • • • • • • • • • • •	$1015 \cdot 0$	$57 \cdot 7$	$57 \cdot 3$	98	$64 \cdot 2$	55.7	56.4	SE	3	164	58	3.4	om
,			1013 0	$57 \cdot 2$	56.8	98	59.5	55.7	55.9	SSE	2	171	6	0.0	or
			1015.5	58.0	56.0	88	63.0	54 0	$52 \cdot 3$	SE	4	219		4.5	ojp
,			1012.3	57.3	$54 \cdot 1$	80	65.8	51.4	46.5	Calm		107		3.3	0,15
;		• • • • • • • • • • • • • • • • • • • •	1009 · 1	61.8	58.7	83	70.5	$53 \cdot 8$	49.5	NNW	i	133	::	6.6	be
		•	$1007 \cdot 3$	63.5	59.9	83	68.0	58.0	53.8	NW	6	235	3	11.9	be
			1002.7	60.8	59.3	91	68.8	58.5	54.0	NW	5	479		9.0	og
		•	1000 · 6	61.0	53.2	55	67.2	55.5	51.4	NW	6	397		12.0	bq
,	••		1006 · 3	66.7	56.6	49	$73 \cdot \overline{9}$	53.5	43.8	NW	ĭ	322		11.8	b
3	• • • • • • • • • • • • • • • • • • • •	•••	1018.0	61.4	55.8	69	69.1	53.1	46.8	Calm		115		7.5	oz
	Means, &c		1013 · 0	60.7	56.7	78	66 · 2	53 • 4	49.7		3 · 2	218	264	$227 \cdot 6$	

Mean earth temperature at 1 ft., 64·7°; and at 3 ft., 62·9°. Number of rain days, 11. Total rainfall, 10 per cent. below normal. Sunshine, 59 per cent. of the possible, being the sunniest February since 1930. Mean dew-point at 9 a.m., 53·8°; mean vapour pressure, 14·0 mb.

Note.—Winds from a southerly quarter were frequent. Fogs occurred on two mornings.

## DIRECTION OF WIND.

Gale (force	Forces	N.	N.E.	Ε.	S.E.	S.	s.w.	w.	N.W.	Calm.
8 or more).	4 to 7.									
	12	$1\frac{1}{2}$	$\frac{1}{2}$	$1\frac{1}{2}$	$8\frac{1}{2}$	$^{\circ}$ $2\frac{1}{2}$		$\frac{1}{2}$	11	$^{-2}$

## Notes on the Weather for February, 1942.

Reneral Notes.—For most of the country February was more summerlike than the two preceding months; but a long spell of easterly weather in the middle of the month made conditions dull and damp, especially east of the North Island ranges. The dry weather prevailing in Auckland and, to a lesser degree, in Taranaki provinces has burnt up the pastures, and milk-production is showing a considerable decline. On the other hand, Hawke's Bay and Wairarapa are unusually green. There has been sufficient rain in the South Island to give abundant growth in most districts. The persistence of showery conditions have made harvesting difficult at times, and has delayed the ripening of seed and grain. It appears that oats and wheat have fairly heavy crops.

Rainfall.—As already noted, rainfall was light in Auckland and Taranaki, this feature being most marked in the Northland and Bay of Plenty districts. Other dry areas were centred near Nelson and Blenheim, while moderate deficiencies predominated in North Canterbury, Westland, and Southland. Surplus rain fell in Hawke's Bay and Wairarapa, well over double the normal total being received in a region south of Hastings. Moderate excesses were experienced in most of the area extending from Central Canterbury to Central Otago.

Thunderstorms.—There were numerous thunderstorms throughout the month, the more active occurring during the two periods from 17th to 20th over the centre of the North Island and on the 24th and 25th in the South Island, where some severe hail was experienced.

Temperatures.—As in January, mean temperatures were cooler than the normal generally by one or two degrees

Temperatures.—As in January, mean temperatures were cooler than the normal generally by one or two degrees renheit. Although a few light frosts occurred during the cold spell about the 4th and 5th there were no unusual Fahrenheit. extremes of temperature.

Extremes of temperature.

Sunshine.—The Auckland Province had an appreciable excess of sunshine above the normal, and, apart from the Wairarapa, most other districts approached or slightly exceeded the average.

Weather Sequence.—At the beginning of the month a period of rain accompanied the passage of a trough across New Zealand, and later low-pressure centres developed and remained to the south of the South Island, while occasional showers persisted in the west. A secondary disturbance on the 5th brought in the general change to southerlies when showers became more widespread, while some snow fell on the ranges.

By the 7th pressure had risen and the weather became fine. A narrow band of rain accompanied a slight disturbance on the 8th and 9th, but an anticyclone built up behind it and became centred over the South Island.

After the 10th the centre of highest pressure remained east of the Dominion, with the result that easterly winds prevailed over the country and brought fog and occasional drizzle to the east coast, conditions being fair to the west. By the 15th there was an extensive belt of high pressure crossing over southern New Zealand. Moderate southerly winds became predominant. Widespread low cloud with further mist and drizzle was prevalent in and east of the ranges, and heavier rain occurred on the 19th and 20th about the central provinces but especially in Hawke's Bay, an active centre being off the east coast.

Fine anticyclonic conditions prevailed from the 21st to the 23rd, but on the 24th a pressure trough from the west reached southern New Zealand, showers occurring with its passage. Canterbury experienced several violent thunderstorms on the 25th. Thereafter westerly to south-westerly winds prevailed and, apart from isolated showers, the weather was mainly fine and clear. However, on the 28th north-westerlies were beginning to freshen and cloud increase.

M. A. F. BARNETT, Director.