THE NEW ZEALAND GAZETTE.

METEOROLOGICAL Observations at Kelburn, Wellington for the Month of March, 1943. Observations taken at 9 a.m.

Altitude of Observatory, 415 ft.														· · · · · · · · · · · · · · · · · · ·	
			s, at dard	Temperature (° F.) from Observations at 9 a.m.							Wind.		Points: (100 Inch.)	ne: Hours	bols) at
			Millibars, at and Standard	In Screen.					rass.	Beau Scal	fort e.	Anemo- meter.			
	Date.		Pressure in M Sea-level and Gravity.	At 9 a.m.			Maxi- mum,		on G			. <u></u>	in Pc	t Sunshine : Tenths.	(Symbols)
		2		Dry.	Wet.	Relative Humidity, per Cent.	Dry.	Dry.	Minimum on Grass.	Direction.	Force.	Miles Run in 24 Hours.	Rainfall Points =	Bright St and Ten	Weather 9 a.m.
1		•••	1011.9	$61 \cdot 2$	$57 \cdot 1$	76	$69 \cdot 1$	47.1	40.2	s	2	157		11.7	be
$\overline{2}$			$1013 \cdot 6$	$64 \cdot 3$	$59 \cdot 2$	72	$71 \cdot 3$	$55 \cdot 1$	51.3	N	3	136	Trace	9.9	b
3			1016.7	$64 \cdot 2$	$62 \cdot 4$	90	$66 \cdot 8$	57.5	52.7	NNE	.3	146	Trace	$2 \cdot 0$	0
4			$1015 \cdot 6$	66.0	$63 \cdot 8$	88	$75 \cdot 0$	$57 \cdot 9$	$55 \cdot 2$	NNW	3	227	Trace	5.3	0
5	• •	••	$1017 \cdot 6$	$63 \cdot 1$	$61 \cdot 8$	93	68.7	$56 \cdot 8$	56.5	NW	2	114	Trace	1.4	oid
6	• • •	• •	$1013 \cdot 2$	$62 \cdot 1$	61.8	98	69.3	58.7	57:2	NNW	4	274	6	$1 \cdot 7$	oip
7	••	••	1007.9	$64 \cdot 2$	$63 \cdot 0$	93	69.0	$61 \cdot 1$	60.3	NW .	6	439	Trace	0.4	0
8	••	••	1018.5	61.0	58.7	86	63.7	50.5	40.2	SSE	3	89	••	10.9	C
.9	•• ,	••	1010.6	$59 \cdot 6 \\ 62 \cdot 1$	$54 \cdot 0$	68	72.0	48.0	39.0	E NNW		109		12.1	b
10	••	••	997.5 1003.9	50.1	$57 \cdot 3 \\ 48 \cdot 7$	77 90	$66 \cdot 8 \\ 57 \cdot 0$	54.7 48.8	$49.5 \\ 47.8$	SSE	$\begin{vmatrix} 2\\ 2 \end{vmatrix}$	$\begin{array}{c}170\\319\end{array}$	Trace	$5 \cdot 9$	b
$\frac{11}{12}$	••	•••	$1003 \cdot 9$ $1022 \cdot 0$	$50.1 \\ 55.0$	51.7	90 76	$62 \cdot 1$	48.8	47.8 46.2	S	$\begin{vmatrix} \frac{2}{2} \end{vmatrix}$	$\frac{319}{246}$	Trace	$2 \cdot 3$	oir
12	••	••	$1022 \cdot 0$ $1020 \cdot 0$	60.0	$51 \cdot 7$	69	$65 \cdot 8$	48.1	40.2	N	3	86	••	$9.5 \\ 11.3$	b c
14	••	••	1020 0 $1012 \cdot 4$	65.5	$61 \cdot 1$	77	69.0	$55 \cdot 4$	52.8	NNW	3	262	i	$\frac{11.3}{8.0}$	0
15	••	•••	$1012 \cdot 6$	60.0	57.8	87	65.7	55.3	55.3	NW	5	154	. *	$7\cdot 2$	0
16^{10}			$1012 \cdot 3$	61.0	$55 \cdot 8$	70	69.9	$54 \cdot 9$	$51 \cdot 2$	NW	5	422		10.0	b
17		••	$1022 \cdot 4$	$58 \cdot 0$	$51 \cdot 9$	64	$65 \cdot 0$	48.0	39.0	NE	1	118		$9\cdot 2$	be
18		••	1009.8	$58 \cdot 9$	$54 \cdot 8$	75	$63 \cdot 0$	$54 \cdot 6$	$52 \cdot 0$	NNW	6	272	40	4.6	c
$\overline{19}$	••	••	1016.5	$55 \cdot 1$	$49 \cdot 3$	68	$57 \cdot 5$	$45 \cdot 5$	41.8	SSW	3	313		9.6	be
20	• ••	••,	1017.9	$56 \cdot 2$	51.5	71	$61 \cdot 8$	$43 \cdot 5$	36.5	NNW	2	140		9.9	b
21	• ••	• • •	$1009 \cdot 7$	59.8	56.5	80	$65 \cdot 0$	$54 \cdot 0$	$50 \cdot 2$	NW	5	369		$8 \cdot 9$	0
22	••	••	$1008 \cdot 2$	61.8	$53 \cdot 5$	54	$64 \cdot 5$	50.5	44.0	NNE	3	208	· • •	8.2	be
23	• • •	••	1010.7	$58 \cdot 8$	$54 \cdot 5$	74	$64 \cdot 2$	$48 \cdot 0$	$43 \cdot 5$	WNW	2	140	Trace	$3 \cdot 3$	0
24	••	••	$1006 \cdot 4$	57.7	$57 \cdot 4$	98	$62 \cdot 0$	$55 \cdot 0$	$51 \cdot 2$	NW	5	333	_ 8	$0 \cdot 1$	oid
25	••	••	$1005 \cdot 7$	61.5	$54 \cdot 0$	58	$65 \cdot 0$	50.4	41.9	NNW	3	170	Trace	10.5	be
26	••	•••	$1017 \cdot 8$	55.8	$52 \cdot 0$	76	63.5	$56 \cdot 2$	$45 \cdot 2$	SSE	3	171	••	8.8	c
27	• •	•••	$1023 \cdot 4$	$59.5 \\ 57.5$	$55 \cdot 0 \\ 54 \cdot 4$	74 80	$64 \cdot 3 \\ 62 \cdot 9$	48.1	39.3	NNE	3	92		10.8	b
28	••	•••	$1025 \cdot 0$ $1024 \cdot 4$	60.5	$54 \cdot 4$ $56 \cdot 0$	74	$62 \cdot 9$ $63 \cdot 0$	$54 \cdot 5 \\ 54 \cdot 2$	$52 \cdot 9 \\ 51 \cdot 4$	NNE NNW	3	154	••	1.5	0
29 30	••	••	$1024 \cdot 4$ $1021 \cdot 7$	$60.5 \\ 61.3$	$56.0 \\ 57.0$	74 75	63.0 66.5	$54 \cdot 2$ $55 \cdot 3$	$51 \cdot 4$ $52 \cdot 0$	NNW	3 6	$\begin{array}{c}173\\299\end{array}$		6.8	C
30 31	••	•••	$1021 \cdot 7$ $1032 \cdot 1$	56.0	$57.0 \\ 53.5$	84	$61 \cdot 1$	$52 \cdot 8$	$\begin{array}{c} 52 \cdot 0 \\ 49 \cdot 5 \end{array}$	SE :	.0 4	$\frac{299}{217}$	Trace	$10.0 \\ 7.7$	b o
	Means, &c.	•••	1014.8	$59 \cdot 9$	$56 \cdot 1$	78	$65 \cdot 5$	$52 \cdot 6$	48.0		3.3	210	0.55	219.5	

Mean earth temperature at 1 ft., 62.6°; and at 3 ft., 62.8°. Number of rain days, 4. The total rainfall was 81 per cent. below normal, being the driest March since 1932. Total bright sunshine equalled 57 per cent. of the possible. Mean dew-point, 53.0°; mean vapour pressure, 13.6 mb.

NOTE.--A rather cool autumn month.

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Gale (force 8 or more).	Forces 4 to 7.		N.		N.E.	E.	S.E.		s.		S.W.		W.		N.W .	Calm.
••	9	1.	8	1	3	1	$2\frac{1}{2}$	1	4	1	$\frac{1}{2}$	I	12	1	$11\frac{1}{2}$	••
					37.	***		~	e .		10					

Notes on the Weather during March, 1943.

General Notes.—March was, for most of New Zealand, dry, sunny, and cool. The prolonged dry spell has further adversely affected dairy production in the Auckland Province, and the lack of appreciable rain, especially in Auckland, Hawke's Bay, Wairarapa, and Wellington, had made the winter feed outlook very serious. In the more southern districts changeable weather has interrupted harvesting, but pastures

had made the winter feed outlook very serious. In the more southern districts changeable weather has interrupted harvesting, but pastures and root crops have made good progress. Rainfall.—North of Westport and Ashburton the deficiency of rainfall has been general. At few places in that region was half the average fall approached. Masterton and several localities in southern Hawke's Bay had no measurable rain whatever during the month. At numerous stations in the North Island the totals were new record low values. It should be noted that the rains setting in from the north at the close of the month later became extensive and gave a fairly general measure of relief. In Westland totals were about normal and in Otago and Southland there was a majority of moderate surpluses. *Temperature.*—Mean temperatures were normal in Hawke's Bay but below elsewhere, with departures increasing to 3° F. on parts of the west coast. On several occasions there were light frosts in both Islands. *Sunshine* was remarkably good in Nelson and Marlborough and the North Island. Many places had, in contrast to February, the equivalent of one or two hours a day above the average, and several new March records were established. In southern districts values were not oreatly different from the average.

equivalent of one or two hours a day above the average, and several new March records were established. In southern districts values were not greatly different from the average. *Weather Sequence.*—At the opening of the month pressure rose in the north while weak disturbances passed in the south. West to south-west winds prevailed with little rain. By the 5th winds were more northerly, and a low-pressure centre, which formed west of the southern Sounds, gave extensive rain in Westland, Otago, and Southland, heaviest falls being near Jackson's Bay. A trough then advanced northwards, strong north-westerlies changing to moderate southerlies, with a short period of rain which became increasingly scattered. On the 7th a high-pressure belt covered New Zealand ; at the same time a tropical cyclone was near Chathams, and, as this moved southwards towards Chatham Islands where it arrived on the 10th, it occasioned some rain in the East Cape area. Elsewhere it was mainly fine until the 10th, when a disturbance, closely followed by a secondary, brought strong south-westerlies with fairly general showers, including hail and snow on the ranges. Christchurch experienced a particularly violent thunderstorm. An anticyclone was over the Dominion on the 12th, winds moderating and the weather clearing from the west and south. After a weak disturbance, which crossed on the 14th and 15th with only scattered showers, a new anticyclone replaced the old. A trough on the 18th had strong north-westerlies ahead and fresh south-westerlies behind. Most districts experienced a period of showers. Some scattered hail occurred on the east coast and light snow fell on the tops. An anticyclone soon followed with fine weather general on the 20th.

general on the 20th.

Weak depressions of the westerly type kept conditions rather unsettled in the south with rain at times in Westland, but scattered falls occasionally extended to Taranaki and Otago. On the 25th a disturbance with a secondary behind crossed the whole country; winds then became more south-westerly, with clearer but cooler weather. An intense anticyclone was over New Zealand on the 27th giving settled conditions.

A trough advanced from the south on the 25th, and a tropical cyclone was approaching Norfolk Island. A clearance followed isolated showers in the south, but with freshening easterlies it clouded over in the extreme north. By the close of the month the Gisborne district had experienced moderate rain and, with the approach of the cyclone, steady rain was setting in over the Auckland Peninsula.

M. A. F. BARNETT, Director.