Government Meteorological Observatory.

METEOROLOGICAL Observations at Kelburn, Wellington, for the Month of January, 1941. Observations taken at 9 a.m.

Altitude of Observatory, 415 ft.

Date.	Pressure, in Millibars, 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.	Beaufort Scale.		Anemometer.			
		At 9 a.m.			Maximum.	Minimum.		Direction.	Force.	Run in 24 Hours.			
		Dry.	Wet.	Humidity.	Dry.	Dry.							
1	1022·4	62·2	56·2	66	69·2	49·1	41·5	ESE	2	151	..	13·8	b
2	1018·6	68·3	63·1	73	72·2	55·2	50·2	NNW	4	118	..	9·8	o
3	1020·5	72·0	64·8	66	76·2	59·0	53·8	NE	1	184	..	11·2	b
4	1022·7	68·0	63·0	74	79·6	57·8	58·0	E	1	94	..	10·4	b
5	1023·4	60·9	59·4	91	65·0	59·6	58·3	N	4	155	Trace	0·0	od
6	1019·2	64·8	60·8	78	68·0	59·0	59·0	NW	3	205	..	3·3	o
7	1018·1	68·0	62·8	73	76·0	61·0	59·2	N	4	211	..	10·9	bc
8	1020·6	68·0	61·6	67	76·6	57·4	51·8	N	1	192	Trace	9·1	o
9	1018·1	64·0	61·8	88	70·8	61·0	61·0	NW	2	190	4	3·7	o
10	1012·3	64·8	63·0	90	70·9	62·0	61·6	NW	6	386	55	5·0	o
11	1005·4	62·0	61·3	96	63·5	59·0	58·1	NE	1	291	40	0·0	or
12	989·1	60·3	57·3	82	63·2	56·4	53·8	S	3	78	..	8·5	op
13	996·6	59·0	51·8	58	65·0	54·2	50·2	W	5	290	..	7·5	c
14	1000·3	64·2	56·8	60	67·6	56·0	53·4	WNW	5	351	3	11·5	c
15	1014·4	57·0	51·6	67	62·2	48·2	46·8	SE	3	217	..	9·5	c
16	1021·7	62·2	55·4	62	69·4	44·8	37·0	N	1	111	..	14·0	b
17	1022·1	64·6	60·0	75	71·0	56·0	52·6	N	3	140	..	12·7	c
18	1021·2	66·8	61·0	70	72·8	59·0	57·0	N	3	195	3	9·7	c
19	1019·6	70·0	66·6	83	70·2	61·0	60·6	N	5	206	38	0·0	od
20	1015·3	65·4	63·4	89	67·2	62·6	62·4	N	4	342	107	0·2	oid
21	1011·8	62·4	62·2	99	62·5	61·0	60·4	N	2	334	62	0·0	od
22	1021·0	57·8	51·3	61	61·2	51·6	48·8	SSE	6	289	..	12·8	b
23	1019·2	56·4	51·4	69	61·6	52·0	49·0	SSE	6	278	3	6·1	o
24	1019·3	55·0	55·0	100	69·6	52·0	50·4	SE	4	351	25	0·0	od
25	1013·4	69·0	65·0	80	75·9	54·0	55·4	N	1	154	3	1·8	or
26	1011·4	74·2	66·5	65	79·2	61·1	55·9	N	1	64	2	9·7	c
27	1008·0	64·6	63·0	91	66·0	62·4	61·8	NW	5	213	60	0·0	o
28	999·5	64·2	61·6	85	67·2	59·4	59·2	NW	7	405	5	6·9	oq
29	1003·1	55·6	54·0	90	62·2	53·0	53·0	S	3	415	Trace	0·7	o
30	1003·3	61·8	54·8	61	68·2	53·4	48·0	N	2	165	..	13·2	b
31	1007·7	68·2	60·4	61	73·8	52·8	45·0	NE	1	189	..	12·9	bc
Means, &c.	1013·5	63·9	59·6	76	69·2	56·5	54·0	..	3·2	225	410	214·9	..

Mean earth temperature at 1 ft., 66·8°; and at 3 ft., 64·2°. Number of rain days, 14. Total rainfall, 41 per cent. above normal. Sunshine, 47 per cent. of the possible. There were six days without bright sunshine being recorded. Mean dew-point at 9 a.m., 56·3°; mean vapour pressure, 15·3 mb.

DIRECTION OF WIND.

Gale (force 8 or more).	Forces 4 to 7.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calm.
..	13	12½	3	1½	3½	3	..	1½	6	..

NOTE.—The drought which commenced on 25th December broke on the night of the 10th. There was a strong north-west gale on the afternoon of the 28th, force 9 on the Beaufort scale being reached.

NOTES ON THE WEATHER FOR JANUARY, 1941.

General Notes.—The earlier part of the month was sunny and warm, the latter part unsettled and dull, especially over the North Island. Most districts received warm and beneficial rain, which has largely combated the effect of the drought that commenced at Christmas. Pastures have been refreshed and the decline in dairy production has been arrested. Cereal crops in some cases have suffered from premature ripening but, on the whole, yields are good, with harvesting in the South Island proceeding under ideal conditions.

Rainfall.—Rainfall was in excess over most of the North Island as well as in Nelson Province and in a small area back from Balclutha. Totals amounted to more than double the average around the Bay of Plenty, in northern Taranaki, and in the Nelson-Collingwood district. There was, however, a narrow strip of country between Palmerston North and Taumarunui where totals were on the light side. The centre of the South Island received rather less than the normal rainfall, but the deficits were most marked in North Canterbury, reaching their greatest value in the Culverden district.

Numerous thunderstorms were reported over the southern half of the North Island on the 25th and 26th.

Temperature.—As in December, mean temperatures were above normal generally, the departure being greater to the east than elsewhere. At first, days were very warm and sunny, but there was a cool spell from the 11th to the 16th with a few inland frosts and some light snow on the far southern ranges. Towards the end of the month conditions were mild again and, in the North Island especially, very humid.

Sunshine.—In eastern districts from Hawke's Bay southward sunshine was slightly above average, but it was below on the west coast. Many stations in the Auckland Province had very poor totals.

Weather Sequence.—While pressure remained high over New Zealand the fine, warm spell of the end of December was prolonged throughout the first eight days of January. On the 9th an extensive depression brought heavy rain to Westland, Otago, and Southland, and on the following days rain extended northwards to most districts. After the deepening of a centre on this disturbance near Cook Strait on the 11th south-westerly winds became strong, while thunder and hail occurred on the east coast of the South Island. As winds gradually moderated showers became less frequent until the 15th, when conditions were fair to fine almost generally, with an anticyclone again over New Zealand.

On the 18th a tropical cyclone that had developed near Lord Howe Island moved towards New Zealand. North-easterly winds with unsettled weather then prevailed. The cyclone moved rapidly south-eastward causing heavy rains in and west of the Southern Alps and in Otago. Other cyclonic disturbances followed down the extensive low-pressure trough, and heavy falls were experienced at times over most of the North Island. The last one deepened off the Auckland Peninsula on the 21st and 22nd, and by the 26th it was filling up west of the North Island. On the 27th, however, a new and active cyclone from the west covered most of the Tasman sea and, after crossing New Zealand, was located to the south-east on the 29th. During the end of this period considerable rain fell in and about the Southern Alps. There were south-easterly gales in Taranaki on the 22nd and in Auckland on the 24th, besides northerly gales in Westland and about Cook Strait on the 27th. During the last days rather changeable westerly weather was experienced in most districts, but fine anticyclonic conditions were established once more on the 31st.

M. A. F. BARNETT, Director.