

Government Meteorological Observatory.

METEOROLOGICAL Observations at Kelburn, Wellington, for the Month of July, 1929. Observations taken at 9 a.m.
Altitude of Observatory, 415 ft.

| Date. | Pressure, in Inches, 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. | Solar Radiation: Maximum. | Beaufort Scale. | | Anemometer. | | | | |
| | | At 9 a.m. | | | Maxim. | Minim. | | | Direction. | Force. | | | | | Run in 24 Hours. |
| | | Dry. | Wet. | Humidity. | | | | | | | | | | | |
| 1 | 29-850 | 41-9 | 40-8 | 90 | 49-7 | 37-4 | 28-8 | 96-8 | SE | 1 | 116 | 17 | 8-2 | b | |
| 2 | 29-981 | 44-6 | 43-2 | 89 | 47-1 | 41-0 | 37-1 | 94-6 | S | 3 | 190 | 1 | 4-4 | op | |
| 3 | 30-127 | 44-0 | 41-2 | 77 | 48-9 | 40-2 | 36-1 | 95-4 | SSW | 1 | 165 | .. | 2-2 | c | |
| 4 | 30-239 | 43-6 | 42-5 | 91 | 52-6 | 38-1 | 32-0 | 99-5 | Calm | .. | 123 | .. | 7-1 | bz | |
| 5 | 30-164 | 46-8 | 44-0 | 79 | 52-2 | 43-0 | 40-1 | 99-2 | NW | 1 | 98 | .. | 7-0 | bc | |
| 6 | 30-087 | 47-2 | 45-0 | 83 | 54-1 | 46-0 | 42-1 | 94-8 | NE | 2 | 179 | 49 | 0-8 | o | |
| 7 | 29-648 | 50-9 | 48-9 | 86 | 53-1 | 46-2 | 45-1 | 60-3 | NNE | 2 | 154 | 100 | .. | or | |
| 8 | 29-604 | 46-2 | 45-8 | 97 | 50-6 | 44-7 | 44-0 | 81-9 | SSE | 1 | 114 | 11 | 0-6 | or | |
| 9 | 29-895 | 47-5 | 46-2 | 90 | 55-8 | 41-4 | 32-7 | 101-0 | Calm | .. | 32 | 21 | 7-8 | bf | |
| 10 | 30-088 | 43-4 | 42-8 | 95 | 47-1 | 40-6 | 32-4 | 68-5 | SSE | 2 | 58 | 3 | .. | or | |
| 11 | 30-123 | 41-4 | 40-1 | 88 | 51-3 | 35-3 | 28-6 | 98-8 | Calm | .. | 72 | .. | 7-6 | bx | |
| 12 | 30-105 | 45-4 | 43-2 | 82 | 53-0 | 40-2 | 37-1 | 100-9 | NNE | 2 | 91 | 16 | 4-6 | bc | |
| 13 | 29-741 | 50-2 | 46-7 | 75 | 53-4 | 43-9 | 42-2 | 62-6 | NNE | 6 | 200 | 90 | .. | op | |
| 14 | 29-463 | 47-2 | 46-5 | 94 | 51-9 | 44-1 | 42-4 | 96-2 | NW | 5 | 316 | 20 | 2-8 | op | |
| 15 | 29-441 | 45-1 | 44-6 | 96 | 46-2 | 43-2 | 40-0 | 57-8 | Calm | .. | 195 | 95 | .. | od | |
| 16 | 29-412 | 45-8 | 45-8 | 100 | 56-5 | 43-7 | 41-0 | 107-3 | Calm | .. | 28 | 50 | 2-4 | of | |
| 17 | 29-529 | 46-9 | 46-3 | 95 | 50-9 | 42-7 | 40-1 | 104-0 | S | 1 | 104 | 30 | 3-4 | bc | |
| 18 | 29-524 | 46-6 | 44-8 | 86 | 52-2 | 44-3 | 41-1 | 98-7 | SSW | 2 | 121 | 4 | 2-3 | o | |
| 19 | 29-657 | 47-3 | 45-1 | 83 | 50-0 | 44-2 | 41-0 | 77-3 | SSE | 2 | 100 | .. | 0-2 | o | |
| 20 | 29-715 | 45-2 | 44-2 | 92 | 50-3 | 41-6 | 35-1 | 77-2 | Calm | .. | 53 | 19 | 0-8 | of | |
| 21 | 29-896 | 46-5 | 44-8 | 87 | 47-3 | 43-0 | 37-0 | 66-2 | S | 5 | 121 | 1 | .. | o | |
| 22 | 30-098 | 46-1 | 42-6 | 73 | 48-5 | 43-0 | 40-4 | 108-8 | SSW | 3 | 286 | 4 | 5-1 | o | |
| 23 | 29-896 | 43-2 | 41-0 | 81 | 52-3 | 37-6 | 28-1 | 98-4 | NE | 1 | 60 | 19 | 6-3 | cf | |
| 24 | 29-539 | 50-7 | 47-6 | 78 | 53-2 | 42-0 | 44-3 | 85-5 | N | 3 | 200 | 31 | 0-5 | c | |
| 25 | 29-688 | 46-0 | 45-6 | 97 | 48-9 | 44-2 | 43-0 | 74-2 | Calm | .. | 88 | 34 | .. | o | |
| 26 | 29-755 | 45-3 | 43-7 | 87 | 46-0 | 42-1 | 41-0 | 70-4 | S | 3 | 64 | 31 | 0-4 | c | |
| 27 | 29-858 | 40-8 | 40-0 | 93 | 47-7 | 39-2 | 35-1 | 96-4 | Calm | .. | 132 | 2 | 3-0 | c | |
| 28 | 29-727 | 47-0 | 44-4 | 80 | 51-7 | 39-4 | 29-8 | 96-6 | NE | 1 | 34 | 6 | 5-4 | b | |
| 29 | 29-440 | 48-5 | 43-8 | 66 | 51-9 | 43-0 | 41-1 | 96-2 | WNW | 4 | 116 | 27 | 1-6 | o | |
| 30 | 29-652 | 43-8 | 41-8 | 84 | 46-7 | 41-3 | 34-7 | 96-0 | S | 4 | 217 | 10 | 3-2 | o | |
| 31 | 29-695 | 42-3 | 40-4 | 84 | 47-2 | 36-0 | 29-1 | 91-0 | Calm | .. | 103 | Trace | 5-9 | b | |
| Means, &c. | 29-795 | 45-7 | 44-0 | 86 | 50-6 | 41-7 | 37-5 | 88-8 | .. | 1-8 | 127 | 691 | 93-6 | .. | |

Mean earth temperature at 1 ft., 46-6°; and at 3 ft., 49-2°. Number of rain days, 25.

DIRECTION OF WIND.

| Gale (force 8 or more). | Forces 4 to 7. | Calm. | N. | N.E. | E. | S.E. | S. | S.W. | W. | N.W. |
|-------------------------|----------------|-------|----|------|----|------|----|------|----|------|
| .. | 5 | 9 | 2½ | 4½ | .. | 2½ | 8 | 1½ | ½ | 2½ |

NOTE.—A wet and cold month with light southerly winds prevailing. Precipitation at Karori Reservoir, near Kelburn, was 57 per cent. above the average. Total bright sunshine, 93-6 hours, 32 per cent. of the possible, and six sunless days. Frost was recorded on the grass on five mornings, hail fell on the 2nd, 14th, and 23rd, and fog was in evidence on ten days. Mean dew-point, 41-9°; and mean vapour pressure, 0-265 in.

SUMMARY FOR THE MONTH OF JULY, 1929.

The month has been, on the whole, a cold, wet, and unsettled one, but, except for a few occasions, there has been an absence of strong winds. Rainfall was again considerably above the average over most of the Dominion, though deficiencies were recorded in some districts. In the South Island these deficiencies were experienced south of Westport, in Otago, and at a few scattered places in North Canterbury. In the North Island places on the east coast and about Wanganui and Taihape received less than the normal fall. The greatest difference from the average occurred at Lambrook Station, Fairlie, with 263 per cent. and Timaru with 169 per cent. above, and at Okuru, South Westland, with 60 per cent. below. The excessive rain in Canterbury interfered with ploughing, so that spring sowing of cereal crops will be retarded. In parts of the North Island there were more deaths amongst hoggets than usual.

Temperatures were everywhere lower than the average for July. Frosts were fairly numerous, and in some cases severe. There was, in consequence, little growth of pastures, but owing to the absence of high winds the actual damage to vegetation was very slight. Snowfalls were frequent and copious in the high country of both Islands, though none lay for any time on the low levels. There still appears, generally, to be ample green feed available, and in comparatively few cases only has resort to ensilage been necessary. Stock are, on the whole, in good condition and farming prospects favourable.

The most notable meteorological feature was the tendency for anticyclones to pass north of New Zealand. There was only one which proved an exception in this respect—namely, that which moved across the Dominion between the 3rd and the 5th. Fine weather prevailed generally on these three days.

Cyclones were again very prevalent, and even when depressions were of the westerly type originally, they had generally developed cyclonic form by the time they had reached the Dominion.

The first of the more severe cyclones experienced moved on to New Zealand on the 7th, and at 9 a.m. was centred off the west coast of the South Island. During the night of the 6th, north-easterly winds increased to gale force in many parts, and at Christchurch the wind was exceptionally violent. Rain set in and became general on the 7th. The Nelson and Marlborough districts experienced particularly heavy falls at this time, and the resulting floods caused considerable damage through low-lying ground becoming inundated and through numerous land slips.