

CLIMATOLOGICAL TABLE—Summary of the Records of Temperature, Rainfall, and Sunshine for June 1970—continued

| Station | Height of Station Above M.S.L. | Air Temperatures in Degrees (Fahrenheit) | | | | | | | Rainfall in Inches | | | | | Bright Sunshine Hrs. | |
|----------------------------------|--------------------------------|--|--------|-----------------|------------------------|------------------------------|------|---------|--------------------|------------|------------------|------------------------|--------------|----------------------|------|
| | | Means of | | Mean of A and B | Difference From Normal | Absolute Maximum and Minimum | | | | Total Fall | No. of Rain Days | Difference From Normal | Maximum Fall | | |
| | | A Max. | B Min. | | | Maximum | Date | Minimum | Date | | | | Amount | | Date |
| | Ft. | °F. | °F. | °F. | | °F. | °F. | | In. | | In. | | | Hrs. | |
| Taieri | 80 | 53.2 | 36.3 | 44.8 | +2.6 | 64.0 | 1 | 28.3 | 14 | 1.38 | 8 | -1.0 | 0.70 | 29 | .. |
| Berwick Forest | 60 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Dunedin Airport | 4 | 53.2 | 34.4 | 43.8 | +2.8 | 69.0 | 4 | 24.5 | 1 | 0.33 | 10 | -1.8 | 0.07 | 17 | 95 |
| Musselburgh, Dunedin | 5 | 52.8 | 40.2 | 46.5 | +2.3 | 63.0 | 4 | 32.8 | 14 | 1.89 | 12 | -1.0 | 0.90 | 17 | 88 |
| Oamaru | 99 | 55.3 | 37.7 | 46.5 | .. | 69.3 | 26 | 31.2 | 9 | 0.97 | 4 | .. | 0.45 | 17 | 115 |
| West Arm, Lake Manapouri | 590 | 45.8 | 36.8 | 41.3 | +1.7 | 54.0 | 4 | 25.0 | 9 | 7.12 | 16 | -3.5 | 1.33 | 15 | .. |
| Borland Saddle | 3,250 | 41.3 | 30.5 | 35.9 | .. | 51.0 | 3 | 24.0 | 13 | 5.14 | 17 | .. | 0.92 | 25 | .. |
| Queenstown | 1,080 | 48.8 | 34.3 | 41.6 | +1.8 | 60.0 | 28 | 28.0 | 14 | 1.09 | 7 | -1.1 | 0.31 | 18 | 74 |
| Queenstown Aerodrome | 1,154 | 48.4 | 31.9 | 40.2 | .. | 59.4 | 4 | 24.5 | 7 | 1.25 | 7 | .. | 0.55 | 29 | .. |
| Mid Dome | 1,268 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Cromwell | 698 | 48.0 | 30.3 | 39.2 | +0.7 | 59.8 | 25 | 18.2 | 8 | 0.76 | 9 | -0.2 | 0.27 | 18 | .. |
| Ophir | 1,000 | 47.4 | 27.2 | 37.3 | +1.5 | 61.3 | 28 | 17.0 | 8 | 0.53 | 4 | -0.5 | 0.17 | 17 | .. |
| Moa Creek | 1,400 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Earnscleugh | 500 | 48.3 | 28.5 | 38.4 | +1.2 | 62.3 | 25 | 17.5 | 9 | 0.64 | 6 | -0.2 | 0.23 | 18 | .. |
| Alexandra | 461 | 48.2 | 30.7 | 39.4 | +1.4 | 62.0 | 25 | 20.9 | 8 | 0.65 | 8 | -0.1 | 0.20 | 18 | 84 |
| Roxburgh (Power Stn.) | 360 | 49.8 | 33.8 | 41.8 | +0.9 | 61.5 | 28 | 26.0 | 12 | 0.61 | 6 | -0.9 | 0.28 | 18 | .. |
| Moa Flat, West Otago | 1,345 | 47.7 | 34.5 | 41.1 | +2.9 | 58.3 | 25 | 26.6 | 14 | 1.07 | 11 | -1.7 | 0.33 | 29 | .. |
| Mahinerangi Dam | 1,300 | 48.7 | 34.9 | 41.0 | .. | 58.8 | 4 | 26.5 | 14 | 1.01 | 12 | -2.4 | 0.23 | 5 | .. |
| Tapanui | 740 | 50.5 | 37.5 | 44.0 | +3.3 | 61.5 | 1 | 31.0 | 14 | 1.02 | 17 | -2.8 | 0.27 | 29 | .. |
| Rankleburn Forest | 835 | 50.5 | 37.4 | 44.0 | +4.7 | 62.2 | 4 | 27.8 | 14 | 0.71 | 13 | -2.2 | 0.18 | 29 | .. |
| Taieri Mouth | 50 | 52.6 | 39.3 | 46.0 | .. | 62.0 | 28 | 28.7 | 14 | 0.85 | 12 | .. | 0.23 | 5 | .. |
| Otautau | 180 | 52.1 | 36.5 | 44.3 | +2.8 | 63.0 | 4 | 27.5 | 14 | 1.09 | 11 | -2.7 | 0.38 | 17 | 76 |
| Winton | 145 | 52.1 | 37.0 | 44.6 | +2.8 | 61.8 | 4 | 29.0 | 14 | 0.46 | 14 | .. | 0.12 | 18 | 83 |
| Gore | 235 | 51.7 | 37.2 | 44.4 | +3.4 | 61.0 | 4 | 29.3 | 14 | 0.98 | 12 | -1.9 | 0.30 | 29 | 67 |
| Hokonui Forest | 150 | 52.4 | 37.9 | 45.2 | +3.9 | 65.0 | 4 | 28.0 | 17 | 1.11 | 14 | -2.4 | 0.25 | 17 | .. |
| Invercargill Airport | 1 | 51.2 | 36.3 | 43.8 | +2.2 | 62.0 | 4 | 29.0 | 14 | 1.15 | 17 | -2.7 | 0.22 | 17, 23 | 61 |
| Tiwai Point, Bluff | 15 | 51.2 | 41.0 | 46.1 | .. | 60.5 | 4 | 33.1 | 14 | 1.32 | 12 | .. | 0.54 | 23 | .. |
| Milton | 60 | 51.9 | 34.5 | 43.2 | .. | 61.0 | 3 | 25.3 | 14 | 0.91 | 12 | -1.7 | 0.14 | 5, 19 | .. |
| Finegand, Balclutha | 20 | 51.6 | 38.0 | 44.8 | +3.5 | 60.5 | 7 | 27.8 | 14 | 0.65 | 11 | .. | 0.15 | 2 | 85 |
| Rarotonga, Cook Islands | 15 | 79.2 | 69.2 | 74.4 | +1.8 | 82.5 | 17 | 63.0 | 21 | 0.70 | 9 | -3.4 | 0.19 | 8, 11 | 148 |
| Raoul Island | 126 | 67.9 | 59.3 | 63.6 | +0.7 | 71.3 | 27 | 50.4 | 13 | 7.32 | 17 | +1.1 | 2.59 | 19 | 134 |
| Chatham Islands | 157 | 52.6 | 45.3 | 49.0 | +2.3 | 59.8 | 5 | 32.8 | 24 | 3.60 | 20 | -0.3 | 0.65 | 17 | 68 |
| Campbell Island | 49 | 46.0 | 38.5 | 42.2 | .. | 55.0 | 4 | 28.9 | 3 | 4.82 | 25 | .. | 0.62 | 23 | 1 |
| Scott Base, Antarctica | 58 | .. | .. | 12.5 | +2.6 | 16.5 | .. | -41.8 | .. | .. | .. | .. | .. | .. | .. |
| Lake Vanda, Antarctica | 510 | -2.5 | -23.6 | -13.0 | .. | 30.4 | 2 | -47.7 | 13 | .. | .. | .. | .. | .. | .. |

LATE RETURNS

| | | | | | | | | | | | | | | | |
|------------------------------------|-------|------|------|------|----|------|----|------|----|-------|----|----|------|----|----|
| Otutira, May 1970 | 1,900 | 54.1 | 41.4 | 47.8 | .. | 61.9 | 9 | 32.0 | 31 | 5.64 | 14 | .. | 1.16 | 8 | .. |
| Taurewa Forest, March 1970 | 2,545 | 67.5 | 46.8 | 57.2 | .. | 76.8 | 8 | 33.3 | 23 | 4.49 | 12 | .. | 1.62 | 25 | .. |
| Taurewa Forest, April 1970 | 2,545 | 59.4 | 42.1 | 50.8 | .. | 68.3 | 17 | 30.2 | 21 | 3.45 | .. | .. | 0.95 | 3 | .. |
| Taurewa Forest, May 1970 | 2,545 | .. | .. | .. | .. | .. | .. | .. | .. | 10.14 | .. | .. | .. | .. | .. |
| Makahu Spur, May 1970 | 4,850 | 41.9 | 33.4 | 37.6 | .. | 56.0 | 7 | 22.0 | 25 | .. | .. | .. | .. | .. | .. |
| Borland Saddle, March 1970 | 3,250 | 55.1 | 41.7 | 48.4 | .. | .. | .. | .. | .. | 6.91 | 13 | .. | 1.94 | 13 | .. |
| Borland Saddle, May 1970 | 3,250 | 42.4 | 32.8 | 37.6 | .. | 56.0 | 3 | 24.0 | 26 | 3.29 | 15 | .. | 0.64 | 5 | .. |
| Avalon, Lr. Hutt May 1970 | 50 | .. | .. | .. | .. | .. | .. | .. | .. | 5.62 | .. | .. | 1.24 | 9 | .. |

The "normal" refers to the present site of the instruments. The standard periods for normals are: for temperature 1931-60, for rainfall 1921-50, and for sunshine 1935-60. No normals are available for stations with only short records.

*The sunshine recorder is not located at the station but is in the near vicinity.

NOTES ON THE WEATHER FOR JUNE 1970

General—June was a mild month. Growth was considered to be good for the time of the year, and stock were wintering reasonably well. However, in parts of Manawatu farmers reported that the ground was waterlogged after excessive rain.

Rainfall—In many parts of the country rainfall was close to normal. However, it was less than half the normal value in Southland and South Otago, and in Hawke's Bay. It was also somewhat below normal over the remainder of Otago and in North Canterbury and northern Wairarapa. It was more than 50 percent above normal in parts of eastern Bay of Plenty and the East Coast, in southern Manawatu and Wellington, in Nelson, and in Central and South Canterbury. Greatest excesses were recorded about the Gisborne ranges, where 2-day falls of up to 16 in. were recorded for the 3rd and 4th, during the passage of a trough in moist northerly winds. Flooding was reported in Whakatane at about this time.

Temperatures—Temperatures were mainly above normal by 1-2 degrees in the North Island and by 2-3 degrees in the South Island. The main spells of cold southerlies were from the 5th to the 11th and on the 18th and 19th.

Sunshine—East of the main ranges in the North Island and in eastern Northland sunshine was below normal by 25-50 hours. Elsewhere it was mainly close to or somewhat below normal, except in South Taranaki, Wanganui, and Taihape, where it was 20-30 hours above normal.

Weather Sequence—On 1 June an anticyclone centred near East Cape extended over the country, while a depression was centred over the central Tasman Sea. Rain was reported in Northland with scattered light falls elsewhere, especially in the Bay of Plenty. The period from the 2nd to the 5th was the wettest in the month for many districts. The depression advanced slowly on to the North Island and crossed it with northerly winds slowly turning to southerlies. Rain was fairly general and it was especially heavy on the East Coast, where some places reported as much as 16 in. in the 2 days 3, 4 June. Flooding was reported in Whakatane.

By the 6th the depression had reached the Chatham Islands and a trough from it still affected the North Island, with cold southerlies still persisting. During the next 5 days the anticyclone moved south-eastward until it was centred close to Southland, while pressures remained low far to the south-east and southerlies continued to bring rain to eastern Northland and areas east of the ranges in the North Island. On the 12th and 13th the anticyclone was centred at first near Auckland and later to the east. It covered the country, with temporarily fine weather.

There was another spell of general rain from the 14th to the 18th. A depression was centred over the south Tasman Sea and its associated trough crossed New Zealand on the 14th and 15th. The depression then moved northward and another trough formed, and on the 17th the depression itself crossed the country via Cook Strait. By the 18th the depression lay to the east and cold