

## THE WEATHER IN NEW ZEALAND IN NOVEMBER 1982

*General*—November was a mild, windy month. The winds this month were mainly westerly, a pattern which, although normal for November, was more pronounced than usual. Southern New Zealand had its highest frequency, 21 days, of north-westerlies since November 1958, while northern areas had south-westerlies on 20 days, the highest frequency since September 1981. The westerlies had a pronounced effect on temperatures in eastern districts of both Islands. Gale force winds damaged buildings and trees in Canterbury on the 8th, central and southern areas of the country on the 18th and 19th, the east of the North Island on the 22nd and Canterbury and Kaikoura on the 25th and 26th. During this last storm gusts to 96 knots were recorded at Mount John and 110 knots at Mount Hutt.

Many farmers in both Islands reported poor grass growth this month due to a combination of winds and generally low rainfall. Low sunshine in central and western area has not suited young stock.

A severe hailstorm in Canterbury on the 21st caused extensive damage to soft fruit crops and market gardens, particularly around Ashburton, while the accompanying thunderstorm caused widespread powercuts.

*Rainfall*—All of the North Island and the north of the South Island had below normal rainfall this month, with the exception of parts of Wellington which had rainfalls slightly above average. Northland and some central areas of the North Island had less than 25 percent of their usual rainfall, while the Waikato and Bay of Plenty areas had between 30 percent and 40 percent of average rainfall. The south and west of South Island, with the exception of some coastal areas of Otago, had above normal rainfall. Totals for the month in excess of 200 percent of normal were recorded in inland areas of Otago, Southland, Fiordland and Canterbury and led to storage lake levels becoming very high.

*Temperature*—Apart from South Westland, Fiordland and Southland, temperatures were above normal over the whole country. Temperatures were particularly high in eastern areas due to the frequent foehn effect induced by the high frequency of westerly winds. In many eastern areas mean temperatures were between 2°C and 3°C above average. The mean temperature at Napier was the highest for November since the station opened in 1870, and among other stations recording record mean temperatures for November were (with starting dates for records in brackets): Gisborne Airport (1937), Blenheim Airport (1941), Kaikoura (1953), and Christchurch (1953).

For the rest of the country mean temperatures were generally between 0.5°C and 1.5°C above average, while in the west and south of the South Island they were between average and 1°C below average.

There were several very warm spells this month mainly affecting eastern areas. On the 7th and 8th temperatures of between 30°C and 32°C were recorded at several east coast stations in the North Island and on the 25th eastern stations on both Islands recorded maximum temperature of 30°C.

There was a very cold spell during a period of southerly winds on 29th and 30th. Mean temperatures were between 5°C and 7°C below average in the South Island and 2°C to 4°C below average in the North Island on the 29th and between 5°C and 10°C below average for the whole country on the 30th.

*Sunshine*—Sunshine hours were generally average or above average in northern and eastern areas of both Islands and below average in areas to the south and west. Among those areas with the greatest departures from normal this month were: Christchurch (+41 hours), Timaru (+37 hours), Gisborne (+35 hours), Hokitika (-51 hours), Taumarunui (-51 hours), and Wellington (-50 hours).

## THE WEATHER SEQUENCE, NOVEMBER 1982

## 1-7 November

An anticyclone lay over the North Island on the 1st, while a south-westerly airstream covered the South Island. A slow moving front lay across the north of the South Island and there were light showers in some western areas. A belt of high pressure had developed between the anticyclone over northern New Zealand and a second over south Australia by the 2nd, with a westerly flow to the south. Dry, mild weather prevailed in most districts during the 2nd and 3rd. During the 3rd a small depression developed in the North Tasman Sea and this brought showers to Northland on the 4th, while a series of fronts in the westerly flow across the South Island brought rain to southern and western areas of the South Island between the 4th and 7th. High temperatures were recorded in eastern districts, particularly in the North Island, during this time.

## 8-14 November

The belt of high pressure remained established across the north of the country until the 11th, while strong westerly winds continued to affect the south of the North Island and the South Island. There were moderate to heavy falls of rain in Westland and Fiordland each day between the 8th and 11th and in Southland on the 10th. Light rain fell in other western areas and about Cook Strait at times but the south and east of the South Island and the North Island were otherwise fine and mild. A cold front associated with a deep depression near Fiordland moved onto the country on the 11th and rain became widespread on the 11th and on the 12th as a second front followed rapidly. By the 13th the rain had cleared from most areas but temperatures remained cool, becoming fine and mild on the 14th as an anticyclone began to move onto the country.

## 15-21 November

The anticyclone continued to spread onto the country bringing fine weather to all districts between the 15th and 17th, apart from Westland and Fiordland on the 16th and 17th and Southland on the 17th. The centre of the anticyclone lay close to Cape Reinga by the 18th and a front, moving within the resulting north-westerly flow over the South Island, brought widespread rain to the South Island and south of the North Island on the 18th. Subsequent disturbances in the flow brought further rain to western and southern areas between the 19th and 21st. Northern and eastern districts continued to have fine, mild weather.

## 22-30 November

There were further showers in western areas of both Islands and isolated inland areas of the North Island between the 22nd and 24th as a strong westerly to south-westerly airstream continued to flow over the country. Temperatures were warm in eastern areas. An anticyclone centred near Lord Howe Island began to move onto the north of the North Island during the 24th and by the 25th the weather in the North Island was fine and mild. However a front associated with a deep depression to the south of the South Island brought heavy rain to western, southern, and central areas of the South Island. The front moved slowly across the country during the next 3 days bringing rain to the south and west of the South Island on the 26th and rain to most of the country on the 27th and 28th. By the 29th an anticyclone had moved into the south Tasman Sea area, with a strong southerly flow developing over New Zealand. There were showers in most parts of the country on the 29th and 30th and temperatures were cold.

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