

## THE WEATHER IN NEW ZEALAND IN NOVEMBER 1981

*General*—November was dull and mild in most parts of New Zealand.

North-easterly winds were more frequent than normal in the north while westerlies predominated in the south of the country this month. There was higher frequency than normal of winds that were either stronger or lighter than usual over the whole country.

Farmers in most areas reported stock to be in good health as a result of the good pasture growth made this month. Some early hay was made in the drier areas of both Islands but in areas of high rainfall some post-shearing sheep losses and crop losses were reported.

Pressures were high in the south and south-east this month. Stations throughout New Zealand reported pressures above 1030mb on the 23rd and 24th due to an intense anticyclone lying to the south-east of the country.

*Rainfall*—Rainfall was above normal over the North Island except in south-western and central areas where many stations had less than half their normal rainfall, and locally around Hamilton and Auckland where rainfall was slightly below normal. Northland had more than 200 percent of normal rainfall and areas around Rotorua, Bay of Plenty and Coromandel had over 300 percent of normal rainfall.

In the South Island, northern Westland, Buller Nelson, Marlborough and the Kaikoura Coast had normal or above normal rainfall while the remainder had less rainfall than usual for November. Areas around Dunedin, Timaru, Oamaru and Milford Sound had only about 30 percent of normal rainfall.

Heavy rain in north-west Nelson between the 14th and 16th caused local flooding. A slip on the Cobb Valley damaged water pipelines to the Cobb Power Station which is now expected to be out of action for several months. The Takaka hill road was closed for some time by slips and slips also closed roads around Motueka.

*Temperatures*—Temperatures were above normal for November over most of New Zealand. Areas having lower mean temperatures than usual were Northland, Whakatane to East Cape, Napier, Blenheim and Kaikoura, which were up to 1°C below normal. Southern and south-western areas of the South Island were between 1° and 2°C above normal while the rest of the country had mean temperatures up to 1°C above normal.

Eastern districts had warm temperatures during a period of north-westerlies on the 4th and 5th with Christchurch reaching 29.5°C on the 5th. Cooler weather followed and between the 8th and 10th maximum temperatures were 5°C to 10°C below the monthly average in many places. Some record November high temperatures were observed in Westland at the end of the month. Record maximum temperatures on the 29th (with the year recording began) were: Greymouth 26.5° (1947) Hokitika 26° (1963) Fox Glacier 24.5° (1973). New Plymouth, on the west coast of the North Island, reached 25.5° on the same day, a record for November since the station opened in 1944.

*Sunshine*—Sunshine figures were low over the whole country with many areas having a shortfall from the November average of more than 40 hours. Northern areas had particularly low totals, Kaitaia had 129 hours sunshine which was 75 hours less than usual and its second lowest November total since 1951. Other centres with large deficits were: Rotorua Airport (66 hrs) Auckland City (56 hrs) Nelson (45 hrs) Dunedin (44 hrs) and Tauranga (43 hrs). Areas around Christchurch and Ohakea had only slightly less sun than normal.

## THE WEATHER SEQUENCE—NOVEMBER 1981

## 1st–7th

The dominant influence on the weather in New Zealand during the first week of November was the passage of an extensive anticyclone over the country. However this was preceded during the first 2 days by the passage of 2 cold fronts within a shallow trough which brought some light rain to south-western areas, about Cook Strait and in Northland. As the anticyclone crossed the country over the next 4 days the weather became generally fine, and some high temperatures were recorded in eastern districts in north-westerly conditions on the 4th. Some rain fell in south-western areas on the 5th and 6th as a front within a moist west to north-west airstream moved onto the south of the country. Rain became widespread on the 7th with the approach of a cold front associated with a depression in the Tasman Sea.

## 8th–14th

The depression that brought cold, wet weather on the 7th continued in influence the weather in the beginning of the second week as it deepened and then moved south-east across the country. By the 10th and anticyclone near Lord Howe Island had extended a ridge over New Zealand, bringing a general clearance to the weather. On the 12th a deep depression which had lain south-east of Tasmania moved eastwards. Although it had weakened by the time it began to spread over the country it brought some rain to southern and western areas of the South Island and the north of the North Island. By the 14th rain had become widespread with moderately heavy falls about Cook Strait and in the north of the North Island.

## 15th–21st

A shallow depression began to form near Lord Howe Island on the 14th, and moved south-east to lie west of the North Island on the 15th. Two fronts were associated with this; one lay across the north of the South Island and the second lay off the west coast of the North Island. This system moved south-east over the next 3 days and heavy rain fell in most parts of the country. Some very heavy falls were recorded in some North Island areas, particularly around Rotorua and the Bay of Plenty, on the 15th. An extensive anticyclone began to move onto the country during the last 2 days of this week and brought generally fine, mild weather to all districts.

## 22nd–30th

The weather during the last 9 days of the month was strongly influenced by the anticyclone which moved onto the country at the end of the third week. By the 24th it had intensified to over 1035 mb and lay to the south-east of the country. Pressures over most of New Zealand were over 1030 mb and all districts had fine, settled weather. By the 26th it had moved away to the south-east but a second high pressure centre had developed off East Cape and fine weather was maintained. On the 28th a complex frontal system associated with depressions near Lord Howe Island and in the central Tasman Sea lay to the west of New Zealand. Heavy rain fell in the central and northern areas of the North Island on the 28th spreading northward over the North Island on the 29th. By the 30th light rain was falling over most of the country.

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