

## THE NEW ZEALAND WEATHER, SEPTEMBER 1981

## THE WEATHER SEQUENCE, SEPTEMBER 1981

*General*—September was dry and windy over most of the country.

There were unprecedented numbers of south-westerly winds in both the north and south this month. Auckland had over 80 percent of its winds from a south-westerly direction and Invercargill over 50 percent; both are records for the last 25 years. The frequency of strong winds was also greater than usual over the whole country this month. The Auckland area suffered extensive damage to roofs and widespread power failures after strong winds on the 6th.

Dry, windy conditions retarded spring growth in many eastern areas, leading to some feed shortages. Growth was better in areas with normal rainfall although low temperatures and lack of sunshine caused some lambing problems.

Pressures were low over the whole country for the 4th consecutive month, particularly in southern and eastern areas.

*Rainfall*—Much of New Zealand had below average rainfall this month. Eastern coastal regions were particularly dry, with some areas around Gisborne, the Kaikoura Coast and south Canterbury coast having less than 25 percent of normal rainfall.

Southland, Fiordland, parts of Westland and the Wanganui-King Country areas had above average rainfall for September. Parts of Southland had more than 200 percent of normal rainfall. Many stations there reported an exceptionally high number of rain days, with 1.0 mm or more on 20 to 25 days, and some stations having only 2 or 3 days without any rain at all.

*Temperatures*—Temperatures in September were normal or close to normal over most of the country. The areas showing greatest departures were Wairarapa, Blenheim and North Otago, which were 1° to 1.5°C above average and Westland and Fiordland which were 1° to 2°C below.

During a cold spell between the 1st and 7th mean maximum and minimum temperatures were between 2° and 8°C below average. There were heavy snowfalls in Southland and Otago on the 6th, disrupting transport throughout both regions and closing the road to Milford Sound, isolating the settlement. Snow also fell at Rotorua for the first time in 17 years and at Taupo on the same day.

This was followed by warm weather until the 10th with temperatures over 20° recorded in some eastern areas. It was also milder during the last week of the month.

*Sunshine*—The east coast of both islands and Wellington, Nelson and Marlborough provinces had between 10 and 50 hours more sunshine than usual for this month. Sunshine totals for Timaru and Christchurch were the second highest for September since 1958, both having been exceeded in September 1980.

The rest of the country had below average sunshine with greatest deficits occurring in Invercargill, Westport, Ohakea and Hamilton.

1-7 September.

The weather in the first week of September was dominated by a series of deep depressions passing to the south of the country. There was an associated west to south-west air flow and a series of cold fronts crossed the country under the influence of these westerlies. A complex depression with 2 associated fronts passed over the north of the country at the beginning of the week. Temperatures were cool this week and rain fell in northern areas on the 1st and 2nd, south-western areas on the 2nd and all districts exposed to the west or south-west over the next 3 days. Isolated western and southern areas had rain on the 6th and 7th.

8-14 September.

A large anticyclone lay centred close to Lord Howe Island during the second week of September bringing fine, cool weather to northern and eastern areas for most of the week. The strong west to south-west conditions continued to be a major influence on weather in the south of the country this week and a further series of cold fronts crossed the South Island. Fronts crossed both islands on the 10th and 13-14th with rainfall generally widespread. Rain was frequent in southern and south-western areas throughout the week.

15-21 September.

The anticyclone remained in the central Tasman Sea for the first 2 days of this week with strong disturbed southerly or south-westerly winds over the country. On the 17th the anticyclone covered most of the Tasman Sea and spread onto New Zealand during the next 2 days. Two fronts associated with a deep depression south of Macquarie Island crossed the country between the 19th and 21st, weakening as they moved eastward. Light rain fell in some southern and western districts of both islands during the first 2 days followed by clearer milder weather. Rain fell in most areas on the 19th and 20th, generally clearing on the 21st.

22-30 September.

A series of deep depressions passed to the south of the country during the last 9 days of the month. These were accompanied by west or south-west winds and a succession of cold fronts. A deep depression formed in the Tasman Sea on the 28th and crossed the country during the 28-29th. It was showery at times in most areas with the passage of fronts, but heavy falls were recorded in southern and central areas of the North Island on the 24th and much of the North Island and northern South Island on the 28th. Mild temperatures were recorded in Eastern districts during this period.

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