

## THE WEATHER IN NEW ZEALAND, SEPTEMBER 1982

*General*—September was generally dry with temperatures that were close to average.

Winds were lighter than normal in the north of the country, with the frequency of light winds at Auckland being the highest equal for September for the last 25 years. South-westerlies were infrequent in the north, this September having the lowest equal occurrence for the last 25 years. However, south-westerlies were more frequent than usual in the south this month, where there were also less strong winds than usual.

Farmers in the North Island reported an excellent season, with stock generally in good fettle apart from some isolated outbreaks of bloat in central and western districts. Feed is still short in eastern areas of the South Island which continue to be very dry. However the dry weather has meant very few lambing problems with virtually no deaths from cold or wet conditions.

A tornado near New Plymouth on the 19th caused minor damage to hangars at the airport and destroyed or damaged several farm outbuildings and homesteads further inland.

*Rainfall*—Extensive areas of the country had less rainfall than normal again this month. The east of the South Island from Kaikoura to Oamaru and inland, Central Otago and Fiordland had less than half their average rainfall with areas around Oamaru and Central Otago having less than 25 percent of their usual September amount. In contrast northern Westland, Nelson, and Blenheim had above average rainfall, with some parts of Nelson having more than twice their normal rain this month.

Although not as dry as the South Island most of the North Island was also drier than usual. The only areas to record normal or above normal totals were parts of Northland, Taranaki, the Gisborne-northern Hawkes Bay area and Wellington. The drier areas, mostly with between 40 and 75 percent of normal rainfall, included southern Hawkes Bay, Bay of Plenty-Rotorua and Waikato. However in most of these areas the rainfall was still sufficient to maintain pasture growth.

Drought conditions continue to be moderate to severe in many parts of Canterbury and North Otago as a consequence of the continuing low rainfall, and wind erosion of dry topsoil is becoming a problem in some areas.

*Temperatures*—Mean temperatures were normal or slightly below normal for most of the country this month. The only areas to have temperatures more than 1°C above average were the South Island high country and Cape Campbell. Most other areas were around 0.5°C below average.

The first three days of September were very cold with mean temperatures on the 2nd 5°C to 6°C colder than average and there were widespread frosts. There was a second very cool period between the 14th and 17th, with mean temperatures between 3°C and 6°C below average. Frosts were again widespread, especially in the south of the country.

There was a warm spell between the 23rd and 26th. Eastern districts were particularly mild, with maximum temperatures of 20°C or above being recorded at many East Coast stations in both Islands. Minimum (night-time) temperatures were as much as 8°C above normal during this period.

*Sunshine*—Sunshine totals were below normal in the North Island and the north and west of the South Island. Eastern and some southern areas of the South Island had more sun than usual. Among

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those places with the greatest departures from normal this month were: Gisborne (−44 hours), New Plymouth (−33 hours), Blenheim (−26 hours), Taupo and Auckland (both −22 hours), Timaru (+23 hours), Christchurch (+19 hours), and Hanmer (+14 hours).

## 1–7 September

A front within a trough lying over New Zealand crossed the country on the 1st, bringing rain to most areas. The rain cleared as the trough moved eastward on the 2nd but temperatures were cool due to the following southerly flow. A ridge from an anticyclone near Lord Howe Island extended onto the country on the 3rd but by the 4th a complex trough had begun to move onto the South Island bringing widespread rainfall to all areas except those to the east during the 4th and 5th. Temperatures remained cool. There was a clearance on the 6th as the trough moved eastward and a ridge extended onto the South Island but a further trough brought rain to the north and west of both Islands on the 7th.

## 8–14 September

The frontal system associated with the trough continued to cross the country on the 8th with widespread rain although falls were light in eastern areas. The weather throughout this week was dominated by the passage of a series of fronts, bringing heavy rain to northern and western districts of both Islands on the 10th, to all districts except Southland and the east of the North Island on the 11th, to isolated northern and western districts on the 12th and to Northland on the 13th. There were some light falls in the North Island and east of the South Island on the 14th. Apart from the 10th and 11th, temperatures were cooler than usual throughout the week.

## 15–21 September

On the 15th an extensive anticyclone lay in the Tasman Sea, with its centre to the east of Tasmania. This moved slowly eastward over the country and the weather between the 15th and 17th was fine and cool, although there were isolated showers in some western areas of the South Island. By the 18th the centre of the anticyclone lay to the east of East Cape and a strong north-westerly flow associated with a trough moving into the Tasman Sea area brought rain to southern and western areas of the South Island and about New Plymouth. Rain became widespread in southern and western areas of both Islands on the 19th, central districts on the 20th and some northern areas on the 21st as a front within this trough moved up the country.

## 22–30 September

A ridge from an anticyclone centred near Tasmania extended onto the South Island on the 21st and by the 22nd this covered the country. The 22nd and 23rd were generally fine and mild with warm temperatures in eastern areas. A deep depression developed near Lord Howe Island on the 24th, and this moved onto the North Island on the 25th, bringing widespread and occasionally heavy rain during the 25th and 26th. At the same time a front within a disturbed westerly flow brought rain to southern and western areas of the South Island. There was further widespread rain on the 27th as a complex frontal system crossed the country. A small depression passing close to Northland caused showers in northern areas on the 28th and 29th and there were showers in western areas of the South Island as a front crossed this area on the 30th, but otherwise the weather during the last 3 days of the month was fine and cool.

(N.Z. Met. S. Pub. 107)

J. S. HICKMAN, Director.