

WEATHER NOTES FOR JULY 1980

General—Throughout the country, July was generally a little dryer than normal, and temperatures were near the average. Pressures were considerably lower than usual in all districts and there was a greater frequency of south-westerly winds.

Many farmers reported little pasture growth, but stock was in good condition with some early lambing and calving underway.

Tornadoes accompanied by hail and thunder affected parts of Taranaki during the month causing widespread damage to a number of farms. Hailstones up to 6 cm long were reported on one occasion.

Rainfall—Rainfalls down to 35 percent of the July normal were recorded in the central districts of the North Island and in Gisborne, Hawkes Bay, Canterbury, Buller, and Westland. However in Central Otago and Southland some stations received nearly twice their usual amount.

Gisborne Aerodrome with 51 mm of rain had its lowest July rainfall since 1964, while at Queenstown 97 mm of rain, made it the wettest July since 1970 when 112 mm fell.

During the 24 hours to 9 a.m. on the 21st of July, 72 mm of rain were recorded at Albert Park, Auckland. This intensity occurs about once in 2 years. More than half of this total fell in the 6 hours from 2 p.m. with more than 10 mm between 5 p.m. and 6 p.m.

Temperatures—Temperatures were about average over much of the country for July, although south-eastern parts of the South Island were about 1.0°C warmer than normal. Temperatures were below normal by a similar amount in parts of the Bay of Plenty and the south-west of the South Island.

During a warm spell at the beginning of the month daily maximum temperatures were up to 8°C above the monthly average along the east coast of the South Island. For the remainder of the month they were mostly below average. On some days this deficit reached 4°C over the South Island.

Sunshine—Sunshine hours were near the July normal over the country with the exception of Southland where there were about 20 hours fewer.

WEATHER SEQUENCE FOR JULY 1980

A cold front crossed New Zealand in the first 2 days of the month and brought moderate to heavy rain to Westland and Fiordland, with

mainly light falls of rain in other western and southern areas.

From the 3rd to 7th a succession of depressions moved on to New Zealand from the Tasman Sea with rain in eastern districts of both Islands and about Northland. Moderate falls were recorded in Northland, Hawkes Bay, and Wairarapa.

On the evening of 7th, a cold front ahead of a complex low pressure area moved on to Fiordland and crossed New Zealand by the evening of the 8th. The trough spread over the country during the 8th and lay to the east of central New Zealand by the morning of the 12th, with a cold showery south-westerly airflow covering the country. During this period widespread rain was recorded with falls in excess of 40 mm in Fiordland and Westland, and isolated heavy falls in Manawatu and about the central North Island. Temperatures on the 11th were 4°C below the monthly average in eastern Canterbury and parts of Westland.

The south-westerly airflow covering the country brought isolated showers to most districts, and lasted until the 17th when a ridge of high pressure spread on to New Zealand. An anticyclone with mainly fine cool weather lay over the country on the 17th and 18th. On the 19th a complex trough of low pressure covered the Tasman Sea and Northland, while a high pressure area lay east of New Zealand. Moderate to heavy rain occurred over Northland and Auckland and dry settled weather predominated elsewhere. This weather pattern remained slow moving until the 22nd when a depression moved towards central New Zealand. Rain fell over much of the country with the passage of the depression and heavy falls were reported in Westland, North Canterbury, Marlborough, Waikato, Taranaki, and Northern and Central Hawkes Bay. By the 24th the depression had been absorbed into a trough of low pressure lying to the east of New Zealand.

A further cold showery south-westerly airflow had spread over the country by the 25th, and lasted until the 28th when an anticyclone from the Tasman Sea spread on to New Zealand accompanied by fine weather throughout both the North and South Islands.

On the 30th a front moved on to the south-west of the South Island accompanied by rain. This front moved north-eastwards over the rest of the country but became slow moving over northern New Zealand as a small wave depression developed near Lord Howe Island.

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