

THE NEW ZEALAND WEATHER IN APRIL 1982

General—April was cool and dry in all areas except some northern and eastern areas which were wetter than normal.

It was less windy than usual over the whole country. There was an unusually high frequency of south-easterly winds.

In the south of the country the frequency of winds from an easterly quarter was the greatest for April since 1968.

Farmers in most districts reported good conditions but with grass growth slowing rapidly by the end of the month.

A widespread hailstorm in Canterbury on the 4th caused considerable damage to crops in the area from Oamaru northwards. Apples, late strawberry crops and market gardens were severely damaged and there were reports of damage to glasshouses, cars and caravans.

Winds gusting to over 60 knots and heavy rain associated with a deep depression, formerly tropical cyclone *Bernie*, affected much of the North Island between the 8th and 10th. Loss of kiwifruit crops in the Bay of Plenty was estimated to be over \$1 million, maize crops and fruit in the East Coast area and forests in the central North Island area were extensively damaged.

A tornado damaged about 50 homes in the North Shore and Browns Bay areas of Auckland on the 29th. Several of the houses affected were completely destroyed.

Rainfall—Rainfall was below normal for April over most of New Zealand, except the north and north-east of the North Island. Timaru and the Kaikoura coast were also wetter than usual.

Heavy rain fell in the East Cape, Gisborne and Hawke Bay areas during the passage of the severe depression between the 8th and 10th. Among the heavier falls recorded on the 9th were: Mohaka 182 mm, Te Karaka 166 mm, Tutira 162 mm, Ruangarehu 153 mm, East Cape 149 mm and Gisborne 102 mm.

The South Island, apart from isolated areas on the east coast, and the west and south of the North Island were dry. Parts of Horowhenua, Manawatu, Blenheim and Central Otago had less than 20 percent of their normal April rainfall, while areas of south Westland and much of Otago and Southland had less than 50 percent of their usual rain for this month.

Temperature—Mean monthly temperatures were between 1°C and 2°C below average over most of New Zealand this month, with the exception of Westland, Nelson, and Bay of Plenty where it was only between 0.5°C and 1°C cooler than normal.

Many areas, especially those on the east of both Islands, had their lowest mean monthly temperatures for April for many years. Among those stations recording their lowest mean monthly temperatures for April since records began (with the year the station opened in brackets) were: Timaru 10.0°C (1910), Christchurch Airport 10.0°C (1954), Dunedin Airport 9.0°C (1963), and Rotorua Airport 11.8°C, while Gisborne with 13.2°C, Ohakea 12.6°C and Waingawa 11.8°C had the lowest or lowest equal since a cold April in 1949.

Sunshine—Sunshine totals were generally higher than normal, particularly in western districts of both Islands. Several stations recorded their highest April sunshine totals, including Ruakura with 220 hours (opened in 1937), New Plymouth with 207 hours (opened in 1972), and Hokitika with 214 hours (opened 1930 but had a site change in 1964). It was the sunniest month for Hokitika since January 1981.

The greatest departures this month were: Ruakura (+57 hrs), Tauranga (+46 hrs), New Plymouth (+39 hrs), Hokitika (+66 hrs), Invercargill (+36 hrs), Blenheim (-44 hrs), Gisborne (-27 hrs), and Kaitiā (-24 hrs).

THE WEATHER SEQUENCE, APRIL 1982

1st-7th April

A shallow depression covered most of the South Island at the beginning of April, with an associated cold front lying to the east of the country. Rain was widespread, with some heavy falls in eastern areas of the South Island. The rain cleared from most areas as the depression moved off the country on the 2nd but became widespread again in the South Island on the 3rd and both Islands on the 4th as a cold front within a trough moved over the country.

On the 5th an anticyclone centred near Lord Howe Island began to spread onto the north and west of the country, bringing fine, cool weather to most districts except those in the south and west of the South Island. These areas had rain between the 5th and 7th with the passage of a series of fronts within a disturbed westerly flow across the south of the South Island.

8th-14th April

On the 8th a cold front within the disturbed westerly flow moved to lie across Southland and Fiordland, bringing heavy rain to these areas. The front moved northwards on the 9th, bringing heavy rain to much of the country. Concurrently a deep depression, formerly tropical cyclone *'Bernie'* began to move down the east coast of the North Island. Some very heavy falls of rain and strong winds were experienced in northern and eastern areas of the North Island on the 8th and 9th. Although still showery in some eastern areas on the 10th the weather began to clear as an extensive anticyclone centred in the Tasman Sea began to spread onto the north and west of the country. It was generally fine and cool until the 12th when a cold front moved onto the South Island, bringing rain to most South Island districts on the 12th and to some western areas of the North Island and the Cook Strait area on the 13th and 14th. Other districts had fine but rather cool weather.

15th-21st April

The anticyclone developed centres to the west of the South Island and east of Southland, maintaining a south-easterly flow over the North Island and bringing fine cool weather, apart from rain in eastern and northern areas of the North Island, to most districts on the 15th and 16th. The rain cleared in the north and east on the 17th and most districts had fine weather on the 17th and 18th. There were showers in Fiordland and Southland on the 18th and in isolated areas of both Islands on the 19th but otherwise the anticyclone across the country brought a continuation of fine, cool conditions until the end of the week.

22nd-30th April

The weather during the last week of the month continued to be dominated by the influence of the anticyclone to the south-east of the South Island. This became stationary between the 22nd and 28th and extended a ridge of high pressure northwards onto New Zealand. The weather in the South Island and the west of the North Island was fine and cool throughout most of this period, but rain fell frequently in northern and eastern districts of the North Island. The heaviest falls in these areas were recorded on the 22nd, 23rd and 26th. On the 29th a cold front within a trough began to move onto New Zealand and rain became widespread, apart from the east of the South Island, with heavy falls in western districts. The trough lay over the country on the 30th, although the rain became lighter and was generally restricted to the North Island.

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