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THE NEW ZEALAND GAZETTE

Station	Height of Station Above M.S.L.	Air Temperatures in Degrees (Celsius)								Rainfall in Millimetres					
		Means of		Mean of A	Differ- ence	Absolute Maximum and Minimum				Total	No. of	Differ- ence	Maximum Fall		Bright Sun- shine
		A Max.	B Min.	and B	From Normal	Maxi- mum	Date	Mini- mum	Date	Fall	Rain Days	From Normal	Amount	Date	
Haast, February 1976 Ashley Forest, February 1976 Bromley, Christchurch, Feb-	Metres 4 107 9	°C 17.4 17.7 19.3	°C 8.1 8.5 10.5	°C 12.8 13.1 14.9	°C -1.6 -3.1 -1.6	°C 22.6 27.5 27.2	9 19 19	°C 4.3 3.8 7.5	8 28 10	mm 81 79 36	10 9 9	mm -242 +13 -10	mm 27 31 13	19 7 7	Hrs 215 194
ruary 1976 Lincoln, January 1976 Lincoln No. 3, January 1976 Temuka, February 1976 Waimate, February 1976 Ranfurly, January 1976 Mid Dome, February 1976 Moa Creek, February 1976 Mahinerangi Dam, January	11 11 24 61 427 427 386 427 396	19.7 19.9 18.8 19.0 21.8 19.6 19.9 21.2 17.1	11.0 11.4 7.5 8.3 7.2 4.3 4.7 3.1 6.6	15.4 15.7 13.2 13.7 14.5 12.0 12.3 12.2 11.9	$ \begin{array}{c} -0.9 \\ .22 \\ -2.2 \\ \\ -2.2 \\ \\ -2.1 \\ -1.2 \end{array} $	27.2 27.6 29.6 30.3 32.0 26.7 26.7 27.5 28.4	17 27 19 5 29 29 29 29 5	$\begin{array}{r} 4.4 \\ 4.6 \\ 2.0 \\ 4.6 \\ -0.5 \\ -3.1 \\ -1.2 \\ -4.5 \\ 2.0 \end{array}$	30 30 27 27 30 27 27 27 27 7	69 70 76 38 17 45 39 20 45	12 12 8 9 11 5 8 5 11	+13 +12 -26 -47 -21 -52	36 36 38 9 6 23 12 15 9	13 13 7 11 22 10 7 6 29	 189 232 188
1976 Tapanui, February 1976 Nugget Point, February 1976 1976 Scott Base, Antarctica, January 1976	226 129 16	18.0 15.3 -1.4	5.4 8.2 -8.0	11.7 11.8 —4.7	-2.6 -1.4 +0.4	25.9 19.1 3.2	29 20 9	0.0 5.2 14.3	27 26 24	36 46 	10 18 	-35 -20	9 18 	6 6 	•••

The "normal" refers to the present site of the instruments. Standard period for normals is 1941–70. No normals are available for stations with only short records.

*Indicates that the sunshine recorder is not located at the station but is in the near vicinity.

A rain day is a day with rainfall equal to or greater than 0.1 mm. Where the extremes of temperature and rainfall have occurred more than once during the month, the date of the first occurrence is given.

NOTES ON THE WEATHER FOR MARCH 1976

General—During March pressures were unusually high over New Zealand and exceptionally high over the Chatham Islands. It was a dry month, especially up to the 27th. For a period of six weeks beginning about 12–15 February and ending on 26 or 27 March the greater part of the country received less than 20 mm of rain. Most farmers found that the dry weather affected pasture growth, but in many areas good rains from 28 to 30 March brought them some relief. However, in parts of the South Island, especially Otago, the very dry conditions still persisted at the end of the month.

Rainfall—The only considerable areas with rainfall somewhat above normal were Manawatu and the greater part of the Marlborough Sounds. In the North Island the rainfall averaged twothirds of the normal value, in the South Island only a little over half. In the North Island the driest area relative to normal was Northland; in the South Island it was Otago, where most stations received less than a quarter of the normal value.

The first three months of this year have been particularly dry in Otago. Dunedin Airport received only 73 mm, Naseby Forest 74 mm, and Lake Hawea 46 mm. Much of Otago has had the lowest total rainfall for these 3 months since 1920.

Temperatures—March was warmer than February. Temperatures were close to normal, except in Northland and Auckland, where they were up to $1^{\circ}C$ above normal. The warmest part of the month was from the 18th to the 25th, and in some areas this was the warmest spell of weather for a year, that is, since March 1975.

Surshine—Sunshine was below normal by about 30 hours in an area extending from Bay of Plenty and Gisborne through Taupo and Taihape to South Taranaki. On the other hand, some areas east of the ranges in the South Island were favoured with the same amount above normal.

Weather Sequence—At the beginning of March an anticyclone was centred to the east whilst a depression lay far to the southwest, and the associated trough of low pressure was moving on to the South Island. Considerable rain was reported in Fiordland and some also in south Westland and Southland. Temperatures were very warm in the east of the South Island. During the next two days this trough crossed most of the country while a second trough was approaching. Rain extended to the remainder of the West Coast, and temperatures became cooler on the 3rd. The second trough was held up with the southward advance of a tropical storm from the north Tasman Sea. On the 4th some rain extended also to Canterbury. By the following day a belt of high pressure extended from south of Tasmania on to the South Island, while pressures remained low over the north Tasman Sea. The weather was mainly fine but some rain was reported in the easterlies in eastern Northland and in the Gisborne ranges. However, on the 6th, with the eastward movement of the belt of high pressure, the weather was fine.

On the 7th and 8th a depression, east of Tasmania, moved south-eastward and the associated trough of low pressure crossed the South Island, with pressures rising rapidly behind it. Considerable rain was reported on the West Coast with some also extending to Southland, the Canterbury high country, northern districts of the South Island, and western districts of the North Island. Temperatures became very warm again temporarily in the east of the South Island. During the next two days an anticyclone moved across the South Island while a trough of low pressure became stationary over the North Island. Some scattered light rain was reported. On the 11th a depression passed close to the southwest of the South Island and the trough of low pressure associated with it brought considerable rain to the West Coast with some also to Southland.

The period from the 12th to the 20th was one of dry settled weather with little rain in any part of the country. From the 12th to the 14th the trough over the North Island, now very weak, continued northward, while an anticyclone moved on to the country from the southwest. Some light rain was reported about the Gisborne ranges. During the next four days the anticyclone remained almost stationary to the north of the Chatham Islands, extending over most of New Zealand, while pressures remained low to the north. Some light showers were reported at times about eastern Northland. During the 19th and 20th a deep depression was centred near Tasmania and a weak trough of low pressure associated with it affected the South Island at times, while pressures were still low to the north. Some light rain was reported in Fiordland, on the Southland coast, and also in Bay of Plenty. Temperatures became somewhat warmer, especially in the east of the South Island.

During the 21st and 22nd a very deep depression moved to the south of Macquarie Island while the associated trough of low pressure moved north-eastward over the South Island.

Considerable rain was again reported on the West Coast, while some also extended to Southland, western districts of the North Island, and northern districts of both islands. The warm temperatures persisted, especially in eastern districts of the South Island. On the 23rd the trough moved over the North Island and some further light showers were reported, while temperatures became cooler in the south. During the following three days an anticyclone covered most of the country, but a weak trough of low pressure affected some areas, mainly in the South Island. However, the Bay of Plenty and Northland also reported some light rain on the 26th.

By the 27th an anticyclone extended on to the South Island from the south-west while a depression over the north Tasman Sea commenced to move south-eastward. This depression was associated with a trough of low pressure which moved southward over the country on this and the following day, bringing fairly general rain, with colder temperatures. However, over most of Canterbury and Otago only a little light rain was reported. On the following day the depression crossed the South Island and further general rain was reported, with some considerable falls in northern districts of both islands, but still only light falls east of the ranges in the South Island. By the 30th temperatures had once again become somewhat warmer. However, by this time the depression lay to the east of the South Island while an anticyclone was moving on to the country from the southwest. Colder southerlies developed; and on this and the following day rain was still fairly general but mainly light.

J. F. DE LISLE, Director.

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