

CLIMATOLOGICAL TABLE—Summary of the Records of Temperature, Rainfall, and Sunshine for March 1973—continued

Station	Height of Station Above M.S.L.	Air Temperatures in Degrees (Celsius)								Rainfall in Millimetres					Bright Sunshine
		Means of		Mean of A and B	Difference From Normal	Absolute Maximum and Minimum				Total Fall	No. of Rain Days	Difference From Normal	Maximum Fall		
		A Max.	B Min.			Maximum	Date	Minimum	Date				Amount	Date	
Black Birch Range, February 1973	1,396	16.4	8.7	12.6	+2.8	31.3	7	0.1	13	..	..	..	..	..	..
Balmoral Forest, February 1973	198	25.8	10.3	18.1	+2.3	36.0	6	3.2	14	7	5	-46	3	21	..
Haldon, February 1973	399	27.0	10.0	18.5	..	..	..	..	..	7	1	..	7	11	..
Woodlands, February 1973	47	19.9	9.2	14.6	..	29.2	6	4.6	22	66	14	..	17	7	..
Milton, February 1973	18	22.7	10.5	16.6	+2.1	33.5	4	2.7	15	10	7	-54	3	7	..
Raoul Island, December 1972	38	23.0	17.2	20.1	-0.4	24.9	14	14.8	9	30	11	-67	12	11	259
Campbell Island, October 1972	15	8.3	2.3	5.3	-0.9	10.1	11	..	..	80	26	-34	9	18	84
Campbell Island, November 1972	15	9.2	3.6	6.4	-0.8	12.1	12	..	..	97	26	-10	14	6	78
Campbell Island, December 1972	15	10.6	4.9	7.8	-1.0	13.3	26	-1.3	15	105	27	+3	26	15	109
Campbell Island, January 1973	15	11.9	6.6	9.3	+0.1	17.6	10	4.0	6	130	25	+6	43	3	95

The "normal" refers to the present site of the instruments. Standard periods for normals are: Temperature 1931-60, Rainfall 1921-50, Sunshine 1935-60. 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 1973

**General**—March was warm and predominantly somewhat dry. After the drought which had prevailed in February, light rains gave some relief but were inadequate, and the soil was still too dry. There was a shortage of feed; and in some areas where supplementary feed was not available the condition of stock suffered. Dairy production was also still adversely affected.

**Rainfall**—Rainfall was mainly only three-quarters of the normal value, the relatively driest areas being in inland districts of north Canterbury and Marlborough. However, rainfall was above normal over nearly the whole of the North Island from Taranaki, Taihape, and southern Hawke's Bay southward; also around Auckland City, in eastern Bay of Plenty, and in parts of Otago.

**Temperatures**—Temperatures were above normal by about 1°C in the North Island and somewhat less in the South Island.

**Sunshine**—Sunshine was below normal in eastern districts from Whangarei to Christchurch and also in southern Manawatu and Wellington, by 20-90 hours; Masterton's total of 126 hours was the lowest ever recorded there in March. However, the West Coast was favoured with 20-50 hours above normal sunshine.

**Weather Sequence**—At the beginning of March an anticyclone was centred to the east and the weather was fine, continuing the dry spell which had commenced on 13 February.

On the 2nd a depression over the Tasman Sea, moved past western Southland and during this and the next 2 days the associated trough of low pressure moved over the South Island. Rain was fairly general over the South Island and western districts of the North Island, but in many areas it was quite light. Temperatures were warm in eastern districts on the 2nd. On the 5th and 6th a depression passed to the south and another trough of low pressure brought light rain to many districts. On the following day an anticyclone was spreading over the country from the west but a weak southerly change caused showers on the east coast of the North Island. A weak trough which crossed the country during the 8th and 9th brought further scattered light rain.

The trough became stationary through Auckland on the 10th and 11th, with scattered rain over the North Island. On the following day it moved southward as a warm front accompanied by a

small depression. There was considerable rain in western and southern districts of the North Island with lighter falls in Marlborough and Nelson. The weather was mainly settled again on the 13th and 14th under the influence of an anticyclone far to the east, but showers were reported in the north-easterlies in Gisborne, Bay of Plenty, and Northland.

A depression from the central Tasman Sea passed to the south-west during the 15th and 16th, and the associated trough of low pressure brought general rain west of the ranges in both Islands and also to Northland, with warm temperatures. Over the next 3 days an anticyclone was moving across New Zealand and the weather was fine, apart from showers in the easterlies, mainly in Northland, Bay of Plenty, and Gisborne. During the 20th and 21st two weak troughs of low pressure brought light rain mainly to Fiordland and Westland. However, the 22nd was mainly fine under the influence of two anticyclones centred to the north and east.

On the 23rd another depression passed far to the south-west and the associated trough of low pressure brought light rain to the South Island and western districts of the North Island. On the following day, with pressures low to the east, cold south-westerlies predominated, but the weather was settled. During the following 2 days an anticyclone developed to the south and a cold southerly change brought showers to a few districts, mainly in the east. On the 27th and 28th the weather was predominantly fine under the influence of an anticyclone centred near the Chatham Islands, but some showers were reported on the West Coast and in Northland.

On the 29th a deep depression passed close to Macquarie Island and the associated trough of low pressure brought considerable rain to Westland and some also to Southland. On the following day a ridge of high pressure was associated with settled weather. On the last day of the month another trough of low pressure moved on to the South Island from the west, bringing rain as far east as Westport and Timaru.

J. F. GABITES, Director.

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#### New Zealand Government Railways—Schedule of Civil Engineering and Building Contracts of \$20,000 or More in Value

Name of Work	Successful Tenderer	Amount of Tender Accepted
		\$
Painting of Bridge 18, Main South Line (Ashburton River) .. .. .	Ivorys Painting Service Ltd., P.O. Box 11047, Sockburn, Christchurch	24,850.00

T. M. SMALL, General Manager.