

CLIMATOLOGICAL TABLE—Summary of the Records of Temperature, Rainfall, and Sunshine for April 1970—continued

Station	Height of Station Above M.S.L.	Air Temperatures in Degrees (Fahrenheit)							Rainfall in Inches				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
	Ft.	°F.	°F.	°F.	°F.		°F.		In.		In.		Hrs.		
Cromwell	698	66.7	43.2	55.0	+3.3	77.0	4	31.0	2	0.40	2	-1.1	0.23	5	..
Ophir	1,000	65.2	39.4	52.3	+3.3	73.0	17	25.6	12	0.00	0	-1.6	..	..	..
Moa Creek	1,400	63.5	35.2	49.4	+2.9	71.4	5	23.0	12	0.24	5	-1.1	0.12	18	..
Earnsclough	500	66.1	37.0	51.6	+1.3	76.2	4	26.5	12	0.32	3	-1.1	0.23	5	..
Alexandra	461	65.6	42.2	53.9	+2.5	75.0	4	32.9	2	0.25	3	-1.0	0.16	5	184
Roxburgh (Power Stn.)	360	64.3	39.7	52.0	-0.1	76.1	18	33.0	12	0.67	5	-1.2	0.56	18	..
Moa Flat, West Otago	1,345	59.1	39.6	49.4	+0.9	67.9	18	33.9	12	1.44	12	-1.2	0.49	18	..
Mahinerangi Dam	1,300	57.3	40.0	48.6	..	68.8	18	33.2	1	2.74	15	-0.6	0.89	9	..
Tapanui	740	59.8	42.0	50.9	+0.5	69.0	24	34.0	12	1.87	14	-1.1	0.39	9, 18	..
Rankleburn Forest	835	58.9	42.1	50.5	+1.3	69.2	24	33.0	2	3.03	15	+1.0	0.91	9	..
Taieri Mouth	50	60.3	43.7	52.0	..	73.0	18	35.9	2	2.40	11	..	0.77	9	..
Otautau	180	60.8	41.9	51.4	+1.0	70.0	18	30.0	2	4.15	18	-0.7	1.01	9	109
Winton	145	60.6	43.6	52.1	..	68.8	29	32.5	17	0.85	14	..	0.20	24	128
Gore	235	60.9	41.2	51.5	+0.2	71.5	18	28.0	1	3.70	17	+0.9	0.81	8, 18	118
Hokonui Forest	150	61.7	43.8	52.8	+2.1	70.0	24	33.0	12	3.75	18	+0.5	0.64	18	..
Invercargill Airport	1	59.6	43.5	51.6	+1.6	67.7	18	34.8	12	4.73	19	+0.9	0.82	24	105
Milton	60	62.1	41.0	51.6	..	73.9	24	32.2	29	1.56	12	-0.9	0.62	9	..
Finegand, Balclutha	20	61.3	42.5	51.9	..	69.4	5	34.1	7	1.30	13	..	0.40	18	142
Rarotonga, Cook Islands	15	83.3	72.1	77.7	+0.3	89.0	20	65.2	30	10.45	15	+3.6	5.68	15	116
Raoul Island	126	75.1	66.1	70.6	+1.5	79.4	5	57.7	13	3.80	15	-1.0	2.30	23	168
Chatham Islands	157	59.7	50.0	54.8	+1.1	64.8	8	41.4	12	1.95	17	-0.6	0.44	1	122
Campbell Island	49	48.4	39.8	44.1	..	54.4	28	30.4	11	8.38	28	..	1.08	28	27
Scott Base, Antarctica	58	..	..	-8.0	+3.3	14.9	14	-42.0	12	..	..	..	..	..	..
Lake Vanda, Antarctica	510	-14.3	-30.5	-22.4	..	17.6	24	-45.2	19	..	..	..	..	..	..
LATE RETURNS															
Rotoehu Forest, March 1970	235	72.1	55.5	63.8	+3.2	77.0	28	42.2	17	16.14	16	+11.5	4.57	7	..
Whatawhata, March 1970	340	75.3	55.7	65.5	+2.3	82.1	10	42.3	17	5.09	15	+1.2	1.52	14	189
Otutira, March 1970	1,900	70.2	53.0	61.6	..	79.0	4	43.0	17	2.49	11	..	0.61	13	..
Taurewa Forest, March 1970	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mawhera Forest, March 1970	910	68.2	53.1	60.9	..	74.0	1	46.1	15	6.56	12	..	1.86	30	..
Te Paki Stn, Te Hapua, March 1970	190	..	..	..	..	..	..	..	..	3.27	13	0.0	0.64	31	..
Omoto Forest, March 1970	1,000	65.0	52.4	58.7	..	72.0	5	43.0	15	8.82	11	..	2.91	6	..
Lake Pukaki (No. 2), March 1970	1,825	66.2	47.2	56.7	..	79.6	4	32.3	17	2.77	7	..	0.89	13	..
Flock House, Bulls, March 1970	30	..	..	..	..	..	..	..	..	4.74	10	+2.5	1.51	31	..

The "normal" refers to the present site of the instruments. The standard periods for normals are: for temperature 1931-60, for rainfall 1921-50, and for sunshine 1935-60. No normals are available for stations with only short records.

\*The sunshine recorder is not located at the station but is in the near vicinity.

NOTES ON THE WEATHER FOR APRIL 1970

**General**—April was dry and warm. In many districts nearly all the rain fell in the first 4 days and on the 30th, and there was little or no rain from 5 to 29 April. Although stock were mainly in good condition, growth was poor, and more rain would have been appreciated. Scattered outbreaks of facial eczema were reported throughout the North Island.

**Rainfall**—Rainfall was below normal except over the Southland plain and on parts of the Kaikoura coast. It was less than half the normal value in most of Otago and Canterbury; in Taumarunui and Taupo, with parts of inland Hawke's Bay; and in central Marlborough. The greatest deficiency was recorded in inland Canterbury and parts of Central Otago, with less than a quarter of the normal rainfall. Ophir, in Central Otago, received no appreciable rain at all.

**Temperatures**—Temperatures were above normal, mainly by 2 degrees.

**Sunshine**—Northland, Gisborne and Hawke's Bay, Central Otago, and the Mackenzie Country of inland Canterbury were favoured with 30-50 hours more sunshine than normal. The only station which received sunshine considerably less than normal was Westport, with a deficiency of 36 hours.

**Weather Sequence**—At the beginning of April a trough of low pressure extended from a depression near Lord Howe Island across the North Island to a second depression to the east of Campbell Island. This trough moved only slowly over the North Island during the first 4 days, with fairly general rain, very light in some eastern districts. A small depression crossed the North Island on the 3rd.

From the 5th to the 17th westerly weather predominated, with little rain except on the West Coast and the Southland coast. From the 5th to the 7th an anticyclone was centred over south-eastern Australia, and a depression passed to the south of New Zealand while the associated trough of low pressure crossed the country. During the next 2 days conditions remained similar, but the trough of low pressure on this occasion also brought some rain

to western, central, and northern districts of the North Island. The 10th and 11th were days of south-westerlies with scattered showers. Further westerly troughs crossed the country from the 12th to the 14th, with light rain extending to parts of the North Island again on the 13th. By now the anticyclone covered eastern Australia and the Tasman Sea and showers continued on the West Coast and the Southland coast during the next 2 days. However, on the 17th the rain cleared on the West Coast.

During the 18th and 19th yet another trough of low pressure moved northward over the country, this time bringing a change to southerlies. Rain affected not only, as previously, the West Coast and the Southland coast, but also the remainder of Otago and Southland and many east coast districts of both Islands. For the next 4 days the anticyclone advanced towards the North Island and across it. A few showers were reported at first, especially on the Southland and Otago coasts. By the 24th the anticyclone was centred far to the east of the North Island. A depression over the South Tasman Sea moved across the South Island on this and the following day, causing rain again on the West Coast and the Southland coast, besides some light falls about Cook Strait and in north Taranaki. West-south-westerlies predominated on the 26th, with scattered showers in a few areas, notably Fiordland, Buller, and Nelson, an area extending from Wanganui past Ruapehu to Napier and Wairoa, and also parts of Northland. On the following day a small depression crossed the North Island, bringing rain to many parts of it, while a westerly trough brought the usual weather to the West Coast and the Southland coast. On the 28th a ridge of high pressure covered the country and the weather was mainly fine.

During the last 2 days of the month a depression from the central Tasman Sea moved towards the North Island. Rain commenced first in Northland and some southern and eastern districts, later extending to nearly the whole of the North Island, besides northern and eastern districts of the South Island.

J. F. GABITES, Director.