

CLIMATOLOGICAL TABLE—Summary of the Records of Temperature, Rainfall, and Sunshine for June 1969—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	
LATE RETURNS																
Opotiki, May 1969	..	Ft. 20	°F. 62.1	°F. 46.1	°F. 54.1	+0.2	68.7	14	29.5	31	4.62	12	−0.7	1.55	6	128
Whatawhata	..	340	61.3	47.0	54.2	+1.7	68.2	4	27.8	31	5.05	15	−0.9	1.46	6	87
Te Kuiti, May 1969	..	201	61.6	44.2	52.9	+1.8	68.6	4	28.5	31	5.78	9	+0.9	1.72	3	103
Lower Retaruke, Sept. 1968	..	680	56.5	38.9	47.7	..	62.0	24	27.6	29	4.12	20	..	1.08	8	..
Lower Retaruke, Oct. 1968	..	680	59.0	41.9	50.4	..	64.4	29	28.9	1	7.13	25	..	0.82	23	..
Lower Retaruke, Nov. 1968	..	680	63.8	43.7	53.8	..	74.4	29	32.2	7	4.70	14	..	0.91	17	..
Lower Retaruke, Dec. 1968	..	680	69.7	48.8	59.2	..	77.7	20	33.1	10	6.85	16	..	2.50	6	..
Lower Retaruke, Jan. 1969	..	680	73.0	50.2	61.6	..	82.0	19	41.1	14	3.59	12	..	1.00	31	..
Lower Retaruke, Feb. 1969	..	680	72.8	50.8	61.8	..	80.6	22	39.8	19	5.45	9	..	2.42	16	..
Lower Retaruke, Mar. 1969	..	680	69.2	47.1	58.2	..	78.1	14	39.7	28	1.35	6	..	0.85	1	..
Lower Retaruke, April 1969	..	680	62.1	42.7	52.4	..	71.3	20	26.3	30	3.95	18	..	1.06	23	..
Lower Retaruke, May 1969	..	680	59.1	41.5	50.3	..	65.7	1, 14	28.0	9	4.63	10	..	1.46	6	..

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 JUNE 1969

General—June was marked by an unusually high frequency of south-westerly winds. It was a cold month and for the most part also rather dry. Growth was less than usual in the North Island but stock were in good condition over the whole country.

A small local tornado caused some damage at Bell Block, New Plymouth, on the 27th.

Rainfall—Rainfall was below average over nearly the whole of the South Island and the greater part of the North Island. It was less than half the average in northern and eastern districts of the South Island north of Dunedin, and in parts of Wellington, Manawatu, eastern Bay of Plenty, northern Hawke's Bay, and Gisborne. In South Canterbury and parts of North Otago it was less than a quarter. Inland from Temuka and Timaru some stations received less than 0.1 in., the lowest for many years.

The main areas with rainfall above average were Northland and Coromandel, Taumarunui and Taihape, and most of Southland. Parts of north-eastern Northland around Doubtless Bay and Whangaroa received more than double the average.

Temperatures—Temperatures were below average except in most northern districts of the North Island and parts of Southland, where they were close to average. Departures were mainly about 2 degrees, but they exceeded 3 degrees in parts of Central Otago and Fiordland, in Westland and parts of Marlborough, and in eastern Bay of Plenty with parts of Hawke's Bay and Gisborne. In these areas it was the coldest June for many years. Napier had its lowest mean temperature for June in 46 years of observations.

On the 16th and 17th snow fell to low levels over the greater part of the South Island and also on the North Island high country. In Dunedin it was considered to be the heaviest fall since the exceptional one of 25–27 July 1939. Transport came to a halt in some of the hill suburbs, where depths of about a foot were reported.

Sunshine—Sunshine was above average by 20–40 hours in most eastern districts, on the West Coast, and in Manawatu and parts of Nelson. Areas especially favoured were Wellington, Taranaki to the south and east of Mount Egmont, and parts of South Canterbury and North Otago. On the other hand, sunshine was below average by 30–65 hours in Auckland and Northland. Auckland's total of 74 hours was the lowest recorded there for any month of the year in 60 years of observation.

Weather Sequence—At the beginning of June and up to the 3rd a ridge of high pressure extended over the South Island from an anticyclone centred west of Tasmania. A trough of low pressure

was stationary to the north of the country with depressions passing eastward along it. Rain covered northern and eastern districts of the North Island but elsewhere the weather was fine and frosty. From the 4th to the 6th the anticyclone was centred over the Tasman Sea while pressures were low far to the south-east, and south-westerly winds prevailed. Showers were reported on the Southland Coast, and in the North Island in some western and northern districts. During the next 3 days a depression from the north-west moved eastward across Northland, becoming complex. Considerable rain was reported in Northland with flooding around the Bay of Islands. Rain was also reported in other northern districts of the North Island, in eastern districts north of Christchurch, and on the Southland coast. From the 10th to the 13th an anticyclone over the western Tasman Sea extended on to the country and the weather was mainly fine. However, showers were reported at times in south Westland and Fiordland and along the Southland coast.

During the 14th and 15th a deep depression far to the south moved eastward and the associated cold front crossed New Zealand. Rain was fairly general, except in eastern districts. On the 16th a secondary depression formed off the Southland coast, and it moved to the east during this and the following day. Very cold and strong southerlies covered the country, with snow to low levels in Southland, Otago, and Canterbury, and on the high country of the central North Island. Rain also spread to eastern districts of the North Island, but the weather cleared in Westland and Fiordland. During the next 4 days the depression moved slowly away with a gradual improvement in the weather.

On the 22nd and 23rd an anticyclone over the South Island moved slowly eastward while a depression from the north moved on to Northland, with considerable rain there and in some other northern and eastern districts of the North Island. On the following day, as the depression crossed the North Island, rain became general over this island and extended also to Nelson and Marlborough. Some heavy falls were reported in Bay of Plenty. A weak ridge brought a temporary improvement in many districts on the 25th. During the next 2 days pressures remained low to the east; and as a cold front crossed the country southerlies set in once again with general rain, clearing first in the west. Pressures remained low to the east and south on the 28th and 29th, with south-westerly to westerly winds, bringing rain to the West Coast, Southland, and Otago, and western and northern districts of the North Island. On the last day of the month southerlies came in behind another cold front and the rain became fairly general.

J. F. GABITES, Director.

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