

Weather Data summary for April 2021 for the Blenheim Meteorological station located at Grovetown Park Campus of the Marlborough Research Centre.

April 2021 was much warmer than average. Sunshine hours were above average. Wind-run was below average and rainfall was well below average.

Table 1: Weekly temperatures, rainfall and sunshine during April 2021

	Mean Maximum	Mean Minimum	Mean	Rainfall (mm)	Sunshine (hours)	Wind-run (km)
1 – 7 April	21.0 (+2.1)	9.0 (+1.0)	15.0 (+1.5)	1.2	56.3	225.4
8 – 14 April	21.6 (+2.7)	11.3 (+3.3)	16.5 (+3.0)	6.2	43.8	194.0
15 – 21 April	19.8 (+0.9)	8.7 (+0.7)	14.2 (+0.7)	0.0	43.3	221.3
22 – 28 April	18.4 (-0.5)	7.6 (-0.4)	13.0 (-0.5)	0.4	50.3	204.7
29 – 30 April (2 days)	19.7 (+0.8)	4.2 (-3.8)	11.9 (-1.6)	0.0	16.9	155.5
April 2021	20.2 (+1.3°C)	8.8 (+0.8°C)	14.5 (+1.0°C)	7.8 (15%)	210.6 (110%)	207.6 (95%)
Long-term Average 1986-2020	18.9°C	8.0°C	13.5°C	50.9 mm	191.6 hours	218.6 km

Sunshine

210.6 hours sunshine for April was 110% of the long-term average (LTA) for April of 191.6 hours (1986-2020)

April 2020 recorded 233.4 hours sunshine.

April 2019 recorded 211.2 hours sunshine.

April 2018 recorded 188.0 hours sunshine.

Total sunshine for Blenheim from January to April 2021 is 992.2 hours, 108% of the LTA of 915.7 hours (1986-2020). This is the fifth sunniest January to April on record for the 92 years 1930 to 2021. Sunniest on record is 2019 with 1044 hours.

Napier was the sunniest town in New Zealand during April with 215.9 hours; 5.3 hours ahead of Blenheim.

New Plymouth is still in first place for total sunshine hours after the first four months of 2021, 44.6 hours ahead of Blenheim. At the end of March New Plymouth had a lead of 59.8 hours. However, Blenheim narrowed the gap by 15.2 hours during April, so New Plymouth's lead is now 44.6 hours. For the first time in a number of years Richmond is well down the list of contenders for sunniest town.

January to April sunshine totals

New Plymouth - 1036.8 hours

Whakatane - 996.2 hours

Blenheim - 992.2 hours (44.6 hours behind New Plymouth)

Napier - 963.5 hours

Tekapo - 945.8 hours

Richmond - 941.4 hours

Rainfall

7.8 mm of rain in April was only 15% of the LTA for April of 50.9 mm (1986-2020). This is the lowest April rainfall total since April 2010, which recorded 7.2 mm. It is also the 6th lowest April rainfall total on record for the 92 years 1930 to 2021.

April 2020 rainfall was 24.2 mm.

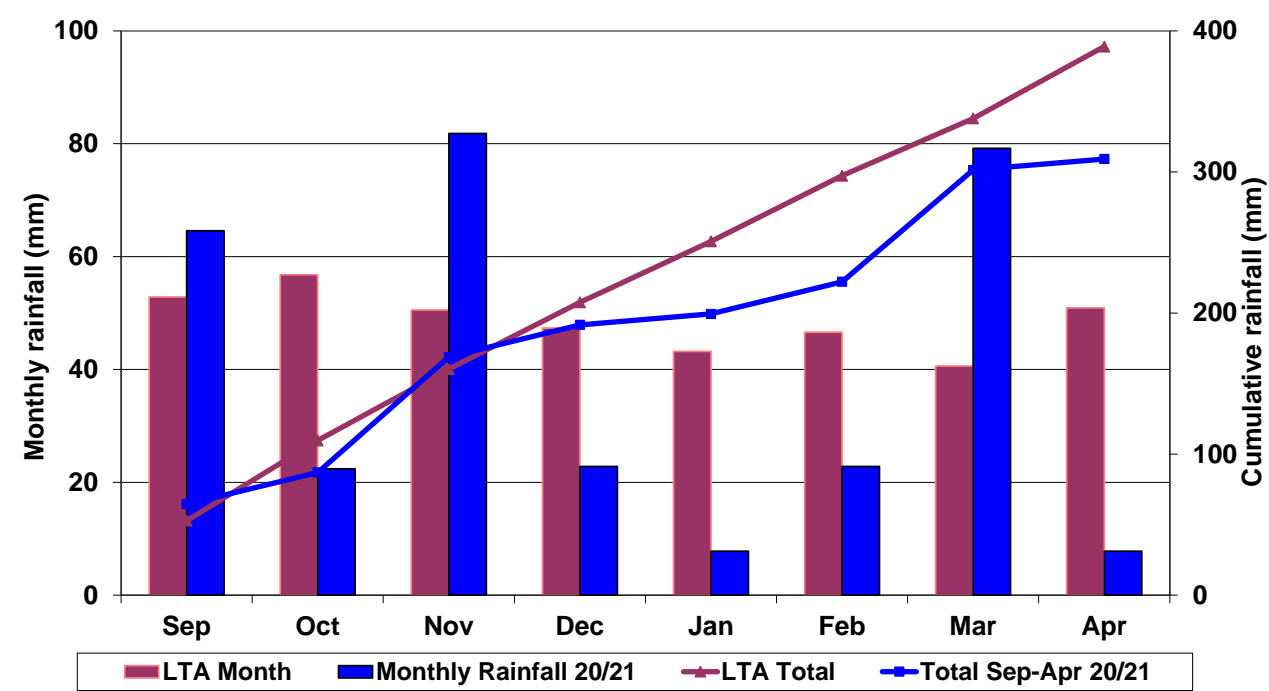
April 2019 rainfall was 80.2 mm.

April 2018 rainfall was 52.2 mm.

Total rainfall January to April 2021 is 117.6 mm, 65% of the LTA.

Total rainfall for the 8-month growing season, September 2020 to April 2021 (Figure 1), was 309.2 mm, 80% of the LTA. However, only 3 of the 8 months recorded above average rainfall. The high rainfall totals in November and March helped to pull the season total up. The 5 months with below average rainfall all recorded totals that were less than half the monthly average.

Figure 1: Blenheim rainfall for the 8-month growing season, September 2020 to April 2021



Soil moisture (5-35 cm depth)

Shallow soil moisture on 1 April 2021 was 35.3% following 77.8 mm rain from 28 to 31 March. However, the soil moisture fell to 26.8% by 30 April. The topsoil was wetter than normal throughout April, however, further down the soil profile it is still fairly dry.

The major rain event at the end of March was of benefit for Marlborough farmers, as air and soil temperatures were well above average through April which gave a boost to autumn pasture growth. The rain also helped to alleviate the very dry conditions that had prevailed from December 2020 to 26 March 2021. However, with low rainfall in April there would have been little soil moisture recharge and moisture levels deeper in the soil profile will still be very dry. Substantial rainfall will be required from May to August 2021 to ensure that soil moisture recharge occurs prior to spring.

Temperature

Mean temperature of 14.5°C was 1.0°C above the LTA temperature for April of 13.5°C (1986-2020). This is the 10th equal warmest April on record for Blenheim for the 90 years 1932 to 2021. The warmest April since 2013 and 2014, which recorded 14.7 and 14.5°C respectively.

April 2020 mean temperature was 13.8°C.

April 2019 mean temperature was 13.2°C.

April 2018 mean temperature was 13.7°C.

The data in Table 1 indicate that the first 3 weeks of April recorded well above average temperatures. However, the final 6 days of April (25th to 30th) were much cooler with some cold overnight temperatures

Coldest and Hottest days during April

The coldest morning in April was the 29th with an air minimum temperature of 3.4°C (4.6°C below the LTA April minimum) and a grass minimum temperature of -0.2°C.

There were no ground frosts in April 2021. April 2020 recorded 2 ground frosts.

The hottest day was 5 April with a maximum temperature of 26.7°C (6.8°C above the LTA April maximum). This was the warmest April maximum temperature in the past 21 years (15 April 1990 recorded 26.8°C).

Soil temperatures

With the above average air temperature for the first 3 weeks of April, the soil temperatures were also above average.

Average soil temperatures in Blenheim for April 2021 compared to the long-term average

Depth	Long-term average	April 2021
10 cm	12.1°C	13.1°C (+1.0°C)
20 cm	13.4°C	13.8°C (+0.4°C)
30 cm	14.6°C	15.1°C (+0.5°C)
100 cm	16.4°C	16.7°C (+0.3°C)

Wind Run

April 2021 recorded below average daily wind-run of 207.6 km compared to the LTA of 218.6 km.

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