

## **Weather Data summary for April 2017 for the Blenheim Meteorological station located at Grovetown Park Campus of the Marlborough Research Centre.**

April 2017 was warm, overcast with high rainfall and calm. However, April was a month of two distinct halves. The first half of April recorded very high rainfall and little sunshine. The second half of April recorded very little rainfall and above average sunshine hours.

### **Sunshine**

169.2 hours sunshine for April was 90% of the long-term average for April of 187.3 hours (1930-2016)

April 2016 recorded 238.3 hours sunshine.

April 2015 recorded 162.5 hours sunshine.

April 2014 recorded 123.7 hours sunshine.

1 to 15 April 2017 - 55.1 hours (59% of long-term average)

16 to 30 April 2017 – 114.1 hours (122% of long-term average)

Total sunshine for Blenheim from January to April 2017 is 898.2 hours, almost the same as the long-term average of 896.6 hours (1930-2016). January and February recorded well above average sunshine hours, while March and April recorded well below average.

January to 28 April 2017 sunshine hour ranking for NZ towns: (Totals for all towns to 30 April will not be available until Tuesday 2 May)

Whakatane 948.3 hours (56.8 hours ahead of Blenheim)

Tekapo 910.5 hours (19 hours ahead of Blenheim)

Blenheim 891.5 hours

Richmond 882.3 hours

Appleby 832.4 hours

Nelson 801.0 hours

### **Rainfall**

131.4 mm of rain in April was 248% of the long-term average for April of 52.9 mm (1930-2016) (5th highest rainfall total for April on record).

April 2016 rainfall was 25.6 mm.

April 2015 rainfall was 52.0 mm.

April 2014 rainfall was 149.8 mm. 4th highest rainfall total for April

April 2013 rainfall was 102.5 mm.

1 to 15 April 2017 – 128.6 mm rain (486% of long-term average); 9 days out of 15 recorded rainfall.

16 to 30 April 2017 – 2.8 mm rain (10.6% of long-term average); 2 days out of 15 recorded rainfall.

Readers may be surprised to see that April 2014 recorded a higher rainfall total than April 2017. Rain was recorded on 18 of 30 days in April 2014, compared to 11 of 30 days in April 2017.

### **Soil moisture (5-35 cm depth)**

Average shallow soil moisture for April 2017 was 34.3%. This was 10.9% above the April average (14 year average 2003-2016).

At a vineyard in Rapaura we measure soil moisture at 30 cm increment depths sequentially down the profile, to a depth of 180 cm. The high April rainfall has meant that moisture down to a depth of 120 cm has shown a marked increase during the month. The marked increase in soil moisture at a depth of 90 to 120 cm has occurred about six weeks earlier than in 2015 and 2016, but at a similar time as in 2014. However, the deep soil moisture from

150 to 180 cm depth has shown little increase following the high April rainfall. It takes a large amount of rainfall in autumn and winter before the deep soil moisture begins to increase. Moisture at this depth (150 – 180 cm) doesn't normally show much increase until June or July.

### **Temperature**

Mean temperature of 14.0°C was 0.6°C above the long-term average temperature for April of 13.4°C (1986-2016).

April 2016 mean temperature was 13.9°C.

April 2015 mean temperature was 14.2°C.

April 2014 mean temperature was 14.5°C.

April 2013 mean temperature was 14.7°C.

### **Weekly temperatures in Blenheim during April 2017**

	<b>Mean Maximum</b>	<b>Mean Minimum</b>	<b>Mean</b>	<b>Deviation</b>
<b>1 – 7 April</b>	17.8	10.7	14.2	+0.8°C
<b>8 – 14 April</b>	18.0	9.8	13.9	+0.5°C
<b>15 – 21 April</b>	18.3	9.0	13.6	+0.2°C
<b>22 – 28 April</b>	19.9	7.5	13.7	+0.3°C
<b>29 – 30 April (2 days)</b>	19.2	12.5	15.8	+2.4°C
<b>April 2017 Average</b>	18.5	-0.3°C	9.5	+1.5°C
<b>Long-term average 1986-2016</b>	18.8°C	8.0°C	13.4°C	

With overcast weather in the first two weeks of April the maximum daily temperatures were below average and the minimum daily temperatures were above average; i.e. a lower daily range in temperature. The fourth week of April was very sunny with clear skies and consequently the average daily maximum was 1.4°C above average and the average daily minimum was 3.0°C below average.

### **Coldest and Hottest days during April**

No ground or air frosts were recorded during April 2017.

The coldest minimum temperatures were recorded on the morning of 10 April, with an air minimum of 4.7°C and a grass minimum (ground frost) of 0.1°C.

The hottest day was 2 April with a maximum temperature of 25.8°C.

### **Wind Run**

April 2017 recorded average daily wind run of 181.2 km compared to the long-term average of 222 km.