



## Weather Front

### April 2021/1921

**April 2021.**

#### **Observers Notes.**

**Bablake:** This was the coldest April since 1986 and was the “most-frosty” in April since 1917.

**Mountsorrel:** It was the driest April on a 20-year record, the coldest April in Leicestershire since 1986, and the highest number of air frosts in April on the station record. The entire month was influenced by high pressure situated, mainly, to the N or NW of the British Isles, which allowed Arctic air to dominate and produce clear, still nights, hence the large number of air frosts. Snow showers were noted in the first half of the month. There were very few warm days despite the amount of sunshine.

**Middleton:** April 2021 was the coldest April since 1989 with mean minimum temperatures being below the lowest on the station record (1977). It was also the first month of any name to record no fog at any time of the day on the station record. Despite a windy start the mean speed for the month (9.5 mph at 0900) was the lowest on the record for April.

**Ely:** The mean temperature was the lowest for April since 1989. While the mean maximum was the lowest since 2012, the mean minimum was the lowest in 51 years of records. Both days of frost and ground frost were the highest reported on the station record.

**Lowdham:** While the mean maximum temperature was the lowest since 2012, the mean minimum was the lowest on the station record (1991) and, in the local area, since 1969. The mean temperature was also the lowest on the station record and, in the local area, since 1989. The lowest “high minimum” temperature for April (on the 2<sup>nd</sup>) was an extreme for the station and, in the local area, since 1986. The grass minimum temperature for April (7<sup>th</sup>) was the lowest since 1996. The rainfall for April was the lowest since 2007 and the 4<sup>th</sup> lowest in the Nottingham area since 1840. There was no measurable rainfall for 17 days (10<sup>th</sup>-26<sup>th</sup>) and only 4.8 mm was recorded in 43 days (15<sup>th</sup> March to 26 April).

**Derby:** It was the driest April since 2011 and the 4<sup>th</sup> driest since 1901 (1938 was the driest at Derby Arboretum). Only 2.9 mm of rain fell below the 1<sup>st</sup> and 26<sup>th</sup> (nil between the 12<sup>th</sup>

and 26<sup>th</sup>). The 8 air frosts were the highest number of days for April since 1986. It should be remembered that, while April 2021 may have been a “frosty April”, in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries “frosty Aprils” were common; ten or more instances were regular occurrences in April at Burton on Trent.

**Mickleover:** April 2021 was the second driest April since 1984. The mean air temperature was the lowest for April 1986 and the second lowest since 1983. There were a record number of ground frosts for April at this site.

**Coton-in-the Elms:** An exceptional April with several records broken in this village. The mean temperature was the coldest on the 30-year record; the mean minimum was also the coldest on record and was lower than the mean minima for both January and February this year. The extreme minimum was a new low for April; the previous record of -4.4 C was exceeded on no less than six nights during the month. Air and ground frosts were the highest number recorded for April. It should be noted that the station is in a frost hollow with open fields rising to the east. Much vegetation has suffered in the cold, dry conditions.

**Lincoln (non-instrumental observations):** Days of Frost: 20, Days of Snow Falling: 4, Days of Hail: 1.

**Pitsford:** An exceptionally dry month, dominated by high pressure, and with below average temperatures. Turning more unsettled in the final few days with a notable rainstorm early on the 28<sup>th</sup>.<sup>i</sup>

**Desford:** Cold and very dry with plenty of sunshine.

**Meteorological Office Assessment:** April began unsettled, but soon turned very cold, and a notable feature throughout the month was the number of frosts. Daytime temperatures did recover from the middle of the month, but it was cold and showery in the closing days. Overall, it was an unusually cold, dry, and sunny month.<sup>ii</sup> The Meteorological Office also issued a press release: April 2021 had the lowest average minimum temperatures for April since 2021, as air frost and clear conditions combined for a frost-laden, chilly month, despite long hours of sunshine.<sup>iii</sup>

## **April 1921.**

### **Observers Notes.**

**Derby/Burton on Trent:** A dry month, with Derby area rain gauges yielding 25-30 mm and Burton ones 30-49 mm, some of these are rather closer to normal. Mean temperatures for the Burton area stations were widely apart; 8.7C and 7.4 C. The Central England temperature was 8.0 C, and the local stations appear to straddle this value. Minima were around -3 C on the 16<sup>th</sup> and maxima, on the following day, were between 3 C and 4 C. There

were six air frosts. The highest maxima were in the order of 18 C or 19 C, at one site, and 21 C in Burton on Trent, on the 1<sup>st</sup> and 2<sup>nd</sup> and 28<sup>th</sup>.<sup>iv</sup>

### **April 1921; An Overview.**

Pressure over north-west Europe varied markedly during April 1921, producing changeable weather and temperatures. Cold weather, and snow was “fairly” general over the British Isles and near Continent. Night frosts were frequent with much damage done to agriculture throughout England. At the beginning of the month high pressure over Europe produced warm weather over much of the British Isles, with temperatures reaching [21 C] at Aberdeen on the 1<sup>st</sup>; the highest recorded up-to that date, for that station in early April. After the 3<sup>rd</sup> much cooler and unsettled weather arrived, especially in the north of the country. Between the 6<sup>th</sup> and 8<sup>th</sup> an anticyclone moved north-east over the UK and, on the 7<sup>th</sup> and 8<sup>th</sup>, the weather was cloudless but cold, with local frosts at night. On the 8<sup>th</sup>, small, secondary depression moved west over Germany and produced showery weather on the 9<sup>th</sup> over England. There were hail showers in many places, snow over higher parts of Derbyshire, and thunderstorms in Sheffield; here two horses were killed by lightning. In the rear of this secondary fine weather spread west during the 10<sup>th</sup> and at South Farnborough the maximum temperature was [20 C]. Fair weather, with warm days, persisted until the 13<sup>th</sup>.

With the breakdown of the Scandinavian anticyclone, a depression moved east towards North Cape, and deepened. By the morning of the 13<sup>th</sup> there was an extremely strong northerly air stream over western Europe. This produced a spell of very cold weather. On the 13<sup>th</sup> the maximum temperature at Kew was [21 C], on the 14<sup>th</sup> [10 C], and on the 15<sup>th</sup> [5 C]. There was also a significant fall of temperature noted at 13,000 ft near Dublin. On the 13<sup>th</sup> the temperature was [-6 C] but by the 15<sup>th</sup> it had fallen to [-26 C]. The introduction of the colder air caused a line of rain to move over the British Isles and, by 0700 on the morning of the 14<sup>th</sup>, there was a continuous line of rain from the Scilly Islands to the Baltic. The movement of a secondary depression near the Faroe Islands towards Denmark intensified the northerly over the UK and produced gales in the North Sea. Snow and hail showers fell generally over the country from the 14<sup>th</sup> to 16<sup>th</sup>, but amounts were small. Overnight frosts were experienced over a considerable area. On the night of the 15<sup>th</sup> the minimum at Eskdalemuir was [-8 C] and, at Benson [-6 C], while at Howden the grass minimum reached [-10.5 C]. Maxima below [4 C] were also observed at some northern stations.

On the 17<sup>th</sup> a depression, centred near Iceland, moved south-east over the UK towards France which produced a fall of snow in many places, including London and Paris; the snow melted as it fell, except over the higher ground. As the centre moved across south-east England dull weather, rain or snow and a cold wind were experienced to the east of the centre, but variable cloud, hail showers and local thunder, in a warm north-westerly could be found to the west of the centre. At 1300 the temperature was [4 C] at Kew but [9 C] at

South Farnborough. During the passage of the depression rainfall was only in the region of 25 mm within the UK, the heaviest falls being in eastern France, where a total of 77 mm of rain and melted snow, was reported between the 14<sup>th</sup> and 17<sup>th</sup>.

To the rear of the depression pressure rose, but upper air temperatures remained low, and thunderstorms were reported on the 18<sup>th</sup> and 19<sup>th</sup>. On the 19<sup>th</sup> a thunderstorm was reported in North London, with damage being done by lightning at Edmonton. There was further snowfall in parts of Scotland on the 18<sup>th</sup>, and sharp night frosts were experienced generally. After the 20<sup>th</sup>, the weather became milder over the whole country as two depressions moved north-east over Iceland. After the 24<sup>th</sup> a large anticyclone, centred over Scandinavia, dominated the weather over the British Isles. There was considerable cloud until the 27<sup>th</sup>, but the weather brightened up after that date. Local thunderstorms were reported at a few western and midland stations on the 27<sup>th</sup> and 28<sup>th</sup>, and along the south coast on the 30<sup>th</sup>. Temperatures reached [21 C] at several stations in southern England and on the continent, and they exceeded [27 C] in southern France.

Visibility was mainly good over the British Isles during the month, but there was local fog at the start of the month and on the 26<sup>th</sup> and 27<sup>th</sup>. There was also some local sea-fog during the last week, especially on the east coast. The cloud base was low all day in south-east England on the 17<sup>th</sup> and 24<sup>th</sup>.<sup>v</sup>

In general, the mean monthly temperature was above average throughout the country, ranging from [1.2 C] in northern Scotland to [0.4 C] in the English Channel. Rainfall however was below average, ranging from 70% in southern Ireland to 87% in eastern England. The rainfall was below average throughout the country, except for a small area of East Anglia where rainfall totals were close to average. In summary; A Sunny and Dry month.<sup>vi</sup>

#### **Central England Temperatures and Rainfall, April 1921.<sup>vii</sup>**

##### **Central England Data (Averaging period 1891-1920):**

Mean Maximum Temperature: 12.7 C. Average: 12.4 C.

Mean Minimum Temperature: 3.3 C. Average: 3.7 C.

Mean Temperature: 8.0 C. Average: 7.9 C.

England and Wales Rainfall: 33.3 mm. Average: 55.8 mm.

Midlands Mean Maximum Temperature: 12.8 C.

Midlands Mean Minimum Temperature: 2.5 C.

Midlands Mean Temperature: 7.7 C.

Midlands Rainfall: 31.9 mm.

## Central England Temperatures and Rainfall, April 2021.

### Provisional Central England Data (Averaging Period 1991-2020).

Mean Maximum Temperature: 11.5 C. Average: 13.3 C.

Mean Minimum Temperature: 0.9 C. Average: 4.6 C.

Mean Temperature: 6.2 C. Average: 9.0 C.

England and Wales Rainfall: 11.8 mm. Average: 63.2 mm.

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<sup>i</sup> Pitsford Monthly Weather Report, April 2021, Pitsford Weather Centre, p. 3.

<sup>ii</sup> Monthly Weather Report, Meteorological Office April 2021, 5 May 2021, opening summary.

<sup>iii</sup> Meteorological Office Press Release, 30 April 2021.

<sup>iv</sup> D J Stanier, by email, 3 May 2021.

<sup>v</sup> Meteorological Magazine, Douglas, C K M, April 1921, HMSO, pp. 104-109.

<sup>vi</sup> Monthly Weather Report, Meteorological Office, April 1921, HMSO, p. 44.

<sup>vii</sup> Meteorological Office Hadley Centre.