## **Weather Front**

# July 2019/1919

### July 2019.

#### **Observers Notes.**

Lowdham: Mean maximum temperature lowest since 2017; mean minimum temperature highest since 2006; mean temperature lowest since 2017

35.3C (25) highest maximum temperature for July on station record (1991). Highest July maximum temperature record for Nottinghamshire at Watnall (36.1C) and Sutton Bonington (36.0C) Met. Office stations and Radcliffe-on-Trent (35.1C) and Lowdham unofficial stations. Previous highest maximum temperature of 34.6C set on 23rd July, 1868 at Nottingham Castle.

Also, 36.1C at Watnall and 36.0C at Sutton Bonington Met. Office stations were the highest ever recorded for any month in the county back to 1868.

19.0C (26) highest July minimum temperature on station record (1991) and in local area (1976).

7.9C (2) lowest minimum temperature for July since 2016

**Desford:** A month of record extremes in temperature and heavy rainfall bringing to an end the prolonged drought conditions. 24<sup>th</sup> Thunderstorms during the early hours of the morning, following a very warm day on 23<sup>rd</sup> with a maximum of 30.8C. The second time that 30C had been achieved so far this year.25<sup>th</sup> Incredible temperature rise during the morning in hot sunshine. From 0800GMT rising at least 2C per hour to break through 30C around 1000GMT. By 1151GMT we had achieved 33.6C making it the second hottest day ever recorded here since my records began in 2000. By 1158GMT we had broken my all time local maximum record and stood at 33.8C (previous record 33.7C Aug 2003). The temperature continued to climb steadily to a new record maximum at around 1400GMT of 35.0C. Cloud cover prevented any further heating and the remainder of the afternoon saw a steady 33-34C. Falling below 30C at around 1900GMT.26<sup>th</sup> Thunderstorms were noted in the vicinity overnight, with a minimum temperature of 18.0C.27<sup>th</sup>-30<sup>th</sup> Very wet with torrential and persistent rainfall giving 90mm of rainfall over these days. 35mm fell on 28<sup>th</sup> making it the wettest day since November 2016 and the wettest summers day since July 2013. 85% of July rainfall fell over these days with local river flooding occuring.

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**Derby:** The highest maximum temperature on the station record since 1952. It is also, probably the highest on instrumental records back to the mid 1860's. Only five days reached or exceeded 25 C, so this was an isolated extreme. The average rainfall for the summer season was reached on the 23<sup>rd</sup>, but it will take a very wet August to threaten a seasonal record.

**Mickleover:** The maximum temperature of 34.6 C was the highest for July on the station record (1981). July records (1981) show 14 occasions when the Maximum temperature exceeded 30 C; 9 having occurred since 1999.

**Coton in the Elms:** A very warm spell in the second half of the month, with 34.1 C on the 25<sup>th</sup> equalling the highest recorded temperature on the station record. Total rainfall was above average, with an exceptionally wet end of the month; wettest July for ten years! After a hot day (23rd-24th) a storm broke out between 0200 and 0300. Heavy rain, windy and continuous thunder and lightning for a time.

Bablake: 25<sup>th</sup> was the hottest day, at any time of the year, in Coventry since before 1892.

The 25<sup>th</sup> saw the hottest July day (32.1 C) on the station record, and the second hottest day in any month (only 3 August 1990 was hotter). Overall it was the 9<sup>th</sup> warmest July in the last 42 years.

**Pitsford:** A dry start with some fine summer days during the first week, turning progressively more unsettled during the second half of the month. A notable heat wave during the third week culminated in the warmest July day on record.

### **July 1919**

#### Observers Notes.i

**Allans Green, Northumberland**: July has been a fine dry month.

Tenbury, Worcester: Fine dry month, rain badly needed.

**Sheepstor, Devon**: A very dry month, extraordinary cold nights.

Weston Turville, Bucks: Vegetation much benefited by break up of May and June drought.

**Hurdlestown, Co. Clare**: A very favourable July; crops of all kinds have not been so good for many years.

**Catterick, Yorkshire**: Extraordinary rainfall. On the afternoon of the first the rain fell in torrents, flooding everything in a few minutes, and then suddenly ceased, only to come on again with redoubled fury.

Lampeter, Cardigan: Dull, sunless month, very cold and dry.

**Kenninghall, Norfolk:** Generally, an exceptionally cold and disappointing month.

**Totland Bay:** Coldest July for 39 years.

Carnforth, Lancashire: [This station] experienced a "black fog" on the 18<sup>th</sup>. [Black Fog is

probably a dense fog. This is a term used in the Cape Cod area of Massachusetts]ii.

**Hidcote, Gloucestershire**: The rain was 29 mm above the average.

**Kimberley, Llandrindod Wells**: [The rainfall] was 34 mm below [the average].

**Derby/Burton on Trent:** Fairly normal rainfall profile with 50-65 mm rain at most gauges, but a very cool summer month with a mean in the range of 13.5 C to 14.5 C (about 2 C below the normal at that time). Minima of 6 C or so were noted on the 1<sup>st</sup>, 2<sup>nd</sup>, and 28<sup>th</sup>, with numerous others under 10 C. A few maxima reached 21 C, with 26 C recorded on the 31<sup>st</sup> in Burton.<sup>iii</sup>

### Cold generally – Sunny and Dry in Scotland and Ireland, Dull in England. iv

"At the beginning of the month the weather was, in some respects, a continuation of that which characterised the closing days of June, and in Scotland the first week was unusually cold for midsummer." Thus, "The Monthly Weather Report" summarised July 1919.

The mean temperature in all areas was below average, ranging from [-0.3 C] in southern Ireland and [-0.4 C] in northern Scotland to [-1.9 C] in south eastern England and [-2.2 C] in eastern England. At individual stations maxima were generally lower than for the previous month; at Durham, on the 6<sup>th</sup>, the maximum was as low as [11 C], while at Dundee and Hodstock Priory (Nottinghamshire) the maximum reached was [27 C]. The lowest minimum noted was [-2 C] at Balmoral, with ground frost also being recorded at other stations in Scotland.

Except in eastern England and the Midlands, rainfall was below average, although in south east England the deficit was minimal. At Glasgow the month was the driest July since 1878, and in Berwickshire and Morayshire it was the driest since 1868. Examples within the East Midlands range from 183% of average at Sheffield, 180% at Belvoir Castle, 140% at Cambridge, 121% at Lincoln and 117% at Bawtry. However, at Buxton and Hull the rainfall was below average (81% and 83% respectively). Heavy rainfall, in excess of 30 mm, was recorded, on the 19<sup>th</sup>, at Belvoir Castle (41 mm), Cheadle and Malmesbury (47 mm) and at Overcourt, near Bristol (63 mm).<sup>v</sup>

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Saturday, 19n July 1919, was Peace Day; a day set aside for the celebration of the signing of the Treaty of Versailles, the official end to "The Great War". It was also a day of heavy rainfall, particularly in the Midlands.

A depression, at 0700, moved south-easterly, through Anglesey, to a position near Newport (Monmouthshire, now Gwent) at 18 hours. By 0700 on the 20<sup>th</sup> it was centred near Dover. Rain probably started at Gloucester by 0900 (GMT) on the 19<sup>th</sup>, but it was not until 1900 that rain started at Worksworth. This suggests that the rain moved north-east at right angles to the main centre of the low. This suggestion is further advanced by a fall of around 1 inch [25.4 mm] in Norfolk the following day.

While there were light showers in North Wales, there was a well-defined band, stretching from Cornwall to Northumberland with no recordable rain. The eastern boundary was less well defined with little rain falling along the east coast. The main rain area (greater than 0.5 inches or 12 mm) extended from Plymouth and Southampton in the south to Whitby in the north (Brocklesby received 0.48 inches or 12.2 mm, which is 22% of the monthly total). The maximum falls appear to be in the area stretching from Newport (Mon.) to York in the west and Weymouth to Newark in the east. There were some small areas in excess of 2 inches (50 mm) between Chepstow and Pontefract while, in the east, 2 inches was reported between Leicester and Grantham. In the latter area nearly 3 inches (75 mm) was noted locally; at Radcliffe-on-Wreake College (Leicester) 2.90 inches (73.7 mm) or 7.1% of the monthly total, at Croxton Kerrial, near Melton Mowbray 2.80 inches (71.1 mm) or 8.1% fell and at Haresfield Court, Stonehouse, near Gloucester, 3.0 inches (76.2 mm) or 8.3% of the monthly total fell.

British Rainfall note that the total land area affected was 9,553 square miles, with a general rainfall of 1.31 inches, corresponds to a total volume of 181,441 million gallons!!vi

Though isolated reports of thunder were noted in Scotland, there was a notable absence of thunderstorms north of the Border. In England and Wales however, thunderstorms were experienced over a wide area in the first five days, and in the Midlands, the south and south east of England, hail was noted on the 1<sup>st</sup>.

Sunshine values varied considerably, from -3.0 hours per day in south east England to +1.7 hours in western Scotland. At individual stations the range was even greater, with -3.8 hours per day at St Leonards, to +2.4 hours at Glasgow.

In general, the month was cold and dry in Scotland, but wetter in eastern England and the Midlands; it was also dull.

Central England Data (averaging period is 1881-1910). vii

Mean Maximum Temperature: 18.0 C; average, 20.1 C.

Mean Minimum Temperature: 9.8 C; average, 11.4 C.

Mean Temperature: 13.9 C; average, 15.7 C.

England and Wales Rainfall: 57.9 mm; average, 75.9 mm.

Midlands Mean Maximum Temperature: 18.0 C.

Midlands Mean Minimum Temperature: 9.0 C.

Midlands Mean Temperature: 13.5 C.

Midlands Rainfall: 71.4 mm

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<sup>&</sup>lt;sup>i</sup> Monthly Weather Report, July 1919, HMSO, 1919, p. 75.

<sup>&</sup>quot; Dictionary.com, Google search dated 10 August 2019.

iiiD J Stanier, by email, 2 August 2019.

<sup>&</sup>lt;sup>i</sup> MWR, July 1919, HMSO, 1919, p.75.

<sup>&</sup>lt;sup>v</sup> MWR, July 1919, HMSO, 1919, pp. 78-80.

vi British Rainfall, 1919, HMSO, 1920, pp. 70 and 71.

viiMet Office Central England Series, www.metoffice.gov.uk/hadobs.