



Weather Front

September 2021/1921

September 2021

Observers Notes.

Middleton: September 2021 was the second warmest September on the station record, equalling that of September 1999 and, locally since 1919. The highest minimum was also the second highest for September on the station record.

Ely: A rare September with the mean maximum temperature higher than both June and August. Rainfall was the second highest this year due entirely to 38.5 mm on the 14th and 14.9 mm on the 28th, these two days providing 79% of the monthly total. The fall on the 14th was the highest in September in 51 years of records.

Derby: There were nineteen days with maxima in the 20 C range, compared to twenty-one in 2006. It is worth noting that this included a run of twelve consecutive days with maxima 20 C or more.

Desford: Warm and dry until the end of the month. The mean temperature made it the warmest September on the local record dating back to 2000 and just beat the mean of 15.5 C set in 2016. There were very mild nights with only seven with minima below 10 C throughout the month.

Mountsorrel: This was the second warmest September on the local record and the second warmest in Leicestershire in records back to 1836. Only September 2006, with a mean of 17.2 C was warmer. After a mainly dry first twenty-six days the last four produced 33 mm, or 63%, of the monthly total. The highest maximum temperature was the highest for September on the station record. September continues the theme of being much warmer, drier, and sunnier than before the millennium.

Mickleover: The extreme maximum temperature, recorded on the 7th, was the highest temperature recorded for September on the local record dating back to 1952.

Bablake: In the first decade of the 21st century, the average monthly temperature was 14.9 C, indicative of recent warming, compared to the warmest decade of the 20th century, in the

1980's at 14.2 C. However, there has been increased warming during September in Coventry since the millennium with an average of 14.7 C, with the warmest on record since 1892 in 2006 (17.2 C), and the fifth warmest September in the Central England Series, in 2016, since 1659. Therefore, with a mean monthly temperature of 16.5 C, this warm trend was much in evidence in September this year, the warmest September for fifteen years, and the second warmest in Coventry records dating back to 1892. During the first twenty years of the 21st century, September rainfall averaged 49.0 mm, compared to 76.1 mm in the decade 1991-2000, suggesting a considerable drying trend in this first autumn month of the season in Coventry. Therefore, with 67.8 mm of rain, September this year has bucked the trend, though only the wettest September in Coventry since 2019 (109.8 mm). Nevertheless, only 6 Septembers have been wetter than this year since 1995 (1998, 2000, 2017, 2019). Thanks to the Clean Air Acts of the last century, September sunshine totals in Coventry had increased by 20% during the 20th century, with an average of 128.3 hours per month from 1901 to 2000. This trend has continued since the millennium in Coventry, with a further 10% increase from 2001 to 2020 (141.3 hours). Therefore, with 145.6 hours of sunshine, 6% higher than normal, this maintained the millennium average, though still the dullest September since 2017 (113.0 hours).

Pitsford: A quiet start with some very warm days by the second week. A very wet day on the 14th, but otherwise fairly dry and settled. Turning cooler and more unsettled in the final week.ⁱ

Weather impacts

The spell of settled weather was broken around the 8th when there were thunderstorms in very warm and humid air. Damage was caused in Eastbourne on the 10th due to a lightning strike, and some trains to and from Hastings were disrupted due to signalling issues caused by lightning. In the south-west there were some reports of surface water flooding. There were reports of flooding in Flintshire, and across parts of the Wirral where some schools were forced to close. In the East of England there were reports of flooding on the 14th, affecting the A414 in Harlow, one road in Hinxton, and the entrance to Cambridge railway station, as well as property flooding in Kings Lynn. In London there were reports of flooding around Tower Bridge, and long delays on the Piccadilly line, the District line, the A41, and the A406 North Circular. There were also reports of flooding at Peckham Rye, and the Blackwall Tunnel was closed due to flooding. On the 19th in Norfolk a person was rescued from a car stranded in floodwater. The main road through Melford (Essex) was impassable, and parts of Sudbury were flooded due to heavy rain. On the 27th in Scotland, one lane of the M8 West Street on-ramp was closed due to flooding. There were reports of flooding on the A469 in Wales on the 27th, and a tornado was observed in Humberston (Lincolnshire), damaging some homes and vehicles. The following day had reports of standing water around Swansea and at junction 43 of the M4. On the 30th trains were delayed at Talerddig and North Llanrwst due to speed reductions imposed due to wet conditions. Elsewhere, fallen trees blocked roads and railway lines across parts of the east and south-east of England, including London.ⁱⁱ

September 1921.

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Derby/Burton on Trent: Rainfall erred towards dryness again, with most gauges in Derby yielding 25-30 mm, while those around Burton were more in the 30-35 mm range. The overall mean temperature was around 14 C, with the highest values early in the month; 24 C on the 6th and 7th, followed by 26 or 27 C maxima on the following two days. The lowest minimum of 2 C was recorded on the 29th, and the Trent valley might have achieved a ground frost with air minima that low.ⁱⁱⁱ

Ipswich (Suffolk): The smallest number of wet days in any September here during the last twenty years, the previous lowest being six days in 1911. The mean temperature of [15.4 C] is the highest in the past twenty years, except [15.4 C] in 1911. The total rainfall for the year now amounts to 254 mm in 78 days, compared to the previous lowest in 1911 of 297 mm on 102 days.

Raunds (Northants): On the 8th and 9th a maximum temperature of [19 C] was recorded, the latter being the twenty-third day this year with a temperature of [27 C] or above.

Totland Bay (Isle of Wight): The eighth month in succession with less than the normal rainfall.^{iv}

September 1921; An Overview.

The fine and warm weather, which had proved to be the main character of 1921, had deteriorated during August, but improved once again during September.

A series of depressions had moved across Britain during August, the last of which was situated off the north-west coast of Ireland at the start of September. This had brought rain to all parts of the country. The depression moved north-east into Scandinavia and produced an improvement in the weather, especially in the south of the country, where anticyclonic conditions prevailed. In the south-east of England around ten hours of bright sunshine were recorded on many successive days. This resulted in a gradual increase in maximum temperatures. On the 4th maxima reached [24 C], on the 6th [27 C] and, on the 9th a maximum of [30 C] was recorded at Southend. In contrast, with clear skies, local reports of ground frost were noted on the 4th. The diurnal range of temperatures was large, exceeding [22 C] at many inland stations. The night of the 9th-10th was unusually warm with temperatures remaining above [16 C] in many parts of south and south-east England. While a depression off north-west Ireland, on the 4th, brought unsettled conditions to northern areas, fine weather continued in the south until the 10th.

On the 10th maxima were [10 C] lower than the previous day and rain became more general. Severe widespread gales and thunderstorms, associated with a secondary low moving up

channel, were observed on the night of 11th-12th. During the rest of that week, with pressure high over Iceland, numerous depressions moved across the whole of the country. One of which travelled across Scotland, bringing rain to most parts of the country, and gales in the English Channel.

On the 18th pressure rose over the Skagerrak and by the 20th the country was under the influence of an anticyclone which stretched from Russia to beyond western Ireland, but occasional depressions near Iceland passed to the north of Scotland. In general fair, but quiet weather dominated until the end of the month.

In south and south-east England there was widespread mist and fog, especially in south and south-east England and, on the 19th, "a dense low gloom"^v was observed over a wide area; in London it continued nearly all day while, on the 25th, thick fog was reported at Scilly and Pembroke. Generally, however the days were warm and sunny and the nights cold and, sometimes, frosty. Ground frosts were noted, locally, towards the end of the month, while in Scandinavia sharp frosts were noted.

The rainfall for the month was below average over the whole country. Less than 50% was to the south of a line Launceston to Canterbury, and north of a line Aberystwyth to the Wash, while, in the extreme south of Wales and the Thames valley, above average rainfall was recorded. In Scotland below average rainfall fell along the east coast but, in the extreme north-west, greater than average rain was noted. In Ireland however, rainfall totals were generally below average; less than 50% occurring along the north-west and south coasts. Areas with less than 25 mm occurred in England, along the south and east coasts and along the Welsh border. In the southern Midlands however 50 mm fell in a broad band from Marlborough to Felixstowe, generally from a thunderstorm on the 11th, when between 25 and 50 mm fell over most of the Thames valley. In the mountains of North Wales, Cumbria and Kerry over 100 mm was recorded, while in Scotland 100 mm was recorded from Dumbarton to Cape Wrath, and 250 mm occurred at Loch Quoich. For the eight months, February to September, a large area in south-east England had less than half the average rainfall for the same period.

Further Afield.

Very heavy rain fell during the 17th to 19th over Correze, France. Severe floods resulted and the Murat viaduct was swept away.

The olive harvest in Languedoc and Provence was the best for many years because of the hot summer and subsequent rainfall.

In South Africa a blizzard was reported between the 8th and 10th with major disruption to rail and other services.

The Indian monsoon was weak at the beginning of the month, but by the 21st rain in Bombay and the Deccan had removed any anxiety.

Heavy rain and snow affected all harvesting in Saskatchewan and Manitoba. On the last day of the month a severe storm passed over Ontario and Quebec resulting in much damage.

In the middle of the month, warm and dry weather prevailed over the cotton belt, but the crop deteriorated further. On the 10th flooding destroyed large parts of San Antonio, Texas, with much loss of life.

About the 27th a typhoon hit western Honshin, Japan, and much property was damaged, and many lives lost.^{vi}

Gleanings from the Press.

Billingboro.

During the violent thunderstorm which raged over the district in the early hours of Wednesday morning, the lightning struck a large tree near to the Abbey church of Sempringham, and completely shattered it. Large pieces of timber were hurled upwards of a hundred yards. A beast belonging to Mr Redford's trustees was injured by the lightning. The fall of rain was torrential, and ponds and watercourses which were practically dry on Tuesday, were on Wednesday half full of water. During the storm, which continued for upwards of an hour, there was a remarkable display of lightning. The weather afterwards became much cooler.^{vii}

Central England Data.^{viii} (Averaging period is 1891 to 1920.)

Mean Maximum Temperature: 18.7 C. Average: 17.7 C.

Mean Minimum Temperature: 9.5 C. Average: 9.1 C.

Mean Temperature: 14.1 C. Average: 13.1 C.

England and Wales Rainfall: 40.9 mm. Average: 64.3 mm.

Midlands (Averaging period 1911-1920)

Midlands Mean Maximum Temperature: 19.1 C. Average: 17.1 C.

Midlands Mean Minimum Temperature: 8.4 C. Average: 7.9 C.

Midlands Mean Temperature: 13.7 C. Average: 12.5 C

Midlands Rainfall: 32.3 mm. Average: 55.2 mm.

2021 (Provisional)**Central England (Averaging period is 1991-2020).**

Mean Maximum Temperature: 20.3 C. Average: 18.3 C.

Mean Minimum Temperature: 11.6 C. Average: 10.1 C.

Mean Temperature: 15.9 C. Average: 14.2 C.

England and Wales Rainfall: 67.8 mm. Average: 76.0 mm.

ⁱ Monthly Weather Report, September 2021, Pitsford, 2021.

ⁱⁱ Monthly Weather Report, September 2021, Meteorological Office, HMSO, September 2021

ⁱⁱⁱ D J Stanier, by email.

^{iv} Monthly Weather Report, September 1921, Meteorological Office, HMSO, 1921, p. 113.

^v Meteorological Magazine, October 1921, Meteorological Office, HMSO 1921, p. 271.

^{vi} Meteorological Magazine, October 1921, Meteorological Office, HMSO 1921, pp. 270-276.

^{vii} Stamford Mercury, 15 September 1911, p. 3.

^{viii} Hadley Centre, Central England and Midlands, Meteorological Office.