



Weather Front.

September 2022/1922

September 2022

Observers Notes.

Derby: After a warm start (temperature 2.5 C above average for the early part of the month), the autumnal cooling trend took hold and brought the month back into line, but it was still the thirteenth consecutive month above normal.

Mountsorrel: A slightly milder, but wetter, month than normal with below average sunshine. The month started out very warm, then there were four consecutive days with thunder, and 48 mm of rain, between the 5th and 12th. The second half of the month was cool and unsettled.

Mickleover: This was the 5th wettest September since 200, and the most days of thunder since 2006. Temperatures were near to the September normal.

Middleton: This was the tenth warmest September in the last 45 years, and the dullest since sunshine records began in 2000. The five days with thunder were the most in September since local records began in 1963.

Ely: 1976 is the only year in the 52-year station record with a lower cumulative rainfall for the period January to September; 1976-277.6 mm, 2022-283.4 mm. The month also recorded the lowest mean pressure for September since 2001, and the lowest, so far, in 2022 at 1010 mb.

Lowdham: The cumulative rainfall total for January to September is 320.8 mm and is the sixteenth lowest in the Nottingham area since 1840. The cumulative rainfall total from June to September is 113.2 mm and is the eighth lowest in the Nottingham area, also since 1840. The sunshine total, recorded at Radcliffe-on-Trent, is 105.8 hours (78% of the 1991-2020 average).ⁱ

Desford: Continuing dry and warm for the time of year, five days of thunderstorms recorded (4th, 5th, 7th, 8th, and 9th). However, the month remained mostly dry with below average rainfall being recorded. The thunderstorm on the evening of the 4th was the first

such overhead event of the year so far, previously only distant rumbles of thunder were heard on the 16th of August.

Coton-in-the-Elms: After a very warm start, the month evened itself out. The month was characterised overall by warm days and cool nights. The minimum on the 25th (0.4 C) was one of the lowest in the village, for September, in over thirty years of records. Rainfall was above average, which helped the drought situation. Thunderstorms overnight 4th/5th, between 0130 and 0230 were accompanied by heavy rain and frequent lightning. Heavy or torrential rain from around 2300-2330 on the 5th was also accompanied by thunder and lightning.

Pitsford: Unsettled for the first half, then turning noticeably cooler with high pressure in charge from the west. Low pressure moving south from Iceland brought a return to unsettled conditions at the end of the month.

Saltfleetby: Thunderstorm with moderate rain on the night of the 4th.

Weather Impacts

A very unstable cyclonic southerly regime dominated between the 3rd and the 9th, with daily development of heavy thundery downpours complemented by areas of more organised frontal rainfall. The morning of the 4th saw localised flooding across Northern Ireland, especially around Drumquin in County Tyrone. A mudslide and associated flooding were responsible for the closure of the A358 near Taunton on the 5th, whilst overnight thunderstorms caused flooding on the M25 in Surrey with the area around junction 11 worst affected. On the 6th there were reports, including video footage, of a tornado at Bonnyrigg, near Edinburgh, and lightning damaged trackside equipment on the Dundee to Carnoustie rail line, while surface water flooding also occurred in Stonehaven in north-east Scotland. The 7th and 8th saw the focus of flooding primarily across central and eastern Scotland, in particular around Perth, with widespread flooding impacting roads and railways in and around the city. On the 9th a primary school in Darlington was closed as a result of flooding. After a more settled period, heavy rain over south-east England on the 23rd caused minor surface water flooding issues along the south coast, particularly between Newhaven and Brighton. On the 30th an active frontal system spread strong winds and heavy rain eastwards across much of the UK, with reports including a significant landslide blocking the A87 in the north-west Highlands, whilst several trees were brought down by the winds across Scotland with disruption to some ferry sailings. Short-period intense rainfall across Cumbria created localised flooding issues in the Borrowdale valley, with reports of numerous sheep lost to the swollen rivers.

September 1922

Observers Notes.

Hodsock Priory (Nottingham): A very sunless month.

Ipswich (Suffolk): The month has been cold and sunless, the thermometer only reaching [21 C] on one day. The total rainfall has only once been exceeded in my twenty years' record. Sunshine is over thirty hours less than the average.

Southport (Lancashire): A dull, calm, humid, and rather cool month.

Dublin: September proved cloudy, cool, and changeable.

Derby/Burton-on-Trent: Rainfall amounts appeared close to, the then, average, with 40-50 mm being the typical range. Temperatures were below average overall, with the mean of 12 C or so being a degree down. Maxima of 21 C occurred on the 20th and a minimum of 2 C on the 30th.ⁱⁱ

Ross-on-Wye: At 1700 on the 6th the observer noted a dense, overhead, fog of a greenish tint overshadowed the town, causing such intense gloom that artificial light was necessary. A little light rain fell towards 1730 and continued until after 1800, but the shower was quite local. Outside the town no rain occurred.ⁱⁱⁱ

The Weather of September 1922

"The widespread belief that a fine September follows a bad summer has found little justification in 1922." So wrote A. A. Watson in his opening comments to the summary of the weather for September 1922.^{iv} The weather was fair during the week of the 3rd, and for a few days around the 23rd. These were the only settled periods during the month. The remaining days were unsettled, wet, and cold. Rainfall however was not above average, it was the lack of sunshine that was below average, around 37% in most places. Cranwell and Fulbeck reported 30%, Buxton 23%, Hodsock Priory 18%, Raunds 29%, Belvoir Castle 31% and Mayfield (Staffordshire) only 7%; all significantly below average. In fact, no sunshine reporting station submitted a return much above 40% of average!

On the 1st an area of low pressure, with several centres, extending from Spitzbergen to the Bay of Biscay, covered the British Isles, with anticyclones over Scandinavia and the Azores. Unsettled weather was recorded, except for Scandinavia, with heavy rain and local thunder. A thunderstorm at Blackpool, on the 2nd, gave 78 mm of rain and caused considerable damage. On the 3rd and 4th, the Scandinavian anticyclone extended towards the south-west establishing a large area of high pressure from the Azores to Scandinavia. This resulted in a period of quiet, but dull, weather with night fog and warm days. By the 8th, the ridge had pivoted towards the west to include Iceland, and pressure had fallen over Scandinavia. On the 9th pressure had begun to fall over Iceland, and by the 11th the anticyclone had

retreated towards the Azores, resulting in the whole of Scotland coming under the influence of the Icelandic depression.

On the 12th, a depression, off the Hebrides, moved south-east producing general rainfall, and gales in the English Channel. On the 13th, 14th, and 15th the depression moved across the North Sea producing strong, cold, northerly winds, and cloudy, showery weather, with local thunderstorms. Snow was noted on the higher peaks of Scotland. On the 16th another depression was located off the Hebrides. This brought three areas of low pressure into the area, the previous one was now located over the Baltic, and a third within the Arctic Circle south of Spitzbergen. In the north of the country rainy weather resulted, but southern England and Central Europe experienced a fine day. By the 17th, the eastward movement of the complex area of low pressure resulted in showery weather over the British Isles, and gales in Scandinavia. On the 19th, a rapidly moving depression to the north of Scotland produced significant rain, wind and, on the 20th, improving, colder, weather following ridge gave a few days of settled, generally pleasant, conditions.

On the morning of the 25th, a deep depression was located to the west of Ireland. At 0700 GMT the "Aquitania", near the centre of the depression, reported a pressure of 952 mb, and at 1300 she reported winds of hurricane force, however, the depression moved slowly east and finally disappeared over France on the 28th although gales were reported along the coast, they were not violent.

Rainfall during the month resulted in, roughly half, the British Isles reporting less than average rainfall. This was, central and southern England, the northern coast of Ireland, and practically the whole of Scotland. This deficiency was nowhere large, except in the Western Highlands of Scotland where only around 50% of average was recorded. However, in northern and eastern England totals were, in some cases, 50 to 100% above average. Totals above 50% of average were noted in Pembrokeshire, Suffolk, and the north-eastern coast of England; at Newcastle more than twice the average was recorded. Examples of the heaviest falls in one day were, 42 mm at Holyhead on the 12th, and 83 mm at Mallarany (County Mayo) on the 18th falls of 50 mm were in southern England, south of a line London to Yeovil, also in Scotland in the neighbourhood of the Moray Firth and Loch Ness. In eastern Kent falls of more than 100 mm were widespread and appear to be of note. Falls of more than 250 mm were confined to the Lake District and Snowdonia. Snow was recorded on the Cairngorm mountains on the 5th and was noted as laying down to 2,000 ft on Ben Nevis on the 18th.^v

Weather Notes from Abroad.

A report from Roma, dated the 8th, stated that the city of Lecce, in Apulia, had suffered from a violent storm that had unroofed 600 house and severely damaged many churches. On the 28th, in the early morning, the fort of Monte Falconara, about 8 miles from Spezia in Liguria, was destroyed during a thunderstorm. It was stated that the fort contained 1500 tons of

explosive and that widespread destruction resulted. The village of San Terezio was almost destroyed, with extensive loss of life; the effects of the explosion were felt as far away as Spezia.

On the 4th, the “Quest” arrived at Ponta Delgado (Azores). The ship had been driven west and delayed by strong north-westerly winds. During the month violent storms had been reported in the North Atlantic. A few days later the liner “Resolute” had encountered a storm in the mid-Atlantic which the captain stated was the worst in his experience.

On the 21st, a severe hurricane passed over the island of Bermuda. Damage to property from the wind, and the subsequent tidal surge, was estimated to reach a quarter of a million pounds [probably several million at today’s rate]. It was remarked that only one life appeared to have been lost. The hurricane was considered to have been the worst experienced in the previous twenty-five years.

A typhoon broke over Chefoo (Shantung Province) on the 2nd, and lasted for 36 hours; the damage was considered not to be extensive.

“Excellent rains” were recorded throughout South Australia during the month, with the prospect of a “really good” harvest. The other states also reported good rainfall.^{vi}

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

Mean Maximum Temperature: 15.8 C. Average: 17.7 C.

Mean Minimum Temperature: 8.6 C. Average: 9.1 C.

Mean Temperature: 12.2 C. Average: 13.1 C.

England and Wales Rainfall: 79.4 mm. Average: 64.3 mm.

Midlands Data. (Averaging period is 1911 to 1920).

Midlands Mean Maximum Temperature: 15.7 C. Average: 17.1 C.

Midlands Mean Minimum Temperature: 7.6 C. Average: 7.9 C.

Midlands Mean Temperature: 11.7 C. Average: 12.5 C.

Midlands Rainfall: 67.2 mm. Average: 55.2 mm.

2022 (Provisional)

Central England (Averaging period is 1991-2020).

Mean Maximum Temperature: 18.7 C. Average: 18.3 C.

Mean Minimum Temperature: 10.2 C. Average: 10.1 C.

Mean Temperature: 14.4 C. Average: 14.2 C.

England and Wales Rainfall: 89.9 mm. Average: 76.0 mm.

ⁱ T Scholey, by email.

ⁱⁱ D J Stanier, by email, 5 October 2022.

ⁱⁱⁱ Meteorological Magazine, October 1922, Meteorological Office, HMSO, 1922, P. 256.

^{iv} Meteorological Magazine, October 1922. P. 256.

^v Monthly Weather Report, September 1922, and Meteorological Magazine, October 1922.

^{vi} Meteorological Magazine, October 1922, p. 256.

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