

MONTHLY WEATHER REPORT

COMPILED FROM RETURNS OF OFFICIAL AND VOLUNTARY OBSERVERS

SEPTEMBER

VOLUME 88

1971

NUMBER 9

Long dry and sunny spells, especially in the south and east

Except on the first 3 days, anticyclones or ridges of high pressure predominated over or near the British Isles until the 22nd, although weak troughs of low pressure affected briefly some areas in the west and north. During the last 7 days relatively low pressure occurred in all districts.

Weather

The first half of the month was mainly dry and sunny and although this weather continued in many eastern and southern areas until the beginning of the fourth week, it became less settled elsewhere. On the 23rd/24th showers of snow or sleet (rain or drizzle and snow) fell on the peaks of the Cairngorms and changeable weather extended to all areas of the country for the remainder of the month.

Wind

On the 1st a vigorous depression to the north of Britain brought gales to parts of Scotland and northern England. Gusts of 40 kt or more occurred widely in the north and they reached gale force even as far south as Kent. During a gale in the extreme north of Scotland on the 23rd a gust of 60 kt was recorded at Kirkwall (Orkney).

Temperature

Monthly mean temperature was above average, except in some parts of eastern England where it was a little below average. The mean temperature of 13.5°C at Buxton (Derbyshire), height 307 metres, was the highest recorded there in September since 1908 when available summaries began, and the mean September temperature of 14.0°C at Llandrindod Wells (Radnorshire) was last exceeded there in 1949. Except for a few days around the 14th and again around the 25th, day-time temperatures often rose well above average. In the Cairngorms on the 8th the temperature at Glenmore Lodge (Inverness-shire), 341 metres, reached 27.1°C which is the highest there in September since 1951. On the other hand the nights were cold occasionally and from the 16th to 22nd the temperature contrast between cold nights and succeeding warm days was very marked in central and south-east England. This was well illustrated at Kew (Greater London) where from the 18th to 20th the daily range of air temperature as measured by an aspirated psychrometer was 18°C which is about twice the average range. Air frost occurred in southern Scotland overnight on the 11th/12th and in central and southern Scotland and northern England on the 3 nights commencing on the 23rd/24th; the air temperature at Carnwath (Lanarkshire) fell to -4.5°C on the morning of the 24th.

Rainfall

Except in a few small areas in north Scotland where the average rainfall was just exceeded, the United Kingdom was drier than average while over England and Wales as a whole and over Scotland it was the driest September since

1959. Most of east and south Scotland, Northern Ireland and practically the whole of England and Wales recorded less than half the average rainfall. Some localities had less than a quarter of the average, notably in the southernmost counties of England where parts of Devon, Dorset and Somerset had less than one tenth; only 3 per cent (1.8 mm) occurred at Vivary Park in Taunton (Somerset). Some stations had their lowest September rainfall for over 40 years, notably Durham since 1910 although it was equally low in 1941, St Andrews (Fife) since 1920 and Sidmouth (Devon) since 1929 when records began. The main feature of the month was the long dry spell in parts of east Wales and eastern and southern England where many places had no measurable rainfall until the 22nd; Littlehampton (Sussex) recorded rainfall on the 24th and 26th only. Elsewhere, very little rainfall occurred during the first fortnight, except in north and west Scotland, but it then became more changeable and this type of weather affected all districts during the last 7 days. On the 23rd rain spread from Scotland to the rest of the United Kingdom with thunderstorms in Wales, the Midlands and East Anglia; a rainfall of 33.1 mm in about 2 hours was recorded at Allensmore (Herefordshire). Widespread rain occurred on the 26th; 53.3 mm of rain fell at Ceinws (Montgomeryshire) in the 24 hours from 09 GMT and thunderstorms broke out in central and eastern England.

Sunshine

Amounts of sunshine were above average nearly everywhere; only parts of extreme north and east Scotland had deficits and these were small. It was the sunniest September at Springburn

Park in Glasgow since 1914, at Perth since 1919, at Braemar (Aberdeenshire) since records began in 1933 and at Armagh since 1949, while many stations had their highest September sunshine since 1959. The period 4th to 12th was very sunny over most of the country; the main exceptions were north Scotland on the 5th and 6th and south-west England on the 10th and 11th. Much of the southern half of England and Wales had another sunny spell from the 16th to 21st.

Fog

Overnight fog was a recurrent feature in many areas during most of the period 4th to 23rd, especially in the Midlands and southern England. In general the fog occurred in patches and cleared soon after dawn but occasionally it was more widespread and persistent. Fog was slow to clear in the Midlands on the 13th and 19th, and in south-east England on the 21st. By dawn on the 23rd fog was widespread in England and Wales with dense patches in places; it was slow to clear everywhere and patches persisted for much of the day in Lincolnshire and south Yorkshire.

Miscellaneous phenomena

On the 24th a waterspout was seen from St Mary's in the Scilly Isles. Violent local winds associated with thunderstorms in Cheshire, Derbyshire and Yorkshire on the afternoon of the 26th caused much structural damage in a number of localities. The aurora was seen by observers in Scotland on 16 nights and there was an observation of noctilucent cloud reported from the Scilly Isles on the 26th.

Table 1 District Values**September 1971**

District	air temperature °C					mean 30 cm earth temp °C	rain days	rain- fall	sun- shine
	High Max.*	Lowest Min.*	max.	min.	mean				
			difference from average						
0 Scotland N	23.3	−0.2	+0.9	+0.1	+0.5	—	−3	52	109
1 Scotland E	25.6	1.1	+1.2	+0.9	+1.1	+0.9	−6	34	109
2 England N E	23.3	2.2	+0.9	+0.0	+0.4	+0.9	−6	32	122
3 England E	24.4	2.2	+0.9	−0.9	0.0	0.0	−7	41	122
4 Midlands	24.3	2.9	+1.2	−0.3	+0.4	+0.7	−7	37	128
5 England S E	25.7	1.9	+1.2	−0.7	+0.2	−0.2	−8	25	127
6 Scotland W	23.3	−1.9	+1.2	+0.4	+0.8	+0.7	−6	44	119
7 Eng N W - Wales N	25.6	1.8	+1.7	+0.0	+0.8	+0.8	−6	38	134
8 Eng S W - Wales S	24.7	1.3	+1.9	+0.4	+1.1	+0.9	−7	30	133
N Ireland	22.3	−1.1	+1.7	−0.3	+0.7	—	−7	43	129
Scotland	25.6	−1.9	+1.2	+0.5	+0.8	—	−5	44	112
Eng - Wales	25.7	1.3	+1.3	−0.3	+0.5	—	−7	34	128

*Highest max. and lowest min. of the District Value Stations.