

MONTHLY WEATHER REPORT

COMPILED FROM RETURNS OF OFFICIAL AND VOLUNTARY OBSERVERS

JULY**1983**

VOLUME 100

NUMBER 7

Mostly very hot, dry and sunny, but thundery at times

On the 1st and 2nd a frontal system came south-eastwards over all areas while during the night of the 2nd/3rd a warm frontal wave crossed northern Scotland. For much of the remainder of the month ridges of high pressure extended eastwards across the British Isles, but between the 8th and 11th an anticyclone was slow moving off eastern Scotland while on the 21st another advanced from the west to the North Sea. However, shallow thundery lows moved northwards into the south-east on the 6th and north-eastwards across the south on the 17th, while during the 22nd and 23rd a complex low spread northwards to cover all districts until the 25th. Further, mostly weak fronts affected northern areas at times, particularly during the last few days while on the 31st a deepening depression passed north-eastwards over northern France.

Weather

Most parts of the United Kingdom were very dry, sunny and, at times, very hot, particularly during the first half of the month. Northern districts, however, were rather changeable and cooler at times, especially early and late in the month. Thunderstorms were reported daily, except during the first four days and between the 28th and 30th. But apart from over England and Wales on the 6th, 17th, between the 22nd and 24th and on the 31st, and over Scotland on the 25th the storms were not widespread. Four men were killed by lightning, on Barnes Common, south-west London, on the 6th, at Grasmere, Cumbria, on the 17th, and at Donnington, Shropshire, and near Boston, Lincolnshire, on the 18th. On the 17th hailstones the size of golf balls were reported at Lampeter, Dyfed, while others like marbles broke car windscreens at Okehampton, Devon, and, on the 23rd, 2 cm diameter hail fell at Lyneham, Wiltshire.

Wind

Winds were often light although on some occasions they were fresh or strong, especially in the north with gales locally on the 2nd, 3rd and 29th. A sudden gust of 63 kn and a pressure fall of 6 mb in 15 minutes were recorded at Guernsey Airport near a thunderstorm on the 31st. Wind directions were mostly from an easterly point, but during the first four days, on the 14th and 15th, and at times in the north they were between south-west and north-westerly. Sea-breezes developed frequently in coastal areas.

Temperature

This was the hottest calendar month in the 325-year record for central England although some mid-month to mid-month periods, including July-August 1975 and June-July 1976, have been hotter. It was also the hottest month in more than 100 years of records in Greater London, Plymouth and Durham. In Northern Ireland, Armagh had its hottest month since July 1868. Over much of Scotland it was the hottest month since July 1976, but not as outstandingly hot as in July 1901 and August 1947. Mean temperatures ranged from more than 4°C above the monthly average in parts of southern England from Greater London to Avon and Gloucestershire to less than 2°C above in the far north-west and north of Scotland, southwards down the east coast to Kent and locally in Glasgow and the Isle of Man; Shetland had near-normal values.

After a rather cool start in the north most parts were hot or very hot, in the south between the 4th and 18th and in the north from the 6th to the 14th. Subsequently, although temperatures were near normal in the north until the 19th, they remained mostly well above average with the south being very hot again during the last three days as cooler weather spread slowly south-eastwards. Extreme maxima were, in general, rather lower than in 1976 although 32°C was exceeded locally in England and Wales each day between the 11th and 16th, including 33.7°C at Liphook, Hampshire, on the 16th. In Scotland the temperature reached 31.5°C at Coatbridge, Strathclyde Region, on the 12th while the 30.8°C at Belfast (Shaw's Bridge), also on the 12th, equalled the highest value on record in Northern Ireland. Eastern coastal areas, however, were cool at times, particularly between the 9th and 13th.

The heat, often accompanied by quite high humidities, had a diversity of effects; five operating theatres were closed in Cardiff on the 14th; the deathrate of the elderly was up by 50 per cent and several drownings were reported; freshwater fish died in some areas; huge traffic jams occurred on roads to the coast; in the High Court, judges and counsel removed their wigs, while at Rochdale, Greater Manchester, a defendant who turned up wearing only football shorts was asked to return more suitably attired.

Rainfall

Generally, this was the driest July since 1919 in Northern Ireland and since 1955 in Scotland. Rain on the last day prevented it from being the driest since 1935 in most parts of England and Wales, although in Tynemouth it was the driest since 1871. Less than half the monthly average rainfall was recorded in much of the United Kingdom with a few places in east Scotland, South Wales and south-west England having less than 10 per cent of average. In isolated parts of England, Wales and the far north-west of Scotland rainfall totals were above normal with more than twice the average locally in Gwynedd.

Northern areas had some rain or showers at times, mostly early and late in the month, the rainfall being heavy in parts of the north-west on the 1st or 2nd. Otherwise most of the rainfall was thundery, storms occurring somewhere or other almost daily, but only on the 31st in southern and central parts of England was heavy rainfall at all widespread. Large daily totals included 87.1 mm in Croydon, Greater London, on the 6th, 80.6 mm at Strata Florida, near Tregaron, Dyfed, on the 11th, 86.5 mm at Bala, Gwynedd, on the 16th, 112.2 mm at Honister Pass, Cumbria, and 104.8 mm at Ireshopeburn, near Stanhope, Durham, on the 17th and 84.3 mm at Wyville, near Grantham, Lincolnshire, on the 31st. Severe flooding occurred locally on several occasions.

Sunshine

Monthly sunshine totals were above normal nearly everywhere with more than 140 per cent of average being recorded in scattered areas mainly in the north-west and south of the United Kingdom. In the north of Scotland, along the east coast from Tayside to North Yorkshire, and locally in West Yorkshire totals were rather below normal.

Sunny days were most frequent in the south during the first half of the month and in the north-west between the 6th and 13th. But it was mainly dull in eastern coastal areas during the second week and in Shetland during the second half of the month.

Fog

Fog occurred frequently, particularly during the second and fourth weeks of the month. Although it mostly cleared from inland areas by midmorning it persisted over coasts at times, especially in the east between the 8th and 12th and from the 24th to the 27th.

Miscellaneous Phenomena

Small tornadoes were reported to have severely damaged a substantial stone building at Allenheads, Northumberland, on the 17th and to have slightly damaged a house at Ivybridge, Devon, on the 31st.

Table 1 District values

District	air temperature °C					mean 30-cm soil temp °C	rain- days	rainfall	sun- shine
	Highest Max*	Lowest Min*	max.	min.	mean				
			difference from average					% of average	
0 Scotland N	28.2	2.2	+1.5	+0.7	+1.1	+1.2	−6	51	123
1 Scotland E	29.5	3.6	+2.7	+1.7	+2.2	+1.6	−7	24	120
2 England E & NE	32.0	4.6	+2.8	+1.5	+2.1	+1.8	−5	52	116
3 East Anglia	32.4	4.5	+3.0	+1.7	+2.3	+1.5	−6	54	124
4 Midland Counties	32.1	4.4	+4.7	+2.2	+3.5	+2.3	−5	70	127
5 England SE & Central S	32.8	6.1	+4.3	+2.6	+3.5	+1.7	−7	48	126
6 Scotland W	30.1	3.6	+3.3	+1.3	+2.3	+1.6	−9	40	124
7 England NW & Wales N	31.7	3.0	+4.1	+1.9	+2.9	+2.3	−8	40	131
8 England SW & Wales S	31.7	5.6	+4.3	+2.0	+3.2	+2.4	−7	28	132
N Ireland	29.9	5.3	+4.0	+1.7	+2.8	+1.8	−12	21	133
Scotland	30.1	2.2	+2.5	+1.2	+1.9	+1.5	−7	38	122
England & Wales	32.8	3.0	+3.9	+2.0	+2.9	+2.0	−6	49	126

* Highest maximum and lowest minimum of District Value Stations