

Monthly Weather Report

OF THE METEOROLOGICAL OFFICE

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April, 1949—Warm generally; wet in the west; mainly rather dry in the east and south

The weather of the month was remarkable for a very warm, sunny spell from the 15th–18th (the Easter holiday period). The month was very wet in the western Highlands of Scotland, the Lake District and on the Berwyn mountains of North Wales. Sunshine was deficient on the whole in the west but substantially exceeded the average in the east.

The first ten days of the month were mainly unsettled, with local gales on most days from the 3rd onwards. From the 1st–5th troughs of low pressure associated with Atlantic depressions moved north-east over the country giving rain, which was heavy at times, notably on the 3rd and 5th, and widespread gales on the 3rd and 4th. On the 5th and 6th a depression moved rapidly across southern Ireland and northern England to the southern Baltic and on the 6th and 7th another depression moved quickly over England to the south of Sweden; rain, heavy in places, fell on the 6th. In the rear of the second depression a polar air stream flowed over the British Isles and temperature fell considerably; widespread gales were recorded on the 7th, with wintry showers and local thunderstorms. From the 8th–10th an anticyclone off our north-west coasts moved rather quickly south-east and a short period of mainly fair weather prevailed, though rain was renewed in the west and north by the evening of the 9th, and on the 10th a cold front off the west coast of Ireland moving north-east caused considerable rain locally in the west and north-west. During the ensuing days pressure was low to the north and high to the south of the British Isles resulting in a westerly type of weather, with rain in the west but little or none in east Britain.

Subsequently on the 14th and 15th an anticyclone over France moved north-east while troughs of low pressure approached our western seaboard. Our air supply was drawn from the south, temperature rose considerably and fair, sunny weather prevailed over much of the country except Ireland and north and north-west Scotland. By the 15th the temperature was very high for the season and on the 16th it rose still higher in eastern districts of England. Thunderstorms occurred locally on the 16th and 17th. During the following days temperature was lower but still appreciably above the average. On the 18th a weak trough of low pressure moving north-east brought slight rain to the northern half of the country while on the 19th a trough moving south-east caused some rain, mainly slight, in the west and north. Meanwhile fair weather continued in the south.

On the 20th and 21st a depression moved from mid-Atlantic to a position off north-west Ireland and thence to the North Sea; rain fell generally though not until the night of the 20th–21st in England and Wales, where sunshine was abundant on the 20th. On the 22nd a trough of low pressure moving quickly east over Scotland was associated with heavy rain in west Scotland. During the remainder of the month unsettled weather prevailed with depressions, to the north of the British Isles, moving north-east and associated troughs crossing the country. Rain or showers occurred at times and gales were recorded locally in the north of Scotland, but there were also considerable amounts of bright sunshine.

Pressure and Wind.—Mean pressure was below the average in the northern half of the country and exceeded the average in the southern half. The deviation at 9h. ranged from -5.0 mb. at Lerwick to $+5.9$ mb. at Portland Bill. In consequence the gradient for westerly winds was greatly increased above the average, winds from north and east were rare and the total run of the wind substantially exceeded the average. Gales occurred rather frequently at exposed stations; for example on 11 days at Lerwick, 8 at Stornoway and 6 at Benbecula and St. Ann's Head. The most widespread were those of the 3rd, 4th and 7th. Among the highest gusts registered in knots were 69 at Southport, 67 at Durham, 66 at St. Ann's Head, 63 at Scilly, 62 at Speke and Holyhead, and 60 at Bidston on the 4th and 60 at Lerwick on the 28th.

Temperature.—Mean temperature exceeded the average for 1906–35 by 4.3°F . in England and Wales, 3.2°F . in Scotland and 3.6°F . in Northern Ireland. An exceptionally warm spell occurred from the 15th–17th. On the 15th temperature rose to 75°F . or above locally; 75°F . at Kelso on that day was the highest April reading in Scotland for 35 years. On the 16th, 85°F . was registered at Camden Square (London) and 84°F . at Kensington and Greenwich. These values were exceptionally high; for example, it was the highest reading in April at Greenwich since records began in 1841. The very mild nature of the month is evidenced also by the fact that the lowest screen minimum registered in Scotland was 26°F .; since 1864 the lowest minimum in April in Scotland has always fallen below this level. A cool spell occurred roughly from the 7th–10th.

The extreme temperatures in the screen for the month were (England and Wales) 85°F . in London (Camden Square) on the 16th, 25°F . at Parkend, West Lavington, Pembrey and Cantref on the 9th and Whipsnade on the 10th; (Scotland) 75°F . at Kelso on the 15th, 26°F . at Lerwick, Balmoral and Glenlivet on the 8th; (Northern Ireland) 65°F . at Lisburn on the 13th, 27°F . at Lisburn on the 9th.

Precipitation.—The general precipitation expressed as a percentage of the average for the period 1881–1915 was 120 over England and Wales, 149 over Scotland and 118 over Northern Ireland. Less than the average occurred over much of east Scotland and less than 50 per cent. of the average over part of Aberdeenshire. On the other hand more than 200 per cent. was measured over most of west Scotland and more than 250 per cent. over part of the western Highlands. In England and Wales less than the average occurred over most of Northumberland and Durham, on the coast of Suffolk, in the Thames valley and in most of the area south of a line from Hartland Point to Southampton and thence to the Thames Estuary. More than 200 per cent. of the average was registered, however, over the Berwyn mountains of north Wales and in the Lake District. In Northern Ireland percentages ranged from rather less than 100 in County Antrim and County Down to more than 175 per cent. in the neighbourhood of Lough Foyle.

Among the heavier falls in 24 hours were:—

3rd 5.20 in. at Cwm Dyli, Snowdon, 4.10 in. at Borrowdale and 3.85 in. at Thirlmere (Cumberland).

5th 2.91 in. at Llyn Fawr Reservoir (Glams).

22nd 4.10 in. at Sloy Dam (Dumbarton) and 2.80 in. at Glenquoich (Inverness-shire).

Thunderstorms occurred locally at times, mainly on the 2nd–5th, 7th, 15th–17th and 24th–26th.

Snow or sleet showers occurred locally during the cold spell of the 7th–9th and on the 22nd, 24th and 25th.

Sunshine.—The duration of bright sunshine expressed as a percentage of the average for the period 1906–35 was 114 in England and Wales, 97 in Scotland and 90 in Northern Ireland. Broadly speaking sunshine substantially exceeded the average in the eastern districts of Britain, particularly the south-east, and the English Midlands but was mainly below the average in the west. The mean daily sunshine in hours ranged from less than 4 over a large area in west Scotland extending south-westward from Stornoway to Eskdalemuir and in a small area in Wales to more than 7.5 locally in south-east England.

Fog.—Fog occurred locally at times, chiefly on the 1st, 2nd, 5th, 6th, 12th, 14th–17th, 24th, 27th and 28th. It was rather persistent at Guernsey on the 28th.

Miscellaneous Phenomena.—The aurora was observed from northern stations in Scotland on the 5th, 8th, 11th and 17th. Solar haloes were noted at Oxford on 13 days.