

Monthly Weather Report

OF THE METEOROLOGICAL OFFICE

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July, 1948—Very cool and dull until the 17th; unusually hot and sunny in the last week.

The weather was remarkable for an unusually cool, dull spell until the 17th and an exceptionally hot period in the last six or seven days. Thunderstorms occurred locally from the 28th to 31st and were severe in some places, particularly on the 31st.

The cool, unsettled weather which set in at the end of June continued until the 17th July. During much of this period pressure was high on the north-east Atlantic while depressions near Iceland moved east and then south-east or south round the anticyclone. On the night of the 3rd–4th a depression crossed northern Scotland and subsequently moved south-south-east to the Netherlands. Heavy rain fell in Scotland during the period ending at 9h. on the 4th and considerable rain locally in England during the 4th. On the 8th a depression over south Norway moving south-south-east caused strong northerly winds in east Britain with a gale locally. From the 12th to 14th a depression centred off the north of Scotland moved south-east to the North Sea and then slowly north-east to Denmark. Rain occurred in most places on the 12th and 13th and scattered rain on the 14th, while scattered showers were reported in the north and west on the 15th and 16th and further rain fell in the south-west late on the 16th.

Subsequently pressure became low on the Atlantic and an unsettled westerly type set in over the British Isles. On the 17th a depression was situated south of Iceland and a secondary moved east across England giving fairly heavy rain there. Temperature rose on the 18th and day temperatures between 75°F. and 80°F. were registered locally in eastern England on the 19th. On the 20th a deep depression approached south-west Ireland and thereafter moved quickly north-north-east across the British Isles to the west of Norway. Widespread strong winds and local gales were experienced on the 21st. In the rear of this disturbance a ridge of high pressure moved across the British Isles giving a spell of fairer weather, though there were scattered showers. On the 24th and 25th a trough of low pressure moving slowly east over the country was associated with rain, chiefly in the north and west.

By the 26th an anticyclone was centred over the Baltic and a ridge extended south-west over east and south England. Subsequently the ridge moved north over the British Isles and a spell of hot, sunny weather prevailed. On the 28th a shallow depression over the Bay of Biscay drifted slowly north and, from the 29th to 31st, a shallow trough of low pressure over our south-west districts moved slowly north to cover the British Isles by the 31st. It was exceptionally hot from the 28th to 30th, temperature reaching or exceeding 90°F. at many places in England and Wales. In the south-west of Scotland temperature touched 90°F. locally on the 29th. Thunderstorms, severe in some places, occurred on the 28th–31st.

Pressure and Wind.—Mean pressure slightly exceeded the average in most places, the deviation from the average at 9h. ranging from –0.5 mb. at Eskdalemuir to +1.8 mb. at the Scilly Isles. The total run of the wind was somewhat above the average and north-westerly winds were more frequent than usual. A mean hourly velocity of more than 38 m.p.h. was registered locally on the 4th, 8th, 21st and 26th. The most widespread and severe gale occurred on the 21st. Among the highest speeds registered in gusts were 71 m.p.h. at St. Ann's Head and Holyhead, 63 m.p.h. at Durham, Spurn Head, Cranwell and Aberporth and 62 m.p.h. at Point of Ayre and Southport, all on the 21st.

Temperature.—Mean temperature for the month was about average in Scotland, 0.5°F. below the average in England and Wales and 0.4°F. below in Northern Ireland. Day temperatures were unusually low from the 1st–17th and the weather continued cool on the whole

until the 25th, though it was rather warm in east England on the 19th and 20th. Some low minima were registered in England and Wales on the 17th and in Scotland on the 24th. The reading on the 17th was the lowest in July at Ross-on-Wye and Rhayader since 1929. Temperature rose on the 25th and the remainder of the month was extremely hot, temperature reaching its peak at most places on the 28th or 29th. At some places in England and Wales the extreme maximum was the highest on record for July; for example at Kew Observatory, Southport and Squire's Gate. In south-west Scotland 90°F. was recorded locally on the 29th; so high a temperature has not been registered in Scotland in July since 1911.

The extremes for the month were:—(England and Wales) 95°F. at Milford (Surrey) on the 28th, 34°F. at Droitwich on the 17th; (Scotland) 90°F. at Kilmarnock, Prestwick Airfield and Ruthwell on the 29th, 34°F. at Braemar on the 24th; (Northern Ireland) 86°F. at Castlerock on the 29th, 39°F. at Aldergrove on the 17th.

Precipitation.—The general precipitation expressed as a percentage of the average for the period 1881–1915 was 62 over England and Wales, 102 over Scotland and 97 over Northern Ireland. In England and Wales the deficiency was general apart from a few small scattered areas where the excess was due to heavy rain on individual days; for example, in the neighbourhood of Cardiff, Woburn and the extreme south-east of Kent. In Scotland more than the average occurred over most of the central and western districts, while less than the average was received on the whole in the east and south. More than 150 per cent. of the average was measured at Foyers, Loch Ness, Inverness-shire and around Perth and Greenock. In Northern Ireland percentages of the average ranged from 82 at Seaford, County Down, to 131 at Londonderry.

Among the heavier falls in 24 hours or less were:—

3rd	2.95 in. at Cwm Dyli, Snowdon, 2.91 in. at Blaenau Festiniog (Merioneth) and 2.50 in. at Ardgour (Argyllshire).
4th	2.69 in. at Machynlleth (Montgomery).
29th	2.16 in. at Cardiff.
31st	2.01 in. at Montgreenan (Ayrshire).

Thunder was reported on the 4th–6th, 12th–15th, 19th–22nd and 27th–31st. The storms were most widespread on the 13th, 22nd and 28th–31st. The thunderstorm on the 31st was severe in north-west England and Scotland. At Southport, houses and churches were struck by lightning and 1.67 in. of rain fell at Hesketh Park in 35 minutes. In Scotland, heavy rain caused flooding in some areas and lightning caused damage to power and telephone lines. During a thunderstorm at Marlborough on the 28th, houses and trees were struck by lightning and trees were uprooted by heavy squalls of wind which occurred for a short time at the peak of the storm.

Sunshine.—Broadly speaking the duration of bright sunshine slightly exceeded the average in Scotland and Northern Ireland and was below the average over most of England and Wales. It was dull until the 18th; thereafter conditions improved and the last six or seven days were unusually sunny.

Fog.—Fog occurred at times, chiefly on the 11th, 15th, 17th–20th and 24th–31st. It was rather persistent on the south-west coasts on the 18th, 19th, 29th and 30th. Fog was most widespread from the 29th–31st. A ship ran aground near Mull Head, Orkney, in thick fog during the forenoon of the 29th.

Miscellaneous Phenomena.—Solar halos were noted at Oxford on five days. Chain lightning was observed during a severe thunderstorm at West Kirby on the 31st.