

## MONTHLY WEATHER REPORT OF THE METEOROLOGICAL OFFICE

SUMMARY OF OBSERVATIONS COMPILED FROM RETURNS OF OFFICIAL STATIONS AND VOLUNTEER OBSERVERS

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## APRIL, 1942.—Unusually sunny; rather mild.

In marked contrast to the first three months of the year, the weather of April was notably sunny. It was also rather warm and the last three weeks were markedly dry. Dry air was a distinguishing feature of the latter half of the month; at 18 h. on the 15th the relative humidity at Boscombe Down was only 14 per cent.

Unsettled conditions prevailed for the first nine or ten days. On the 1st a depression moved east-south-east from the north of Scotland, while a trough of low pressure crossed the British Isles; precipitation, mostly showers, occurred generally and there were local thunderstorms. Gales were reported at a few exposed stations on the 1st and 2nd. By the morning of the 3rd a new disturbance was situated off north-west Ireland and during the day an associated trough moved east-north-east over the British Isles; general rain occurred, which was rather heavy locally. Between the 4th and 9th complex Atlantic depressions moved over the British Isles and weather during this period was very unsettled, with general rain, local thunderstorms and gales at a few exposed places. On the 10th a wedge of high pressure moved eastward across the British Isles and during subsequent days pressure was high eastward of the British Isles and low on the Atlantic. Fair weather prevailed in the east, but there was rain at times in the west.

On the 14th the anticyclone over southern Scandinavia extended its influence westward and for several days dry, sunny weather prevailed generally over these islands with easterly winds and very dry air. On the 19th a shallow depression over the British Isles moved north-east and on the 20th a shallow trough moved south-east over England; weather deteriorated a little and small amounts of rain fell at a few scattered stations, but for the most part fair conditions persisted. On the 22nd and 23rd a trough of low pressure moved south from the north of Scotland; rain occurred in some districts, chiefly in Scotland and northern England. In the rear of the trough an anticyclone moved east-south-east from the north of Scotland and subsequently north-east as a depression north-east of the Azores moved east, and from the 24th onwards fair weather prevailed with strong easterly winds. A little rain occurred locally on the extreme south-west coasts but, for the most part, during this period there was no rain, little cloud and abundant sunshine.

**Pressure and Wind.**—Broadly speaking, mean pressure somewhat exceeded the average except in the south-west; the deviation at 7 h. ranged from +3.8 mb. at Wick to -3.2 mb. at the Scilly Isles. The map of mean pressure shows the highest pressure eastward of the British Isles and the lowest to the west and winds from an easterly point were more frequent than usual. The month was windier than the average over England and Wales and at 13 h. strong winds were reported on 14 days at Spurn Head, 13 at Cranwell, 12 at Holyhead and the Lizard, and 10 at Larkhill and Plymouth. Gales were registered at one place or another on each of the first 10 days except the 3rd, on the 12th, at Lerwick on the 21st and locally in England on the 25th, 26th, 28th and 29th. Among the highest speeds registered in gusts were 83 m.p.h. at St. Ann's Head, 65 m.p.h. at Manchester (Ringway), and 64 m.p.h. at Cardington on the 1st, 64 m.p.h. at Larkhill on the 9th, 68 m.p.h. at Bidston Observatory on the 10th, and 65 m.p.h. at Manchester (Barton) on the 28th.

**Temperature.**—Mean temperature exceeded the average, the excess over the country as a whole being rather more than 2°F. The mean daily range of temperature was generally greater than the average, particularly in Scotland. Broadly speaking, the highest day temperatures were registered between the 11th or 12th and the 19th, particularly on the 16th. Low minima were recorded locally at times, especially during the second half of the month.

The extremes for the month were:—(England and Wales) 74°F. at Ambleside on the 16th, 20°F. at Meltham on the 30th; (Scotland) 73°F. at Forres, Tarland, Stirling and Dumfries on the 16th and at Onich on the 17th, 21°F. at Tarland on the 18th, Dalwhinnie on the 26th and Balmoral on the 30th; (Northern Ireland) 69°F. at Armagh on the 16th and 32°F. at Aldergrove on the 4th and at Castlerock, Garvagh and Hillsborough on the 25th.

**Precipitation.**—The general precipitation expressed as a percentage of the average for the period 1881-1915 was 76 over England and Wales, 75 over Scotland and 94 over Northern Ireland. The distribution was variable; broadly speaking, in Scotland, rather more than the average rainfall occurred over much of the country lying between the Moray Firth and the Solway Firth, while in England and Wales more than the average occurred over an inland area covering mid-Wales and part of the western Midlands as well as locally in the Lake district and south-east England. On the other hand less than 50 per cent. was received over a fairly large area in the north of Scotland, including the Outer Hebrides and the Orkneys, over much of East Anglia and the extreme north-east of England. In Northern Ireland the percentage varied from 65 at Londonderry to 109 at Armagh and Donaghadee. Most of the rain fell during the first nine days and the last three weeks were very dry. By the end of the month an absolute drought had occurred over much of England and Northern Ireland and at many stations in Wigtown and Ayrshire.

Daily falls of 1 in. or more occurred at scattered places on each day from the 1st-9th except the 2nd. Among the largest daily falls were 1.57 in. at Princetown and 1.51 in. at Holne, S. Devon, on the 8th.

Local thunderstorms occurred on the 1st and daily from the 3rd-9th.

In Scotland light falls of snow occurred at some high level stations on the 1st-3rd, 5th, 7th, 9th, 23rd and 24th; on the 3rd the falls extended to Aberdeen, Peebles and the Edinburgh district.

**Sunshine.**—The most noteworthy feature of the weather of the month was the abundant sunshine enjoyed almost everywhere; it was only at a few places in Devon, Cornwall and the Scilly Isles that stations registered less than the average. Over Scotland as a whole it was easily the sunniest April for many years; for example, at Orkney it was the sunniest April in its long record back to 1880, at Nairn and Kilmarnock the sunniest in records which began in 1907 and 1908 respectively, while at Edinburgh and Marchmont it was the sunniest since 1914. Records at widely separated stations in England and in Northern Ireland also show the exceptional nature of the excess. To quote a few: at Nottingham the total was the highest for April since 1909, at Cheltenham since 1912, at Durham since 1914 and at Armagh since 1921, while at Norwich it equalled the previous record in 1912. The number of days with more than 9 hours was unusual; for example, Eskdalemuir 13 (average 4), Aberdeen 11 (average 4), Kew Observatory 10 (average 4).

**Fog.**—On the whole there was not much fog, but it occurred at times locally, chiefly on the 10th-11th, 13th-14th and 19th-23rd. Fog was thick at times on the south-west coasts of England and Wales on the 10th-11th and 13th-14th.

**Miscellaneous Phenomena.**—The aurora was observed from some northern stations in Scotland on 16 nights; it was seen as far south as Felixstowe on the 16th. Solar halos were noted at Oxford on 13 days. A complex lunar halo, with arc of contact and mock moons, was observed at Canterbury on the 28th; the arc of contact was almost rainbow hued.