

MONTHLY WEATHER REPORT OF THE METEOROLOGICAL OFFICE

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

PUBLISHED BY HIS MAJESTY'S STATIONERY OFFICE. To be purchased directly from H.M. STATIONERY OFFICE at the following addresses: YORK HOUSE, KINGSWAY, LONDON W.C.2; 120 GEORGE STREET, EDINBURGH 2; 26 YORK STREET, MANCHESTER 1; 1 ST. ANDREW'S CRESCENT, CARDIFF; 80 CHICHESTER STREET, BELFAST; or through any bookseller.

VOL. 58. No. 5.

ISSUED BY THE AUTHORITY OF THE METEOROLOGICAL COMMITTEE

Price 1s. 0d. net, Post-free 1s. 1d.

Annual Subscription, including Annual Summary and Introduction, 15s. 0d. post-free.

MAY, 1941.—Unseasonably cold, particularly in the south.

The month was cold especially in southern districts and severe ground frosts were a notable feature of the first half of the month. Sunshine was deficient on the whole and rainfall variable. Winds from between north and east were more frequent than usual.

Conditions during the first ten days were mainly determined by an anticyclone, which was centred at first between Iceland and northern Norway; subsequently it moved slowly westward and on the 8th and 9th retreated south-westward. Dry, cold weather prevailed for the most part with frequent ground frosts and winds mainly between north and east. Rain in the south on the 1st was associated with a shallow depression over France moving east-north-east and on the 2nd with a trough of low pressure moving south-west over England.

Between the 11th and 13th a depression moved east-south-east from the north of Iceland and on the 12th minor troughs of low pressure over Scotland moving east-south-east caused slight local rain in north Scotland and north Ireland. On the 13th and 14th a trough of low pressure moved southward from the north of Scotland; in the rear of the trough cold, northerly winds and wintry showers spread south over the British Isles. Between the 17th and 19th a depression south-east of Iceland and a trough of low pressure westward of Ireland moved south-south-east over the British Isles. Somewhat unsettled weather prevailed with thunder at a few places. Rain on the 21st was associated with a trough of low pressure moving eastward across the country.

A period of very unsettled weather ensued from the 22nd–27th, with heavy local rain and occasional local thunderstorms. On the 22nd a depression over Iceland and an associated trough to westward of Ireland moved south-east and on the 23rd, the centre over the Irish Sea moved north-east and subsequently north-west; unusually heavy rain occurred in Scotland on the 23rd and gale force was recorded at one or two exposed stations between the 22nd and 24th. A deepening secondary depression over south-west Ireland on the 25th moved slowly east; later it moved north and finally south-west. This disturbance was associated with general rain on the 25th and 26th and showers on the 27th and 28th.

During the closing days high pressure over Iceland spread south and there was a marked rise of temperature in western and central districts of Scotland and extreme north-west England, though it continued rather cool in the east and south. Good sunshine records were obtained at many places in the west and north on these two days.

Pressure and Wind.—Mean pressure somewhat exceeded the average in the north of Scotland and was slightly below the average elsewhere, the deviation from the average at 7h. ranging from +1.4 mb. at Stornoway to –2.0 mb. at Kew Observatory. Mean pressure was thus very uniform over the British Isles. Winds from between north and east were more frequent than usual. Gale force was reached in Orkney on the 12th, Skye on the 22nd, the Irish Sea on the 23rd and on the coast of south-east Scotland on the 24th. Among the highest speeds recorded in gusts were 65 m.p.h. at Bidston Observatory, 62 m.p.h. at Sealand and 60 m.p.h. at Fleetwood and Manchester (Barton) all on the 23rd.

Temperature.—Mean temperature was notably low, particularly in the south; the deviation from the average was as much as –4.5°F. in England, S.E. and –4.3°F. in England, E.

Over Scotland as a whole it was the coldest May since 1927 and at individual stations in the north of England, for example Wakefield and Southport, it was the coldest since 1923. It was, however, in the south that the cold was most unusual; thus at Teignmouth it was the coldest May since at least 1871 and at Ross-on-Wye since 1877. At some places in the south-eastern districts May 1902 was slightly colder. The mean minimum temperature in May 1941 was particularly low; for example at both Eastbourne and Copdock the mean and mean maximum temperatures were lower in 1902 but the mean minimum temperatures were the lowest on record. Ground frosts were a notable feature of the weather during the first half of the month; at Wakefield the total number of ground frosts, 12, equalled the highest number on record for May. At Totland Bay, Isle of Wight, there was a screen frost on May 16th, 8 days later than in any previous May in 56 years' records. The absolute maximum

temperature for the month was very low over much of England; at Copdock, near Ipswich, 68°F. on the 21st was the lowest absolute maximum for May in the period 1902–41, while the values at Kew Observatory and Ross-on-Wye were 66°F. and 65°F. respectively and at neither station had the absolute maximum been lower in May since 1877.

In the west and central districts of Scotland and extreme north-west England temperature rose sharply at the end of the month and readings approaching 80°F. were recorded on the 31st.

The extremes for the month were:—(England and Wales) 78°F. at Ambleside on the 31st, 15°F. at Thetford on the 4th and 11th; (Scotland) 82°F. at Kilmarnock on the 31st, 15°F. at Fort Augustus on the 15th; (Northern Ireland) 74°F. at Aldergrove on the 31st and 27°F. at Garvagh on the 4th.

Precipitation.—The general precipitation expressed as a percentage of the average for the period 1881–1915 was 106 over England and Wales, 89 over Scotland and 90 over Northern Ireland.

The distribution was very variable and somewhat unusual. In Scotland, a large area in the west embracing the whole of the western Highlands and extending down to the Ayrshire coast had less than the average; a number of places on the east coast and in the extreme north also had less than the average, while between these two comparatively dry areas totals exceeded the average and locally on the Pentland Hills nearly twice the average occurred. Over a considerable part of the extreme west of Scotland less than half the average was registered. In England and Wales, most of northern England except a coastal strip in the north-west had less than the average; a deficiency occurred also in the Thames Estuary and east Kent, and in an area in the south-west covering much of the Bristol Channel and extending east to Oxford and west Hampshire and south-west to north-east Devon. On the other hand an excess was reported in a central belt extending from Wales to East Anglia, on the north-west coast, in the extreme south-west, along the south coast and in parts of south-east England. In Northern Ireland the percentages ranged from 59 at Newtownbutler to 106 at Londonderry.

The first part of the month was very dry and with the dry weather at the end of April numerous places experienced an absolute drought ending on one of the days from May 11th–14th. At Southport an absolute drought of 24 days occurred from April 20th to May 13th inclusive and in west Scotland many places recorded an absolute drought lasting 20 days, while at Oban, Greenock and Rothesay it lasted 22 days.

Heavy rain fell between the 22nd and 27th. Noteworthy falls in the south of Scotland on the 23rd caused extensive flooding and serious damage to property and growing crops.

Among the heaviest falls in 24 hours were:—

22nd 2.09 in. at Douglas, Isle of Man.

23rd 4.31 in. at Preston House, near Linlithgow, 3.89 in. at Morton (Pentland Hills), 3.77 in. at Uphall, 2.33 in. at Troutbeck (Cumberland) and at Borrowdale (Cumberland) and 2.28 in. at Carlisle.

Local thunderstorms occurred on the 10th, 11th, 18th–21st, 23rd–24th and 26th–29th.

Local snow showers occurred in Scotland on the 7th, 13th, 16th and 18th. Snow or sleet was widespread in Scotland on the 14th and 15th, and in England also on the 15th.

Sunshine.—Sunshine was deficient on the whole but an excess was enjoyed locally along the western seaboard. The deficiency was marked in England, E., England, S.E. and the Midlands where the percentages of the average were only 71, 79 and 71 respectively.

Fog.—Fog occurred locally at times during the month, but chiefly from the 20th–23rd and 27th–31st. It was fairly widespread in England and south Scotland on the morning of the 31st and on the south-west coasts of England and Wales it was widespread and persistent locally on the 22nd.

Miscellaneous Phenomena.—The only observation of Aurora in Scotland was at Eskdalemuir on the night of the 15th. Solar halos were noted at Oxford on 12 days. A line squall accompanied by a heavy snow shower was reported at Bala, Merioneth, on the morning of the 15th.