

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: ADASTRAL HOUSE, KINGSWAY LONDON, W.C. 2; 28, ABINGDON STREET, LONDON, S.W. 1; YORK STREET, MANCHESTER; 1, St. ANDREW'S CRESCENT, CARDIFF; OR 120, GEORGE STREET, EDINBURGH or through any Bookseller.

VOL. 43, No. 9.

ISSUED BY THE AUTHORITY OF THE METEOROLOGICAL COMMITTEE.

Price 9d. Net, Post free, 10d.

Annual Subscription, including Annual Summary and Introduction, 10s. post free.

SEPTEMBER, 1925: COLD AND WINDY.

General.—Throughout the month the weather was generally cold, unsettled and showery, but with many bright periods.

As the deep depression, which at the end of the previous month was centred between Iceland and Norway, moved eastwards, while pressure continued high over the Atlantic, winds from being westerly veered during the first few days of September to between north-west and north, followed by a marked drop in temperature after the warm weather experienced at the end of August. Showery weather with occasional bright sunny periods prevailed until the 9th, when a secondary to the low pressure system over Scandinavia developed over the North Sea and Scotland; rain fell generally over the British Isles on the 9th and 10th accompanied in some cases by thunder. In the rear of this depression the anticyclone off our south-west coasts spread slowly over the British Isles, giving a few days bright weather with a wider range of temperature but much mist or fog. Slight precipitation in the form of showers was experienced at a few places. In Ireland and Scotland rain or drizzle on the 13th and 14th was associated with an Icelandic depression. Secondaries to this depression approached the British Isles on the evening of the 15th, causing a renewal of unsettled weather. On the 19th one such secondary began to deepen rapidly near the north of the English Channel and became the dominant centre as it passed in a north-easterly direction across Great Britain. The wind rose to gale force on exposed parts of the southern and eastern coasts and heavy rain fell locally in the south-western and midland districts of England, e.g., 55mm. (2.18 in.) occurred at Filey, Yorkshire, 49mm. (1.93 in.) at Newport and Usk (Mon.) and 46mm. (1.83 in.) at Lincomb Lock (Worcester). On the night of the 21st to 22nd a fresh depression caused very stormy weather on the Atlantic, the "Caronia" reporting force 10 (59 m.p.h.) at 1 a.m. Unsettled, rainy weather continued until the 26th, when a belt of high pressure spread across the southern districts, causing quiet, fair and somewhat warmer weather with much morning mist or fog. In the north of the British Isles secondaries maintained cloudy conditions with rain at times.

The general character of the month is illustrated by the following remarks taken from observers' notes:—Lerwick,—"The rainfall though above normal is below that of last September, but there has been a deficiency of sunshine. This has hampered harvesting operations. Southport,—"A remarkably north-westerly September, NE, E and SE. winds being greatly in defect. Windy, cool and rather wet, but sunshine nearly normal. Ipswich,—"A dull, wet and cold month; 1909 and 1916 alone show smaller sunshine totals, and September 1912 is the only September with a lower mean temperature, while I have no year in all my records in which there have been seven consecutive days in September during which the thermometer has failed to rise above 60°F., as happened this year from the 4th to the 10th inclusive. Torquay,—"The weather during the month was more or less unsettled, although the first seventeen days were fairly sunny and dry. The total duration of bright sunshine was above last September to the extent of 15.1 hours, while the total rainfall, although well in excess of the normal, was considerably below many Septembers in the past. Teignmouth,—"The sunshine was considerably above the average. Unusually large rainfall for the month, chiefly made up of five days rain. Ocean temperature rather low. Dublin,—"A cold, showery month, largely due to a prevalence of north-westerly winds. Had it not been for warm spells of short duration at both the beginning and close, the monthly mean temperature would probably have been lower than the record low mean temperatures for September, viz., 52.8°F., which occurred in 1918.

Pressure and Winds.—The mean pressure was below normal at all stations in England and Wales, and in Scotland. The deviations of monthly means of pressure at fixed hours varied from -4.4 mb. at Aberdeen to +1.3mb. at St. Mary's, Scilly. In most districts the lowest pressure occurred on the 22nd; the lowest at telegraphic reporting stations in the British Isles was 977mb., and occurred at Lerwick on the 20th.

The trend of the isobars varied considerably from the normal; and winds instead of being south-westerly were between west and north. High winds occurred at exposed stations on several days between the 9th and 28th. In England N.W. the number of days of high winds at coast stations varied from 17 to 19. Spurn Head had 18 and Lerwick 14. A gust of 68 m.p.h. was recorded at Cahirciveen on the 15th and a gust of 63 m.p.h. at Lerwick and Fleetwood on the 28th. Gales were infrequent but occurred on one or two occasions at stations on or near the coast. The largest number of days of gales, viz., 4, occurred at Holyhead.

Temperature.—Owing to the prevalence of cold north-westerly winds the mean temperature was below normal in all districts. The largest deficiency, 3.5°F., occurred in England S.E., elsewhere the deficiency ranged from 1.8°F. to 3.0°F. Following the high day-temperatures which occurred on the last day of August (at several stations the 31st August was the warmest day of the month) there was a rapid fall in day temperatures as the wind veered gradually to the north-west; by the 4th the drop had amounted to as much as 20°F. at some stations. From about the 4th to the 10th day temperatures remained for the most part below 60°F. in several districts with occasional ground frosts locally at night. Higher day temperatures occurred during the fair to fine weather which prevailed between the 11th and the 15th and towards the end of the month.

The extreme temperatures for the month were:—(England and Wales) 73°F. at Sprowton on 1st and 73°F. at Tunbridge Wells on 30th and 29°F. at Rhayader on 13th; (Scotland) 69°F. at St. Andrews on 15th and 26°F. at Braemar on 12th and Eskdalemuir on 17th; (Ireland) 70°F. at Dublin, Trinity College on 1st and 2nd, 31°F. at Glasnevin, Phoenix Park and Kilkenny on 13th.

Ground frosts occurred frequently throughout the month; grass minimum temperatures of 23°F. and 20°F. were recorded at Rhayader (757 ft.) on the 12th and 13th.

Precipitation.—The general precipitation of the British Isles expressed as a percentage of the normal was 140; the values for the several countries were:—England and Wales 155, Scotland 135, Ireland 107. Except in the east of Scotland and the north of England, the rainfall for the first half of the month was less than normal, but thereafter rain fell frequently until about the 27th. At most stations in England and Wales the monthly totals were above normal, and at some stations in the midland counties and west of England exceeded twice the normal. In Scotland monthly totals varied greatly, a very large excess in eastern districts contrasting with a decided deficiency towards the north-west. Thus Edinburgh (Blackford Hill) had 232 per cent. of the normal but Aberfoyle and Fort William 58 per cent. At several stations in the south and west of Ireland monthly totals were less than normal but elsewhere there was a moderate excess.

Heavy rainfall was associated with the passage of the depressions of the 9th and the 19th (Tracks G and M). In the east of Scotland and in some districts as far north as the Moray Firth a rain-storm of great intensity was experienced on the 9th with more than 1 inch over a considerable area; more than 2 in. fell at Arbroath, Gorebridge and Marchmont and as much as 2.87 in. at Galashiels. At Edinburgh and elsewhere fully one-third of the month's total was accounted for on 9th. The region of heavy rain did not extend beyond central Scotland; none fell, for instance, at Oban or Arrochar. Reference has already been made in the general section to the heavy rainfall on the 19th.

Snow fell in the Scottish Highlands above the 2000 ft. level on the 3rd-4th, an abnormally early date. On the 9th there was again snow on high ground both in the north and south of Scotland.

Thunderstorms occurred generally in the British Isles between the 6th and 9th, in the north and west on the 19th and in the south on the 21st.

Sunshine.—Although the mean daily duration of sunshine was less than normal in all districts except Scotland W., there were many bright periods throughout the month in all districts, when records between 10 and 12 hrs. were obtained. The sunniest districts were Scotland W., where there was a mean daily excess of 0.52 hrs. and England S.W., where the mean daily deficit amounted to only 0.04 hrs.

Fog.—Much mist and fog occurred during the short spells of anti-cyclonic weather which occurred between the 11th and the 15th, and again towards the end of the month.

Miscellaneous Phenomena.—Solar and lunar halos were observed at several stations on various dates. Parhelia were observed at Oxford on the 7th, 15th and 18th, and at Ross-on-Wye on the 18th. A brilliant double rainbow was seen in London from 17h. 30m. to 17h. 45m. (G.M.T.) on the 12th. Aurora was observed at Lerwick on 15th, 16th, 22nd and 24th, and "auroral glow" on six other occasions. The aurora of the 24th was seen as far south as Perth. Aurora was observed also at Wick at 20h. 30m. (G.M.T.) on the 22nd and at 20h. on the 24th. The Zodiacal Band and Counter-glow was observed at Wadhurst on 8th, 10th, 11th, 12th, 23rd and 24th.