

MONTHLY WEATHER REPORT OF THE METEOROLOGICAL OFFICE

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

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APRIL, 1938.—Exceptionally dry; unusually sunny in the western half of the country.

The weather of the month was distinguished by an exceptional deficiency of rainfall; over the British Isles generally it was by far the driest April on record. Sunshine was excessive on the whole except in some parts of the eastern districts of Great Britain and the north of Scotland; in the west the excess was noteworthy. Mean temperature substantially exceeded the average in the north and east of Scotland but was deficient in the east and south-east of England.

During the opening days an Atlantic depression moved north-east to the south of Iceland and then eastward to the Baltic. Gales were reported in Scotland on the 2nd and 3rd and in northern England on the 3rd and rain occurred at times, chiefly in the northern half of the country, though rain was also experienced at most places in the south on the 2nd. The rainfall was moderately heavy in the north and north-west on the 1st and 2nd. The 3rd was a sunny day but polar air in the rear of the depression caused a considerable fall of temperature on that day. From the 5th-7th depressions passed east across Iceland and further local gales were reported in Scotland; temperature rose again in the north and west on the 5th and in the south on the 6th. On the 7th and 8th the anticyclone off west Ireland moved north and then east over the British Isles and anticyclonic conditions prevailed generally until the 15th. There was practically no rain throughout the country from the 8th-14th and low minimum temperatures were registered at times, particularly from the 9th-11th. Subsequently the anticyclone became centred off the north-west of Ireland while pressure was low over Scandinavia, and during the Easter holiday cold winds prevailed with local wintry showers, though it continued dry and sunny in many parts, particularly in the west; sharp frosts occurred in some localities on the 18th and 19th. Thereafter the anticyclone remained over or to westward of Ireland; there was a good deal of cloud in many parts and slight rain occurred locally at times in Scotland and eastern England, and more generally in England on the 22nd and 23rd but the weather continued mainly dry and rather sunny over most of Ireland. A thunderstorm, accompanied by hail, was reported at Tunbridge Wells on the 25th. A trough of low pressure crossed Scotland on the 27th, causing some rain chiefly in the northern half of the country, and from the 28th-30th the anticyclone moved north-east to the north of Scotland, while a depression moved south-south-east from Jan Mayen to Germany. Rain occurred in the eastern districts of England on the 29th and in the south-east on the 30th also. Sunshine records were good on the whole on the last three days, particularly in the north-west and west; 14.5 hours were registered at Tiree on the 29th and 30th and 14.4 hours at Oban on the 30th.

Pressure and Wind.—Mean pressure markedly exceeded the average throughout the British Isles, the excess at 7h. ranging from 10.6 mb. at Lerwick to 16.7 mb. at Malin Head. The mean pressure over Scotland as a whole was the highest recorded in the month of April for at least 80 years. At Oxford the mean pressure was the highest for April since before 1881 and at Southport the mean pressure was the highest in April since records were first taken in 1871. Winds from some northerly point were unusually persistent. Gales were reported locally in Scotland on the 2nd, 3rd, 5th-7th and 16th-17th; they were fairly widespread in Scotland on the 2nd and 3rd and were experienced locally in northern England on the 3rd. Among the highest speeds recorded in gusts were 65 m.p.h. at Bell Rock Lighthouse and 64 m.p.h. at Stornoway on the 2nd, 72 m.p.h. at Kirkwall and 63 m.p.h. at Spurn Head on the 3rd and 74 m.p.h. at Lerwick on the 6th.

Temperature.—Mean temperature exceeded the average on the whole in Scotland, Ireland and England, N.E. and was below the

average in England, E. and England, S.E. In north and east Scotland the excess was considerable and amounted to 3.0°F. or more at a number of stations. At individual places in England a deficiency of 2°F. or more occurred; for example, 2.8°F. at South Farnborough, 2.7°F. at Usk and 2.2°F. at Woburn and East Malling. This was due to low minima; the mean minimum temperature was 30.2°F. at Usk, 31.0°F. at Thetford, 31.3°F. at Marlborough and 32.4°F. at Woburn. The lowest minimum temperatures were registered as a rule from the 9th-11th and 17th-19th. Ground frosts occurred frequently; they were recorded on 24 days at Rugby, Halton, Wisley and South Farnborough.

The extremes for the month were:—(England and Wales) 67°F. at Lowestoft, Halstead, Enfield and Tottenham on the 1st, at Hereford and Newport, Mons., on the 6th, at Newport, Isle of Wight on the 7th and 13th, and at Rugby on the 14th, 15°F. at Thetford on the 11th; (Scotland) 65°F. at Perth on the 5th and at Crieff, Wolfelee and Stirling on the 12th, 20°F. at Dalwhinnie on the 9th; (Ireland) 66°F. at Cork on the 6th, 24°F. at Aldergrove and Phoenix Park, Dublin, on the 18th and at Markree Castle on the 18th and 19th.

Precipitation.—The general precipitation of the British Isles expressed as a percentage of the average for the period 1881-1915 was 17, the values for the constituent countries being England and Wales 13, Scotland 34 and Ireland 7. Over the British Isles as a whole it is by far the driest April on record and the month ranks with February 1891, June 1925, March 1929 and February 1932 as one of the driest ever recorded over the British Isles generally. In numerous small areas in southern Ireland, in an area covering part of Hampshire and Dorset, at a number of stations in south Wales and south-west England and at a few isolated stations elsewhere in England there was no measurable rainfall. More than 50 per cent. of the average was confined to a large area in the west and north of Scotland and to a few stations in east and south-east England. In Scotland less than one-tenth of an inch was registered over fairly large areas in the east and south-east but more than 4 in. occurred in a part of Inverness-shire westward of the Caledonian Canal and 7.2 in. at Loan.

Among the heavier falls in 24 hours were:—

- 1st 2.95 in. at Kinlochquoich and 1.18 in. at Glenquoich (Inverness-shire).
- 2nd 2.10 in. at Glenquoich, 1.50 in. at Broadford (Skye), 1.28 in. at Upper Teesdale and 1.17 in. at New Dungeon Ghyll (Westmorland).

Thunderstorms occurred locally in south-east England on the 25th.

Sunshine.—The excessive sunshine experienced in western districts was a striking feature of the weather of the month; at a number of places a daily mean of 8 hours or more occurred and at Valentia Observatory 262 hours is the largest total for April in a record which started in 1880. At Mallaranny, County Mayo, 129.6 hours were recorded from the 8th-18th inclusive or a daily mean of 11.8 hours for 11 consecutive days. On the other hand, at most stations in the north of Scotland and at numerous stations in the eastern districts of Great Britain less than the average amount was registered.

Fog.—Fog occurred locally at times, mainly from the 11th-16th and on the 27th; it was fairly widespread in England on the mornings of the 12th and 13th. Fog was reported at times outside these periods at rather isolated stations.

Miscellaneous Phenomena.—The aurora was observed in Scotland on 12 nights; it was seen as far south as Holyhead on the evening of the 16th. A violent magnetic storm was recorded on the 16th. Solar halos were noted at Oxford on six days.