

MONTHLY WEATHER REPORT OF THE METEOROLOGICAL OFFICE.

SUMMARY OF OBSERVATIONS COMPILED FROM RETURNS OF OFFICIAL STATIONS AND VOLUNTEER OBSERVERS IN THE UNITED KINGDOM, AND AT GIBRALTAR AND MALTA, WITH A CHART OF RAINFALL CONTRIBUTED BY THE BRITISH RAINFALL ORGANIZATION.

ISSUED BY THE AUTHORITY OF THE METEOROLOGICAL COMMITTEE.

PUBLISHED BY HIS MAJESTY'S STATIONERY OFFICE. To be purchased through any Bookseller or directly from H.M. STATIONERY OFFICE at the following addresses:—IMPERIAL HOUSE, KINGSWAY, LONDON, W.C.2, and 28, ABINGDON STREET, LONDON S.W.1; 37, PETER STREET, MANCHESTER; 1, ST. ANDREW'S CRESCENT, CARDIFF; 23 FORTH STREET, EDINBURGH; or from E. PONSONBY, LTD., 116, GRAFTON STREET, DUBLIN; or from the Agencies in the British Colonies and Dependencies, the United States of America and other Foreign Countries of T. FISHER UNWIN, LIMITED, LONDON, W.C.

FORTY-THIRD YEAR.

Vol. XXXV. (New Series)

No. IV.

APRIL, 1918.

[Price 6d., Post free, 7d.]

Temperature below normal; Wet in South and East; Many dull days.

Winds which blew very persistently from points between North and East were accompanied by a great deficiency of warmth over the British Isles generally, so that not until the last week was the weather at all spring-like. Overcast skies, moreover, with much mist and haze on many days caused a great reduction in the amount of sunshine in most localities, the daily mean deficiency during the week ended April 20th, for instance, being as much as 4.3 hr. in the English Channel district and 3.8 hr. in England East. Rainfall in the South and East was, in addition, excessive, the conditions in these districts being in marked contrast with those which prevailed in the North and West, which were much drier. At Richmond (Kew Observatory) the total rainfall for the month was 82 mm., and was the largest recorded in April since 1878; while at Yarmouth the total of 77 mm. was the largest since 1872. At Berkhamsted the large total of 128 mm. was registered, an amount not exceeded in April during the past 53 years. On the other hand, Glasgow (Springburn Park) recorded only 16 mm., this being the smallest April total since 1892. At Aberdeen only 11 mm. were totalled, there having been only one drier April since 1866. The contrast between North and South as regards sunshine was also great, Eskdalemuir and Aberdeen, for instance, having 78 and 77 more hours of sunshine respectively than during March, while Sevenoaks had 65 less, and Hitchin 50 less. Snow fell in many places between the 15th and 21st, Scaleby, Cumberland, having 18 cm. on the 20th, and Eskdalemuir 6 cm., Hemel Hempstead, Herts, having 13 cm. on the 16th and 8 cm. on the 21st. Hail showers also were experienced on various dates, and, in some instances, were accompanied by thunderstorms, the most general of the latter being those of the 1st, 2nd, 7th, 10th, 25th, and 26th. On the 7th the hail at Littlehampton was very heavy and cut the buds from many of the fruit trees. Heavy hail fell also in many localities on the 2nd, some of the hail-stones at Eskdalemuir being $\frac{1}{2}$ cm. in diameter, the hills in the neighbourhood being white with them. At Grayshott, Hants, on the same date there was also a heavy hail-storm, some of the hail-stones still lying in the shade the following morning. In Scotland much cold weather, with a good deal of gloom and some fog and mist, was experienced, but during the fourth week there was a considerable rise in temperature, especially in the western and southern districts. Snow and sleet occurred, except in the western districts, towards the end of the third week, a fairly heavy fall being experienced on the night of the 19th-20th.

The following notes, supplied by observers, indicate the local variations of weather experienced in various localities:—*Allan's Green, Northumberland*.—April, 1918, will be mostly remembered in this part of the country as a cold, dry, barren month, with fields having less grass on them than they had at the beginning of the month, even with no stock on to eat the crop. *Kenninghall, Norfolk*.—Generally a dull cold month with much rain 14th-20th; vegetation, which was very forward at the commencement of the month, being much retarded by the cold easterly winds. *Copdock, Ipswich*.—The 15th was the only day in April during the past 16 years on which I have registered more than 25 mm. of rain. Only 112 hours of sunshine were registered, the lowest April total ever recorded here. *Meltham, Yorkshire*.—More winds from points between North and East than in any April during the past 39 years, the total rainfall being the smallest since 1893. *Oundle, Northants*.—A bleak, dull, gloomy month. High floods in Nene valley from 17th to 26th. *Weston Turville, Bucks*.—A cold month with no great extremes of temperature, but many cold nights. Severe floods on the 21st, which, however, quickly subsided. *Tenbury, Worcester*.—A very variable month and, owing to the prevalence of North-East winds, a cold one, with much haze and mist. On the 21st the maximum temperature was only 27.6a. Much damage to fruit trees was caused by sharp frosts on the 3rd and 23rd. *Bromyard, Hereford*.—An unpleasant month, a cold spell in the middle period causing much damage to plum and damson blossom. *Isleworth, Middlesex*.—Heaviest April rainfall in 30 years record. A gloomy month with 21 days Northerly winds; very unfavourable for garden work. *Wallington, Surrey*.—Pear tree in flower on 11th; double cherry in flower on 21st; small blue butterfly seen on 27th. *Warlingham, Surrey*.—During the week ended on the 22nd there was a spell of most extraordinary weather, with many dull, gloomy, and overcast days, and a remarkably dense darkness on the afternoon of the 20th. There were frequent shifts of wind, mostly to a northerly quarter, which were accompanied by snow mixed with rain on Monday, Tuesday, Saturday, and Sunday, the total precipitation for the week amounting to 81 mm., the individual amounts for the seven days being 25, 6, 3, 0, 3, 21, 23 mm. *Totland Bay, Isle of Wight*.—First swallow seen on the 11th; cuckoo heard and lilac in full bloom on the 26th. On the 12th, at Newport, I hived a strong swarm of bees. I have handled bees at times since I was seven years of age, but have never had to hive a swarm in April before this. *Llandrindod Wells, Radnor*.—This has been a curious spring so far. A warm March was followed by a cold April with winds more keen than I can remember, and blowing incessantly from the North-East

from the 9th to 30th. *Dublin (City)*.—A cold month with very persistent North-East and East winds. Rainfall was heavy on the 5th, 8th, and 9th, but for the rest of the month insignificant. It was rainless from noon of the 21st to the 30th. *Carrigoran, Co. Clare*.—From the 1st to the 14th we had a period of exceedingly gloomy, cold, and showery weather. From the 14th to the end of the month it was very fine with much sunshine and a high temperature. The total rainfall (29 mm.) was 42 mm. below the normal and the rain-days seven below. *Hurdlestown, Co. Clare*.—The rainfall during the month (30 mm.) was 30 mm. below the normal, and the rain-days five below. A very fine, dry, and warm April with perfect summer weather during the last ten days. *Fethard, Co. Waterford*.—The wet spell which began on March 27th lasted till April 9th, ending with a fall of 26 mm. on the latter day. During the three weeks ended on the 30th the total rainfall was only 3 mm. and there was an unusually large amount of sunshine. Winds from the North and East blew nearly all the month and ground frosts were frequent.

Air Pressure.—As will be seen from the map on p. 39, the distribution of atmospheric pressure was abnormal, the highest values being in the North instead of in the South as in a normal April, and the lowest in the South-East instead of in the North-West. Pressure was above the normal in Scotland and Ireland and below it over the greater part of England, the divergences varying from + 6.8 mb. at Lerwick to - 1.4 mb. at Dungeness. The highest reading recorded was 1,033 mb. at Stornoway on the 18th and at Lerwick on the 28th; the lowest being 988 mb. at Tynemouth on the 1st. Gales were rare, the highest of the gusts recorded by the anemometers being one of 24 m/s. at Cahirciveen (Valencia Observatory) on the 3rd.

Temperature.—Temperature was below the normal in all districts, the deficiency ranging from 1.2a in England East to 0.1a in Ireland North and South. The highest of the individual readings in Scotland were 29.5a at Fort William on the 25th, and the lowest 26.6a at Kingussie and Leadhills on the 15th. In England the corresponding values were 29.4a at Lancaster and Southport on the 26th; and 26.9a at Mayfield on the 3rd and West Witton on the 19th. In Wales the highest readings were 29.2a at several places on various dates, the lowest being 27.0a at Rhayader on the 23rd; the values for Ireland being 29.6a at Killarney on the 26th and 27th, and 27.0a at Dublin (Phoenix Park) and Markree Castle on the 3rd and 15th.

Precipitation.—Rainfall was very variable, the departures from the normal varying from + 37 mm. in England East to - 52 mm. in the North of Scotland. In the latter country precipitation was very deficient in nearly all localities, considerable areas having only one-third or less of their normal, and practically nearly everywhere the month's totals were largely accounted for on two or three days. At Glasgow (Observatory) and Greenock it was the driest April since 1873; while at Edinburgh (Blackford Hill) the total rainfall for March and April combined was only 29 mm., the smallest aggregate since 1853. These comparatively dry conditions were in notable contrast with those experienced in England East and South-East, the totals for these two districts being 75 mm. and 63 mm. respectively, compared with only 24 mm. in Scotland East. On the 15th unusually heavy rain, which was associated with winds from the North and East, fell over a large part of Eastern England, 49 mm. being recorded at Little Massingham (Norfolk), 42 mm. at Norwich, and 41 mm. at Cambridge.

Sunshine.—The mean daily amount of sunshine varied from 6.49 hr. in Scotland West to 3.44 hr. in England South-East, the departures from the normal ranging from + 1.56 hr. in Ireland North to - 2.21 hr. in England South-East.

Aurora was seen in various parts of Scotland on the 3rd, 4th, 5th, 6th, and 25th; and at Oxford on the 5th and at Hartland Quay (Devon) on the 6th. On the 7th it was seen in the Orkneys and in Scotland generally, and on the 11th at Aberdeen, Castlebay, and Wick, as well as in the North of Ireland.

Zodiacal Light was observed at Hartland Quay on the 1st, 2nd, 6th, and 28th, at Hitchin on the 6th, and at Dunfanaghy, Donegal, on the 28th. On the 18th a **Sun Pillar** was seen at Eskdalemuir.

Solar Halos were very frequently seen from many localities, **Lunar Halos** and **Lunar Coronae** being occasionally seen between the 18th and 22nd.

Audibility of gunfire in Flanders was reported as being unusually distinct at Warlingham on the 13th and again on the 24th.

