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"METEOROLOGICAL MAGAZINE"

September 1940.

Mean temperature over the British Isles.



Maps have been prepared showing the distribution of the mean monthly and annual temperature at sea level, based on the values given in M.O.364 for 242 stations for the period 1901-1930. This is the period recommended for use by the International Climatological Commission in computing climatological normals. The preparation of these maps has enabled estimates to be made of the general temperature over England and Wales, Scotland, Ireland and the British Isles generally, by taking the mean of the values for 100 stations selected to give as uniform a distribution as possible. In a few localities, for which no records were available, the values were read off the maps as drawn. No stations were selected in the Orkneys, Shetlands, Scilly, Guernsey or Jersey, so that the means are applicable more especially to the larger land masses.

The final values are given below:-

Mean temperature (°F) over the British Isles (1901-1930) (at sea level)

	JAN.	FEB.	MCH.	APR.	MAY	JUN	JULY	AUG	SEPT.	OCT.	NOV.	DEC.	YEAR.
<u>England and Wales.</u>													
	40.5	40.5	43.0	46.6	53.1	57.4	61.0	60.5	56.8	50.8	43.8	41.3	49.6
<u>Scotland.</u>													
	39.2	39.3	40.9	44.1	49.5	54.0	57.4	56.7	53.0	47.9	42.0	39.6	46.9
<u>Ireland.</u>													
	42.4	42.3	43.6	46.4	51.7	55.9	58.9	58.4	55.4	50.6	44.7	42.7	49.5
<u>BRITISH ISLES.</u>													
	40.7	40.7	42.6	45.9	51.8	56.2	59.6	59.0	55.5	50.0	43.6	41.2	48.9

It is usual to regard February as slightly warmer than January on the average, and that would have been the case if the values back to 1881 had been included. The years 1901, 1902, 1917, 1919, 1929 and 1930 gave unusually cold Februarys, while the weather of January in these years was not so remarkable. On the other hand in the years 1881, 1885, 1891, 1893 and 1897 January was considerably colder than February.

J. Glasscock.

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A FOG BOW AT BEXHILL.

During the late afternoon of April 26th 1940 I observed at Bexhill a fog bow formed in thick sea fog drifting in from about S.S.W. The sun was shining brightly at the time and the bow appeared as a complete semicircular arc, one end of which seemed to rest on the water a few yards from the beach and about 50 yds. from where I was standing. Careful examination failed to reveal any colour in the bow.

Shortly before 13h.B.S.T. on the same day I had observed thick ground fog forming over a field of young sprouting corn to the west of Bexhill.

The sun was shining and the formation of the fog was apparently due to strong insolation falling on very wet clay soil in the presence of a damp cool wind from the southward. When seen from a little distance the fog, as it drifted across the field and rose over the surrounding hedge was almost thick enough at times to suggest a grass fire. After crossing this hedge and reaching the next field, which is pasture land, the fog at once dissolved. The same phenomenon could be seen over other arable fields in the vicinity though in these cases the evaporation and condensation were much less vigorous and gave nothing more than a faint steamy appearance close to the ground.

Except where the wind carried it over the hedge tops the fog at no point seemed to extend to more than about four or five feet above the ground.

C. Stuart Bailey.
May 6th 1940.

Brendon,
Pear Tree Lane,
Bexhill.

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THE BLACK SKY OF JUNE 10th 1940.

In the July Magazine Mr.H.V. Simms describes the darkness of the sky observed from Earls Colne before the shower of black rain. Mr.E.V.Newnham and Mr.H.L.Pace both comment upon the appearance of the sky in Stonehouse on that day.

Mr.Newnham writes that the darkness at Stonehouse lasted almost till noon. "The light reminded me very much of that which accompanied the eclipse of the sun (nbt quite total in London where I observed it) a few years ago, and from this it seems a fair deduction that the obscuring layer of nearly uniform high level smoke or haze reduced the sunlight unselectively, i.e. it acted like a shutter. There was certainly no reddening of the light. The intensity was so reduced that the sun even towards noon could be looked at in comfort with the naked eye, yet was sharply defined. A bit more reduction of the light would have given a fair imitation of moonlight(full moon). At the time I thought the smoke or haze might be the result of big fires in the battle zone, the wind at the time being easterly".

Mr.Pace writes "Apparently there was no cloud although it would have been difficult to observe cirrus type through what appeared to be smoke of great depth. The sun had the appearance of being viewed through smoked glasses".

22.7.40.

A FOG OF BUTTERFLIES.

On Sunday morning, August 11th, above a large field of clover near Sapperton, Glos. literally millions of white cabbage butterflies were fluttering. So thick was the swarm that it resembled a dense white cloud, and visibility across the field was limited to 30 or 40 yards. Was this a fog?

C.E.P.Brooks.

CLOUD-PENDANT OBSERVED FROM PORTREE, SKYE.

Mr. James McLean observed a well defined cloud pendant on July 26th 1940. He writes:

"The 26th was a fair day with a westerly breeze, scattered clouds in the northwest at 11 a.m. it became somewhat like thundery showers in the west, then suddenly at 12.30 noon in the west a large Horn descended from the base of the clouds, it was in this form for 30 seconds then it began to shake and tremble violently and disappeared. It was the same as photos of Tornados which I would be seeing in "Meteorology" books that I will be getting sometimes from Mr. Morris Bower of the Thunderstorm Survey. I will be getting the Quarterly Journal of Meteorology from him sometimes too. After this Great Horn disappeared it was very like thunder in the north and the northside of Locharport opposite the village of Carboist had a coating of large hail for 3 hours, rivers in Flood and a small scale landslide, at 4 p.m. it began to clear in the west and moor cool. Many years since I witnessed such a fall of hail.

The point of the Horn did not descend to the horizon. If it had I would judge it would descend on Ullinish or Struan."

AN UNUSUAL RAINBOW.

MISS M.L. Southall of Birchlea, Ross-on-Wye reports:

"Curious low and wide rainbow, rather dull colours, near horizon, afternoon of July 19th, highest part of arch say about double the width of the "waggon" in Ursa; time Greenwich about 3.50 p.m."

At the time in question the sun was at an elevation of 34° . The highest part of a rainbow would therefore be at an elevation of approximately 8° .

METEOROLOGICAL STATIONS.

The Health Resort Stations at Margate and at Brighton have been closed for the duration of the war.

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REVIEW.

By

Forecasting Weather. Sir Napier Shaw: 3rd edition with a supplementary note on sixteen years' progress in forecasting weather by R.G.K. Lempfert. London (Constable & Co.), 1940. 8° Pp.XL.iii and 644. illus.42/-

In January 1940 there appeared in this Magazine a review of a new treatise on Terrestrial Magnetism and Electricity. The reviewer said - "It is an imposing work. (794 pages) but what makes the greatest impression on me is that practically everything described in this volume has been done since I became interested in terrestrial magnetism and atmospheric electricity in 1903". Yet terrestrial magnetism as a science is old, at least as old as meteorology. What was known about Terrestrial Magnetism and atmospheric electricity before 1903 was substantial, though it now seems small in relation to the advance made since that time.

And if we must be candid how different is the position in meteorology. The appearance of a third edition of Sir Napier Shaw's "Forecasting Weather" provides an excellent means of measuring the corresponding rate of progress. In this edition of 644 pages some 60 pages cover the "sixteen years' progress in forecasting weather" since 1923. The 1923 edition had grown by 200 pages over the 1911 edition but in this case the change was accounted for in large measure by revision and the inclusion of additional subjects rather than by entirely new knowledge. Van Everdingen in reviewing the 1923 edition commented on the slow rate of progress of the science despite "an enormous increase in the number of reporting stations, or observed data and of wireless messages" and thought it had gained little by these crowded data for the lower strata.

The new matter in the third edition is from the pen of Mr.R.G.K.Lempfert and brings the work up to date with a clear and compact account of Synoptic Developments, Structure of Depressions, Air Masses and Fronts, Upper Air Observations in Forecasting, Practical Applications of Forecasting and Forecasting for Long Periods. Approximately half of this can be regarded as connected with the collection and distribution of information, terminology and the charting of data, and the remaining half as representing proportionately the advance in fundamental knowledge of the science. To quote Sir Napier it becomes more and more "obvious that we must not only have the pile of observations ... but we must also find the skill to compile and co-ordinate the facts in some general description which gives the effective results and disregards the unimportant details."

A.H.R.G.

OBITUARY.

R.C. MOSSMAN.

We regret to learn of the death of Mr. R.C. Mossman at Buenos Aires on July 19th at the age of 69. Mr. Mossman was born in Edinburgh in 1870 and early became interested in climatology. He was one of the observers on Ben Nevis and in 1902 he sailed as meteorologist in the Antarctic expedition of the Scotia, while wintering in 1903 at Laurie Esland, South Orkneys, he established there the southernmost permanent observatory in the world, and afterwards remained in charge of it for some time, under the Argentine Meteorological Service. In 1913-14 he was at the British Rainfall Organization, and since 1920 he has been in charge of the Climatology Section of the Argentine Meteorological Service. He has published numerous papers, mainly on climatology, including a well known work on the Climatology of Edinburgh, but he was also one of the first workers to apply the method of correlation to relations between different centres of action in the southern hemisphere.
