

British weather

H. H. Lamb

The Climate of the British Isles. Edited by T. J. Chandler and S. Gregory. Pp. xviii + 390 (Longman; London and New York, 1976.) £5.95.

THIS useful book is likely to win wide acceptance as the fundamental reference work that its title implies. It presents a mine of information within a handy size and will serve many practical needs. Its editors, who are the heads of the Geography Departments of Manchester and Sheffield Universities, planned the book as a successor to E. G. Bilham's classic work which appeared under the same title in 1938: this new version, written with more awareness of climatic change, and incorporating a chapter on that topic, is to provide up-to-date observational data, including much (for example, on pollution) that was not available 40 years ago, and an introduction to modern ideas and analysis techniques (notably the greatly increased use of synoptic climatology). Although 12 of the 15 chapters are by scientists holding university appointments and only three by present or recently retired members of the UK Meteorological Office staff, the Office, together with the Irish Meteorological Service and their official publications, have provided most of the data.

The book is on about the same scale as Bilham's, having 390 pages to his 347 and 110 maps and 80 tables to his 101 and 63. Like all works made up of contributions from different authors, however, the style and standard of the chapters in the new work is somewhat uneven (although as regards most, not badly so). One is not told about the qualifications of the authors, but the research fields preferred by all but two of them can be recognised in their works cited in the 560-item bibliography (a very good list of modern references, although omitting some of C. E. P. Brooks's works, such as his *Climate in Everyday Life* and *British Floods and Droughts*, which are still useful).

It is sad to have to criticise anything in such a useful straightforward job as this compendious book. Yet the text is presented in a thin spider's web of print which is also too large for the spacing of the lines and fades to an indecipherable greying of the page in poor light in which Bilham's older text is still clearly readable. Another unhappy choice is the bold poster-print of

page-numbers in the index which has no point in combination with the spidery print of the subjects to be identified. The style in itself is not unattractive but is more appropriate to a mail-order catalogue than to a book that is to be read and re-read carefully over many years. By contrast, the printing of the many maps and tables is mostly good; but it is too small, so that a magnifying glass is needed to check many details. In some cases this, combined with awkward spacing of the figuring (as in Fig. 6.6 on p141), presents a real danger of misreading 1.0 as 10 and 2.5 as 25, and so on. It is odd, too, that so few publishers seem to realise the virtue of giving the key date—the year(s) and/or month or season—of each map of a series boldly on the map rather than in a list in small print in the group caption. There are also a few complaints about language. The Gaelic word *Eire*, which means the whole island of Ireland, is wrongly used in the title of the Irish Meteorological Service and elsewhere in the book to relate to just the 26 counties of the Republic. Another author prefers to use the five-syllable word "altitudinal" when he means "height" differences. In these changing times the fashion for changing names presents problems to writers who have to refer to the geography. This book boldly uses names of new counties in England and Wales, possibly before it is certain that they will stick.

In writing of the book's many virtues it is hard to know what to stress. This reviewer will probably find most occasion to refer to the data in the chapters on wind, radiation, temperature, precipitation, the climates of coasts and inland water bodies, of soils, slopes and vegetation, and the climates of towns. But nearly every chapter is packed with data, presented in forms likely to be of wide usefulness, and some of the other chapters also (for example, on synoptic climatology) are very good and up-to-date.

A few samples of items that struck one reader as interesting either *per se* or as indicating lines of development of the subject will illustrate the content and flavour of the book. First, a point that indicates *inter alia* where further development is needed: the presentation (pp62–68) in text, map and tables of extreme windspeeds having average recurrence periods of just once in 50 and once in 100 yr, derived by sound statistical theory and adopted by the British Standards Institution for basic design windspeeds for buildings, are based in many cases on only 20–30 yr of record (and, in at least some cases, it may be presumed based on the

very unrepresentative decades earlier in this century). The table of average yearly number of days with gale at 19 sample places illustrates not only the real gross geography of gales in these islands but how localities (and other things) may change with time and affect the issue: The second lowest frequency of gales (1.3 days per year) is at Mildenhall, Suffolk, now on the edge of Thetford Forest, an area which was known in the seventeenth century when it was open barren land for its storms of blowing sand that ruined many estates.

It is odd that there is no reference to hail in the index, but in the precipitation chapter we learn (p129) that this is an item which has been insufficiently studied and for which data are sparse. Many readers will be interested in the opportunity to compare the raininess of different places in terms of the average duration of rainfall: within the British Isles (in the 1950s) this ranged from 407 h yr⁻¹ at Ipswich (427 in the London area) to 616 at Plymouth, 1,157 at Swansea and up to 1,422 in the Western Highlands of Scotland. Cloud-cover apparently varies much less widely, from an overall average of 6.7 tenths at Aberdeen and 7.0 in London and East Anglia to 7.8 in the west and north of Scotland. Another aspect of the western climates comes out in the temperature chapter, where the extreme south-west, the coasts of Wales and south-west Ireland, so favoured for retirement, are pointed up as the areas where the average winter temperatures are not low enough for the vegetation (and the grass of your lawn!) to cease to grow.

Other interesting features include a map of the summer albedo of England and Wales, and diagrams detailing the radiation falling hour by hour on slopes of various angles facing north, east and south. A map of the frequencies of fog, with the greatest frequencies (up to 60–70%) occurring on the high ground, reminds us how poorly represented are the hills in this country by observing sites since the discontinuation already in 1904 of the pioneer Ben Nevis Observatory. There is much that is interesting also in the chapter on coasts and inland waters, although we learn that most of the study of the climate of the latter so far has been left to the freshwater biologists.

This book is a worthy successor to Bilham's, keeping abreast of the climate itself and our developing knowledge of it and its impacts. Altogether good value at the price. □

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