The Meteorology Manual follows the popular Haynes Manual format, which seems to cover every subject from a 1968 Austin Mini through to the Space Shuttle. Written by the well known and aptly named Storm Dunlop, this book follows the tried and tested Haynes format of clear explanations aided by full colour diagrams and photographs in guiding the reader through a fairly comprehensive course in elementary meteorology, albeit without any mathematics. The book starts with the makeup of the atmosphere, and logically guides the reader through the fairly standard theory, with a particularly informative chapter on optical phenomena. The last portion of the book gives a quick summary of observing methods, followed by a useful glossary and a list of further reading and internet links.

Although generally well laid out the book suffers from a number of instances where text and the relevant pictures are on different pages, a description of clouds and the associated photographs being a good example of this.

The book is aimed at the intelligent reader who does not necessarily have any previous experience of meteorology. As an experiment I had a non-scientific friend read the cloud chapter. After about half an hour of study the cloud types in the sky could be correctly identified and described! Despite the entry level nature of the book, it has sufficient depth to make it an ideal study and revision aid for someone taking meteorology exams for aviation or sailing purposes, where its non-mathematical descriptions allow topics to be easily understood.

My only real recommendation for change would be a little more information on how the amateur may set up his own observing station, either with electronic or traditional instruments. Having whetted the appetite with the theory, it would be good to encourage the practical aspects.

Overall, this is a valuable addition to the library, and its readily identifiable Haynes Manual style should make it a popular gift for a rapidly looming Christmas...

David-John Gibbs

This book is an extended essay on the global warming issue. It has a clever title that implies that meteorologists might be the people to help save the planet. The justification for this comes from the methodology they have used over the past decades to improve weather forecasting. Apparently, meteorologists have good attitude, cooperation and realism in their approach to their work.

The author is quite humble in stating you may not find many new ideas, and he recognises that there is an interdependency that makes a definitive coping strategy for a warmer world difficult to achieve.

There are chapters covering the physical and social scientist’s approach to living on the real world. It is stated that hitting the CO₂ off-switch is inherently a social problem and there is no sign of collective decision-making across any institutions/countries.

The Earth does most of its business through extremes is the author’s favourite phrase. I assume he does not mean this is the way heat is generally redistributed across the globe, but more a reference to our vulnerability to extreme events.

I was particularly attracted to chapter 5 A basis of facts, expecting to find some data to ponder, but there were only words. The need for more data in climate modelling is discussed and the lack of some essential information is highlighted. For example, more detail is required on the location of clouds and cloud microphysics.

The chapters go on through policy making to leadership. Science informs policy, but does this speed up decision making? The author suggests that innovation and thinking outside the box may be a better way of survival through the 21st century and beyond. Some of the methods used in numerical models of the climate system could be used for living on the real world. However, the latter has too many self-interest groups, globally and locally, that need consultation before a consensus can be reached for modelling purposes. This long and turgid process is even more difficult than coping with the numerous feedback processes in a numerical model of our climate system.

The Internet and social networking are put forward as a great help in speeding up communications today compared with the past. It brought a wry smile to my face knowing that the bulk of social networking is tittle-tattle and the passing on of information does not necessarily promote understanding.

This book is aimed at anyone wanting to read about and ponder the wider issues in the climate change debate. The author leaves no stone unturned in discussing the complexities which we face, but still manages to sound positive that humans will choose a path for survival.

Len Wood

Authors wishing to see their books reviewed, and those interested in submitting reviews of recent books, should contact

helen.roberts@metoffice.gov.uk
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