

Winged Sentinels: Birds and Climate Change

Janice Wormworth & Çağan H. Şekercioğlu
Cambridge University Press, 2011
Paperback £24.99
262 pp, 24 pp of colour plates
ISBN 978-0521126823

Being highly visible and attractive, birds are well studied and this book is a thorough up-to-date review of their responses to climate

change. The title refers to the fact that we ignore at our peril the warning signs that birds are showing us. The extensive bibliography illustrates the explosive growth in research in recent years, contributing to the book's content which focuses on phenology, migration, range and population changes, seabirds and conservation. There is little on climate science itself and the subject matter may seem rather esoteric to readers of *Weather*.

The authors describe the complex and often finely-tuned relationship of birds to their global environment, using numerous examples from every continent. The most absorbing chapter, on migration, shows how many long-distance migrants use discrete refuelling sites that are crucial to survival. Movements have been honed to perfection over time, but the current rapid rate at which climate change and humans are modifying habitats is outstripping migrants' ability to adapt. Other chapters reveal that many species are becoming mismatched to their

environment. This primarily concerns food resources, namely other living organisms that are themselves subject to climate change at differing rates. The ability of a species to adapt depends on its own capacity to do so and the resilience of its ecosystem. Specialist species suffer most, with subsequent extinctions and markedly reduced biodiversity. The authors point out that conservationists are significantly re-examining their strategies to mitigate the effects of our changing climate, although options are few.

The text is well written but on a pessimistic note, except in the final more upbeat chapter on conservation, and is accompanied by some attractive colour plates. Although there are more readable (but less comprehensive) works on this subject, I can recommend it to those who are concerned about global biodiversity and whose interest in 'global warming' extends beyond just the atmosphere.

Norman Elkin

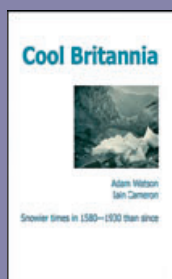
Other books of interest:



The Met Office Book of the British Weather

The Met Office
David and Charles, 2010
Paperback £5.59
160 pp
ISBN 978-0715336403

The Met Office Book of the British Weather provides a graphical representation of month-by-month, as well as seasonal, weather across Britain. It also has sections on extreme weather, annual averages and a look at the future of the British weather using climate projections.



Cool Britannia

Adam Watson and Iain Cameron
Paragon Publishing, 2010
Paperback £12.99
64 pp
ISBN 978-1907611469

Cool Britannia gives evidence of a colder, snowier Britain in the 1580s to early 1900s than since 1930. This comprehensive, historical account looks not just at snow patches on British hills but also collates data for the lowlands: evidence that was previously unpublished or difficult to obtain. The authors recount a few past extraordinary cases of severe snow affecting British people, even in lowland southern England. The cool centuries described by the authors for Britain also affected the rest of Europe and indeed other continents across the globe, hence this book will be of interest to many readers far beyond Britain.



Encyclopedia of Climate and Weather

Oxford University Press, Second Edition, 2011
Hardback, £300
Also available via online access
1488 pp
ISBN 978-0199765324

The second edition of the *Encyclopedia of Climate and Weather* provides a comprehensive history of various aspects of meteorology, as well as an up-to-date resource with many additions, revisions and updates since the publication of the first edition in 1996.

Over 330 entries cover a broad range of topics from extreme weather events to atmospheric physics, and this new edition includes more recent developments such as the Kyoto Protocol and global warming.

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