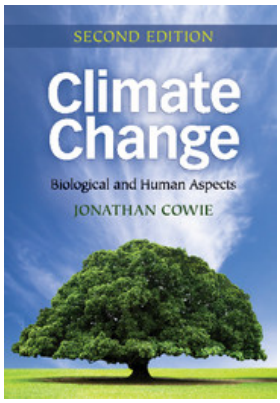

Climate Change

Biological and Human Aspects

2nd Edition

Publication date

Digital publication date: 05 December 2012
Physical publication date: 31 January 2013

Jonathan Cowie Institute of Biology, London

Subjects

Atmospheric Science, Climate, Earth and Environmental Sciences

The second edition of this acclaimed text has been fully updated and substantially expanded to include the considerable developments (since publication of the first edition) in our understanding of the science of climate change, its impacts on biological and human systems, and developments in climate policy. Written in an accessible style, it provides a broad review of past, present and likely future climate change from the viewpoints of biology, ecology, human ecology and Earth system science. It will again prove to be invaluable to a wide range of readers, from students in the life sciences who need a brief overview of the basics of climate science, to atmospheric science, geography, geoscience and environmental science students who need to understand the biological and human ecological implications of climate change. It is also a valuable reference text for those involved in environmental monitoring, conservation and policy making.

Prices

eTextbook £29.00, ISBN: 9781139087735
Paperback £35.99, ISBN: 9781107603561

Resources

There are Instructor restricted resources available for this textbook

Key features

- Accessible to students from multiple disciplinary backgrounds
- An updated version of the successful first edition
- Emphasises the link between climate change and biology and human ecology

https://doi.org/10.1017/CBO9781139087735

About the book

Format: Paperback
Publication date: 31 January 2013, ISBN: 9781107603561
253 x 177 mm, 0.97Kg, 582 pages

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Reviews

Review of the first edition:‘Cowie's book deserves more than a cursory glance - it demands to be read. I think you'll be pleasantly surprised at both the range of contents and the style which is reader-friendly, quantitative, authoritative, but above all, stimulating; the pages dare you not to turn them over and read further.'

Review of the first edition:‘Cowie offers an excellent overview of the foremost environmental problem of the twenty-first century. As such, the book is about biology and human ecology as they relate to climate change … The author provides non-specialist readers with a very good introduction to the complexity of global climate change … a useful starting point for environmentalists, policy makers, and teachers. The book does an excellent job of pulling together the complex web of evidence for climate change … Summing up: highly recommended. All levels.'
D. F. Karnosky -

Review of the first edition:‘As Cowie explains in his introduction, Climate Change: Biological and Human Aspects is written to be accessible to undergraduates, scientists outside of the life sciences, specialists reading outside of their field, and policy makers and analysts interested in climate change

and its relevance to society. In this regard, he succeeds very well … a fine treatment of global climate change and interactions with biological systems that can be used to inform a variety of readers. It has value as an educational introduction to climate change for nonscientists as well as a refresher for scientists. Almost everyone is likely to gain a fresh perspective or learn something new.'

Review of the first edition:'This remarkable book about global warming was written by an erudite biologist rather than a physical scientist … The result is a very valuable and original contribution about how climate change has affected the Earth's biota in the past, what is now occurring and what is likely to occur in the future … Cowie has a very clear mastery of his subject and … is an excellent communicator … It is a masterpiece in its subject area in the opinion of this reviewer and will be read for many years.'

Review of the first edition:'… a book that is measured, informative, balanced, scientifically sound, and as up-to-date as a book can possibly be in these days of rapid information accretion.'

Review of the first edition:'… as I got deeper into this tome, I became more and more impressed by just how well Cowie tied together so many disciplines … There is so much to gain from [this] book … I know of no other source, including the Intergovernmental Panel on Climate Change (IPCC), that brings together the breadth and depth of material that this book does … the bottom line is that anyone who wants to understand climate change and its impacts, but who doesn't have time to earn a PhD on the topic, should buy this book … Cowie does a brilliant job of weaving together the evolution of life with the evolution of Earth's climate.'

Review of the first edition:'[This book] is an impressive endeavor that weaves together discussion of both natural and social science processes associated with climate change … the strength of this contribution is precisely the interdisciplinary approach taken to such a multifaceted challenge. The author commendably accounts for the dynamism and agency of biophysical as well as human elements in telling this history at the human-environment interface.'

Review of the first edition:'Overlapping the disciplines of atmospheric and life sciences, this is the first book on aspects of climate change and biological impacts which I have seen for some years which addresses these issues in a comprehensive manner, by showing the co-evolution of climate and life through geological time. The book provides an up-to-date synthesis of this rapidly developing field … The book will make an excellent teaching aid, allowing students from the biological and atmospheric sciences to see the fundamental interaction between climate change and life, and an excellent reference for anybody interested in these interactions.'

'Read this book and gain a new perspective on climate change. This is above all an interdisciplinary

topic, and hard to grasp in all its essentials by those of us brought up in the old-fashioned ‘single discipline’ mode of instruction. Few people have put together in such a compelling and reader-friendly way the full extent of information about climate change and its effects, ranging all the way from changes with geological time to real or potential impacts on human health and welfare and on plant and animal life … This is an invaluable, readable and well-referenced guide to where we are now, how we got here, what is happening now, what may happen next, and what we can do about it.'
Colin Summerhayes -

'… a useful synthesis of recent literature for undergraduates.'
A. M. Mannion -

'This book provides a reasonable synopsis of the material available on climatic change and is thus a useful addition to the literature … a reasonable price for a good-sized text.'
Antoinette Mannion -

'This book presents, in reader-friendly language, an immense amount of information taken from primary literature from a great variety of disciplines connected with the study of climate change and its impacts. It is thus an invaluable reference not only for undergraduate students, but also for scientists.'
Simone Fattorini -