

Preface

The title of this book should more accurately be 'Global Climate and Atmospheric Change and Terrestrial Invertebrates' because many of the contributors consider the effects of changes in greenhouse gases, especially carbon dioxide, on invertebrates. Our students, past and present, will be bemused because for many years we've laboured the point that carbon dioxide is an atmospheric chemical and not a climatic variable. We decided to use the term climate change as a 'catch all' to include atmospheric change, not just because the title is snappier, but in most peoples' minds, climate change includes components such as greenhouse gases. Public engagement with global climate change research has increased dramatically in the last few decades, helped in part by using accessible language without getting stuck on strict definitions, so we think this is a small compromise to make.

Invertebrates account for over 95% of multicellular life on our planet and represent an unrivalled level of diversity from nematodes which are a few microns in size to the colossal squid (*Mesonychoteuthis hamiltoni*) which can reach 14 metres. While we focus on terrestrial invertebrates in this book, this still represents a massively diverse group which occupy disparate habitats, aboveground and belowground. It would be impossible to provide comprehensive coverage of all groups in a single volume. Our second *mea culpa* is therefore that we have not been able to consider some groups of invertebrates of interest to readers of this book. Our selection of topics reflected those that we considered were ripe for synthesis and could be related to one another in a single volume.

Given the importance of invertebrates to our planet we felt consideration of this group in the context of global climate change was much needed. There are many books on global climate change, some which blend diverse disciplines such as the humanities, economics and science (e.g., Bloom, 2010)¹ and others that cover broad disciplines, such as biology (e.g., Newman et al., 2011).² This book aims to fill a gap by taking a more in-depth examination of a crucial group of organisms that shape the world we live in. The book would have not been possible without the work of the 44 contributors throughout the globe and we are indebted to them for their efforts. We sincerely hope that this book will provide a good survey introduction to the issue of global climate change and terrestrial invertebrates.

Scott N. Johnson
Sydney, Australia

T. Hefin Jones
Cardiff, United Kingdom
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