

photographs and, overall, it makes for quite an enjoyable read.

On the other hand, the volume also has some severe shortcomings. Despite the subtitle (which refers to “insect societies”), the book only covers ants—bees, wasps, and termites hardly get any mention. The expression of intracolony conflict also gets short shrift, despite the fact that this has been a major focus of inquiry in insect sociobiology for the last 30 years. And, sadly, the book also features one highly confusing chapter on the origin of social behavior, in which the authors try to denounce kin selection and attempt to reinstate group selection as the explanation of insect altruism—a move that has baffled researchers worldwide and that is highly ironic given Wilson’s pivotal role in promoting sociobiology in the 1970s, plus the fact that kin selection has become one of the core theories of modern social evolution theory.

In summary, this is a very nice and beautifully produced volume, but it will not please everyone because of its limited and somewhat poor coverage of modern sociobiological theory.

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#### THE LIVES OF ANTS.

By Laurent Keller and Élisabeth Gordon; translated by James Grieve. Oxford and New York: Oxford University Press. \$27.95. xi + 252 p. + 16 pl.; ill.; species and general indexes. ISBN: 978-0-19-954186-7. 2009.

This new book is a strange hybrid in several ways. It has short chapters about the diverse aspects of the lives of ants with often excellent short introductions, but then chapters either become very superficial and sometimes loaded with errors (e.g., “ants of the genus *Myrmecocystus* live in arid . . . areas of Australia and America,” p. 107; *Myrmecocystus* is endemic to North America) or chapters venture into scientific realms full with jargon and details that will probably be hard for the general public to understand (e.g., Chapter 27). Hence, as a myrmecologist, I enjoyed reading some of the chapters and was rather annoyed by others. I suspect that general readers will have a difficult time comprehending some of the more “scientific” chapters. On the other hand, some chapters read like straight from Maurice Maeterlinck’s *La Vie des Fourmis*, written more than half a century ago with all of the questionable prosaic elements and anthropomorphisms (e.g., Chapter 8, Let Slip the Ants of War). What is also irritating for more scientific readers is that some chapters describe behaviors and evolutionary scenarios, but the authors never indicate what ant species this

information is based upon (pp. 51–52). Chapter 29, which is a plea to sequence the genome of *Solenopsis invicta*, would be more appropriate for a granting agency than general readers and certainly can be disputed from a scientific perspective.

Despite its appealing sections, the volume has too many inconsistencies for me to recommend it to students or colleagues seriously interested in learning about ants and myrmecology. The future will show how well it is suited for a broader public readership.

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#### THE PRIVATE LIFE OF SPIDERS.

By Paul Hillyard. Princeton (New Jersey): Princeton University Press. \$29.95. 160 p.; ill.; index. ISBN: 978-0-691-13552-6. 2007.

The author was previously the Curator of Arachnida and Myriapoda at the Natural History Museum in London, and was therefore in the direct firing line for all sorts of arachnological queries—from commercial identifications through sensational stories of invasions of deadly tarantulas to urban myths about spiders. From this experience, he came up with the best-selling publication, *The Book of the Spider: From Arachnophobia to the Love of Spiders* (1994. London: Hutchinson), which explored folklore, dispelled myths, and presented the case for the study of these fascinating animals. The present volume is completely different in format, being larger in size, full of color plates, and follows a more traditional textbook pattern with chapters devoted to morphology, taxonomic groups, silk production, mating, venom, and social spiders, but not forgetting spiders and man.

The information contained is as much as in other spider books for the general public, and is even a little outdated in places—arachnologists have not used suborder Liphistiomorphae since the dawn of cladistics—but, in general, it is fairly well researched. The chapter on Social Spiders is unexpected, but refreshing. The pictures (all from photographic libraries) are excellent and, no doubt, the reason the publishers have opted for such a large format. The text is also large, and I feel that in a smaller format, the volume would be more manageable. In comparison, the spider books by photographers and naturalists Rod and Ken Preston-Mafham are informative, beautifully illustrated, and would appeal to a similar audience as Hillyard’s work. Like most commercial publications, the copyediting is shoddy in parts. Misspellings affect taxon names predominantly and, in some cases, the pictures can be misleading because they are not referenced from the text. For example, the *Araniella* with a “woolly” egg sac on

page 57 could be interpreted as a cribellate (weaver of "woolly" silk). Nevertheless, this is an attractive volume that will be gifted to naturalists of all ages.

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DECAPOD CRUSTACEAN PHYLOGENETICS. *Crustacean Issues, Volume 18.*

By Joel W. Martin, Keith A. Crandall, and Darryl L. Felder. CRC Press. Boca Raton (Florida): Taylor & Francis. \$139.95. xi + 616 p. + 2 pl.; ill.; index. ISBN: 978-1-4200-9258-5. 2009.

In recent years, there have been a large number of studies and opinions published about decapod crustacean phylogenetics. Consequently, there has also been a great deal of controversy related to the ideas and hypotheses expressed by scholars who study it. A comprehensive review of the subject was therefore of paramount importance for many scientists and students. This book represents a major effort in that direction. It has been wisely organized into five sections, each with a variable number of chapters. The general presentation was also wisely left to the decision of the authors of each chapter—the regular, journal-like style (i.e., introduction, methods, results, and discussion) or a rather free, open system, more suitable to the content.

Section I, Overviews of Decapod Phylogeny (almost one-third of the book), summarizes our knowledge on decapod origin and contains 10 additional chapters that deal with the kind of data used in establishing phylogenetic trends (e.g., mitochondrial and nuclear genes, cleavage, gastrulation, embryonic development, appendages, and larval characters), and with the importance of spermatozoal morphology, mating systems, vision, and parasite-host relationship in decapod evolution and phylogenetics. The other four sections addressed specific groups of Decapoda. Section II, dedicated to shrimp-like organisms, includes a brief overview of what "shrimp-like" decapods are, their diversity, and what is known about their classification. Two other chapters present original data that result from the analysis of morphological characters (Dendrobranchiata) or via DNA analysis (Caridea). Section III discusses Thalassinidea and other lobster-like decapods. All five chapters of this section include original data based on molecular analysis (Thalassinidea, Callinassidae, Thaumastochelidae, Nephropidae, and Polychelida) and molecular timing (Crayfishes). Section IV (a single, 15-page chapter) uses original data to present Anomura phylogenetic relationships. Finally, Section V contains nine chapters that deal with the Brachyura. It includes short review-like contributions, some with and others without new data, and addresses

both high (i.e., Podotremata, Majoidea, Pinnotheridae, Cryptochiridae, "freshwater crabs," Portunoidea, and Cancroidea) and low (i.e., *Hexapanopeus* and *Cronius*) categories of crabs. A very useful and detailed index is included at the end of the book.

This will be a major reference for scholars interested in phylogenetics, particularly Crustacea Decapoda. This volume of Crustacean Issues will—like all its ancestors—find a good place on the bookshelves of most carcinologists.

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NEW ZEALAND INVENTORY OF BIODIVERSITY. *Volume One: Kingdom Animalia: Radiata, Lophotrochozoa, Deuterostomia.*

Edited by Dennis P. Gordon. Christchurch (New Zealand): Canterbury University Press. NZ\$89.95. 566 p. + 16 pl.; ill.; species index. ISBN: 978-1-877257-72-8. 2009.

An inventory sounds like a useful book to refer to but dreary to read. In contrast, this is a spectacular volume that will serve as a textbook and reference source for a wide-ranging, global audience. It is worth owning. As the first of three volumes whose broad aim is to undertake an "accurate stocktake" (p. 7) of "all of life through all of time" (p. 9), the preliminary sections introduce the need to compile a species inventory for New Zealand and the globe. The categorization of life by country usually serves political, rather than biological, aims but New Zealand is sufficiently geographically isolated, with high levels of endemism, to merit such an undertaking. Arising from the country's commitment to global Species 2000 (<http://www.sp2000.org/>) and the *Electronic Catalog of Names of Known Organisms* program of the Global Biodiversity Information Facility (<http://www.gbif.org>), this volume sets a high standard for other nations to follow, should they venture beyond simple species lists.

Over 100 international experts contribute to 24 chapters that each focus on one animal phylum. The editor has done well to achieve organizational consistency throughout, without dampening the obvious enthusiasm for the animal groups discussed by a diversity of authors. Each chapter provides concise essays on classification, biology, ecology, and biogeography, with sections on global, ecological, and economic importance, as and where appropriate. After these broad introductions, emphasis turns to the New Zealand fauna, both living and fossil. It is here that the "stocktaking" occurs. Few contributors hold back on expressing their views on where the ignorance lays, where it stems from (largely the loss of taxonomic expertise), and how many undescribed or undiscovered taxa await our attention. There are