

chapters are organized in three parts (plants and fungi; invertebrates; and vertebrates) and provide clear reviews of the current stage of knowledge of molecular and physiological mechanisms. Moreover, each chapter offers perspectives and a discussion of future research directions. Finally, the three overviews and the epilogue present a synthesis and an integration of themes emerging from studies with different taxa.

One of the promises of molecular analyses in diverse model organisms that is illustrated nicely in this book is the potential to identify general physiological and molecular underpinnings for photoperiodic responses. Such an approach has been very successful in elucidating common molecular principles that govern circadian rhythms in diverse organisms.

An additional strength of this volume is that it advocates for the study of diverse organisms that represent wide-ranging taxonomic groups and habitats. The focus on a broad phylogenetic view is important because photoperiodic and seasonal phenomena are diverse and insights obtained from studies on a narrow range of model organisms, although helpful, may not account for seasonal phenomena in other taxa or even in related species that live in different environments.

Given the prevalence of photoperiodic responses, this book is an important contribution, not only for specialists studying photoperiodism and annual rhythms, but also for those in other fields such as ecology, animal behavior, chronobiology, neurobiology, and endocrinology. Although the level of contributions will mainly appeal to scientists and graduate students, some chapters may be used in undergraduate-level courses.

GUY BLOCH *Ecology, Evolution, & Behavior* and RACHEL GREEN, *Plant & Environmental Sciences*, A. Silberman Institute of Life Sciences, Hebrew University of Jerusalem, Jerusalem, Israel



ECOLOGY

COMMUNITY ECOLOGY: PROCESSES, MODELS, AND APPLICATIONS.

Edited by Herman A. Verhoef and Peter J. Morin. Oxford and New York: Oxford University Press. \$99.00 (hardcover); \$49.95 (paper). xiv + 247 p. + 4 pl.; ill.; index. ISBN: 978-0-19-922897-3 (hc); 978-0-19-922898-0 (pb). 2010.

In contrast to my expectations raised by the book's title, this relatively slim volume is not comprehensive in its coverage—as the editors clearly admit in the preface. Even so, it would provide a stimulat-

ing backdrop for a graduate seminar on selected topics in community ecology.

The main themes of the book include species-interaction networks (structural aspects and dynamics, including and extending beyond food webs), metacommunity ecology, and applied community ecology for emerging communities. Individual chapters range from detailed reviews to focused case studies. Several contributions include a summary of unanswered questions relevant to the chapter's focus. Together with a concluding chapter—devoted specifically to emerging frontiers of community ecology—the summaries of what we do not yet know are useful contributions of this volume, especially to graduate students who are charting the courses of their dissertation and thesis projects.

The puzzle-metaphor artwork on the book's cover by Janine Mariën effectively illustrates the bidirectional nature of community assembly (pieces may be added) and disassembly (pieces may be removed). This simple metaphor highlights an additional purpose of the volume: to remind us of the utility of analytical tools, concepts, and other products from the discipline of community ecology for making a positive difference as environmental stewards. In this light, several chapters would also be useful to practicing conservation biologists, environmentalists, and other keepers of the often complex, dynamic communities that inhabit the land and sea.

KYLE E. HARMS, *Biological Sciences, Louisiana State University, Baton Rouge, Louisiana*

BIOINVASIONS AND GLOBALIZATION: ECOLOGY, ECONOMICS, MANAGEMENT, AND POLICY.

Edited by Charles Perrings, Harold Mooney, and Mark Williamson. Oxford and New York: Oxford University Press. \$140.00 (hardcover); \$70.00 (paper). xviii + 267 p.; ill.; index. ISBN: 978-0-19-956015-8 (hc); 978-0-19-956016-5 (pb). 2010.

Invasive species are a global issue and the editors of this publication have produced a well-organized volume that examines this issue on a global scale. This book includes contributions from 36 authors and is organized into three parts: The Drivers of Biological Invasions; Economics; and Management and Policy. Given that one of the goals of this project was to bridge “gaps and inconsistencies” in our knowledge of biological invasions” (p. v) in the context of the Convention on Biological Diversity (CBD), I thought the strength of the volume rests in the section on management and policy.

The first two parts of the book soundly set the stage for defining why biological invasions are an important issue at a global scale. The spread of