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Edited by Douglas J Futuyma, H Bradley Shaffer, and Daniel Simberloff. Palo Alto (California): Annual Reviews. $74.00. ix + 732 p + 18 pl; ill.; subject index and cumulative indexes (contributing authors and chapter titles, Volumes 31–35). ISBN: 0-8243-1435-2. 2004.

THE FIRE ANT WARS: NATURE, SCIENCE, AND PUBLIC POLICY IN TWENTIETH-CENTURY AMERICA.

By Joshua Blu Buhs. Chicago (Illinois): University of Chicago Press. $55.00 (hardcover); $22.50 (paper). x + 216 p; ill.; index. ISBN: 0-226-07981-3 (hc); 0-226-07982-1 (pb). 2004.

This book describes the spread of the red imported fire ant (*Solenopsis invicta*) across the southeastern United States and the efforts to eradicate it. The volume's 216 pages are arranged into five chapters, each covering a different theme and time period. The first chapter chronicles the introduction of imported fire ants into the United States. Chapters Two and Three explore the development of human attitudes regarding fire ants. Chapter Four describes the battles that arose between the U.S. Department of Agriculture (USDA) and environmentalists due to the widespread spraying of insecticides to eradicate the ant. The final chapter attempts to elucidate the reasons for the successes and failures of efforts to control this species.

Chapter Four is a well-presented case history of the evolution of environmental regulation in the United States. The author describes a culture within the USDA that did not give a damn about impacts to nontarget species. To avoid public scrutiny, the agency attempted to spray clandestinely.

The book has several serious shortcomings. First, it frequently alternates between referencing memoranda, anecdotes, and peer-reviewed scientific papers. The author gives each source equal credence, and readers are left checking each of the nearly 900 footnotes to determine the strength of the reference for the information presented. Second, each chapter is written so that it can be read independently, and the time periods for each chapter overlap. This results in redundancy and a lack of cohesion for the book as a whole. Third, the volume does a disservice to the integrity of men such as E O Wilson, insinuating that scholarly work on the fire ant was done for personal gain rather than to further scientific knowledge (see pages 55 to 56, and 120). Finally, Blu Buhs presents his perspective as fact rather than the more accurate portrayal as one perspective among many. For these reasons, I do not recommend this book.

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DESERTS: THE LIVING DRYLANDS.

By Sara Oldfield; photography by Bruce Coleman Collection; Foreword by Mark Rose. Cambridge (Massachusetts): MIT Press. $29.95. 160 p; ill.; index. ISBN: 0-262-15112-X. 2004.

Despite the difficulties humans may have in occupying and appreciating them, deserts abound in living organisms, many of which exhibit exquisite adaptations to the conditions encountered there. This lavishly illustrated book provides a very accessible introduction to many of the amazing plants and animals of arid environments, as well as the central physical and cultural phenomena that have shaped and characterized them. The first of seven short chapters addresses the basics of deserts, including their geography, hydrology, and geomorphology; their discovery, inhabitation, and exploitation by humans; and the fundamental mechanisms plants and animals use to live within them. This is followed by five chapters that focus in detail on the deserts of Africa, the Middle East, Asia, Australia, and the Americas. The final chapter considers the many threats now facing deserts and discusses some of the more progressive efforts to protect these environments.

Topics are presented as short vignettes that are accompanied by marvelous photographs from the Bruce Coleman Collection. The emphasis is on the uniqueness of desert environments and their inhabitants, how they have been affected by human activity, and what might be done in response to this activity. Throughout, desert natural history is blended well with human ecology, reinforcing the theme that regardless of their apparent desolation, no desert environment is now beyond human influence.

Desert specialists may be disappointed that their favorite environment has been excluded, or that certain details of desert life are omitted. Although I could make this complaint, I realize that as a desert primer this work simply cannot be all-inclusive. Others may flinch at Oldfield's tendency to indirectly depict deserts as inherently stressful places for all living organisms to exist. Such an anthropocentric view is hardly uncommon given the majority of authors' temperate zone upbringings. Indeed, most of the natural histories presented do a marvelous job of pointing out how so many life forms truly prosper in deserts, and not just survive there. *Deserts: The Living Drylands* is a timely, informative, and thoroughly engaging book that suc-

ceeds in accurately portraying these remarkable and poorly understood ecosystems, the people associated with them, and the threats they now face.

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TROPICAL FOREST DIVERSITY AND DYNAMISM: FINDINGS FROM A LARGE-SCALE PLOT NETWORK. *Based on a symposium held at the Smithsonian Institution, Washington, DC, August 1998.*

Edited by Elizabeth C Losos and Egbert G Leigh, Jr. Chicago (Illinois): University of Chicago Press. $95.00 (hardcover); $38.00 (paper). xiii + 645 p; ill.; index. ISBN: 0-226-49345-8 (hc); 0-226-49346-6 (pb). 2004.

The editors, members of the Smithsonian Tropical Research Institute, have compiled an encyclopedic inventory of results from 15 forest dynamics plots established to understand why tropical forests are so diverse. Using standardized methods, every individual plant stem greater than 1 cm in diameter is mapped, identified, and cataloged at least once every five years in the plots, which range in size from two to 52 hectares.

The book contains seven parts and 38 chapters, with Parts 1 and 2 presenting an eclectic mix of background material on the goals of the plot network, continental drift, and tropical climate, soils, and vegetation. Chapter 2 is certainly worth reading, as Stephen Hubbell provides a fascinating scientific history of the Barro Colorado Island (Panama) plot. Parts 3 through 6 include reports based on data from individual plots, and Part 7 provides standardized data summaries for each plot. In an unsatisfying chapter on the neutral theory of forest ecology, Leigh et al. refer to the vague and outdated "balance of nature" concept (p 251), and claim that "the neutral theory's predictions . . . may be said to transcend the validity of the neutral theory itself" (p 252). I would have traded this unconvincing assertion for more discussion about the utility of the neutral theory as a null model. Part 6 is a bright spot in the book that outlines some novel statistical techniques and provides compelling evidence for density dependence in tree populations. However, the section, The Diversity of Tropical Trees: The Role of Pest Pressure, is a misnomer, given that none of its five chapters directly measures pest pressure.

The book's main strength is that it summarizes a truly impressive amount of data about tropical forest structure, diversity, and turnover. Aside from a few chapters that present simple correlations, the enormous value of this dataset is not exploited through rigorous analysis of data from multiple plots. I was also hoping for a more global synthesis of the ecological factors that determine the interesting patterns in tropical forest diversity and structure presented in the volume.

As Hubbell also suggests in Chapter 2, it is my hope that future research will address these mechanisms for the next compendium of forest dynamics plot results.

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WETLAND AND RIPARIAN AREAS OF THE INTERMOUNTAIN WEST: ECOLOGY AND MANAGEMENT. *Peter T. Flawn Series in Natural Resource Management and Conservation, Number 4.*

Edited by Mark C McKinstry, Wayne A Hubert, and Stanley H Anderson. Austin (Texas): University of Texas Press. $39.95. xv + 319 p; ill.; index. ISBN: 0-292-70248-5. 2004.

This volume covers wetlands that exist between the Sierra Nevada and Rocky Mountains. This selection of habitat is well justified by the oft-cited statistic that regional wetlands comprise less than 2% of surface area, yet support 80% of the wildlife. Furthermore, a rapidly growing human population coupled with a scarcity of surface water in much of the western U.S. is concentrating pressure on these Intermountain wetlands and generating unique challenges and opportunities for research and management—all within an area of little historic wetland research relative to more densely populated regions of the U.S.

The editors approach their topic broadly, beginning with a well-written contribution on wetland law. They also present a superbly readable synopsis of wetland regulatory history that applies to both the west and the U.S. as a whole. The next two well-organized chapters describe the area covered by the book in a truly comprehensive manner, including formative and ecological processes. Unfortunately, the following chapters on riverine wetland wildlife and management lack depth, perhaps due to limited applicable research from the region. Specifically, Chapter 4 briefly mentions entire wildlife groups and includes only the most obvious species, while Chapter 5 does not mention managing the spread of exotic plants and animals, a topic critical to management of Intermountain riverine wetlands. The next chapter on natural palustrine wetlands provides in-depth information on irrigation and salinity issues unique in the U.S. to the Intermountain West, followed by two chapters on wildlife and management of these habitats. The strong chapter on palustrine wildlife mentions exotic species, but it is glaringly absent from the broad scope management chapter that follows.