

mals. This broad subject encompasses a wide array of phenomena, ranging from the role of herbivore-induced plant volatiles as olfactory foraging cues for insect predators to the use of visual and other plant-derived cues by fruit-eating vertebrates. These disparate topics are studied by similarly diverse researchers from a variety of scientific disciplines. Nevertheless, these topics are unified—or should be—by a common grounding in basic ecological and evolutionary principles relating to the origin and function of biological cues and signals. This book does a good job of explicating those principles and describing their application across a wide range of systems through an explicitly comparative approach.

An initial introductory chapter presents general concepts in the evolutionary ecology of communication within the context of plant-animal interactions and a second discusses key aspects of the sensory modalities (olfactory, visual, gustatory, and auditory) that mediate such interactions. Building on this foundation, subsequent chapters discuss the role of plant-animal communication in ecological interactions, including herbivory and frugivory, seed dispersal, and pollination, and also touch on issues such as mimicry and deception. A concluding chapter highlights overarching conceptual issues and priorities for future research, including the role of communication in multispecies interactions and the need for further synthesis of work on sensory and ecological aspects of communication.

This accessible volume will no doubt serve as a useful introduction for nonspecialists. But it is also likely that researchers studying various aspects of plant-animal interactions will find it a helpful summary of broader conceptual issues that integrate work on different taxa and modes of communication.

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**TROPICAL RAIN FORESTS: AN ECOLOGICAL AND BIOGEOGRAPHICAL COMPARISON. *Second Edition.***

By Richard T. Corlett and Richard B. Primack. Hoboken (New Jersey): Wiley-Blackwell. \$140.00 (hardcover); \$79.95 (paper). x + 326 p.; ill.; index. ISBN: 978-1-4443-3254-4 (hc); 978-1-4443-3255-1 (pb). 2011.

**THE WORLD OF NORTHERN EVERGREENS. *Second Edition.***

By E. C. Pielou. Ithaca (New York): Comstock Publishing Associates (Cornell University Press). \$19.95 (paper). xiii + 155 p.; ill.; index. ISBN: 978-0-8014-7740-9. 2011.

This small and engagingly readable book is an updated and expanded version of *The World of Northern Evergreens*, first published in 1988. In it, Pielou successfully combines: a general introduction

to North American boreal forests; a field identification guide to the many conifers, the handful of broadleaf (deciduous) trees, and major groups of animals in these forests; informative (and sometimes playful) illustrations; and decades of research findings by herself and others into a rich, descriptive tapestry of information about a kind of forest that many of us take completely for granted. Chapters retained from the first edition include those on the origin of evergreen boreal forests; conifer identification, reproduction, and life history; contrasts between broadleaf and conifer trees (with an apropos reminder that angiosperms and gymnosperms, both of which we bipeds call “trees,” are more distantly related to each other than mammals are to birds); the wealth of animals—including parasites, herbivorous insects, mammals, and birds—that inhabit the boreal forests; and forest succession. New material on logging is included in the chapter on forest succession, and three completely new chapters cover: the soil and understory vegetation of the forest floor; biogeography; and the physics of global climatic change and its effects on these forests.

*The World of Northern Evergreens* is as timely in 2012 as it was in 1988. Now, as then, people in much of North America see conifers as ever-present background, assuming they will be there forever. At the same time, conifers are dying and disappearing throughout their range: eastern and Carolina hemlocks from the hemlock woolly adelgid, many western pines to various *Dendroctonus* bark beetles, and all of them felled by axes, fires, and climatic change. Already, visitors to southern forests where eastern hemlock is almost entirely gone—the Shenandoah and Great Smoky Mountains—barely recognize its loss, just as the absence of American Chestnut from eastern North American forests is rarely appreciated. Pielou once again reminds us to stop and pay attention while we still can.

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**CONSERVATION BIOLOGY**

**DIVERSITY AND COMPLEXITY. *Primers in Complex Systems.***

By Scott E. Page. Princeton (New Jersey): Princeton University Press. \$19.95 (paper). xi + 291 p.; ill.; index. ISBN: 978-0-691-13767-4. 2011.

This volume addresses important issues. The idea of an intellectual exploration of the concepts of diversity and complexity in the context of complex systems is interesting, all the more so because of his goal of developing a general concept of these