BOOK NOTICE

MARK V. LOMOLINO, BRETT R. RIDDLE, & ROBERT J. WHITTAKER. 2016. Biogeography. 5th Edition. (ISBN-13: 978-1-60535-472-9, hbk).Sinauer Associates, Inc., P.O. Box 407, Sunderland, Massachusetts 01375, U.S.A. (now an imprint of Oxford University Press). (Orders: global.oup.com; 1-800-445-9714; custserv.us@oup. com). \$151.95 US, 730 pp., 462 illustr., 9" × 11".

From the Publisher: Biogeography, first published in 1983, is one of the most comprehensive text and general reference books in the natural sciences. The fifth edition builds on the strengths of previous editions to provide an insightful and integrative explanation of how geographic variation across terrestrial and marine environments has influenced the fundamental processes of immigration, extinction, and evolution to shape species distributions and nearly all patterns of biological diversity. It is an empirically and conceptually rich text that illustrates general patterns and processes using examples from a broad diversity of life forms, time periods and aquatic and terrestrial ecosystems.

Biogeography, Fifth Edition, is written as a primary text for undergraduate and graduate courses, and is also an invaluable reference for biogeographers, ecologists, evolutionary biologists, and conservation biologists. Its fundamental assertion is that patterns in biological diversity make little sense unless viewed within an explicit geographic context. Starting from principal patterns and fundamental principles, and assuming only a rudimentary knowledge of biology, geography, and Earth history, the text explains the relationships between geographic variation in biological diversity and the geological, ecological, and evolutionary processes that have produced them.

The use of color illustrations, evaluated and optimized for colorblind readers, has transformed our abilities to illustrate key concepts and empirical patterns in the geography of nature. By providing a description of the historical development of biogeography, evolution and ecology, along with a comprehensive account of the principal patterns, fundamental principles and recent advances in each of these fields of science, our ultimate vision is for Biogeography to serve as the centerpiece of a one- or two-semester core course in biological diversity.

Table of Contents

UNIT 1. INTRODUCTION TO THE DISCIPLINE

Chapter 1. The Science of Biogeography

Chapter 2. The History and Reticulating Phylogeny of Biogeography

UNIT 2. THE GEOGRAPHIC AND ECOLOGICAL FOUNDATIONS OF BIOGEOGRAPHY

Chapter 3. The Geographic Template: Visualization and Analysis of Biogeographic Patterns

Chapter 4. Distributions of Species: Ecological Foundations

Chapter 5. The Distribution and Dynamics of Communities, Biomes, and Ecosystems

UNIT 3. BIOGEOGRAPHIC PROCESSES AND EARTH HISTORY

Chapter 6. Dispersal and Immigration Chapter 7. Speciation and Extinction Chapter 8. The Changing Earth Chapter 9. Glaciation and Biogeographic Dynamics of the Pleistocene

UNIT 4. EVOLUTIONARY HISTORY OF LINEAGES AND BIOTAS

Chapter 10. The Geography of Diversification and Regionalization Chapter 11. Reconstructing the Evolutionary History of Lineages Chapter 12. Reconstructing the Geographic History of Lineages and Biotas

UNIT 5. ECOLOGICAL BIOGEOGRAPHY

Chapter 13. Island Biogeography

Chapter 14. Areography, Ecogeography, and Macroecology of Continental and Oceanic Biotas

UNIT 6. CONSERVATION AND THE FRONTIERS OF BIOGEOGRAPHY

Chapter 15. Biogeography of Humanity, Biological Diversity, and Conservation Biogeography

Chapter 16. From the Foundations to the Frontiers of Biogeography

Glossary Bibliography

Index

J. Bot. Res. Inst. Texas 12(1): 26. 2018