The Biology of Rocky Shores. *Second Edition. Biology of Habitats.*

By Colin Little, Gray A. Williams, and Cynthia D. Trowbridge. Oxford and New York: Oxford University Press. $120.00 (hardcover); $55.00 (paper). xiii + 356 p.; ill.; index. ISBN: 978-0-19-856490-4 (hc); 978-0-19-856491-1 (pb). 2009.

This volume provides an overview of the ecology of rocky coastlines in a compact edition. It is separated into 12 chapters that cover topics such as the physical environment, some of the key groups of organisms present, their physiological and life-history adaptations, the biology of key functional groups (producers, grazers, and predators, among others), important processes that control species distributions and abundance, and the impacts of humans on these ecosystems. A short overview of some methods relevant to the system is provided. Illustrations are also included, which give a flavor for the sort of research carried out in intertidal systems. The book has been substantially revised from the first edition, including a welcome expansion of attention to rocky shore systems throughout the world. The writing is clear and flows well, making it a pleasure to read.

Overall, this volume is more of a review than a synthesis, and it does a good job of discussing the major topics relevant to rocky shore biology. The work is generally well referenced given the size constraints, although I found the pattern of citations somewhat uneven, with some topics very well referenced, but other key assertions lacking any sources at all. The ideal audiences for this book are students in upper-level undergraduate or graduate courses in rocky shore ecology, but the broad coverage of key processes also could make is suitable for a more general marine ecology course. Researchers will also find it useful as a reference, and its well-written, nontechnical style also makes it an excellent source of information for more general readers with an interest in their local shorelines; therefore, it will be a valuable addition to most public libraries. Overall, this volume is recommended reading for anyone interested in rocky shore ecology.

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Ecology of Marine Sediments: From Science to Management. *Second Edition.*

By John S. Gray and Michael Elliott. Oxford and New York: Oxford University Press. $130.00 (hardcover); $60.00 (paper). xiii + 225 p. + 14 pl.; ill.; index. ISBN: 978-0-19-856901-5 (hc); 978-0-19-856902-2 (pb). 2009.

This useful volume emphasizes the analysis of diversity and abundance patterns of organisms living in marine sediments and the applications of data collections to our understanding of the structure of marine benthic communities as well as to the formulation of monitoring and management programs relating to applied issues such as pollution. Throughout, there is an emphasis on how sampling design must match the objectives of the study program and that design of sampling should be driven by hypotheses.

This book is not intended to give a student a sense of the limiting physiological, genetic, and ecological processes unique to marine sediments, although a brief chapter speaks to sampling techniques. Instead, the text shows how various sampling designs (including some descriptions of equipment and sample processing) can be used to estimate benthic diversity and abundance with maximum efficiency. In general, the authors demonstrate how to exact the most from the study of pattern and, in some cases, general estimates such as properties of food webs and energy budgets. For example, a chapter on spatial analysis emphasizes the advantages of sampling on a variety of spatial temporal scales and shows how process may be inferred from pattern. Occasional references to field experiments are also incorporated into the discussions. Throughout the text, a variety of very useful means of statistical analyses and data rendering are explained and demonstrated.

This volume will be a useful and quick introduction for graduate students and advanced undergraduates of the analysis of benthic sampling for use in monitoring programs and integrative studies that seek to extract general features of communities from large sampling schemes.

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Ecology of the Shortgrass Steppe: A Long-Term Perspective. *Long-Term Ecological Research Network Series.*

Edited by William K. Lauenroth and Ingrid C. Burke. Oxford and New York: Oxford University Press. $69.95. xiii + 522 p.; ill.; index. ISBN: 978-0-19-513582-4. 2008.

Having plowed up the soil or transformed the flora of most of our North American grasslands, the shortgrass steppe of the western Great Plains of North America represents our last chance to show that we can thrive within the limits of the ecosystem services provided by a native grassland. Much of what we know about grasslands stems from over 40 years of research at the Shortgrass Steppe Long-Term Ecological Research station (SGS-LTER), which is compiled in this volume by 34 authors who contributed to 19 chapters that serve as a necessary complement to a similar effort for the more productive tallgrass prairie.