centuries for each area, with key aspects of its character spotlighted. In the highlands, for instance, the book focuses on the forest cover and its management, with consequent effects on agriculture. Readers learn that Superior National Forest, sprawling across nearly 4 million acres, has seen old-growth spruce trees give way to mixed deciduous and coniferous forests. The resulting intensive shade affects the distribution and growth of wildlife, particularly birds. The effects of pollution and climate change are gauged throughout the text. The authors attempt to document and save an environment both beautiful and vulnerable. The book's merits include breathtaking photos, maps and charts, handsome page design, and impassioned writing. However, its hybrid nature makes it hard to categorize: coffee-table book, reference volume, or textbook? Weighing in at nearly 5 pounds, it ranks low on portability, requiring a tabletop for extended reading. Valuable for biologists, environmentalists, and audiences with connections to the Great Lakes region. Summing Up: ** Recommended. General, academic, and professional regional library collections.—K. B. Sterling, Pace University

Biodiversity in a changing climate: linking science and management in conservation, ed. by Terry L. Root et al. California, 2015. 229p bibl index afp ISBN 9780520286719 pbk, \$39.95

This book, a collaboration between biologists and land managers, provides a somewhat novel approach to the topic of how climate change might impact biodiversity and ecosystem functions. The editors focus on the interaction between ecologists and land managers—offering ways to aid cooperation between these two groups and to translate climate change adaptation research into on-the-ground management. The first section provides a brief summary of climate change projections and how they might affect species and ecosystems. The largest portion of the book contains seven case studies from California. Five discuss animal (krill, sea urchins, salmon/trout, bumblebees, and birds) communities and two deal with grassland ecosystems, describing how climate change will likely impact these systems. These chapters read like short scientific journal articles; interestingly, each chapter is followed by one to two pages of questions/comments from land managers. The final section steps back to take a long-term view of climate change impacts on ecosystems by discussing how evolution, paleobiology, and historic data can provide context to managers working to understand and manage climate changeinduced alterations to the ecosystems they oversee. Summing Up: **★★** Recommended. Upper-division undergraduates and above.—*D*. Goldblum, University of Calgary

53-2631 SH177 2015-939907 MARC Impacts of the Fukushima nuclear accident on fish and fishing grounds, ed. by Kaoru Nakata and Hiroya Sugisaki. SpringerOpen, 2015. 238p bibl afp ISBN 9784431555360 cloth, \$59.99

The March 2011 earthquake and subsequent 15-meter high tsunami in Japan led to a partial core meltdown of reactors 1, 2, and 3 of the Daiichi nuclear reactor located in Fukushima. As a result, radioactive materials were released directly into the atmosphere and ocean. Here, experts in the fields of marine and freshwater ecology affiliated with the Fisheries Research Agency provide the first comprehensive results of studies on the effects of this radioactive release on both marine and freshwater systems. Results are broken into 19 chapters and five parts related to seawater/plankton, sediment/benthos, marine fisheries, radioactive contamination of fish, and freshwater systems. While the results relate to Japan, they could potentially be applied to other regions affected by

the fallout due to the movement of radioactive particles by wind and ocean currents. The primary nature of the research makes this title most appropriate for advanced students in marine and freshwater fisheries and marine ecology programs, as well as researchers in related fields such as environmental science. Available for free download at http://link. springer.com/book/10.1007%2F978-4-431-55537-7. Summing Up: **
Recommended. Upper-division undergraduates through professionals/ practitioners.—K. R. Thompson, Missouri State University

Mutualism, ed. by Judith L. Bronstein. Oxford, 2015. 297p bibl index ISBN 9780199675654 cloth, \$125.00; ISBN 9780199675661 pbk, \$64.95

Mutualisms are among the most important and fascinating of ecological interactions. Understanding the dynamics of mutualistic interactions—including control of mutual investments, degree and stability of associations, influence of invasive species, and concepts of exploitation (i.e., cheating)—has far-ranging implications for both biodiversity and the health and integrity of ecosystems. In this first major work on the natural history and evolution of mutualism in almost 30 years, 64 contributors provide a broad overview of modern concepts of the subject. Consideration ranges from cellular to community-wide associations, encompassing twospecies interactions and complex interacting biological networks. Three principal associations, protection, nutrition, and transportation (e.g., pollination and seed dispersal), are emphasized. Features of spatiotemporal relationships, conservation, and ecological restoration are included, along with information about study methodologies/design and outlooks for future research. Analogies are made to economic theories. The book presents interesting, detailed information, although the extent of descriptions, depth of coverage, and review of general underlying concepts vary greatly from chapter to chapter. Discussion is most suited to readers with an appropriate background in ecological principles, including graduate students and researchers. Advanced undergraduates may find information helpful for various ecology-related research projects. Summing Up: ★★ Recommended. Upper-division undergraduates and above.—D. A. Brass, independent scholar

Botany

53-2633

SB952

2014-42820 CIP

Wurster, Charles F. **DDT wars: rescuing our national bird, preventing cancer, and creating the Evironmental Defense Fund**. Oxford, 2015. 231p bibl index afp ISBN 9780190219413 cloth, \$24.95

Wurster (emer., environmental sciences, SUNY, Stony Brook), who was a founding member of the Environmental Defense Fund (EDF), provides a fascinating account of the history of the EDF, which was founded in 1967 and is now a firmly established US entity. Wurster tells of the beginnings of the organization as a ragtag of scientists and environmentalists meeting in various living rooms, with no budget to speak of, bound by the shared hope that science combined with the law could act together and make a larger difference than environmental advocates ever could. All the original members were passionate bird lovers, and their earliest fights focused firmly on the widespread use of DDT, a once-popular chemical that is now a proven biocide and carcinogen. Using DDT as the backbone of this story, Wurster shows how the EDF slowly grew in both membership and stature, learning how