

sea otters. Importantly however, Lorimer provokes readers to think about which of our assumptions remain valid in the Anthropocene and to acknowledge that conservation science is a sociopolitical beast, with attending values—and every choice we make costs lives.

After reading this book, it seems more pressing that biologists, ecologists, geographers, and philosophers (among others) join forces and tackle these tough questions in theory and practice. We need real integration. Aldo Leopold said, “one of the penalties of an ecological education is that one lives alone in a world of wounds.” What seems worse today is that, even if we share common viewpoints, we have become so specialized and institutionalized through the demands of contemporary science and education that we have lost the ability to speak to one another. Lorimer’s volume offers a platform to bridge this gap and engage in more meaningful discussions about saving species.

SHELLEY M. ALEXANDER, *Geography, University of Calgary, Calgary, Alberta, Canada*

**COEXISTENCE: THE ECOLOGY AND EVOLUTION OF TROPICAL BIODIVERSITY.**

By Jan Sapp. *Oxford and New York: Oxford University Press.* \$49.95. xiii + 275 p.; ill.; index. ISBN: 978-0-19-063244-1. 2016.

*Coexistence* is many stories together, from biographies of tropical biologists in Panama to a history of the development of theories about how tropical ecosystems evolve. It is focused on what is now the Smithsonian Tropical Research Institute (STRI), and its history in terms of politics, people, and research from the 1920s through today. The book progresses roughly chronologically, starting with the flooding of Gatun Lake in 1914 in the building of the Panama Canal, which created the island of Barro Colorado. The American military presence in Panama, and the island’s isolation, made Barro Colorado the ideal place for a tropical field station. To establish the station required delicate but persistent political maneuvering with local and national governments in Panama and the United States. Politics play a role throughout the volume, from government funding for research to the U.S. occupation of Panama. It is a compelling story of how politics, and some particularly motivated characters, can shape the trajectory of scientific research.

Throughout *Coexistence*, the biographies of biologists are interwoven with history of tropical research and development of evolutionary thought. The earliest biologists of the story were naturalists of another era, explorers curating collections of zoological and botanical specimens. The early period was riddled with strong personalities that often disagreed about

what type of field station should be founded, as well as its focus. But these biologists, such as the herpetologist Thomas Barbour, entomologist James Zetek, and the botanist David Fairchild, were determined to found a research station on Barro Colorado Island and contributed their personal finances to sustain the project. The proscience era of the 1960s greatly expanded support for scientific research and the Smithsonian Institution took over the station. Led by Martin Moynihan in the 1960s, Barro Colorado changed from a place to collect specimens to a place to study the processes behind tropical diversity. This trajectory was continued by Moynihan’s successor Ira Rubinoff who expanded the STRI to include marine stations. Rubinoff also led the next phase of research at STRI by building molecular facilities in the late 1980s. Developments at STRI therefore followed scientific changes generally, from collecting specimens to studying processes to molecular tools.

The uniting theme of the book is tropical ecology, and in particular how the extraordinary diversity of tropical plants can coexist. Sapp discusses how tropical evolutionary ecology developed through the lineage of tropical biologists working in Panama. From debates about whether the tropics were a “cradle” or a “museum” to niche theory, the Janzen-Connell hypothesis, and neutral theory. *Coexistence* therefore serves as a primer on the competing (and complementary) theories behind tropical biodiversity. The volume is dense, with enigmatic chapter and heading titles that do not make it any easier for readers. It also seems uncertain about whether it wants to be a tropical ecology primer or collection of biographies of tropical ecologists or a history of STRI. There is too much detail in each component for the book to move smoothly between them. But for readers interested in any of these three topics, it is interesting and thorough. A perfect read for first-year graduate students planning PhD fieldwork in Panama.

PATRICIA L. JONES, *Ecology & Evolutionary Biology, Cornell University, Ithaca, New York*

**LIFE IN THE DARK: ILLUMINATING BIODIVERSITY IN THE SHADOWY HAUNTS OF PLANET EARTH.**

By Dante Fenolio. *Baltimore (Maryland): Johns Hopkins University Press.* \$39.95. 317 p.; ill.; index. ISBN: 978-1-4214-1863-6 (hc); 978-1-4214-1864-3 (eb). 2016.

An irrational fear of the dark is normal in young humans and I was not different. Dark quarters used to bring anything from black mambas to giant Venus flytraps to my adrenaline-intoxicated childhood dreams. A teenage interest in bats eventually transmuted fear into a love affair, and I spent 15 years exploring dark places. It was, therefore, with the excitement of reencountering night and cave creatures