

Some readers may find it slightly surprising that this book about remarkable creatures and their natural history was written by a molecular biologist. The divide between organismal and molecular biologists has fractured a number of prominent academic departments over the last two decades, and I find it reassuring that a prominent molecular biologist such as Carroll recognizes the role that natural history has played in the development of modern biology. This illustrates an implicit point of Carroll's—evolution is a unifying theme throughout biology, whether one speaks of remarkable creatures themselves or their molecular underpinnings.

Before reading this book, I was a bit skeptical that a molecular biologist could effectively capture the essence of early naturalist expeditions such as those by Humbolt, Darwin, Wallace, Bates, and others. I had little doubt that Carroll would do justice to the more recent (molecular) work of Linus Pauling, Allan Wilson, and Svante Pääbo, but how could a bench scientist such as Carroll appreciate African expeditions, seasickness, tropical diseases, and the other trials and tribulations of field work? In fact, Carroll does so masterfully. Furthermore, I think it is the very juxtaposition of fieldwork (by naturalists and paleontologists) with laboratory work (by geophysicists and molecular biologists) that makes this book so persuasive. The evidence for evolution comes from many scientific disciplines, and Carroll covers each of them—and spins a good yarn while doing so.

*Remarkable Creatures* is relatively small, with an attractive layout and a pleasant font. I love the beautifully designed and illustrated dust jacket, which depicts a diverse mural of plants and animals on tattered parchment. The book contains a captivating diversity of figures (photographs, portraits, drawings, maps, etc.); unfortunately, the publisher's rendering of many is subpar. Some figures (e.g., 9.4) appear as though they were printed on an old dot matrix printer;

perhaps the quality can be improved in subsequent printings.

In summary, this book is a genuine pleasure to read. I think this is evidenced by its popularity with the general public and the various accolades it has garnered (e.g., a finalist for the National Book Award). I highly recommend *Remarkable Creatures* to anyone interested in science.

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### SMALL, WARM, AND FUZZY

#### **The Biology of Small Mammals.**

Joseph F. Merritt. Johns Hopkins University Press, 2010, 336 pp., illus. \$60.00 (ISBN 9780801879500 cloth).

**A**t least 90 percent of the 5416 known species of living mammals are “small.” They are cosmopolitan in distribution and the subjects of extensive research, most notably as model organisms in medical research. Because they are often common members of their communities, they frequently play major roles in the structure and function of community systems. Furthermore, they can invade agricultural crops and carry diseases transmitted to humans.

*The Biology of Small Mammals* provides an overview of the diversity of life histories exhibited among small mammals, and thereby promotes increased interest, appreciation, and understanding of these creatures that impinge so much on human life. Author Joseph F. Merritt, a senior mammalogist with the Illinois Natural History Survey (University of Illinois, Urbana), is a respected scientist with many years of experience researching these interesting

and important organisms. His book aims for a “broad readership” ranging from amateur naturalists and students to wildlife professionals (p. xi, xiii). He makes no pretense to be comprehensive but writes engagingly about the species he simply finds particularly unusual or informative. He defines “small mammal” as those species weighing 5 kilograms (11 pounds) or less; however, most appropriately, he ignores this arbitrary boundary whenever it seems sensible to do so.

After an introductory chapter that lays out the scope and context of the book, Merritt divides 12 additional chapters into three parts: “Modes of Feeding,” “Environmental



Adaptations,” and “Reproduction.” These chapters are followed by a one-page list of useful Web sites, a 10-page glossary, literature cited, and an index (17 pages). Some organizational anomalies occur, but this is not surprising since life histories resist being compartmentalized according to just one or a few of their attributes.

*The Biology of Small Mammals* has many important strengths: (a) In most cases, chapters begin with a brief overview of the taxonomic context of the chapter's subject matter; (b) Merritt often provides a welcome historical context for the topic being discussed; (c) the information is up to date, an example being the discussion of the white-nose syndrome currently devastating bats in

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