April 2012


Brian Scholtens  
*College of Charleston*

Follow this and additional works at: https://scholar.valpo.edu/tgle

Part of the Entomology Commons

**Recommended Citation**

Available at: https://scholar.valpo.edu/tgle/vol45/iss1/11

This Book Review is brought to you for free and open access by the Department of Biology at ValpoScholar. It has been accepted for inclusion in The Great Lakes Entomologist by an authorized administrator of ValpoScholar. For more information, please contact a ValpoScholar staff member at scholar@valpo.edu.
BOOK REVIEW


As a long-time researcher and observer of insects, Waldbauer is the ideal person to write a book about insect defenses. It is obvious throughout the text that he has been intimately involved with these topics during his career, and his enthusiasm for these animals shines through. I can imagine his many students thoroughly enjoying classes, field trips and research with such a talented observer.

In the first two chapters of the book, Waldbauer introduces the players, first the insects and then their predators, concentrating on the many ways that animals capture and consume insects (including humans). In the subsequent chapters he introduces the many ways in which insects avoid being eaten, devoting sections to escape mechanisms, crypsis of various sorts, startle defenses, social insects, toxins and other chemical defenses, and mimicry. Waldbauer finishes with an extensive reference list for each chapter, allowing any interested reader to easily delve more deeply into a particular topic.

This book cleverly illustrates something that I often tell my students: insects provide great examples of any type of ecological interaction, including almost all conceivable variations. The ecological and behavioral diversity of insects is on display in the topics covered in this book, and it emphasizes the crucial role that insects play in terrestrial ecosystems (fresh water also, but that was not a major theme of this book).

If I were to quibble with any aspect of the book, it would be that some of the chapters seemed a bit like a tour through examples of insect defenses. This was not necessarily a bad thing, but as much as I love the diversity of ecological reactions in insects, examples sometimes received a very quick mention and made parts of the book a bit disjointed. Fewer, more in-depth examples might have been a better approach. Even this is unlikely to be a barrier for those reading the book as an introduction to the world of insect defenses.

Waldbauer is at his best when he writes about work that he has been involved with over the course of his career, particularly mimicry. Here his prose captures your interest and involves you in the interactions that he describes. I truly enjoyed his personal reflections of seeing behaviors in the field, and the explanations of experiments that he and his students did. As always, it is wonderful to read descriptions of interesting and seldom noticed behaviors, like those that have inspired many naturalists. I recall some of the work that he did at the University of Michigan Biological Station while I was a graduate student in the 1980s. During the summer, the students in the Biology of Insects class enjoyed watching the variously painted Promethea moth males, used in his mimicry experiments, flying to a screened enclosure with calling females. I still have a male Promethea specimen given to me by Dr. Waldbauer after it emerged that summer.

Although those with a significant background in insect biology may want more depth on some topics, this is an excellent book for those interested in introducing themselves to the tremendous predation pressure on insects and the diversity of insect defenses. As he has in his other popular books, Waldbauer continues to find and describe topics that will increase interest in insects, a fascinating group of animals that is crucial in ecosystem function.

Brian Scholtens
Biology Department
College of Charleston
Charleston, SC 29424