Secret Weapons - Defenses of Insects, Spiders, Scorpions, and Other Many-Legged Creatures

By Thomas Eisner, Maria Eisner, Melody Siegler. Belknap Press of Harvard University Press, Cambridge. 2005. 372 pages.

This book is dominantly about chemical defences of terrestrial arthropods, though other types of defences (camouflage, catapulting, sticky traps) are also mentioned. Chapters are short, and typically feature the defences of one organism, or at most a small group of related organisms. One or more colour photos, in themselves almost worth the cost of the book, enhance both the aesthetics of the book and the ability to drive home each chapter's message. Chemical formulae are illustrated in those chapters focusing on chemical defences.

As the subtitle alludes, an array of terrestrial arthropods is dealt with, but by far, the majority of this book is about insect defences. However, scorpions, centipedes and other non-insects together account for about 15% of the book's material. Examples include the well-known spray of the Bombardier Beetles, the less well-known vomit attacks of noctuid moth caterpillars and immobilizing wax of oleander aphids.

This book will appeal to a wide array of readers, the caveat being that those with no (or little) training in chemistry (like me) will miss out on some of the nuances of the chemicals themselves; this did not give rise to any problems at all for my enjoyment of this book. The other caveat being that those not liking those long, tongue-tripping scientific names of organisms will have to gloss over them periodically as they read; even where common names exist for the organism of the chapter's focus, the scientific name is typically used throughout the text. Grade-school children will be able to use this book though clearly not as completely as older folk; entomology instructors could easily incorporate this material into lectures. Truly, this book can meet the needs of many.

There is an abundant amount of fascinating material that simply makes this well-written book a joy to read; I have been equally satisfied after having read Waldbauer's books, including *What Good are Bugs?* (also from Harvard Press). Unlike the latter book, the chapter bibliographies of *Secret Weapons* are replete with papers of the book's authors, particularly the Eisners. Their work in chemical ecology, translated by them from their papers to this book, is a grand example of making science more consumable by the nonspecialist.

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Rodents and Lagomorphs of British Columbia

By David W. Nagorsen. 2005. Royal British Columbia Museum, Victoria, British Columbia.

I read this book both with a general interest in mammals overall, and, as a raptor biologist, a desire to more completely understand the creatures which are the prey of my birds. I was not disappointed on either account. From a simply presentational point of view, the artwork sticks out as being very aesthetically pleasing. Each species is illustrated with a pencil drawing of the complete animal – not in a standard three-quarter pose or profile, but in varying postures that show snapshots of each animal's character. Additionally, the skull of each species is presented in lateral, dorsal and palatal views – perhaps this is not useful to the general reader, but I certainly benefited from them; the illustrators (Michael Hames, Donald Gunn and Bill Adams) must be commended.

The book has three keys – one each for whole animals, skulls and chipmunk genital bones. Anyone who has used an unillustrated key understands the frustration of trying to interpret the author's meaning (what is meant by "relatively large?"). A fully illustrated key has diagrams for each couplet – the keys in this book are not fully illustrated, but there are plenty of diagrams that make the process of keying out an organism rather straightforward.

An introductory chapter describes the biogeography of British Columbia, along with conservation strategies, winter survival and several other topics which link these species together. Maps and good photographs are featured here.

The species accounts dominate this book. Each runs about six pages and describes physical aspects of the species, its natural history, geography, and conservation status. An occurrence map accompanies each account; I believe British Columbia residents and nonresidents alike would have benefited from place names being included on the maps – especially those which are only mentioned once or twice in the whole book. Similarly, even the introductory maps do not include all the major sites mentioned in the book.

There are a small number of mistakes, some editorial (e.g. "supraorbital bone" is used instead of "supraorbital process"), some factual (e.g. "[The muskrat has] rooted cheek teeth."). In the introduction to the lagomorphs, I think it would have been appropriate to differentiate rabbits from hares.

I take particular exception to the oft-used expression that some introduced animal (in this book, the Eastern Cottontail) "seems to be filling an ecological niche." This is at best an empty comment (what introduced animal would not have a different ecology than the natives) and at worst could be interpreted as an excuse to tolerate and perhaps enhance introductions.

Those few shortcomings aside, this is a very good book which serves its purpose admirably. I will refer to it frequently.

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