



Predation in Organisms: A Distinct Phenomenon, Ashraf M. T. Elewa, 2006, Springer, New York, 311 p., hardcover, USD129.00, ISBN: 3-540-46044-6.

From its title, one might expect that the scope of Ashraf Elewa's book would be too broad. One's expectations are soon realized. The book contains, in no particular order, 13 chapters by 25 authors, including the editor. Individual chapters cover an eclectic array of highly specialized topics ranging from predator-prey interactions of Brazilian Cretaceous pterosaurs to biological control of mosquito populations. Five of the chapters are case studies that deal with predation in the fossil record using direct indicators provided by trace fossils or indirect proxies, such as functional morphology. The remaining chapters, excluding the brief introductory chapter by the editor ("An Introduction to Predation in Organisms"), deal with living organisms on diverse topics ranging from invasive predators and wildlife management to trophic relationships of crustacean decapods in rivers. Six of these chapters on living organisms are reviews, while the contribution by Reymont provides a very brief commentary on modeling the dynamics of predator-prey systems in ecological studies. The book is a sum of its parts.

While I could quibble about the details, some chapters naturally held my attention more than others, given my interests in the role of biological interactions in evolution. Langerhans's chapter, "Evolutionary Consequences of Predation: Avoidance, Escape, Reproduction, and Diversification," although not written with a paleontological audience in mind, includes a brief discussion of the role of predation as a driver of speciation that is worthy of comment, given that such ecological mechanisms are rarely considered important by paleontologists. The chapter by Kelley and Hansen, "A Case for Cannibalism: Confamilial and Conspecific Predation by Naticid Gastropods, Cretaceous through Pleistocene of the United States Coastal Plain," presents an interesting dataset that can be interpreted tentatively to support the hypothesis that biological hazards have become more severe with time, and adaptations to those hazards have increased in expression—a subject area close to my own heart. While I did not find some of the other chapters to be of interest, this likely reflects my own idiosyncrasies more than the scholarly merits of the chapters, although readers will find that there is considerable variation in how well written these chapters are.

The main weakness of this volume is its internal intellectual integrity. I can easily imagine that a selection of predation papers from a random assortment of current issues of ecological and paleontological journals could have produced a similar volume. In other words, having a general broad theme or topic for a book—in this case, predation—does not guarantee that its chapters will hold together structurally in a way that renders the book intellectually viable. Elewa's book amounts to little

more than a hodge-podge of topics. By this I do not mean to imply that the individual chapters represent a hodge-podge of inchoate and irrelevant ideas, but merely that a greater thematic coherence could have strengthened the book. Readers should not be left (as I was) thinking of a book as merely a miscellaneous set of papers that stand on their own; in the spirit of holism, the whole should be greater than the sum of its parts. The lack of thematic coherence in *Predation in Organisms* stems largely from the editor's limited goals for this book, but blame must also be shared by the publisher.

Why was this mélange of papers assembled? This is not a rhetorical question because it is not at all clear (to me at least) from the editor's introductory remarks (which read at times like a stream of consciousness) why *Predation in Organisms* was put together—other than to produce a book. Elewa envisioned his book as a "valuable synopsis" (p. 4) of predation studies. His statements that "most of the published books on predation just focus on limited groups of organisms and could not answer several questions concerning predation philosophy and predator-prey interactions" while "conversely, the present book introduces diverse organisms ranging from small invertebrates to mammals and includes the most popular subjects..." (p. 3) provide some clues to the inspiration behind this book. But, unfortunately, when one digs deeper into what these questions actually are, it becomes clear that there is no apparent overarching goal for this book. In the end, the simple truth is that, while *Predation in Organisms* succeeded in bringing together a diverse array of authors and subject matter, it failed to capitalize on an opportunity to open a dialog between ecologists and paleontologists on a common set of questions. This need remains an open niche, or to be technically correct, a niche waiting to be created.

Based on its high sticker price (USD129.00), I expected more from this book. If you are a reader generally interested in predation, then you may benefit from some of what this volume has to offer. If, however, you are a reader looking for a comprehensive and up-to-date synopsis of the current state of understanding of predation and its role in ecology and evolution, there are better ways to spend your money. I cannot recommend this book to paleontologists.

Gregory P. Dietl
Paleontological Research Institution
1259 Trumansburg Road
Ithaca, NY 14850
gpd3@cornell.edu