



## **Trilobites illustrated**

**Whittington, H. B. 1992. *Trilobites*. 145 pp., 14 text-figs, 120 plates. D. Palmer & B. Rickards (series eds) *Fossils Illustrated*, The Boydell Press, Woodbridge.**

Trilobites are as attractive a subject of the invertebrate paleontology as are dinosaurs among fossil vertebrates, yet, differently than dinosaurs, they have never been favorites of popular literature. This book is thus certainly needed.

Although trilobites are probably the most extensively studied group of extinct marine animals, there is still much to be known about some aspects of their biology, exoskeleton composition, functional meaning of various elements of the exoskeletal sculpture – to mention just a few still unresolved, or only partly resolved, questions.

Many of these questions, e.g., concerning anatomy, ontogeny and relationships of trilobites, have been answered in numerous papers by Harry Whittington, undoubtedly the preeminent student of these extinct arthropods. Consequently, a reader of this book gets a first-hand knowledge of trilobites, and, at the same time, the most up-to-date one, as some results there reported (e.g. those concerning the possible anatomy of the Ordovician *Placoparia*, on p. 34) come from Whittington's paper quoted as 'in press'.

Following a brief preface by S. J. Gould, and an introduction, there are seven chapters dealing with: general characters, terminology of exoskeleton, zoological names (I), limbs (II), anatomy and activity (III), growth and moulting (IV) form and function of exoskeleton (V), preservation and occurrence (VI), distribution in time, evolution, and classification (VII). Chapters are illustrated by instructive line drawings, mostly coming from the author's most recent works; each chapter is provided with a list of references.

As implied by the title of the series (*Fossils Illustrated*), an emphasis is put in this book on the photographs. They display magnificent, superbly (or uniquely) preserved trilobites. As explained in the introduction (p. ix), the photographs '...show the hard parts of complete or incomplete adult individuals, or these parts at different stages of growth, and some with soft parts preserved, such as limbs', and they come mainly from the author's own papers.

However, limitation of the photos mainly to the species that have been elaborated by the author is the greatest weakness of this book. Most species here illustrated (about eighty) are Cambrian or Ordovician ones, about fourteen are Silurian, while Devonian, Carboniferous and Permian trilobites altogether are represented just by ten species! It is true, that during the Cambrian and Ordovician times trilobites were most differentiated (nine high-rank taxa in Cambrian, thirteen – in Ordovician, comp. text-fig. 14) and very numerous; however, they were still an important component of some Devonian marine invertebrate faunas (representing eight high-rank taxa, fig. 14) as well as of the Carboniferous ones.

Nevertheless, almost anyone who reads this book will learn a great deal about the trilobites and should have an enjoyable time looking through the plates. To an interested layman, or just to those who collect fossils, the book is an excellent source of the most recent information about these exciting animals.