

Book Review**Invertebrate Zoology (5th Edition)**

Robert D. Barnes

Saunders College Publishing (1987)

893 pp.

Price: £24,50 (Hardback)

To many it may seem strange to review a book which has been a popular university text for nearly 20 years. During the years Barnes has gradually enlarged the text so that in 1980 the fourth edition was well over 1000 pages long with numerous colour photographs. For South African students it became an expensive text book. The fifth edition (1987) has undergone considerable revision and it was for this reason I felt it was worth examining this new edition of the text. Primarily it is still one of the best invertebrate texts available despite the revision. As I am sure that most people are familiar with the format of 'Barnes' I have concentrated on giving information on what changes have been made. The fifth edition is still divided into 20 chapters but the book as a whole has been reduced in size. About 180 pages have been removed as well as all the colour photographs. The author's reason for reducing the size of the text was reader pressure. Many readers felt that the book was undesirably large (does this really mean expensive?). I personally was never convinced that the colour photographs in the fourth edition added to the text book. Barnes has achieved a reduction in size by removing some diagrams and tables as well as reducing the text.

It would serve no purpose to attempt to list all that Barnes has removed but my impression was that the quality of the chapters has not suffered from such pruning. Many of the diagrams have been redrawn and

are thus improved.

Another change to the text is a slight re-arrangement in the order of the invertebrate groups. For example, the annelids now precede the molluscs and the onychophorans are dealt with in a chapter on lesser Protostomes. The classification system used by Barnes will clearly never satisfy all invertebrate zoologists. The author has made an attempt to be up to date and in controversial taxonomic areas tries to draw the student's attention to such problems. I was surprised to see that Barnes does not include the new class Concentricycloidea in the chapter on Echinoderms. Surely one of the more interesting finds of 1986.

A new feature of the fifth edition is the inclusion of short 'boxed essays' on subjects that are applicable to more than one group of invertebrate. Subjects such as nephridia, photoreceptors and eyes, origins of coelomates and acoelomates, trochophore larvae, neural organization of ganglia, crustacean filter-feeding, and utilization of dissolved organic nutrients are all highlighted. Some subjects are dealt with in more detail than others. I found the 'boxed essays' a good idea but it is a pity that the author did not expand some of them. In the section on pogonophorans I was surprised that the subjects of hydrothermal vent animals and chemoautotrophy were not highlighted, an exciting discovery in the invertebrate world.

One other change that Barnes has made is that the glossary of recurring terms is now incorporated in the index and not as a separate section. The glossary has been expanded.

In summary, I still find Barnes to be one of the best invertebrate text books available. The fact that the book has been reduced in size may make it more palatable to many students. I have no information as to whether it is available in paperback as was the fourth edition. If it is I hope that the binding is better! Despite the lack of South African examples the book will certainly satisfy the needs of most invertebrate courses.

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