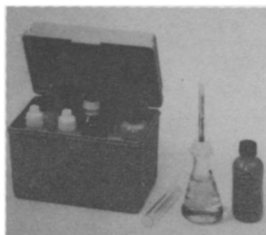


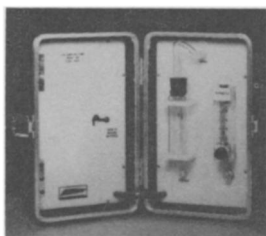
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The main reason this manual is so good is that it contains a wealth of information about mammals as well as clear, workable keys. The writing is lucid and the manual is well organized. Similar manuals in other vertebrate fields are sorely needed.

Jon R. Fortman
Mississippi University for Women
Columbus

MARINE ZOOGEOGRAPHY, by John C. Briggs. 1974. McGraw-Hill Book Co., New York. 475 p. \$25.00 hardback.

This textbook first considers in detail each of the world's nine oceanic regions. Information on the historical development of knowledge, exploration, currents, and the animals is presented. Reasons for faunal correlations between regions, or lack of them, are considered. A thorough review of subject material is evident from the extensive literature citations. Emphasis is on fishes, but other groups are included.

The second analysis is of the various vertical depth zones of all nine regions. A history of the evolution and development of our planet, its oceans and their animals, and present oceanic patterns and trends complete the book. A good index (taxonomic and subject headings) follows the last chapter. The 65 black-and-white illustrations are nearly all full-page drawings of a single specimen or a map showing water currents.

Marine Zoogeography is agreeably, knowledgeably, and attractively written. It will be useful to biological oceanographers and advanced undergraduate and graduate students either as a reference, course textbook, or course supplement. An up-to-date collection of information which has been scattered in the literature for over 30 years has been long overdue.

David R. Voth
Metropolitan State College
Denver

TROPICAL MARINE INVERTEBRATES OF SOUTHERN FLORIDA AND THE BAHAMA ISLANDS, by Warren Zeiller. 1974. John Wiley & Sons, New York. 132 p. \$19.95 hardback.

Staff photographers at the Wometco Miami Seaquarium photographed tropical marine invertebrates over a 15-year period. This is a visual identification guide for 248 macroscopic species. It is not a field guide or taxonomic key. All of the photographs are in color, in aquaria, except for three corals photographed in the sea. The photos are quite clear, with bright colors and suitable backgrounds. Two to five photos are on a page, and vary in size from 4 by 7 cm to 7 by 15 cm. Dis-

tinguishing features of some of the specimens are not easily discerned in some of the smaller shots. In most, the specimen occupies the full photo.

There is a brief introduction to each of the six invertebrate phyla: Coelentera, Platyhelminthes, Mollusca, Annelida, Arthropoda, and Echinodermata. For each specimen there are three descriptive divisions of common name, scientific name, and etymology. The common names are taken from textbooks or common vernacular usage. For common names that are unknown or nonexistent, the author suggests ones that are generally derived from the generic or specific nomenclature. The scientific name includes the phylum, class, order, family, genus, and species. Subdivisions are not used except for three subspecies of Mollusca. The etymology describes the roots of the genus and species names. A brief description of each specimen gives general information about habitat, behavior, or economic importance. An unfortunate omission is any reference to size of the animal, and it is not possible to estimate this from the photograph.

The bibliography contains a mixture of technical, general, and popular references without any categorization to content or reading level. One wonders how a young or naive reader would react to a combination of Libbie Hyman's *The Invertebrate: Protozoa through Ctenophora* and Lorus and Margery Milne's *Invertebrates of North America*.

Marine aquarists or naturalists and scuba and snorkeling buffs should find this a worthy reference. Secondary-school libraries near the habitats described should consider obtaining a copy. Serious students of invertebrate taxonomy or anatomy would probably not find it useful.

John R. Pancella
Montgomery County Public Schools
Rockville, Md.

HISTOLOGY: A TEXT AND ATLAS, by Johannes A. G. Rhodin. 1974. Oxford University Press, New York. 816 p. \$19.50.

It is a rare occasion when a textbook comes along that is both novel and unique. This histology book is entitled "text and atlas" which causes the student or teacher of histology to wonder whether it is good at being one or the other, or whether it fails in both categories. Even a brief examination of this method of presentation convinces one that here is a successful, readable, and utilitarian way of teaching histology. Every page of text is faced on the opposite side (right-hand) with a series of photomicrographs illustrating beautifully the succinct and skillfully abbreviated verbal descriptions. The black-and-white photographs are

selected with care and good judgment, then organized to show sequential magnifications of the same field from light microscopy to low-magnification electron microscopy as well as medium- and high-magnification electron microscopy. This pleasing arrangement of large, clean, well-selected photos in immediate juxtaposition with the captions and the text is certain to satisfy the student who desires both a text and an atlas.

There are good histology textbooks and there are good histology atlases; each type of publication is well-known and easy to find. However, this new book by Rhodin is a singular accomplishment, succeeding in combining pictorial and verbal descriptions of animal and human tissues. There are no line drawings, schematic diagrams, or color plates, but the high quality of the photographs makes these unnecessary and fosters consistency throughout.

There is no doubt that every secondary-school library will want this book as a reference. For the high-school instructor and his students, this can become an indispensable tool for clarifying and elaborating microscopic structure. At least some of the large and lucid photographic plates can find a place in biology and other science courses at any level of sophistication. Remember, every other page is filled with large, lucid photographs; consequently, one gets a very attractive and serviceable format for what is a moderate price these days.

Raymond E. Henzlik
Ball State University
Muncie, Ind.

INTRODUCTION TO MOLECULAR EMBRYOLOGY, by Jean Brachet. 1974. Springer-Verlag, New York. 172 p. \$5.90 (softback).

In this book, the author poses the two main questions of embryology: how can the fertilized egg, with DNA from male and female parent, give rise to all the organs of the adult; and how can a limited number of cells, in a given time and place, differentiate into specialized tissues and organs? Reviewing the classical work of first the descriptive and then the chemical embryologists, Brachet discusses the investigations of cell biologists, geneticists, and molecular embryologists that have contributed to our present state of knowledge in this intriguing and important area of research. Further, he points directions in which research of the future may proceed.

Brachet is himself perhaps the foremost authority in this field, and his expertise is apparent throughout the volume. The material is beautifully organized and clearly presented. In reviewing the work of various investigators, he fails however to give exact re-

ferences; this becomes a frustration for the person who would like to find the original papers. He includes a bibliography at the end of each chapter, but these are not complete.

The advanced undergraduate or beginning graduate student should find this book most useful. It could be used as a supplement in a traditional course in embryology or as background for a research project.

Margaret L. Watson
Simpson College
Indianola, Iowa

THE SHELL MAKERS: INTRODUCING MOLLUSKS, by G. Alan Solem. 1974. John Wiley & Sons, New York. 289 p. \$9.95.

The serious shell collector who has always wanted to know what manner of creature produced a shell will welcome the publication of this book. It is not about shells, nor is it a guide to collecting; it is about the shell makers. The author deals with the second largest group of animals, the mollusks, describing each kind as a living functional unit that has evolved and faced many problems in its developmental history. Emphasis is placed on anatomical development in relationship to ecology.

The three introductory chapters, "Understanding Variety," "The Molluscan Patterns," and "From Life's Start to Shells" include the importance of mollusks to man, their diversity, scientific literature concerning mollusks, major groups, and origins. The remaining chapters deal with the habits, anatomy, and evolution of the various molluscan groups. The author includes an interesting discussion on endangered molluscan species—with man and his reservoir-building activities the main villain. The final chapters present an interesting block of topics with particular emphasis on the ecology and habits of land mollusks.

Format, pictures, diagrams, and color photos are well done and make this a valuable book for amateur shell collectors and for teachers who require anecdotal information about mollusks.

David E. Kidd
University of New Mexico
Albuquerque

INSECTS IN FLIGHT, by Werner Nachtigall. 1974. McGraw-Hill Book Co., New York. 158 p. \$12.95. Translated from German by H. Oldroyd, R. Abbott, and M. Biederman-Thorson.

This is neither a textbook nor a laboratory manual. The author says it is "a book of popular science in the boundary between biology and physics." It deals with the biophysics of

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