

potential of the book in words that I associate with a publisher's notice.

This is a good and useful book for the kind of course for which it is intended. Suitable for use in high schools, it should find its greatest use in junior and community colleges.

Gerson M. Rosenthal, Jr.
University of Chicago

LIFE SCIENCE, by William L. Smallwood, Melissa Sousley, and William Harmer. 1973. McGraw-Hill, Inc., New York. 466 p. (hardback). Price not given.

This is a text prepared for use in the junior high school, mainly in seventh grade. Treatment is given to life science as science; the organization of life into populations, ecosystems, cells, tissues, organs, and systems; man and his body functions; challenges to man's survival, such as disease, drugs, and pollution; survey of animal and plant life; and freshwater, marine, and terrestrial ecosystems.

The format is attractive, and there is extensive use of full-color pictures and illustrations that are an integral part of the text. Chapters are short, with an average of one laboratory activity included in each chapter. At the end of each chapter is a check-your-facts section, designed to determine if

the student has a factual understanding of the major concepts of the chapter. There is also a section of questions that ask the student to apply what has been learned. A list of key words is also presented at the end of each chapter.

As is found in most general textbooks, the treatment of the topics is rather shallow. The sections on genetics, growth and development, and challenges to survival are well developed and are directed toward the changes and concerns of a junior-high-school student. The section on man and his function is very factual and anatomic, with little material related to the functioning of man.

One major criticism of the book is that there are too few laboratory activities. A teacher would need to supplement the text with several laboratory activities per unit if an activity approach is desired. The laboratory activities that are included can usually be completed with materials readily available in most homes. This is generally true except for those activities involving the microscope. It seems that the number and variety of lab activities has been sacrificed for those that take little equipment. Without more activities, there is a heavy reliance on reading. This may create some problems.

The teacher's guide is integrated with

the book. Concepts to be learned are clearly identified. Helpful suggestions and explanations are given throughout each chapter. The laboratory activities are explained in terms of preparation time required, procedure, results, and questions to discuss.

The text has enough good features to make a careful examination worthwhile. A teacher should be aware that supplementary laboratory activities may be necessary and that this book may not be a good choice for students who find reading difficult.

Jack Sherman
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BIOLOGY, by Aaron O. Wasserman. 1973. Appleton-Century-Crofts, New York. 851 p. \$12.95 (hardback).

Wasserman's *Biology* represents one of the year's few new classic, comprehensive biology textbooks. It introduces the student to all aspects of the subject with no particular theme or bias. The organization of the book is conventional, and plant and animal materials are integrated throughout.

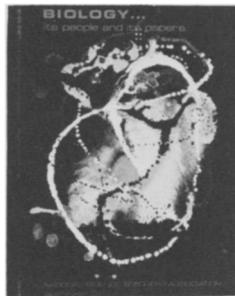
Designed for use in introductory college courses in biology, the book would function most effectively in nonmajors courses. The author's objective is to convey readable information, an aspira-

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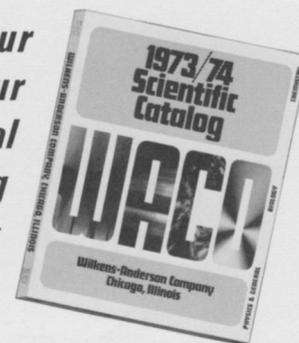
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tion in which he has whole-heartedly succeeded. However, as a result emphasis on experimental evidence and scientific methodology is omitted.

The book is attractively printed, with color and half-tone photographs being exceptionally effectively employed. The montages preceding each major section of the book are both provocative and artistic. Light and electron micrographs are scattered throughout the book and, unlike the poor quality of reproduction often evident in introductory books, are very finely reproduced.

Accompanying the book is a uniquely attractive group of supplementary materials. The *Study Guide* is a programmed learning manual. It includes an excellent outline review of the subject matter and two types of study questions: (i) concepts and definitions and (ii) applications and review. The innovative "access" method of having the answers to these questions appear after the invisible ink with which they are written in the *Guide* is developed will prove a delight to any student using the *Guide*. The *Instructor's Manual* contains an imaginative selection of topics for discussions. For example, in the behavior chapter a section called "freud eggs" reports studies correlating eating styles with personality-structuring. Sources of supplementary films and study questions are also provided. In addition, a descriptive laboratory manual (by V. Chiappetta) is also available.

Georgia E. Lesh-Laurie
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Zoology

THE SCIENCE OF ENTOMOLOGY, by William S. Romoser. 1973. Macmillan Co., New York. 449 p. \$13.95.

Here is a good, up-to-date textbook in entomology that appears highly suitable for a first-professional-year course. To be fully appreciated by a student it should be preceded by two years of biologic science: a general course and one in general zoology. There are three parts to the book: "Structure and Function," "Unity and Diversity," and "Applied Aspects of Entomology." The first of these occupies half of the text and is a thorough discussion of the anatomy, physiology, and behavior of insects. This section is somewhat more fully developed than is usual in textbooks of entomology; however, it is not as detailed as Fox and Fox's *Introduction to Comparative Entomology*.

I found Romoser's treatment nicely pitched at the undergraduate of today: clear, succinct, and free of confusing technical terms. A wealth of fine drawings illustrates the text; these are placed where they are in direct illustration of the discussion. The photomicrographs used are well chosen. Both optical and scanning electron-micro-

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Part 2 is a systematic treatment of the class Insecta, with thumbnail sketches of the orders, well illustrated with drawings of typical forms. The part is introduced by a short, fairly adequate summary of what we know and what we guess of the ancestry of insects and a good synopsis of systematics. The selected references for this part include the best of the currently available overviews of each order and its parts. I wish that the editors had seen fit to put the names of the orders in boldface type so this section could be used more rapidly for reference by students.

The third part is a sane treatment of applied entomology—essentially pest control. The five terminal pages are devoted to beneficial insects. Both chemical and biologic control are treated without hysteria. Romoser's advocacy of the term "pest management" for applied entomology seems to me particularly apt. The book is concluded with 17 pages of references cited. The most recent of these are dated 1972—a feat for a book published in 1973. The index is average. (I've never seen a truly adequate index for a textbook.)

As I noted in my first sentence, this is a good textbook for the introduction to entomology as a profession. It is a good reference book to have around for students in general biology or for anyone with a general interest in insects. This holds true for college students. From what I have seen of recent secondary-school students, this book will have limited reference use unless the teacher is particularly interested in insects and stresses them in class work.

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Natural History)

A HANDBOOK TO THE COMMON INTERTIDAL INVERTEBRATES OF THE GULF OF CALIFORNIA, by Richard C. Brusca. 1973. University of Arizona Press, Tucson. 444 p. \$10.95 (softback).

This publication is a compilation of data and identification keys for intertidal fauna of the Gulf of California. The approach is systematic. A discussion of the physical evolution of the gulf, physical factors that affect the fauna, the faunal provinces or regions characterized by distinctive types of animals, and the various habitats of the gulf intertidal, with examples of organisms inhabiting each, are described. An excellent discussion of tides, tidal flow, their causative factors, and their influence on intertidal zonation set the stage for the handbook.

A comparison of ecologic equivalents and zonation with the coast of Califor-