

chapter deals exclusively with that area of interest. The book is divided into four parts, or units: unity, diversity, interaction, and continuity. The concluding chapter of the first unit is a new one, "Life and Environment." Aside from the small print, this new chapter, with text developed around an excellent selection of illustrations, provides a most effective overview of biology.

The incorporation of laboratory inquiries into the textbook to form one package for student use is a sound modification. Not only does it help to emphasize the fact that the science of biology grows directly from observation and experiment; it also reminds the reader that the authors have adhered to the idea of optimizing the use of the laboratory in the teaching of science as inquiry. This is apparent in that text-laboratory redundancies, which tend to vitiate the inquiry processes, are noticeably lacking. Also, the 70 well-integrated laboratory inquiries are designed to provide the student with a wide variety of experiences in experimental design.

Those familiar with earlier editions would note that the amount of detail has been reduced considerably in those sections dealing with biochemistry, molecular genetics, and population genetics. The result of the revision is a book of text-plus-inquiries that is only slightly larger than the previous edition of the textbook alone. The continued inclusion of a small number of "Guide Questions and Problems" at the end of each chapter is of dubious value. Too often, teachers have been observed using these lists as representing everything that was of importance in the preceding text and laboratory studies. However, the addition of something new in the edition—"Ideas for Independent Study"—at the end of each chapter should have considerable appeal to the personal interests of students and help to relate their biologic knowledge to the natural and the social world.


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**BIOLOGICAL SCIENCE: MOLECULES TO MAN**, by Biological Sciences Curriculum Study. 3rd ed., 1973. Houghton Mifflin Co., Boston. 783 p. \$7.95 (hardback).

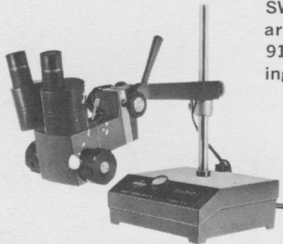
This revised edition of the BSCS Blue Version general-biology textbook for secondary schools is definitely an improvement over the earlier editions. The illustrations are more attractive and functional. Students are more vigorously encouraged to offer suggestions for future revisions. The content is updated, taking into consideration recent information on population growth and advancements in the molecular biology of genetics and the cell. It includes not only biologic information but some of the social consequences of man's at-

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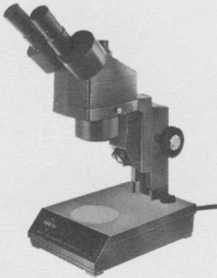
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tempt to solve biologic problems. Additional emphasis is placed on population growth, regulation of populations, and the associated pollution problem. The content is reorganized so that students are introduced in the early chapters to societies, communities, and ecosystems. The chapter on the human species is moved to the section on genetic continuity, and the chapters on cell theory and multicellular organization are combined into a single chapter.

The revised textbook retains the same basic overall design of the earlier editions. The concepts of cell, gene, and evolution still provide the general

framework. All levels of biologic organization are evident; however, biology is still approached primarily from the molecular and cellular levels. Like earlier editions, an attempt is made to unify the subject matter by structuring it around one of the BSCS themes: science as inquiry, history of biologic concepts, changes of living things through time, diversity of type and unity of pattern in living things, genetic continuity of life, regulation and homeostasis, complementarity of the organism and its environment, complementarity of structure and function, and biologic roots of behavior. The 27 chapters are grouped

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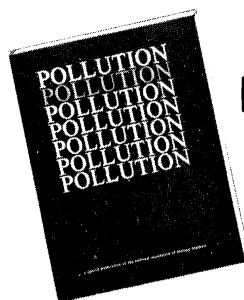
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into six sections: interactions, evolution of life processes, new life, genetic continuity, energy utilization and regulation, and coordination. Although fewer in number, these sections include the same general subject matter covered in earlier editions.

A number of limitations remain evident in the revised textbook. Several referents to scientific literacy, such as interrelationships between science and the humanities, ethics that control a scientist in his work, science as a human enterprise, social obligations of a scientist, and interrelationships among science, technology, and society are treated too briefly or are ignored. The reading level, depth at which some of the concepts are covered, and approach used to cover these concepts appear to be too difficult for the average 10th-grade biology student. In addition, the content often assumes previous learnings, which may or may not have occurred.

This is an excellent general-biology textbook, even with the identified limitations. It is recommended for high-ability biology students and for above-average teachers who have a good background in molecular and cellular biology.

Thomas P. Evans  
Oregon State University  
Corvallis

### Zoology

**LIFE OF THE MARSUPIALS**, by Hugh Tyndale-Biscoe. 1973. "Contemporary Biology" series. American Elsevier Publishing Co., New York, 254 p. \$15.00 (hardback).

Books detailing serious studies of marsupials have long been lacking in areas other than taxonomy. The would-be student of marsupials has had to track down shreds of information in numerous journals and other scientific publications in an attempt to assemble a total picture. Now there has been an important breakthrough in marsupial study: the publication of *Life of the Marsupials*.

With this book Tyndale-Biscoe presents, under one cover, a comprehensive discussion of marsupial biology. All aspects—from evolutionary origin through reproductive and general physiology to man's role in contemporary marsupial distribution—are thoroughly and clearly discussed. Many concepts are excellently illustrated in accompanying figures. Particularly noteworthy is the figure in chapter 1 depicting probable marsupial and eutherian molar evolution from a common ancestor.

The text is meaty yet straightforward and easy to understand. Principal ideas of each chapter are summarized at the end of that chapter. The book also has a good index and a very impressive, useful reference list. I would rate this book excellent in both content and format.

*Life of the Marsupials* is a must for any college course, graduate or undergraduate, dealing with marsupials. It is an equally important addition to the library of every vertebrate biologist. I heartily recommend it as both a textbook and a source of personal information.

Nancy A. Andersen  
University of New Mexico  
Albuquerque

**A TURTLE IS BORN**, by William White, Jr. 1973. Sterling Nature Series. Sterling Publishing Co., New York., 96 p. \$3.50 (hardback).

This small book explains in detail the life history and physiology of the tortoise and the turtle. It is accurate and concise, and all the scientific terms are well defined. The illustrations—diagrams and photographs—are well done and in sufficient number. Individual kinds of turtles and tortoises are described, but in brief detail. The printing is attractive and easy to read. The