

THE MOTH BOOK, by W. J. Holland. 1969. Dover Publications, New York. 479 pp. \$5.00 (softback).

This is a reprint of the 1903 classic, which is still one of the important guides to moth identification. It is startling to see the dedication to Andrew Carnegie, however; and the bibliography, with its dates in the 1800s, is still more surprising. It reminds us that taxonomy has much ancient history.

The initial chapters give general information on collecting classification, and life histories. The bulk of the book is composed of species descriptions (with line drawings) and color-plates.

The book is well worth the price. This reviewer believes it should be available to every elementary biology class.

Paul Klinge  
Indiana University

THE ANATOMY OF PARAMECIUM AURELIA, by A. Jurand and G. G. Selman. 1969. St. Martin's Press, New York. 218 pp. \$18.00

This elegant volume on the ultra-structure of *Paramecium aurelia* should dispel any illusions about ciliates being "simple" organisms: the intracellular differentiation revealed in this collection of photomicrographs is stunning in its complexity. The text accompanying these splendid illustrations is lucid, concise, and readily understandable by nonspecialists.

The authors give a bibliography of anatomical studies of *Paramecium* and provide a fascinating discussion of why these little animals are of such fundamental interest to biology. Because of complex reproductive cycles, species of *Paramecium* are ideal subjects for studying cytoplasmic inheritance and the influence of nuclear-cytoplasmic relationships in inheritance. And, finally, there is the fascination of a detailed study of differentiation and development in a complex organism that is so very different from the Metazoa, with which we are more familiar.

This text would not be suitable for use in the average high school class but would be a valuable addition to any school or teacher's library. It is "must" reading for the microbiologist and would be an excellent supplementary text for many zoology courses.

Jon R. Fortman  
Mississippi State College  
for Women

PRINCIPLES OF ZOOLOGY, by Willis H. Johnson, Louis E. Delaney, Eliot C. Williams, and Thomas A. Cole. 1969. Holt, Rinehart, & Winston, New York. 814 pp. \$11.95.

This new text by well-known authors is comprehensive, skillfully executed, and beautifully illustrated. It is organized in a traditional pattern. Chapter-end materials are questions

and bibliography.

Only in the last chapter—on ecology and applied science—do the authors assume more than a straightforward style. The book has much in common with the senior author's other texts. It is well worth the price as a reference work, and its use as a zoology text can be "teacher's choice": it is made to leave out chapters.

Paul Klinge  
Indiana University

INSECTS: THEIR WAYS AND MEANS OF LIVING, by Robert Evans Snodgrass. 1969. Dover Publications, New York. 362 pp. \$2.00 (softback).

First published in 1930, this is a popular handbook. Identification of species in the major orders is made readable by putting it in the context of some major physiological or behavioral feature; for example, metamorphosis serves to introduce the Lepidoptera. However, the main emphasis is on identification. The book is a useful classic.

Paul Klinge  
Indiana University

THE MARINE AQUARIUM, by R. F. O'Connell. 1969. Great Outdoors Publishing Co., St. Petersburg, Fla., 159 pp. \$6.95.

*The Marine Aquarium* gives an adequate set of guidelines for the novice who wishes to begin keeping tropical fish. O'Connell makes many useful comparisons with the practice of keeping freshwater fish, on the assumption that this is more familiar to most readers. He describes the latest equipment that enables the hobbyist to keep tropical fish at least expense. Names and addresses of firms from which equipment may be obtained in Europe and the United States are included.

The book is well illustrated with drawings and color photographs, which help to acquaint the beginner with the variety of fish and other marine fauna available. Descriptions, scientific status, and comments on the behavior of the animals are also included. One shortcoming, which makes this section somewhat awkward to use, is that the pertinent photographs are scattered throughout the book and are labeled only with the species name; thus, to find the description of a fish or to find its picture after reading the description one must consult the index. The index includes general items, scientific names, and common names. There is also a glossary.

The book provides valuable information and should be considered by anyone planning to establish a marine aquarium for the home.

Judy von Ahlefeldt  
Colorado College,  
Colorado Springs

THE MARVELOUS ANIMALS, by Helena Curtis. 1968. Natural History Press, Garden City, N.Y. 189 pp. \$5.75.

The subtitle to this book, "An Introduction to the Protozoa," and the fact that it was published for the American Museum of Natural History provide clues to the book's proposed audience. The high school student of biology, interested in protozoa, will find this book a good source of information, and a visitor to the museum may well pick up such a book to derive a great deal of satisfaction in reading about the "wee beasties."

*The Marvelous Animals* is certainly recommended for the high school biology classroom library. Helena Curtis has done a thorough job of reading the literature and writing a short account of protozoology. My own disappointment about the book is that though it is meant to be an introductory book, it turns out to be what a friend of mine calls a "rhetoric of conclusions." The reader does not get caught up in activities or problems that may be attempted by the neophyte investigating the world of a drop of water. He is told that protozoa provide a rich bonus for exploration and speculation; however, he is nowhere drawn into ways of starting such an adventure. To add to the up-to-date facts of the presentation are the drawings, photos, and references to electron microscopic work. These are in addition to line drawings and photomicrographs of the protozoa. The whole package, including a short bibliography and index, may well serve the needs for the high school students looking for facts—and perhaps this is goal enough for any introductory book.

Jack Fishleder  
University of California  
Berkeley

#### BOOKS RECEIVED

BIBLIOGRAPHY ON THE GENETICS OF DROSOPHILA, Part 5, by Irwin H. Herskowitz. 1969. Macmillan Co., New York. 376 pp. \$9.50.

COMPLEMENTARITY IN BIOLOGY, by James P. Isaacs and John C. Lamb. 1969. Johns Hopkins Press, Baltimore. 175 pp. \$6.50.

THE BIOLOGICAL CODE, by M. Ycas. 1969. John Wiley & Sons, Inc., New York. 360 pp. \$11.95.

THE ART OF ORGANIC FORMS, by Philip C. Ritterbush. 1969. Smithsonian Institution Press, Washington, D.C. 149 pp. \$10.00.

TEXTBOOK OF NEUROANATOMY, by H. Chandler Elliott. 2nd ed., 1969. J. B. Lippincott Co., Philadelphia. 571 pp. \$14.00.

METABOLIC EFFECTS OF GONADAL HORMONES AND CONTRACEPTIVE STEROIDS, ed. by H. A. Salhanick, D. M. Kipnis, and R. L. Vande Wiele. 1969. Plenum Publishing Corp., New York. 762 pp. \$27.50.