

## Books

PARK, O., ALLEE, W. C., AND SHELFORD, V. E. *A Laboratory Introduction to Animal Ecology and Taxonomy*. The University of Chicago Press, 1939. 271 pp. \$2.00.

"This book represents the work of three academic generations of teaching ecologists"—this, the first sentence in the foreword of the manual will give the student and layman an objective view into the practical teaching qualities and general information which the manual contains.

The first twenty-five pages offer a review of the basic divisions in the field of biology, much emphasis being placed on the interrelations of animals and their environment. Some thirty-five exercises are devised for the student, including: (a) how to construct a key, (b) a study of terrestrial animals, (c) a study of fresh water animals, (d) a general study of Faunal Percentages and Quadrats. The Synoptic Key, another division of the manual, gives accurate information on the descriptions and characteristics of animals of each phylum and on their habitats. A valuable fourteen-page glossary of technical terms is provided for the student. There are forty-seven diagrams which will prove helpful for identification purposes. The manual is bound in a unique style with a patent clasp which allows the book to open fully and lie flat on the desk. Criticism might be made of the rather fine print used throughout.

The writer considers this manual a practical, convenient, and thoughtfully constructed text, a sound treatise in the field of ecology and taxonomy.

S. W. ROBERTS,

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BRYAN, ARTHUR H., AND BRYAN, CHARLES. *Principles and Practice of Bacteriology*. Barnes and Noble, Inc., 1938. 267 pp. \$2.25.

This text and manual of procedure is divided into three main sections. Part I discusses the history of general bacteriology, general characteristics of bacteria, how to prepare culture media, the inoculation of culture media, how bacteria are destroyed, and a practical method of study.

Part II is a study of pathogenic bacteria affecting human beings.

Part III deals with serology and immunology.

Fifteen pages are devoted to a glossary of technical terms, which will be of great aid to the student.

The arrangement of the book is practical, containing laboratory technique, 31 photographs, 101 illustrations, and provision for the student to take a minimum amount of notes in the back. The material is concise and definite, making it easy for the student or the layman to follow directions and apply his knowledge.

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ADELL, JAMES C., DUNHAM, OLIVE O., WELTON, LOUIS E. *Explorations in Biological Science*. 345 pp. Ginn and Co., Boston, 1937. \$1.12. (One copy submitted for evaluation.)

The publishers present a current development in biology textbooks, a perishable, soft-covered 10 $\frac{1}{8}$  inch by 7 $\frac{1}{8}$  inch tape-bound book. Three holes have been punched on the binding side to assist in the use of a looseleaf cover. Non-coated paper and black and white typography

are used throughout. Line cuts, many of which are superbly executed, are featured. Only a few halftones supplement the copy. A small number of illustrations are sufficiently labeled, the rest are merely titled, plus an occasional legend.

The language is simple, and tends to use such phraseology as "Mystery of Pollen Grains, A Mental Motion Picture of the Development of Seeds . . ." Pronunciation keys are included.

The thirteen units utilize the following pattern of approach. The major principle to be studied is put in question form; about a page and a half of didactic information follows; the principles and generalization are listed, an excellent spelling and pronunciation drill follows; and then each individual problem is presented. The individual problem also follows a pattern, i.e., the problem is indicated; the elaboration of the stated problem is written up directly in the text; additional questions for classroom discussion are given space for outlining; and further projects are listed. The end of the unit has a *Student Aids* section consisting of a list of textbooks, mainly on a 9th year level, more questions and problems, and a long self mastery test. This is repeated for thirteen units and some 70 problems.

There is an even page space allotment to each of the thirteen units, amounting to an average of fifteen pages per unit. About six units are of a morphological nature covering such topics as Flowers, Insects, Cell Structure, Plant Classification, Animal Classification, and Vertebrate Relationship. Almost three units have a physiological development covering such principles as nutrition, digestion, circulation, and activities of the green plant. One unit elaborates Behavior, another Ecology, a third Health. Not more than twenty pages treat Genetics, including maturation of the

gametes, mitosis, cleavage and eugenics. The authors include an excellent section on *Hobbies for Leisure Time*.

ALAN A. NATHANS

BROTHER H. CHARLES, F.S.C., *Biology*.

The Bruce Publishing Company. Milwaukee, 1939. 408 pp. \$1.72.

The Bruce Publishing Company has released a textbook superbly set up in almost every mechanical phase. It is  $5\frac{1}{2} \times 8\frac{1}{2}$  inches with a blue-orange pebbled-finish cover. The text has a sturdy serviceable binding. The typography represents an extreme high in sharpness, readability and workmanship. The excellence of the typography is further enhanced by a high gloss carefully selected paper stock. The halftones and line cuts are well executed and carefully labeled. The book has the imprimatur of the Catholic Church.

This book, according to the preface, is to serve as a textbook of biology for Catholic high schools. Its most significant departure from the usual textbook type in science, is its close coordination between Catholic doctrine and science. While it does not moralize or indoctrinate, it emphasizes the relationship "Between God, man, and the other creatures." It offers the pupils two incentives for proper living—the natural and the divine. In controversial subjects such as evolution, it explains what Catholics may or may not believe. How desirable such a combination is in a science text is a moot question.

Brother H. Charles has stated in the preface that his purpose is to have students acquire an abiding interest in living things, to have respect for life and a disposition to protect and preserve it, to possess a desire to contribute to the betterment of what is faulty and undesirable in the environment in which they live, and to grow closer to the Divine