

ison of results of different groups of observations. It then moves on to tests of association between species and theoretical approaches to the ecological concept of associations. Correlation of vegetation with habitat factors is treated according to different combinations of quantitative and qualitative data relating to plant and environmental factors. Floristic composition, species-area relationships, and other features of plant communities are considered in a separate chapter on quantitative aspects of phytosociology. The final chapter is a well-presented summary of the author's views on the quantitative approach to plant ecology, including interesting observations on the meaning of pattern as elucidated in quantitative studies.

All ecologists are more or less concerned with the quantitative approach as it is discussed in this book. Many will find the book a useful guide to recent progress and a thought-provoking critique of major problems in quantitative aspects of plant ecology.

WILLIAM S. BENNINGHOFF
Department of Botany,
University of Michigan

Methods of Biochemical Analysis. vols. 5 and 6. David Glick, Ed. Interscience, New York, 1957; 1958. ix + 502 pp. \$9.50; ix + 358 pp. \$8.50.

This series constitutes a valuable contribution to biochemistry. Its objectives are to discuss the recent developments in biochemical methodology, to evaluate critically the available procedures, and to give detailed instructions for the method or methods of choice. For the most part, the editors and the contributors should be commended for their success in carrying out these objectives.

These two volumes are worthy additions to this series. Volume 5 should be of particular value to biochemists interested in the microanalysis of metallic ions, since it contains a chapter on "The micro determination of cobalt in biological materials," with emphasis on the spectrographic procedures; an excellent review of "Activation analysis and its application in biochemistry"; and a discussion of "Contamination in trace element analysis and its control." This volume also contains chapters on "Assay methods for cholinesterases," "Biological standards in biochemical analysis," " α -Keto acid determinations," "Chemical determination of estrogens in human urine," and "Infrared analysis of vitamins, hormones and coenzymes." Volume 6 should be of particular interest to purine and pyrimidine biochemists, since it includes chapters on the "Chemical

determination of nucleic acids," "Microbiological assay of nucleic acids and their derivatives," and "New methods for purification and separation of purines." The other chapters are "Determination of formaldehyde and serine in biological systems," "Assay of serotonin and related metabolites," "Determination of transaminase," "Determination of thiamine," "Glycolipid Determination," "Determination of hexosamines," and "Electrophoresis in density gradients combined with pH and/or conductivity gradients."

The reviews are logically organized, well documented, and clearly written. These two volumes should be valuable to the research biochemist as reference books. As an aid to their use, each volume has a subject index, an author index, and a cumulative title index. However, no cumulative subject index has been included.

JAMES R. GILLETTE
Laboratory of Chemical Pharmacology,
National Heart Institute,
National Institutes of Health

New Books

Angler's Guide to the Salt Water Game Fishes, Atlantic and Pacific. Edward C. Migdalski. Rondla, New York, 1958. 516 pp. \$7.50.

Atlas of Microorganisms, The Penicillia. Shigeo Abe. Kin-Ichiro Sakaguchi, Ed. Kanehara Shuppan Co., Tokyo, Japan, 1957 (order from Matthews Book Co., St. Louis 4, Mo.). 336 pp. \$20.

Brave New World Revisited. Aldous Huxley. Harper, New York, 1958. 147 pp. \$3.

Catalogue of the Type Specimens of Microlepidoptera in the British Museum (Natural History) described by Edward Meyrick. Tortricidae, Olethreutidae, Noctuidae. J. F. Gates Clarke. British Museum (Natural History), London, 1958. 600 pp. £6.

Catalysis. vol. 6, *Alkylation, Isomerization, Polymerization, Cracking and Hydroreforming.* Paul H. Emmett, Ed. Reinhold, New York; Chapman & Hall, London, 1958. 712 pp. \$19.50. Contents: "Catalytic alkylation of paraffins with olefins" (Robert M. Kennedy), "Catalytic isomerization of hydrocarbons" (F. E. Condon), "Mechanisms of polymer formation and decomposition" (R. Simha and Leo A. Wall), "Polymerization of olefins" (A. G. Oblad, G. A. Mills, Heinz Heinemann), "Catalytic cracking" (Hervy H. Voge), and "Catalytic reforming of pure hydrocarbons and petroleum naphthas" F. G. Ciapetta, R. M. Dobres, R. W. Baker).

The Chemical Prevention of Cardiac Necroses. Hans Selye. Ronald, New York, 1958. 244 pp. \$7.50.

Collecting, Preserving and Studying Insects. Harold Oldroyd. Macmillan, New York, 1958. 327 pp. \$5.

Electronic Aviation Engineering. Peter C. Sandretto. International Telephone and Telegraph Corp., New York, 1958. 781 pp. \$9.50.

Elementary Matrix Algebra. Franz E. Hohn. Macmillan, New York, 1958. 316 pp. \$10.

Emergency War Surgery. U.S. Armed Forces issue of *NATO Handbook* prepared for use by the medical services of NATO nations. U.S. Department of Defense, Washington, 1958 (order from Supt. of Documents, GPO, Washington 25). 422 pp. \$2.25. This handbook was developed by a committee of three surgical consultants representing the military medical services of France, the United Kingdom, and the United States, assisted by observers and the written recommendations from other NATO countries. The material used was obtained from authors and publications of many NATO countries.

Experiments in General Chemistry. Joseph B. Nordmann and Ernest S. Kuljian. Burgess, Minneapolis, Minn., 1958. 162 pp.

The Fossil Book. A record of prehistoric life. Carroll Lane Fenton and Mildred Adams Fenton. Doubleday, New York, 1958. 495 pp. \$12.50. *The Fossil Book* relates the story of life during the past 2 billion years. It is a collector's guide that tells what fossils are and where to find them.

Geology of the Great Lakes. Jack L. Hough. Univ. of Illinois Press, Urbana, 1958. 331 pp. \$8.50.

The Health of a Nation. Harvey W. Wiley and the fight for pure food. Univ. of Chicago Press, Chicago, Ill., 1958. 342 pp. \$6.

The Illustrated Library of the Natural Sciences. vols. 1-4. Simon and Schuster, New York, 1958. 3042 pp. \$19.95 until 25 Dec.; \$25. This four-volume survey of the world of nature—over a million words and more than 3000 pictures—covers every field of natural science. From the first entry, Aardvark, to the last, Zebra, the alphabetically arranged volumes provide entertainment and information. Among the outstanding contributors are Marston Bates, William Beebe, Alfred Emerson, Homer E. Newell, Jr., and George Gaylord Simpson.

Immunology and Development. Mac V. Edds, Jr. Univ. of Chicago Press, Chicago, Ill., 1958. 69 pp. \$2.50.

Internal Conversion Coefficients. M. E. Rose. North-Holland, Amsterdam; Interscience, New York, 1958. 182 pp. \$6.25.

Introduction to the Theory of Sound Transmission. With application to the ocean. C. B. Officer. McGraw-Hill, New York, 1958. 292 pp. \$10.

Linear Operators. pt. I, *General Theory.* Nelson Dunford and Jacob T. Schwartz. Interscience, New York, 1958. 872 pp. \$23.

Living Birds of the World. E. Thomas Gilliard. Doubleday, New York, 1958. 400 pp. \$12.50. Gilliard, associate curator of birds at the American Museum of Natural History, discusses all the known bird families and subfamilies and almost 1500 species.