

• Books for Biologists •

WILD FLOWERS AND HOW TO GROW THEM. Edwin F. Steffek, Associate Editor of *Popular Gardening Magazine*. 192 pp. \$3.95. Crown Publishers, Inc., New York 16, New York. 1954.

A practical book on the cultivation of wild flowers, with full information on where to find them, how to transplant them and raise them in the home garden.

Soils, seasons, water, light, drainage, climate, plant enemies, nutrition, etc. are discussed. The illustrations, in full-color and black-and-white are carefully keyed to descriptions: statements of where the flowers grow, their blooming seasons, species, and cultures.

WITHIN THE LIVING PLANT. Erston V. Miller, Professor of Botany, University of Pittsburgh, formerly Physiologist, United States Department of Agriculture. 325 pp. \$12.00. The Blakiston Company, Inc., New York 22, New York. 1953.

This textbook for an advanced, undergraduate plant physiology course has two major objectives: (1) it presents fundamental principles of plant physiology; (2) it then focuses attention on the manner in which plant physiology may affect the everyday life of the individual.

ZOOLOGY. Clarence J. Goodnight, Associate Professor of Zoology, Purdue University, and Marie L. Goodnight, formerly Instructor in Biology, Purdue University. 700 pp. \$6.50. The C. V. Mosby Company, St. Louis 3, Missouri.

A new type zoology text to provide the necessary technical background for students in the curricula in general agriculture, preveterinary, pre-dental, premed, prepharmacy, medical technician and zoology, as well as the humanistic appeal that should be an integral part of biology.

After a brief introduction to the study of science, scientific method, protoplasm, classification, and other background material, the book emphasizes vertebrate study. Following the chapters on vertebrate anatomy and physiology, the book returns to material on the cell which logically leads into embryology, genetics, and evolution. Next there is a survey of the animal kingdom, which presents type forms and stresses their biological and economic importance. Concluding chapters take up discussion of ecology and its many implications.

MODERN EXPERIMENTS IN TELEPATHY. S. G. Soal, Senior Lecturer in Mathematics, Queen Mary College, University of London; and F. Bateman, M. Sc. (Lond.). 425 pp. \$5.00. Yale University Press, New Haven, Connecticut. 1954.

The subject of this book is a question of great

importance to contemporary science and philosophy. If the evidence that some events in the external world can be perceived in a manner independent of ordinary channels of communication withstands critical examination, and if it appears that the extrasensory process has quite peculiar properties, particularly in relation to time, many mechanistic explanations that have proved so fruitful in modern science will require reconstruction. The authors of this book have considered all the available evidence and present the case in favor of telepathy that appears to some competent critics irrefutable. They describe their own experiments, emphasizing the extreme precautions taken to exclude sensory cues, self-deception, and statistical artifacts. Because of the extreme care taken in its preparation, this book may well raise serious doubts in the minds of many who hitherto have refused to examine its subject matter.

Professor G. Evelyn Hutchinson of Yale University contributes an introduction.

ELEMENTS OF ECOLOGY. George L. Clarke, Associate Professor of Zoology, Harvard University. 534 pp. \$7.50. John Wiley and Sons, Inc., New York 16, New York. 1954.

Stressing the unity of the science, the book deals with the ecological interrelations of both plants and animals, and with the aquatic as well as the terrestrial environment. The principal factors of the physical environment, such as water, temperature and light, are treated individually before their combined action is discussed.

Similarly, the ecological relations of individual plants and animals are regarded as one step in the understanding of communities and populations. Lucid descriptions of natural situations are given to help develop the general principals. Complex terminology is avoided. About 200 illustrations, including graphs, diagrams, and photographs augment the discussion.

One new chemical compound "completely retards" the growth of a common strain of bacteria in the test tube, declared Donald F. Loncrini, a chemist engaged in graduate studies at the Florida State University. The active compound is trifluoro norvaline, one of a series of altered amino acids which were produced in a search for non-poisonous bacterial agents, said Mr. Loncrini.

Just as a key fits into a lock, the "fake" amino acid fits into the germ cell at a spot where a vital amino acid would normally go, explained Mr. Loncrini, but because the substitute "key" is not a vital amino acid, the germ is deprived of nourishment and dies.