

Books of the Week

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ADAPTATION AND NATURAL SELECTION: A Critique of Some Current Evolutionary Thought—George C. Williams—Princeton Univ. Press, 307 p., \$6.50. Written for advanced students and professional biologists, the author's critical appraisal of such concepts as genetic assimilation, group selection and cumulative progress in adaptive evolution leads to advocating the rigorous application of the ideas of Fisher, Haldane and Wright in explaining adaptation.

AGRICULTURAL CHEMICALS, BOOK III, MISCELLANEOUS CHEMICALS: Fumigants, Growth Regulators, Repellents and Rodenticides—W. T. Thomson—Simmons Pub. Co., 182 p., diagrams, \$9; spiral-bound, \$6.50. Provides accurate, current information on 493 trade names, lists chemical formula of product, type, origin, toxicity, phytotoxicity, uses, pests controlled, rates, application and precautions.

THE ALCHEMISTS: Fathers of Practical Chemistry—Richard Cummings—McKay, 146 p., illus. by Yukio Tashiro, \$3.50. Tells the story of the origin, development and decay of the art of alchemy through the lives of nine alchemists; for young adults, includes bibliography.

ALEXANDER WILSON: Wanderer in the Wilderness—Robert Plate—McKay, 216 p., photographs from Wilson's paintings, \$4.50. Biography of a great American bird painter.

THE ASHANTI OF GHANA—Sonia Bleeker—Morrow, 160 p., illus. by Edith G. Singer, \$2.95. Describes for younger readers the origin and civilization of one of the mightier tribal groups in West Africa.

BUILT TO SURVIVE—Anne Terry White and Gerald S. Lietz—Garrard Pub. Co., 80 p., illus. by Ted Schroeder, \$2.07. Grade school reading about man's fitness for survival.

CELLS AND SOCIETIES—John Tyler Bonner—Atheneum, 234 p., illus., paper, \$1.95. Reprint (1955), gives insight into several kinds of mammalian societies such as fur seals, red deer and termites, and deals with reproduction in plants; and the feeding, breathing and circulation processes in animals.

THE CHALLENGE TO WOMEN—Seymour M. Farber and Roger H. L. Wilson, Eds.—Basic Bks., 176 p., \$4.95. With the pressures of overpopulation in mind the writers of this symposium consider the choices open to modern women in terms of human alternatives to having large families.

THE CHANGING AMERICAN SCHOOL: The Sixty-fifth Yearbook of the National Society for the Study of Education, Part II—John I. Goodlad, Ed.—Univ. of Chicago Press, 319 p., \$5. Discusses the changing role of the teacher, the curriculum, guidance and the pupil, instructional resources, team teaching, and the potential influence of economic, social and political forces.

CHEMICAL ASPECTS OF POLYPEPTIDE CHAIN STRUCTURES AND THE CYCLOL THEORY—Dorothy Wrinch—Plenum Press, 196 p., diagrams, \$9.50. This monograph investigates the picture of polypeptide chain structures which emerges in the advanced development of the cyclol theory.

DEPTHS OF THE EARTH: Caves and Cavers of the United States—William R. Halliday, M.D.—Harper, 398 p., photographs, maps, \$7.50. The Director of the Western Speleological Society gives a historical account of America's caves and their explorers, together with first-hand descriptions of actual descents.

THE FORGOTTEN VOYAGE OF CHARLES WILKES—William Bixby—McKay, 184 p., illus. by John Flynn, map, \$4. Presents the record, accomplishments and hardships of the U. S. exploratory expedition in the years 1838 to 1842. For young people.

FRONTIERS IN ARCHAEOLOGY—Robert Silverberg—Chilton Bks., 182 p., plates, maps by Dorothy de Fontaine, \$4.95. Deals with the more recent accomplishments of archaeology, emphasizing the years since the end of World War II, the author describes the work done at Jericho, Ugarit, Shang, Zimbabwe, Teotihuacan and Easter Island.

FUNDAMENTAL PHENOMENA IN HYPERSONIC FLOW: Proceedings of the International Symposium Sponsored by Cornell Aeronautical Laboratory—J. Gordon Hall, Ed.—Cornell Univ. Press, 354 p., diagrams, \$12.50. Includes contributions on the problems of entry heat transfer at superorbital speeds, structure of

low density hypersonic flows, and stability of hypersonic boundary layers and wakes.

THE GROWTH OF CEREALS AND GRASSES: Proceedings of the Twelfth Easter School in Agricultural Science, University of Nottingham, 1965—F. L. Milthorpe and J. D. Ivins, Eds.—Butterworths, 359 p., illus., \$19. Contains detailed and up-to-date information concerning the growth of cereals and grasses, while comparison of the two groups reveals the different physiological and ecological phenomena influencing the growth of agricultural crops.

GROWTH OF CRYSTALS, Vol. 4—A. V. Shubnikov and N. N. Sheftal', Eds., transl. from Russian—Consultants, 206 p., illus., \$20. Contains 42 papers concerned with experimental studies on growth of crystals and monocrystalline films, liquid crystals, production of monocrystals of various materials, and the search for ways of growing new crystals.

HELPING HANDS: Volunteer Work in Education—Gayle Janowitz—Univ. of Chicago Press, 125 p., paper, \$1.75. Practical guide to the organization of after-school study centers in disadvantaged neighborhoods, discussing programs, activities, atmosphere and resources, volunteers and case studies.

THE HUMAN ORGANISM: An Introduction to Physiology—David F. Horrobin—Basic Bks., 208 p., diagrams, \$4.95. A research scientist's introduction to the basic chemical and physical processes involved in bodily function, concluding with the problems man faces in exploring inner and outer space.

INFRARED BAND HANDBOOK: Supplements 3 & 4—Herman A. Szymanski, Ed.—Plenum Press, 261 p., diagrams, \$15. These infrared absorption bands cover more than 400 additional organic and inorganic compounds in the entire range from 2 to 25 microns, tabulating 4906 bands by wave number.

INSECTS—Ross E. Hutchins—Prentice-Hall, 324 p., illus. by Stanley Wyatt, photographs, \$6.95. Surveys in one volume the whole field of entomology, tells what insects have in common and describes the most important types, illustrating the types with specific accounts of their behavior.

THE INTEGRITY OF THE BODY: A Discussion of Modern Immunological Ideas—F. M. Burnet—Atheneum, 189 p., diagrams, paper, \$1.75. Originally (1962) published by Harvard University Press, the Nobelist here deals with the theme of immunity as based on the demand for chemical and cellular consistency within the body.

JUNIOR SCIENCE BOOK OF CANADA GEESE—Alexander L. Crosby—Garrard Pub. Co., 64 p., photographs, \$1.98. Attractive nature book for beginning readers.

MENTAL HEALTH FOR STUDENTS: A Guide for Adjusting to College—Arthur G. Nikelly—Thomas, C. C., 208 p., \$7.50. Discusses at student level the emotional behavior of students, areas of maladjustment, devices for adjustment, symptoms and major types of maladjustment, and mental health personnel.

MICROCHEMICAL TECHNIQUES: Plenary Lectures at International Symposium, 1965—P. J. Elving and others—Butterworths, 184 p., plates, diagrams, \$8. Lectures deal with such subjects as recent microtechniques in forensic science, organic microanalysis in Japan, photometric titrations, and techniques in organic microsynthesis.

MINERALS YEARBOOK 1964, Vol. III: Area Reports: Domestic—Bureau of Mines Staff—GPO, 1152 p., \$4.50. Statistical summary and individual chapters covering the mineral industries in each of the 50 states, with chapter on employment and injuries.

THE NOBLE GASES—Isaac Asimov—Basic Bks., 171 p., \$4.50. Explains to the general reader what the noble gases are, why they are called noble, discusses the argon and its family, noble-gas atoms, helium, fluorine and noble-gas compounds.

NUCLEAR DATA, (Sections A and B) Vol. 1, No. 1: A Journal Devoted to Compilations and Evaluations of Experimental and Theoretical Results in Nuclear Physics—Katharine Way, Ed.—Academic Press, 102 p., 122 p., paper, \$3 each; six issues annually each section, \$15 annually each. Section A will contain new issues of Charged-Particle Cross Sections as they

appear. Section B will be devoted exclusively to the Nuclear Data Sheets.

THE ORCHID WORLD—Walter Richter, transl. from German and rev. by Edmund Launert; P. Francis Hunt, Ed.—Dutton, 292 p., 100 color photographs, \$12.50. Details on the history, distribution, cultivation and breeding of orchids, with tabulated descriptions of 727 of the more commonly cultivated species.

THE ORIGIN OF THE SOLAR SYSTEM: Genesis of the Sun and Planets, and Life on Other Worlds—Thornton Page and Lou Williams Page, Eds.—Macmillan, 336 p., more than 100 photographs, drawings and diagrams, \$7.95. This third volume of the SKY AND TELESCOPE Library of Astronomy presents authoritative review of the framework of current theories about the evolution of the planets and the sun.

PHYSICS OF QUANTUM ELECTRONICS: Conference Proceedings—P. L. Kelley, B. Lax and P. E. Tannenwald, Eds.—McGraw, 861 p., illus., \$24. Provides up-to-date, indexed source of information on basic research in quantum electronics as presented at 1965 Conference held in San Juan, Puerto Rico.

PLOUGHSHARE—Carl R. Gerber, Richard Hamburger and E. W. Seabrook Hull—USAEC, 54 p., photographs, diagrams, paper, single copies free upon request direct to USAEC, P.O. Box 62, Oak Ridge, Tenn. 37830. This Atomic Energy Commission booklet explains the development and uses of nuclear explosives for excavations and other peaceful purposes.

RED LEGS—Alice E. Goudey—Scribner, unpagged, illus. by Marie Nonnast, \$2.95. A close and accurate look for beginning readers at a red-legged grasshopper's life.

REVIEW OF TEXTILE PROGRESS: A Survey of World Literature—M. L. Ryder and others, introd. by H. O. Puls—The Textile Institute and the Society of Dyers (Butterworths), 16th ed., 458 p., diagrams, \$16.95. Of interest to polymer scientists, textile and dyeing technologists and color chemists.

RIVERS: A Book to Begin on—Lee Sebastian—Holt, unpagged, photographs, \$2.75. Dramatizes for young readers the geology of rivers and their many uses.

SCIENCE IN PROGRESS—Harold G. Cassidy and others, Wallace R. Brode, Ed.—Yale Univ. Press, 15th ed., 417 p., illus., \$10. Outstanding lectures on subjects ranging from aerial photography and its usefulness to the scientist, to the energy environment in which we live, the retinex, and the role of eddies in fluid motion.

SOCIAL DEVIANCY AMONG YOUTH: The Sixty-Fifth Yearbook of the National Society for the Study of Education, Part I—William W. Wattenberg, Ed.—Univ. of Chicago Press, 434 p., illus., \$5.50. Presents current thinking and research on delinquency, from a review of trends to the training of educational specialists for emotionally disturbed and socially maladjusted children.

SPECIAL LIBRARIES: A Guide for Management—Edward G. Strable, Ed.—Special Libraries Assn., 72 p., illus., paper, \$4. Describes the characteristics, functions, relationships, staff, space equipment, cost and budget requirements and the organization of special libraries for industry.

STUDY ABROAD, 1966-1968—International Guide to Fellowships, Scholarships and Educational Exchange—Unesco Pubns. Center, N. Y., 589 p., paper, \$4. Data on 170,000 scholarships and fellowships offered by 77 international organizations and some 1,690 donor bodies in 120 states or territories.

A TEN-YEAR PROGRAM OF FEDERAL WATER RESOURCES RESEARCH—Federal Council for Science and Technology, Committee on Water Resources Research, 1966—Office of Science & Technology (GPO), 88 p., paper, 40¢. Recommendations to speed the development of a comprehensive, long-range water research program.

A THEORY OF NATURAL PHILOSOPHY—Put forward and explained by Roger Joseph Boscovich, S.J.—M.I.T. Press, 229 p., diagrams, paper, \$2.45. English translation of the Venetian edition published in 1763, with a short life of Boscovich.

TODAY'S HOSPITAL: A Guide for Trustees, Administrators and Volunteers—Raymond P. Sloan—Harper, 212 p., \$4.50. A realistic appraisal of the U. S. hospital situation, types of services rendered, administration, the function of trustees, professional organization, executive direction, auxiliaries and volunteers.

WRITING SCIENCE NEWS FOR THE MASS MEDIA—David Warren Burkett—Gulf Pub. Co., 183 p., \$4.95. A practical discussion of the expanding field of science writing based on the experience of professional science writers.

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