

# books OF THE WEEK

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**BUILDING BLOCKS OF LIFE:** Proteins, Vitamins and Hormones Seen Through the Microscope—Roman Vishniac—Scribner, 1971, 62 p., color photographs by author, \$6.95. Collection of biologist's magnified views taken with the interference microscope, shows how the structure and color of substances essential to the processes of life resemble abstract art.

**COLOR UNDER GROUND:** The Mineral Picture Book—John S. White, Jr.—Scribner, 1971, 62 p., color photographs by Lee Boltin, drawings, \$6.95. Shows the striking beauty of mineral crystals, elucidated with concise, scientific text.

**DRYING OF MILK AND MILK PRODUCTS—**Carl W. Hall and T. I. Hedrick—Avi Pub. Co., 1971, 2nd ed., 338 p., illus., \$18.50. Deals with the theory of evaporation and evaporators, the methods of drying, instrumentation and control, processing, packaging and storage, by-products, quality control, properties, markets and uses.

**EARTHBOUND ASTRONAUTS:** The Builders of Apollo-Saturn—Beirne Lay, Jr.—Prentice-Hall, 1971, 198 p., photographs, \$6.95. A readable account of the men, the design, construction and testing, the uncertainties and problems involved in the engineering feat of getting man to the moon.

**AN EXPERIENCE WITH ORGANISMS—**Darrel L. Murray—Addison-Wesley, 1971, 219 p., illus., paper, \$3.95. Laboratory manual focuses on specific topics selected for their importance to the understanding of basic concepts in today's biology, such as structure-function, metabolism, and growth.

**EXPERIMENTAL COELENTERATE BIOLOGY—**Howard M. Lenhoff, Leonard Muscatine and Lary V. Davis, Eds.—Univ. of Hawaii Press, 1971, 281 p., photographs, drawings, tables, \$12. Describes research of a group-research summer training program studying growth and development of coelenterates, feeding behavior and metabolism, endosymbiosis of algae and coelenterates, and calcification of corals.

**GENETICS EXPERIMENTS WITH BACTERIAL VIRUSES—**D. Peter Snustad and Donald S. Dean—Freeman, 1971, 65 p., illus., paper, \$2.50. Laboratory manual developed to allow relatively inexperienced students to illustrate the principles of genetic fine structure using a minimum of expensive equipment and a maximum of initiative.

**HOW TO FIX IT—**Morton J. Schultz—McGraw-Hill, 1971, 318 p., photographs, drawings, tables, \$7.95. This practical guide to home, car and boat repair deals with such topics as adhesives, caulking, draftproofing, engine troubleshooting, floors, furnace, paint, septic tank, and many more.

**INTERNATIONAL HEALTH ORGANIZATIONS AND THEIR WORK—**Neville M. Goodman, foreword by M. G. Candau—Williams & Wilkins, 1971, 2nd ed., 408 p., illus., \$18.25. Updated, comprehensive history, from the quarantines of the Mecca pilgrimages to the 23rd Health Assembly in 1970, describes the agreements, organizations, constitutions, aims and achievements.

**IS THERE AN OPTIMUM LEVEL OF POPULATION?—**S. Fred Singer, Ed.—McGraw-Hill, 1971, 426 p., diagrams, \$12.50. A group of scholars consider the underlying concepts and search for a methodology to

outline the many factors that determine an optimum growth rate in which the population, as a whole, can enjoy the highest quality of life.

**MARTIN GARDNER'S SIXTH BOOK OF MATHEMATICAL GAMES** from *Scientific American*—Freeman, 1971, 262 p., illus., \$9.95. A collection of instructive mathematical diversions, starting with helical forms, parity checks, the trip around the moon, and including problems of infinite regress, extraterrestrial communication, and op art.

**MOLECULAR ACOUSTICS—**Andrew J. Matheson—Wiley-Interscience, 1971, 290 p., diagrams, \$16.50. Addressed to the researcher, the book describes the molecular information which may be obtained from studies of the propagation of high-frequency longitudinal and shear waves in gases, liquids, polymers and solids.

**ON ICE AND SNOW AND ROCK—**Gaston Rebuffat, transl. from French by Patrick Evans—Oxford Univ. Press, 1971, 194 p., 258 photographs (58 in color), drawings, \$15. Shows in meticulous detail how an expert mountaineer proceeds to execute very steep ascents on limestone, gneiss, granite and icy peaks. Photographic record is breathtaking.

**PESTICIDES IN THE ENVIRONMENT,** Vol. 1 (in Two Parts): Part II—Robert White-Steven, Ed.—Dekker, 1971, 629 p., diagrams, tables, \$28.50. This compendium presents the properties, functions, utilities and contribution of pesticidal chemicals, deals with assay procedures for pesticide residues, toxicological assessment to establish proof of safety, and pest resistance to pesticides.

**THE PHYSIOLOGY OF AGGRESSION AND DEFEAT—**Basil E. Eleftheriou and John Paul Scott, Eds.—Plenum Press, 1971, 312 p., illus., \$13.50. Proceedings of AAAS Symposium, 1968, describes detailed studies of the use of brain electrodes to stimulate aggression in rhesus monkeys, biochemical changes in nervous systems of fighting and defeated animals, and adrenal function of combat troops.

**THE RELATIONSHIP OF MAGNESIUM TO DISEASE IN DOMESTIC ANIMALS AND IN HUMANS—**Jerry K. Aikawa—Thomas, C. C., 1971, 145 p., diagrams, \$8. Presents general hypothesis concerning the biochemical and cellular functions of magnesium, treats normal distribution in man, and regulation of magnesium metabolism. Covers thoroughly magnesium deficiency in ruminants, experimental animals and man.

**SAMUEL JOHNSON AND THE NEW SCIENCE—**Richard B. Schwartz—Univ. of Wis. Press, 1971, 188 p., portrait, \$10. Monograph shows Johnson as a man of the 18th century deeply involved with the new science, carefully treading a middle ground between the province of science and that of religion and morality.

**SUGAR:** Chemical, Biological and Nutritional Aspects of Sucrose—John Yudkin, Jack Edelman and Leslie Hough, Eds.—Butterworths (Daniel Davey), 1971, 246 p., illus., \$14.50. Inter-disciplinary symposium papers, organized to emphasize the unique role played by sucrose in widely varied aspects of chemistry, biology and medicine.

## FOR YOUNGER READERS

**BACKYARD SAFARI—**John and Cathleen Polgreen—Doubleday, unpagged, photographs by authors, \$4.50. Shows and describes plant, bug and bird life just outside the back door.

**THE BALANCE OF LIVING:** Survival in the Animal World—Margaret Cooper and Linda Mantel—Natural Hist. Press, 1971, 126 p., illus. by Fuka Hervert, \$5.95. Highly readable tale of the great variety of adaptation to environment in animals, from butterfly and penguin to amoeba and whale.

**FOR POLLUTION FIGHTERS ONLY—**Margaret O. Hyde—McGraw-Hill, 1971, 157 p., pen drawings by Don Lynch, \$4.95. Shows what young people can do to help save lakes, rivers, and wetlands, get cleaner air, and fight noise and people pollution.

**MYSTERIES FROM THE PAST:** Stories of Scientific Detection from *Nature and Science* magazine—Thomas G. Aylesworth, Ed.—Natural Hist. Press, 1971, 113 p., photographs, maps, \$3.95. Shows how scientists pieced together some of the more intriguing anthropological puzzles, from Stonehenge to Jarmo.

**THE MYSTERIOUS WORLD OF CAVES—**Ernst Bauer—Watts, F., 1971, 130 p., photographs in color, diagrams, maps, \$4.95. Tells about the challenges of exploring caves and the life they shelter.

**THE NATIONAL WEATHER SERVICE—**Melvin Berger—Day, 1971, 124 p., photographs, \$3.96. About the work of weather scientists and their instruments.

**NATURE STRIKES BACK—**John Gabriel Navarra—Natural Hist. Press, 1971, 224 p., photographs, \$5.95. Describes disastrous earthquakes, thunderstorms, twisters, floods, heat waves and tsunamis, and lists correct safety rules for each.

**THE PRAYING MANTIS, INSECT CAN-NIBAL—**Lilo Hess—Scribner, 1971, 48 p., photographs by author, \$4.95. Extraordinary close-ups with detailed description of the ways of the mantis, from hatching to its death.

**PURITY OR POLLUTION:** The Struggle for Water—Pierre Rondiere—Watts, F., 1971, 130 p., photographs in color, \$4.95. Hand-somely illustrated, world-wide view of the many aspects of water essential to man.

**SEEING STARS—**Patrick Moore—Rand McNally, 1971, 48 p., color photographs, maps, diagrams, \$3.95. Large-format informative picture atlas of stars, moon, sun and planets.

**SHELF PETS:** How To Take Care of Small Wild Animals—Edward R. Ricciuti—Harper, 1971, 132 p., photographs by Arline Strong, \$4.50. Tells how to create habitats in which small creatures can be kept successfully indoors, such as frogs, lizards, spiders, crayfish, crickets, snails and guinea pigs.

**STORMS AND MAN—**Frank Ross, Jr.—Lothrop, 1971, 191 p., photographs, drawings, \$4.95. Describes memorable hurricanes, cyclones, tornadoes and blizzards, and discusses methods of storm control; includes Beaufort scale and glossary.

**THE STORY OF RODENTS—**Dorothy E. Shuttlesworth—Doubleday, 1971, 95 p., illus. by Lydia Rosier, \$4.50. Superior art and narrative text describe the nature and habits of mice, squirrels, marmots, gophers, muskrats, porcupines, chinchillas and many more.

**TEST TUBES AND BEAKERS:** Chemistry for Young Experimenters—E. H. Coulson, A. E. J. Trinder and Aaron E. Klein—Doubleday, 1971, 134 p., illus., \$4.95. Takes the young chemist from simple lab activities to simple research experiments, with safe and detailed instructions.

**TREASURE OF THE CAVES:** The Story of the Dead Sea Scrolls—Iris Noble—Macmillan, 1971, 214 p., photographs, map, \$5.95. An account of the discovery and of the scientific know-how and ingenuity that went into the preservation and preparation of the scrolls before they could be studied.

**WHAT'S UNDER A ROCK?—**Robert Gannon—Dutton, 1971, 122 p., drawings by Stefan Martin, \$4.95. Explores the little known ecology beneath a rock, the history of the rock itself, the soil, the weather, and the hidden organisms and communities that come to light.