

# books OF THE WEEK

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**AGING AND THE BRAIN**—Charles M. Gaitz, Ed.—Plenum Press, 1972, 231 p., photographs, tables, \$14.50. Symposium papers present research exploring behavior described as organic brain syndrome, and relating it to current knowledge of anatomic, physiological and pathological changes in the brain.

**ANNUAL REVIEW OF MATERIALS SCIENCE**, Vol. 2—Robert A. Huggins, R. H. Bube and Richard W. Roberts, Eds.—Annual Reviews, 1972, 778 p., illus., \$10. Review articles cover advances in experimental and theoretical methods, structure, synthesis, properties, and recent development of special materials.

**AQUACULTURE**: The Farming and Husbandry of Freshwater and Marine Organisms—John E. Bardach, John H. Ryther and William O. McLarney—Wiley, 1972, 868 p., photographs, diagrams, tables, \$37.50. Gives conservative overview of present practices of food aquaculture the world over, from the common carp to seaweeds.

**ATLAS OF THE VERTEBRATE BRAIN**: Morphological Evolution from Cyclostomes to Mammals—Shiro Igarashi and Toshiro Kamiya—Univ. Park, 1972, 12x17, 130 p., 297 photographs, 247 micrographs, \$29.50. Valuable contribution to comparative anatomy, presents gross anatomical and microscopic observations on serial sections of brains of specimens from every branch of the vertebrate evolutionary tree.

**BIOLOGY AND CULTURE IN MODERN PERSPECTIVE**: Readings from SCIENTIFIC AMERICAN—Intro. by Joseph G. Jorgensen—W. H. Freeman, 1972, 441 p., 387 illus., \$12; paper, \$5.95. Surveys the field of modern anthropology, from current controversy concerning the primate fossil ancestors of man, to discussion of the industrial influence on the culture of poverty.

**BIOLOGY OF NUTRITION**: The Evolution and Nature of Living Systems. The Organization and Nutritional Methods of Life Forms—Richard N. T-W-Fiennes, Ed.—Pergamon, 1972, 681 p., illus., tables, \$54. Traces the evolution of life in relation to habitat and energy use, and the nutritional requirements of living things from algae to mammals.

**BUSINESS MATHEMATICS**—Flora M. Locke—Wiley, 1972, 463 p., paper, \$3.95. A self-teaching guide for solving problems dealing with income, property and sales taxes, trade discounts, depreciation, payroll deductions, insurance, interest and promissory notes.

**CANCER, THE WAYWARD CELL**: Its Origins, Nature and Treatment—Victor Richards, M.D.—U. of Calif. Press, 1972, 328 p., illus., \$8.50. Presents the main known facts about cancer in concise terms, addressing nonspecialist and layman alike, covering the subject from the biology of cell structure to chemotherapy and immunology.

**COMPUTERS IN THE SERVICE OF SOCIETY**—Robert Lee Chartrand, Ed.—Pergamon, 1972, 192 p., \$12.50. A series of papers and comments on such topics as the process of rational change, systems management and government, computer utility as a regulated utility, and trends in computer technology.

**CONTAINERIZATION**: The New Method of Intermodal Transport—Lawrence J. Rinaldi—Sterling, 1972, 80 p., photographs, dia-

grams, \$6.95. A practical discussion of the concept, the economics, methods, types and sizes, cargo systems and required paperwork.

**CONTEMPORARY ARCHAEOLOGY**: A Guide to Theory and Contributions—Mark P. Leone, Ed.—S. Ill. U. Press, 1972, 476 p., illus., maps, tables, \$15; paper, \$8.95. Essays outline the theoretical base and the concrete accomplishments in recent anthropological archaeology, the strategy for contemporary study of hunter-gatherers, horticulturists and complex agricultural civilizations.

**DRUG ABUSE**: Current Concepts and Research—Wolfram Keup, M.D., Ed.—C. C. Thomas, 1972, 467 p., photographs, tables, \$19.50. Contributions addressed to the specialist and worker in the field cover the physical and medical aspects, psychological, sociological and psychopharmacological aspects, and deal with clinical experience and treatment.

**THE EMERGENCE OF MAN**—John E. Pfeiffer—Harper, 1972, rev. ed., 574 p., photographs, drawings, maps, \$12.95. Expanded edition incorporates the findings of the last three years in an unfolding story of human evolution and the human condition as revealed by new discoveries in archeology, geophysics and primate behavior.

**ENERGY, ECONOMIC GROWTH AND THE ENVIRONMENT**—Sam H. Schurr, Ed.—Resources for the Future (Johns Hopkins), 1972, 232 p., diagrams, tables, \$10. Papers examine, from different points of view, two societal objectives of prime importance: providing energy to meet the needs of economic growth and protecting the quality of the natural environment.

**ENERGY METABOLISM OF HUMAN MUSCLE**—J. Keul, E. Doll and D. Keppler; transl. from German by J. S. Skinner—Univ. Park, 1972, 313 p., diagrams, \$22.50. Examines the transfer of energy in skeletal muscle, especially in regard to its functional importance.

**THE ENVIRONMENT OF THE EARTH**—Francis Delobeau—Springer-Verlag, 1972, 113 p., photographs, diagrams, \$10.80. Describes for the nonspecialist reader the gravitational and magnetic fields, the upper atmosphere and ionosphere, the Van Allen belts, geomagnetic disturbances, and micrometeorites.

**EVOLUTION, MAMMALS AND SOUTHERN CONTINENTS**—Allen Keast, Frank C. Erk and Bentley Glass, Eds.—State U. N.Y. Press, 1972, 543 p., drawings, maps, tables, \$17.50. Comparative studies of the evolution of fossil and contemporary mammals in Africa, South America and Australia. Explores the possible significance of continental drift to mammalian evolution.

**EXERCISE AND THE HEART**: Guidelines for Exercise Programs—Robert L. Morse, M.D., Ed.—C. C. Thomas, 1972, 265 p., diagrams, tables, \$11.75. Covers the subject of adult exercise from basic physiology through medical evaluation for exercise programs, legal aspects, physical training and coronary heart disease, to practical program administration.

**HOW TO REPAIR SMALL GASOLINE ENGINES**—Paul Dempsey—TAB Bks., 1972, 288 p., illus., \$8.95; paper, \$4.95. Do-it-yourself advice for troubleshooting, alignment and maintenance.

**IONS IN SOLUTION (2)**: An Introduction to Electrochemistry—J. Robbins—Oxford U. Press, 1972, 128 p., illus., paper, \$4.95. Short text for students with good mathematical background, presents fundamental ideas of conduction in electrolyte solutions and discusses electrolyte potentials, their significance, measurement and application.

**KNOW YOUR WOODS**—Albert Constantine, Jr.—Scribner, 1972, 384 p., photographs, drawings, maps, \$10. Source of information

for the craftsman, on cabinet woods and veneers in particular, describes individual woods, from *abura* to *zebrano*, wood index includes some 1,400 names.

**LET THEM LIVE**: A Worldwide Survey of Animals Threatened with Extinction—Kai Curry-Lindahl—Morrow, 1972, 394 p., \$9.95. Zoologist's documented survey continent by continent, of the plight of nearly 1,000 potentially doomed species and subspecies of mammals, birds, reptiles, amphibians and fishes in their various ecological areas.

**LIFE IN MUD AND SAND**—S. K. Eltringham—Crane-Russak Co., 1972, 218 p., diagrams, tables, \$9.75. Demonstrates the underlying principles governing the ecology of mud flats and sandy shores, describes physical features and shore fauna, seasonal variation of numbers, and analyzes the environmental factors which control the distribution of shore animals.

**THE MACROPHAGE**—B. Vernon-Roberts—Cambridge U. Press, 1972, 242 p., illus., \$21. Monograph provides an account of present knowledge regarding the life-history of the macrophage, and the evidence for its role in various physiological and pathological processes.

**THE MAMMALIAN CELL AS A MICROORGANISM**: Genetic and Biochemical Studies *in Vitro*—Theodore T. Puck—Holden-Day, 1972, 219 p., photographs, diagrams, \$14.95. Describes studies on somatic mammalian cells, which have followed the pattern of molecular-biological developments in the simplest microorganisms.

**THE NEW ASTRONOMIES**—Ben Bova—St. Martin, 1972, 214 p., photographs, diagrams, \$7.95. Summarizes for the layman developments in astronomy that have added a whole new vocabulary to the science beyond the limits of optical study, from radio telescope observations to satellites exploring X-ray sources, exploding galaxies and black holes.

**NEW CONCEPTS IN CONTRACEPTION**—Malcolm Potts and Clive Wood, Eds.—Univ. Park, 1972, 231 p., tables, \$14.50. Represents an overview of the multidisciplinary attack on the problem of population numbers, from medical and technical innovations associated with contraception and abortion, prostaglandins in fertility control, to the advantages of commercial distribution of contraceptives in developing countries.

**THE NUCLEAR-POWER REBELLION**: Citizens vs. the Atomic Industrial Establishment—Richard S. Lewis—Viking, 1972, 313 p., \$8.95. Documented, dramatic account of what has been done to prevent a hazardous new technology from developing without citizens' consent and due regard to public health and safety.

**THIS LIVING EARTH**—David Cavagnaro—Am West, 1972, 9x11, 191 p., 114 color photographs by author, \$17.50. Beautifully illustrated journey through the web of life of meadows and grasslands, with biologist's discerning commentary.

**TRANSFER, MEMORY AND CREATIVITY**: After-Learning as Perceptual Process—George M. Haslerud—U of Minn Pr, 1972, 180 p., diagrams, \$7.50. Presents the author's theory of the transfer of learning, the concept of perceptual reorganization which takes place after the period of formal learning has ended, a process designed to lead to new and relevant, i.e. creative, alternatives and insights.

**WHEN REASON FAILS**: Psychotherapy in America—Robert A. Liston—Macrae, 1972, 174 p., \$5.95. A popularly written survey of the theories and methods that have been developed for treating mentally ill and/or emotionally and behaviorally disturbed people.