

books OF THE WEEK

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AIR POLLUTION AND INDUSTRY—R. D. Ross, Ed.—Van Nos Reinhold, 1972, 489 p., illus., tables, \$18.95. Outlines the total air pollution problem, how it affects the environment, legislative and regulatory trends, air pollutants and analytical techniques, designing plant air management systems, improving existing systems, and selection of equipment for particulate removal, liquid and gaseous waste disposal.

ANALYSIS OF PUBLIC SYSTEMS—Alvin W. Drake, Ralph L. Keeney and Philip M. Morse, Eds.—MIT Press, 1972, 532 p., diagrams, \$14.95. An up-to-date review of applications of formal modeling for the improvement of the delivery of public services, from blood bank inventory control to analysis in airport development.

ANNUAL REVIEW OF MICROBIOLOGY, Vol. 26—Charles E. Clifton, Sidney Raffel and Mortimer P. Starr, Eds.—Annual Reviews, 1972, 579 p., illus. \$10. Topics covered include genetics of the proteus group, rifampin, rifamycins, lipids of protozoa, carcinogens produced by fungi, and the microbe as a source of food.

AT THE TURN OF THE TIDE: A Book of Wild Birds—Richard Perry; foreword by Robert Arbib—Taplinger, 1972, 256 p., illus. by Nancy Lou Gahan, \$7.50. Takes the reader among the water birds of the unspoiled wetlands of England's eastern coast, some 30 years ago.

THE ATOMIC ESTABLISHMENT—H. Peter Metzger—S&S, 1972, 318 p., \$8.95. Authoritative and readable critical presentation of the various aspects of the U.S. atomic energy program—from uranium mining to nuclear weapons, from fallout to radioactive waste disposal.

AUSTRALIA'S SOUTH EAST: A Natural History of Australia, Vol. 2—Stanley and Kay Breeden—Taplinger, 1972, 10x12, 256 p., color plates, photographs, drawings, maps, \$27.50. Beautiful volume shows the richness and variety of wildlife in the region, ecosystem by ecosystem. Text stresses the interrelationships of climate, soils, topography, with the particular flora and fauna.

CERAMIC SCIENCE FOR THE POTTER—W. G. Lawrence—Chilton Bks., 1972, 240 p., diagrams, tables, \$10.95. Provides the potter with the essentials for understanding formation and properties of crystals, glass structure, the nature of clays, plastic properties, firing, glazes and glazing, thermal shock theory, and interpretation of phase diagrams.

CITY OF THE STARGAZERS—Kenneth Heuer—Scribner, 1972, 170 p., photographs, drawings, \$7.95. From 332 B.C. to A.D. 646, the story reconstructs the rise and fall of ancient Alexandria, its intellectual climate centered in its famous schools, libraries and museum, producing a rare succession of great mathematicians and astronomers.

CLOUDS OF THE WORLD: A Complete Color Encyclopedia—Richard Scorer—Stackpole, 1972, 9x13, 176 p., 337 color plates, diagrams, \$29.95. A global presentation of cloudscapes and cloud physics, analyzes the conditions of air flux, location, light, temperature and humidity of each particular formation and phenomenon shown. Includes classification, bibliography and index.

THE COMPUTER from Pascal to von Neumann—Herman H. Goldstine—Princeton U.

Press, 1972, 378 p., photographs, \$12.50. Provides brief history of earlier developments, and first-hand accounts of wartime developments of ENIAC and EDVAC, to post-WW II research at the Institute for Advanced Study.

CREDIT CARD USE IN THE UNITED STATES—Lewis Mandell—ISR, 1972, 115 p., tables, paper, \$4. Summarizes and analyzes data compiled from three nationwide studies conducted in 1970 and 1971, assessing the use of different types of cards, attitudes toward credit cards and patterns of use of the debt feature of the cards.

THE CYBERNETIC SOCIETY—Ralph Parkman—Pergamon, 1972, 396 p., illus., \$15; paper, \$7.50. Interdisciplinary evaluation of man's role in an increasingly technological environment, from the implications of computers and automated processes to systems planning and communication control.

THE DAWN OF LIFE—Giovanni Pinna, foreword by Errol White—World Pub, 1972, 9"x12", 128 p., 126 color plates by Carlo Belivacqua, drawings, \$5.95. Illustrated with specimens from Italian collections, the book is an introduction to the study of fossils, their forms and classifications.

DICTIONARY OF ELECTRONICS—Harley Carter—TAB Bks, 1972, 2nd ed., 410 p., diagrams, \$8.95; paper, \$3.95. Defines most often used terms, from alpha particles to zoom lens, appendix materials include abbreviations, letter symbols and graphic symbols, color codes, conversion tables, and valve bases.

THE ECOLOGY OF ANIMALS—N. P. Naumov, transl. from Russian by Frederick K. Plous, Jr.; Norman D. Levine, Ed.—U. of Ill. Press, 1972, 650 p., illus., \$17.50. Second edition of standard work by leading Russian ecologist, good source on the state of ecology in Russia, cites many Russian examples of ecological phenomena.

ENERGY, ECOLOGY, ECONOMY—Gerald Garvey—Norton, 1972, 235 p., illus. \$8.95. Sets forth the elements of a practical response, after developing a new framework for assessing the long-term environmental destruction caused during production, transportation and conversion of fuel needed to meet the heavy demands for energy.

THE ENVIRONMENT OF AMERICA: Present/Future/Past—Thomas C. Jones, Ed.—Ferguson (Doubleday), 1972, 324 p., 258 photographs, 60 illus. in color, \$17.50. Articles give overall view of some of the environmental problems facing this generation, with suggested solutions, and past writings that describe the conditions created by the advancing industrialization of the country.

EXCITATION IN HEAVY PARTICLE COLLISIONS—E. W. Thomas—Wiley, 1972, 436 p., tables, \$22.50. Monograph provides researchers with tabulation and critical assessment of measurements on the formation of specific excited states of atomic and molecular systems as a result of collisions between atoms, ions and molecules.

THE FACE OF THE DEEP—Bruce C. Heezen and Charles D. Hollister—Oxford U. Press, 1972, 672 p., 600 photographs, diagrams, maps, paper, \$12.50. Reprint of 1971 edition of the extraordinary photographic and scientific record of the natural history of the visible abyss, with its life forms, the deep-sea floor, submarine canyons, currents, and rocks.

THE FLOWERING WILDERNESS—Uberto Tosco, foreword by Sir George Taylor—World Pub, 1972, 9"x12", 128 p., 127 color plates, \$5.95. Brings to life a spectacular variety of exotic plants and landscapes, with text providing information about the habitats, peculiarities and classification of important species.

FOLIAGE HOUSE PLANTS—James Underwood Crocket and Eds. of Time-Life Books—Time-Life Bks, 1972, 160 p., color

plates, drawings, charts, \$6.95. Tells how to keep greenery at home in healthy condition and multiplying, and describes growing requirements of 103 genera. Includes chart listing characteristics of 239 foliage plants.

THE FORGOTTEN AMERICANS: A Survey of Values, Beliefs and Concerns of the Majority—Frank E. Armbruster with Doris Yokelson—Arlington Hse, 1972, 455 p., diagrams, tables, \$9.95. A Hudson Institute survey, shows changes in general attitudes, based on hundreds of opinion polls and surveys, of young people in particular, from the thirties to November 1971.

FOSSILS IN COLOR—J. F. Kirkaldy—Hippocrene Bks, 1972, rev. ed., 223 p., 183 color photographs, drawings, maps, \$5.95. Geologist's guide deals with the main groups of fossil organisms (invertebrates, vertebrates and plants), not only for identification, but also reconstructing their environment during definite periods of earth's history.

A GARDENER'S GUIDE TO PLANT NAMES—B. J. Healey—Scribner, 1972, 284 p., \$7.95. Lists common names of garden flowers and their botanical equivalents, botanical names of more than 400 genera and their species, glossary of specific names, family groups, and botanical terms.

GENETICS AND AMERICAN SOCIETY: A Historical Appraisal—Kenneth M. Ludmerer—Johns Hopkins, 1972, 222 p., \$10. A critical, scholarly review of the effect of society on the literature of genetics, science and pseudoscience, the political postwar thrust, the repudiation of eugenics, the resurgence of human genetics, and influence of radiation genetics.

GLOSSARY OF GEOLOGY—Margaret Gary, Robert McAfee Jr., and Carol L. Wolf, Eds., foreword by Ian Cambell—Am. Geological Institute, 1972, 857 p., \$22.50. The volume reflects the growth and diversification in the past decade in engineering geology, age-dating of rocks, global tectonics; its almost 33,000 entries give definitions of both actual and preferred standard usage.

GRADUATE SCHOOL IN THE SCIENCES: Entrance, Survival and Careers—Jack G. Calvert, James N. Pitts, Jr. and George H. Dorion—Wiley, 1972, 304 p., graphs, tables, \$9.95. Based on the authors' decades of experience in various aspects of teaching and administration in universities, as well as industrial R&D and management.

THE GREAT SOUTHWEST: The Story of a Land and Its People—Elna Bakker and Richard G. Lillard—Am West, 1972, 287 p., color plates, photographs, drawings, maps, \$17.50. Captures the spacious landscape, the natural communities of plants and animals, man's imprint, and considers the future of the region.

LICIT AND ILLICIT DRUGS: The Consumers Union Report on Narcotics, Stimulants, Depressants, Inhalants, Hallucinogens and Marijuana, including Caffeine, Nicotine and Alcohol—Edward M. Brecher and the Eds. of CONSUMER REPORTS—Little, 1972, 623 p., \$12.50. See story on p. 357.

ON THE MOON WITH APOLLO 17: A Guidebook to Taurus-Littrow—Gene Simmons—NASA (GPO), 1972, 120 p., illus., paper, \$1. Gives in nontechnical terms information about the Apollo 17 mission, with emphasis on the scientific exploration of the Taurus-Littrow area of the moon.

THE URUK COUNTRYSIDE: The Natural Setting of Urban Societies—Robert McC. Adams and Hans J. Nissen—U. of Chicago Press, 1972, 241 p., drawings, maps, \$17.50. Systematic archaeological surface reconnaissance and hydrological and ecological studies support this analysis of the pattern of rural settlements that sustained the first known urban civilization in ancient Mesopotamia.