framework for the study of man's impact on the surface of the earth.

The diversity of interests and the accelerated pace of research have engendered new findings and new methodology. Much of this growth has taken place since World War II. Although the apparently segregated research communities concerned with drainage basins have in truth many overlapping interests, no book heretofore has drawn together the extensive results of drainage basin studies and made them available to a broad audience. While the authors emphasize the geographers' interest in drainage basins as a fundamental unit for the study of river and hillslope processes, *Drainage Basin Form and Process* accomplishes this.

Proper description of a drainage basin includes analysis of process and form. Because a myriad of physical, chemical, and biological processes operate in concert within a drainage basin, analysis of their linkages demands study of the inputs, movement, and output of the products of all these processes. Field measurement of the clastic load of streams, for example, requires diverse techniques depending on flow, size distribution of material, and quantity. Similarly, measurement of nutrient balances or geochemical processes in drainage basins requires not only the application of field techniques in chemistry but their integration with observations of the movement of water in soil, overland, in channels, and within the ground. Because geomorphic processes are inseparable from the flora and fauna and ecological observations are inadequate without appropriate hydrologic measurements, the techniques of observation and analysis in one field are essential to the successful pursuit of allied fields.

Gregory and Walling have provided an almost bibliographic coverage of the wide and varied studies of drainage basins. Including excellent observations from their own studies in England, they have drawn upon experience throughout the world to bring together the results of descriptions and analyses of a vast range of drainage basin characteristics and processes. From the widely scattered literature they have structured a succession of discussions summarizing such matters as the nature of the hydrograph, the way in which water reaches streams, the variety of methods of measuring bed and suspended load in channels, diverse techniques for analyzing drainage basin morphology, and hypotheses concerning drainage basin evolution. This extensive coverage is not merely a recitation of bits and pieces of information but includes numerous tables and figures providing illustrative and comparative data on many aspects of drainage basin form and behavior including channel characteristics, basin geometry and topology, flow frequency, sediment yield, and their interrelationships. These illustrations are often striking, having been drawn from virtually every region of the world. The discussion of rates of denudation measured as dissolved and suspended load, for example, synthesizes for the first time the results of many studies over the broadest spectrum of climatic conditions.

The book is packed with both historical and current references to and examples from the literature. It is comprehensive, not selective. There is much explanatory material, but shortage of space has prevented discussion of detail and evaluation of the state of the art or of reigning explanatory hypotheses. Not that these are entirely absent; for example, the authors dwell at some length on the evidence for and significance of the partial area concept of runoff. But the emphasis throughout is upon comprehensiveness. The authors succeed in providing an enormously useful review of current methodology, an often fascinating description of findings, and clear statements of different views of drainage basin behavior. Using the findings from many sources including geography, geology, engineering, and biology but without slicing the drainage basin into professional disciplines, they provide a collective picture which will be of use to all workers whether they consider the drainage basin as a handy tool for budgets or as a unique spatial aspect of the landscape.

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Books Received

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Biochemistry of Parasites. Theodor Von Brand. Academic Press, New York, ed. 2, 1973. xii, 500 pp., illus. $29.50.

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Elementary Linear Algebra. Evar D. Nering. Saunders, Philadelphia, 1974. xii, 376 pp., illus. $11.

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Floating-Point Computation. Pat H. Sterbenz. Prentice-Hall, Englewood Cliffs, N.J., 1974. xvi, 316 pp., illus. $15. Prentice-Hall Series in Automatic Computation.

Freshwater Fishes of Canada. W. B. Scott and E. J. Crossman. Fisheries Research Board of Canada, Ottawa, 1973. xiv, 966 pp., illus. $C9.75. Fisheries Research Board of Canada Bulletin 184.

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The Greatest Adventure. Basic Research That Shapes Our Lives. Eugene H. Kone and Helene J. Jordan, Eds. Rockefeller University Press, New York, 1974. x, 294 pp., illus. $9.80.

The Human Body. Its Structure and Physiology. Sigmund Grollman. Macmillan, New York, and Collier Macmillan, London, ed. 3, 1974. x, 612 pp., illus. $10.95.

Humoral Control of Growth and Differentiation. Vol. 1, Vertebrate Regulatory Factors. Joseph Lobue and Albert S. Gordon, Eds. Academic Press, New York, 1973. xvi, 412 pp., illus. $17.50.

Immunology. An Introduction to Molecular and Cellular Principles of the Immune Responses. Herman N. Eisen. Harper and Row, New York, 1974. x, 272 pp., illus. + index. Paper, $10. Reprinted from *Microbiology*, ed. 2 (1974).

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Preventive Medicine and Public Health. Philip E. Sartwell, Ed. Appleton-Century-Crofts, New York, ed. 10, 1974. xvi, 1190 pp., illus. $38.50.

The Primary Structure of Transfer RNA. T. V. Venkstern. Translated from the Russian edition (Moscow, 1970) by Basil Haigh. Plenum, New York, 1973. x, 296 pp., illus. $25.

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2nd International Symposium on Polymer Characterization. Proceedings of a symposium, Seattle, Wash., Aug. 1972. F. A. Sliemers and K. A. Boni, Eds. Interscience (Wiley), New York, 1973. vi, 348 pp., illus. $14.95. *Journal of Polymer Science*. Polymer Symposia, No. 43.

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Soil Organic Matter and Its Role in Crop Production. F. E. Allison, Elsevier, New York, 1973. viii, 638 pp., illus. $52. Developments in Soil Science, vol. 3.

Solo. The Story of an African Wild Dog. Hugo Van Lawick. Drawings by David Bygott. Houghton Mifflin, Boston, 1974. 160 pp., illus. + plates. $6.95.

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Biochemical Pharmacologist. Ph.D. 1972. Two years of postdoctoral studies in muscle membrane biology. Seeks academic or industrial position. Box 263, SCIENCE. X

Biochemist, Ph.D. 1974, female. Research experience in nuclear protein synthesis. Also interested in marine biochemistry. Postdoctoral or academic position desired. United States or Canada. Box 264, SCIENCE. X

Biochemist. M.S. Three years' experience. Publications. Background in electronics. Desires academic or industrial research placement, preferably in the Northwest. Available in September. Robert Seely, 1600 Wabash, Denver, Colorado 80220. 6/7

Biochemist. Ph.D. Several cyclic nucleotides research publications. Additional courses taken include immunology, microbiology, clinical biochemistry, anatomy, physiology, and pharmacology. Seeking appropriate industrial, teaching, or research position. 210 North Avenue, NW, Apartment 83, Atlanta, Georgia. X

Biologist/Botanist. Ph.D. 1972. Plant morphogenesis, physiology, tissue culture. Postdoctoral teaching/research experience. Publications. Seeks position in college, university, industry. Minority. Box 266, SCIENCE. X

Biologist, Photographer, Pilot. B.S. 1974. Desires employment in the field of marine biology, ecology, or microbiology. Robert Walker, FIT Box 5995, Melbourne, Florida 32901. X

Biologist: Water Pollution. Three years of industrial laboratory and field experience bioassay, environmental impact, treatability, pollution abatement studies. Ph.D. 1961 (plant science). Seeks academic, government, industry, consulting group position. Box 265, SCIENCE. X

Biophysicist/Bioengineer, Ph.D. 1974. Training in biocompatible implant materials, biochemical-specific electrodes, interfacial phenomena. Publications. Desires teaching/research position. Box 267, SCIENCE. X

Chemist. Wife (Ph.D., 1973, organic-biological chemistry). Husband (Ph.D., 1971, physical chemistry, kinetics). Desire teaching or research positions. Research publications, teaching experience. Will share appointment. Box 257, SCIENCE. 5/31; 6/28