five headings: Taxonomy, Evolution and Zoogeography, Medical and Veterinary, Physiology and Morphology, and Ecology and Faunistics.

The only taxonomic presentation is that of Traub, dealing with the complex family Pygiopsyllidae. In it six new genera and three new subgenera are erected and a key to many of the taxa is provided.

Important papers under Evolution and Zoogeography include accounts of some adaptive modifications in fleas by Traub and of the function of combs in ectoparasitic insects by Marshall; an extensive treatment of zoogeography and evolution in fleas, lice, and mammals, also by Traub; and a study of the host associations and zoogeography in the genus *Pulex* by Hopla. All are thoughtful treatments of their subjects and synthesize much material from diverse sources, although not necessarily all reaching the same conclusion.

Interesting presentations dealing with the medical and veterinary aspects of fleas include an account of the control of flea vectors of disease by Gratz; a review of studies on fleas in the U.S.S.R. by Bibikova and Zhovtyi; an account of the ecology of murine typhus by Traub, Wisseman, and Farhang-Azad; and two papers on the transmission of myxomatosis by the European rabbit flea by Shepherd and by Mead-Briggs and Vaughan.

Two particularly interesting contributions included under Physiology and Morphology deal with how bloodsucking insects perforate the skin of their hosts (Wenk) and the morphological similarities between the skeletal structures of Siphonaptera and Mecoptera (Schlein).

The nine presentations included under Ecology and Faunistics include three abstracts and six papers dealing mainly with distribution and ecological and host preferences. Two of these are in French.

A few of the papers included in this volume constitute major contributions to our knowledge of the order Siphonaptera, and most of the remainder are appropriate for inclusion, albeit somewhat parochial. Both the binding and the type are pleasing to the eye, and for a publication of this type the book is remarkably free of mechanical flaws. However, though this is a book that will appeal to students of the order Siphonaptera, it is not likely to attract a broad audience in the more applied fields of medical and veterinary entomology.

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Genetics

Gene Expression. Second edition. Vol. 2, Eucaryotic Chromosomes. BENJAMIN LEWIN. Wiley-Interscience, New York, 1980. xviii, 1160 pp., illus. Cloth, $45; paper, $25.

The first and third volumes of this work on gene expression are devoted to prokaryotes and to plasmids and phages, whereas the volume under review deals with eukaryotic chromosomes. The author intends to delineate the current state of knowledge of the structure of the chromosome and the dynamics of its reproduction as well as the expression of the genes contained in it. The treatment is brought to the molecular level wherever the necessary information is available. To put these issues in context there are extensive treatments of the cell skeleton, the cell cycle, and chromosome segregation in mitosis and meiosis before the structure of chromatin itself is discussed. The treatment of chromatin structure includes discussion of DNA sequence organization as well as of the physical conformation of the nucleoprotein strands. Gene expression is considered at the levels of the transcription apparatus, messenger RNA structure, messenger RNA processing, and RNA splicing. This is an unusually broad array of subject matter to bring together in the detail with which it is treated here. Nevertheless, Lewin actually does bring the reader abreast of the whole advancing front in a thorough and balanced way.

The book is remarkably up to date, especially considering the rapidity with which this subject has grown recently and the ambitious scope of the book. This feat is the more impressive in light of the author's reliance on primary research reports rather than derivative material. Nearly all the references are from the 1970's, including many from 1979. So much has been learned in the seven years since the publication of the first edition (for example, about nucleosome structure and interrupted genes) that the present book ought to be thought of as new.

The book is easy to read because of its straightforward style. When comprehensive coverage of rapidly developing subjects is attempted, exposition often becomes disjointed as a result of the inclusion of information whose significance is still obscure. Lewin has avoided this pitfall and produced smoothly integrated stories. Somehow, he has maintained the momentum of his developing thoughts without obscuring discrepancies and controversies. He explains the different positions in a controversy and states his position and the reasons for it without appearing to force the argument. I believe the reader will come away with balanced views whether he or she always agrees with Lewin or not. Despite the commendable reliance on primary research data, which helps the reader to distinguish fact from interpretation, the volume has the flavor of a textbook. I suspect this is inevitable in light of the primary objectives of the book. Lewin is a master at integration and reconciliation, and I doubt that he intended to be a bold blazer of new trails. In any case, the emphasis is on balance and broad perspective more than on insight and incision.

For anyone with elementary biochemical and biological preparation, the book would be a first-class instrument for learning current (1979) knowledge, and doing so with perspective. Similarly, it would be a useful means for researchers to broaden and consolidate the context in which they work out their specialties, although it would be of less value to the specialist in those sections that deal more narrowly with his or her specialty.

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Books Received

Advances in the Study of Behavior. Vol. 11. Jay S. Rosenblatt, Robert A. Hinde, Colin Beer, and Marie-Claire Busnel, Eds. Academic Press, New York, 1980. xii, 378 pp., illus. $35.

Agenda for Progress. Examining Federal Spending. Eugene J. McAllister, Ed. Heritage Foundation, Washington, D.C., 1981. viii, 376 pp. Paper, $6.95.

Alcohol and Drug Problems in Women. Oriana Josseau Kalant, Ed. Plenum, New York, 1980. xxii, 762 pp., illus. $55. Research Advances in Alcohol and Drug Problems, vol. 5.

American Genesis. The American Indian and the Origins of Modern Man. Jeffrey Goodman. Summit, New York, 1981. 288 pp., illus. $11.95.

The Amphibian Embryo in Transplantation Immunity. E. Peter Volpe. Karger, Basel, 1980. x, 148 pp., illus. $74.25. Monographs in Developmental Biolgy, vol. 14.

Baalbek. Friedrich Ragette. Noyes, Park Ridge, N.J., 1980. 128 pp., illus. $21.

Ballistic Materials and Penetration Mechanics. Roy C. Laible, Ed. Elsevier, New York, 1980. x, 298 pp., illus. $73.25. Methods and Phenomena, vol. 5.

Basic Anatomy for the Allied Health Professions. Royce L. Montgomery. Urban & Schwarzenberg, Baltimore, 1981. viii, 456 pp., illus. $19.50.

Basic Chemistry. William S. Seese and Guido H. Daub. Prentice-Hall, Englewood Cliffs, N.J., ed. 3, 1981. xiv, 596 pp., illus. + index. $19.95.

Basic Corrosion and Oxidation. John M. West. Horwood, Chichester, England, and Halsted (Wiley), New York, 1980. 248 pp., illus. $69.95.

Basic Medical Microbiology. Robert F. Boyd and Bryan G. Hoerl. Little, Brown, Boston, ed. 2, 1980. x, 766 pp., illus. $19.95. Laboratory Manual. x, 182 pp., illus. Paper, $7.95.

Cluster Analysis. Brian Everitt. Published for Social Science Research Council by Heinemann, London, and Halsted (Wiley), New York, ed. 2, 1980. viii, 136 pp., illus. Paper, $16.95.

Cluster Analysis Algorithms for Data Reduction and Classification of Objects. Helmuth Späth. Translated from the German edition (1977) by Ursula Bull. Owen Hanson and Biran Meek, Transl. Eds. Horwood, Chichester, England, and Halsted (Wiley),

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