

heating and thermal sensation, physiological responses to heat and to cold, hypothermia, and temperature regulation. Perhaps the least represented are studies on the metabolic mechanisms of heat generation in relation to environmental temperature changes, but the biophysical and physiological aspects have been very well covered.

The volume is hardly for undergraduates, but the professional scientist without sophistication in this field can learn a great deal and the expert will be pleased to have the material available in so useful a form. The volume represents a valuable exposition of the present state of knowledge in a field of great practical and theoretical interest. If the contributors sometimes disagree, if the reader occasionally encounters something which bothers him scientifically or which seems to be incomplete—well, the subject is not closed and there are plenty of problems yet to be solved.

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Entomology

The Mosquitoes of the South Pacific (Diptera, Culicidae). vols. 1 and 2. John N. Belkin. University of California Press, Berkeley, 1962. vol. 1, 620 pp.; vol. 2, 412 pp. Illus. \$20.

Little systematic collection of mosquitoes was attempted in the South Pacific area prior to 1940, and most of the available records were the result of mere samples of the fauna, principally that of the better-known islands. But the arrival and establishment of Allied troops in the area during World War II awakened a wide interest in arthropod-borne disease, and various epidemiological units eventually combed the islands and collected probably several hundred thousand specimens of all stages of the developing mosquito, over 100,000 of which are now preserved in institutional and private collections.

In these two volumes the author attempts to describe, illustrate, and key out all species of mosquitoes now known from the South Pacific and to present the readily available information on their bionomics, disease relationships, and distribution. He has

not only succeeded admirably in this task, but he has also laid a foundation for future studies on the derivation of the mosquito fauna of the area as a whole and of its various parts. The 82-page introduction makes fascinating reading for one whose general interests lie in the general faunistic problems of the area. Belkin's tentative conclusions about the movement of people and populations within the area promise to provide a stepping stone to further investigations along these lines, which may be valuable to anthropology.

Of principal importance to alpha taxonomists is the section on systematic treatment, which comprises most of the pages of the first volume and all of the second (the illustrations). The genera are grouped by tribe, and each species is discussed from the standpoint of synonymy, descriptive taxonomic characters, systematics in the broadest sense (including discussions of variations and relationships), bionomics, disease relationships and economic importance, and distribution (for the most part by individual island or island group). The subfamilies, tribes, and genera are characterized in much the same way wherever possible.

Belkin's wide personal knowledge of, and experiences in, the South Pacific area lend his work an authenticity seldom found in works of such broad scope.

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The Spine—in Full Color

A Stereoscopic Atlas. David Bassett. Section 8, *The Back*. Sawyer's, Portland, Ore., 1962. 112 views. \$14.50.

Section 8, *The Back*, maintains the quality of the color photography and the choice selection of instructive dissections that have distinguished the preceding sections of the atlas. Views of a corrosion preparation which illustrate the arterial supply of the vertebral column of a year-old infant (views 211:1 through 211:7) provide an interesting study of some developmental and arterial relations in the vertebral canal of the infant. A thorough and detailed presentation of the anatomy of the back, in the adult (including a number of radiographs of the different

segments of the vertebral column), is given in this section of the atlas. This presentation includes skeletal, joint, muscular, vascular, and neurological relations. Anatomical details are displayed with respect to the related head, neck, thoracic, abdominal, and pelvic structures, in anterior, lateral, and posterior views.

Students, teachers, and practitioners will find this section a valuable source for review.

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Biological Handbook

Growth, Including Reproduction and Morphological Development. Compiled and edited by Philip L. Altman and Dorothy S. Dittmer. Federation of American Societies for Experimental Biology, Washington, D.C., 1962. xiv + 608 pp. Illus. \$12.50.

This is another biological handbook which has been prepared and issued under the direction of the Committee on Biological Handbooks of the Federation of American Societies for Experimental Biology and under the general auspices of the National Academy of Sciences—National Research Council. Much of the data appeared in more truncated form in the *Handbook of Biological Data*, edited by W. S. Spector (Saunders, 1956), which was also prepared under the auspices of NAS-NRC.

Data are presented under 13 section headings: Chromosome numbers; Linkage groups, heritability, and hybridization; Cells and tissues; Vertebrate reproduction; Invertebrate reproduction; Plant reproduction; Prenatal vertebrate development; Postnatal vertebrate development; Plant development and comparative morphology; Comparative animal morphology; Sex ratios and life spans; Environmental factors and growth; Growth regulators and inhibitors.

The question of whether this book is worth the price and whether one should consider owning it can scarcely be answered in the negative. Sooner or later it will prove of service to almost anyone engaged in research or teaching in the areas that it covers, and \$12.50