

laborators will be able to maintain this high level of performance year after year. However, in this fourth volume, the original standard is fully maintained.

All libraries carrying scientific books must have at least one set of this series. Individual crystallographers will also want to possess their own copies, and if *Structure Reports* would catch up a little more rapidly with current work, they might seriously contemplate canceling numerous subscriptions to journals and societies and rely on the reports. Unfortunately, the cost seems to be rising to a level at which few individuals will buy their own copies. Now that the series is getting well past the period of World War II, the amount of work to be summarized is likely to require larger and still more expensive volumes. One may hazard the guess that relatively few individuals in the United States will purchase these volumes at \$21.50 each, and in most other countries the cost will probably appear even more prohibitive. Can the cost of future volumes be kept down to a level at which individual workers will feel able to buy them? The increased sales might then offset the lower cost per volume.

I have no intention of proving my diligence by seeking out a few errors. The sections of particular interest to me have been extremely well done, and there are no reasons for supposing that other sections are less well treated. I record with gratitude my indebtedness to the editors and their assistants for the valuable work they are doing, and I look forward to the appearance of further volumes.

G. W. BRINDLEY

*School of Mineral Industries,
Pennsylvania State University*

Comparative Anatomy of the Vertebrates. George C. Kent, Jr. Blakiston (McGraw-Hill), New York, 1954. xii + 530 pp. Illus. \$6.

Several decades ago textbooks in comparative anatomy were almost nonexistent. The solid if stolid old Kingsley volume was breathing its last, and Miss Hyman's present excellent textbook was then merely a laboratory manual, although containing good, if brief, general discussions. In recent years this seeming sterility has changed to fecundity. No less than a dozen writers (I am one of the culprits) have spawned textbooks in the field. These volumes vary considerably in length and style of treatment, according to the desires and interests of their authors, and one or another among them will in general satisfy the needs of an instructor in a course of any type. Kent's work is the newest member of the family.

The book is relatively short (530 pp.) and is definitely designed for a one-semester course. Many of the illustrations are reproduced (as the author notes in his introduction) from the Kingsley book, and it is a pleasure to see these old but reliable friends again in modern surroundings. The treatment follows a familiar pattern. Introductory chapters treat of vertebrate characteristics, furnish an account of lower chor-

dates and of the various vertebrate groups, and give a brief introduction to embryology (94 pp.). The remaining 400 pages give, seriatim, an account of the various organ systems. Like the present reviewer, Kent is fond of bones, and devotes 30 percent of his space to the skeleton. May I warn you, Sir, that because of this you are going to receive complaints from people whose tastes run more to viscera than to osteology. I've received plenty of them myself, although devoting a rather smaller percentage of text to the skeleton.

All in all, this is a compact, well-written, and well-illustrated account of vertebrate anatomy which should find a useful place in the family of textbooks in the field. Welcome, brother!

ALFRED S. ROMER

*Museum of Comparative Zoology,
Harvard University*

Reviews of Research on Problems of Utilization of Saline Water. Arid Zone Programme, No. IV. UNESCO, Paris, 1954. (Order from Columbia University Press, New York.) 96 pp. Illus. Paper, \$1.75.

This collection of three papers is the fourth in a series under UNESCO's Arid Zone Programme which since 1951 has been dealing with the various problems of arid regions. The bulletin reviews research in two aspects of saline water, that is, the use of saline water for irrigation, and methods for converting saline water into fresh water.

The agricultural problems resulting from the use of saline waters for irrigation are discussed by two competent authorities. Research in Europe, Africa, and the Middle East is covered by Georges Grillot, head of the Service de la Recherche Agronomique in Morocco. His paper is entitled "The biological and agricultural problems presented by plants tolerant of saline or brackish water and the employment of such water for irrigation." Work carried out in the Americas, Australia, and India is reviewed by H. E. Hayward, director of the U.S. Salinity Laboratory, Riverside, California, in "Plant growth under saline conditions." These two papers summarize a vast amount of knowledge on the effects of various salts on plant life, and on the specific water quality requirements of certain plants.

In a paper entitled "Utilization of sea water," Everett D. Howe, associate dean of the Faculty of Engineering, University of California, very ably reviews the published results of research on methods for the purification of saline water.

Each of these reviews is a thoughtful and intelligent reporting on a specific aspect of the application of saline water to man's requirements. All persons interested in this subject will find here much informative data and constructive opinions. Of particular interest and value are the well selected and organized bibliographies prepared by the three authors.

SHEPPARD T. POWELL

Baltimore, Maryland