

Management and Conservation of Vegetation in Africa

A Symposium. (Commonwealth Bureau of Pastures and Field Crops, Bulletin No. 41.) Pp. 97+14 plates. (Farnham Royal: Commonwealth Agricultural Bureau, 1951.) 10s. 6d.

THE title of the symposium which this book records is perhaps liable to lead to unfulfilled expectations. There is relatively little emphasis on management and a lack of data on conservation. The emphasis is rather on the need for vegetation surveys, which, however desirable in themselves, as a record of what now exists, can alone do little, if anything, to arrest the losses we all deplore. One of the great needs in Africa concerns the controversy that still rages as to whether to burn or not to burn, and I recently heard in South Africa both views defended with great vigour.² Even where there is a measure of agreement that some burning is desirable, or at least unavoidable, there are few precise data as to when and how often to burn so as to attain the optimum result.

The first of the contributions included in this volume is by J. P. Scott, who does in effect consider, all too briefly, the actual principles involved in conservation. G. C. Edwards, writing on the vegetation types of East Africa, stresses the need for a changed system of agriculture based upon the ecological conditions, of which the native vegetation is the best indication, and he advocates the value of a temporary ley as the best means of building up and conserving soil fertility. H. J. Rensberg strikes a similar note for the Tanganyika area. An interesting account of the ecology of savanna in Nigeria is provided by R. N. J. Keay, while A. Fogie gives a summary of the forest reservation in the Gold Coast. There are also brief accounts of what is being attempted in the Sudan and Sierra Leone.

With such a title, however, one might have anticipated some account of the experimental results achieved in various areas, such as those carried out at the experimental station at Frankenwald. Nevertheless, with all its limitations, this is a book that all those interested in such problems will find of value.

E. J. SALISBURY

Statistical Methodology Reviews, 1941-1950

Edited by Oscar Krisen Buros. Pp. xi+457. (New York: John Wiley and Sons, Inc.; London: Chapman and Hall, Ltd., 1951.) 56s. net.

THIS is the third compilation issued by Prof. O. K. Buros, the last being published in 1941. It assembles in one large well-printed volume the reviews of books on statistical methodology published in English during the decade 1941-50 and contains 842 review excerpts from 112 journals covering 342 books. There are, in addition, useful indexes of periodicals, publishers, titles and authors' names, as well as a classified index to the books themselves.

A would-be student of statistical methods will find it useful to consult this work to see what books have been published and what reviewers think about them. But for statisticians and reviewers of any class of scientific book the work will have a wider appeal, not to say a considerable entertainment value. It is a fascinating study to compare a number of reviews of the same work and to observe the variation of opinion expressed in them. Review editors will also find much here of help in framing their general policy.

One of Prof. Buros's objects in embarking on this work some fifteen years ago was to improve the quality of reviews, and a comparison of this book with its predecessor, the "Second Yearbook", indicates that he has been partly successful. It is to be hoped that he will continue to find support for this useful enterprise.

Understanding Heredity

An Introduction to Genetics. By Richard B. Goldschmidt. Pp. ix+228. (New York: John Wiley and Sons, Inc.; London: Chapman and Hall, Ltd., 1952.) 30s. net.

THIS book is intended for the educated layman who wishes to acquire an elementary knowledge of genetics. Its aims are to give a broad outline of the subject and of its implications in biology and in everyday life, and to stimulate enough interest to make the reader eager to attack some more advanced treatise. There is no denying that to many it will come somewhat as a disappointment. From Prof. R. B. Goldschmidt, who has been constantly and successfully ahead of the times in criticizing the shortcomings of accepted genetical concepts, one would have expected better. The very necessary sacrifices required by simplification and conciseness do not justify the omission of the salt and pepper, that is, the problems still unsolved and the wider vistas opened up. As an addition to the number of books giving in a simplified form the main facts and ideas of genetics, it will have its value.

G. PONTECORVO

Substances naturelles de synthese

Préparations et méthodes de laboratoire. Collection publiée sous la direction de Dr. Léon Velluz. Vol. 4. Pp. 165. (Paris: Masson et Cie., 1952.) 1800 francs.

VOL. 4 of this series follows the same plan as the earlier volumes (see *Nature*, 169, 169; 1952). The more important and larger part of the book gives experimental details, taken from recent chemical literature, for the laboratory preparation of certain biologically important substances.

The preparations described are *d*-pantothenic acid (Stiller, Harris, Finkelstein, Keresztesy, and Folkers, *J. Amer. Chem. Soc.*, 1940), adermine (Harris, Stiller, and Folkers, *J. Amer. Chem. Soc.*, 1939), riboflavine (Karrer and Meerwein, *Helv. Chim. Acta*, 1936), testosterone (Serini and Köster, *Ber.*, 1938), and *dl*- α -tocopherol (Smith and Sprung, *J. Amer. Chem. Soc.*, 1943). Each synthesis is prefaced by a short introduction and is followed by a lengthy series of notes on related processes, etc.—for example, analogues of pantothenic acid, β -alanine, the phthalimide synthesis, elimination of hydroxyl from aromatic heterocyclic compounds, ethoxyacetylacetone, 3:4-xylidene, amino-saccharides, etc. In several cases, alternative syntheses are discussed.

The second half of the book contains lengthy sections on cyclizations leading to derivatives of pyridine and on adsorption chromatography, including practical notes on the preparation of adsorbents. There are finally some tables relating metric to other measurements, °F. to °C., and lb./sq. in. to kgm./sq. cm. The price of the book is very high considering that all the factual information is readily available elsewhere. If many of the notes and addenda were omitted, these volumes would lose little of importance and could be published at a lower price.

W. BAKER