

collecting and measuring particulate matter suspended in air, and R. Ehrlich discusses the properties and applications of membrane filters. In the remaining article, F. Kavanagh contributes a thoughtful essay on the theory, practice and pitfalls of microbiological assays.

As in the first volume, the wide variety of topics covered illustrates the broad scope of the applications of microbiology, but it is perhaps unfortunate that much of the international flavour so desirable in publications of this type has been lost. All the authors are drawn from laboratories in the United States, and several of the chapters, although giving full credit to work done outside the United States, are frankly concerned primarily with American practice in the field discussed.

J. W. G. PORTER

OYSTERS: THEIR BIOLOGY AND GASTRONOMY

The Glorious Oyster

Edited by Hector Bolitho. Pp. 174+17 plates. (London: Sidgwick and Jackson, Ltd., 1960.) 25s. net.

Oysters

By Prof. C. M. Yonge. (New Naturalist Special Volume.) Pp. xiv+209+17 plates. (London: William Collins, Sons and Co., Ltd., 1960.) 21s. net.

THESE two books provide an interesting contrast. Hector Bolitho is frankly concerned with the pleasures of oyster eating and is supported by W. A. Bentley, in whose restaurant he has no doubt extended his practical experience. Maurice Burton contributes chapters on reproduction and growth, enemies, anatomy and physiology and culture. C. M. Yonge, however, sets out to provide an up-to-date, fully illustrated, scientific account of the structure, biology and cultivation of the European oyster, but includes also references to similar work on other species from the United States, Japan and Australia.

"The Glorious Oyster" first appeared in 1929 but became out of print. This revised and extended edition is well presented and is illustrated by photographs of still-life paintings from collections in Europe and the United States. Some of these, as, for example, that by Jan Steen, which also appears as a frontispiece in Prof. Yonge's book, are well known, but others, such as those by Braque and Manet from private collections, are unfamiliar but very appropriate.

In the section on the history of the oyster, Hector Bolitho has clearly drawn his information mainly from Philpots's monumental work of 1890, and this is acknowledged. The description of oyster dredging at Whitstable, taken from "All the Year Round", of November 26, 1859, is worth every inch of the space it occupies; it will be recognized as authentic by anyone who has worked in the creeks and estuaries of the east coast of Britain. There is an interesting anthology containing not only Sam Weller's "two very remarkable facts" concerning the oyster, but much less-familiar material from Pepys, John Evelyn, Robert Boyle and others.

Maurice Burton's scientific contributions fit easily into the scheme of the book, dwelling rather more

on the curious and bizarre features of the oyster's biology than is permissible in a scientific monograph. It is a pity that he repeats the clearly disproved suggestion that the dumping of trinitrotoluene and other explosives was responsible for the catastrophic losses among oysters in Britain in 1920.

Of Prof. Yonge's book it is only necessary to say that, while it upholds the high technical standard of the New Naturalist Special Volumes, it is more readable and of wider interest than some of the earlier books in this series. Clearly his main difficulty has been to compress adequate references to all the major studies on oysters into a monograph of 200 pages. It may be suggested that the description of the extremely scientific oyster culture of Holland should not have been limited to less than a page, but the extraordinary system used in the Norwegian polls has also (necessarily) to be described in a couple of paragraphs. However, all the important references are here for anyone with a desire for further knowledge. The author begins: "This is a small book on a very big subject", and, towards the end, he writes of the consciousness of lack of knowledge about commercially valuable oysters even though they have been more closely studied than any other marine animals. He may rest assured that his latest contribution will help us considerably to appreciate where effort should be applied.

H. A. COLE

LIVESTOCK IN AFRICA

The Indigenous Livestock of Eastern and Southern Africa

By I. L. Mason and J. P. Maule. (Technical Communication No. 14 of the Commonwealth Bureau of Animal Breeding and Genetics, Edinburgh.) Pp. xv+151+179 plates. (Farnham Royal, Bucks: Commonwealth Agricultural Bureaux, 1960.) 45s.

AS might be expected, the indigenous livestock of Africa, with few exceptions, have not been improved, even for work purposes, to the extent of those in Asia where ancient civilizations existed. As Norman Wright points out in his foreword, it will probably be easier to increase the production of native breeds adapted to their particular environmental conditions than to import improved breeds unsuited to the local hazards of environment and disease. However, perhaps one might add, except where by suitable crossing and selection the production of the one is combined with the adaptability of the other as in the case of Bonsmara cattle and Dorper sheep.

The book attempts to classify the different types of livestock by various morphological characters—cattle by the position and size of the hump and horns; sheep by their tails, thin, fat or fat rumped; and goats by the length of their ears. Where available, facts are given concerning their size, weight and milk production together with a large number of excellent photographs; references to original descriptions are quoted. For most types estimated numbers and their distribution in different countries are given, but one misses, except in a few cases, an account of the ecological conditions of temperature, altitude, rainfall and type of vegetation with which each type is associated. Nomenclature forms a problem throughout and in the absence of well-recognized