

## AFRICA REVIEW

## Wild Lives of Africa

By Juliette Huxley. Pp. 255 + photographs. (London: Collins Publishers, 1963.) 30s.

**T**HIRTY years ago, before my first visit to tropical Africa, I read Julian Huxley's *Africa View*. I found it an ideal introduction to the country, and my appreciation of what I later saw was greatly enhanced. I found those who had lived in East Africa for many years divided in their opinion of the book. The more observant were amazed how a newcomer saw and reported in such a fresh way things they had experienced but never properly observed. The less-observant were very critical of anyone who could write a book after only a few weeks' travel, when they had written nothing after perhaps 30 years; they did not realize how important the power to observe is in order to have an experience to record.

With such favourable memories of her husband's earlier volume, I came to Lady Huxley's new book with some misgivings. Although she had not lived for periods of years in Africa, she had not come fresh to the country as she accompanied her husband on his tours in 1929 (when *Africa View* was conceived) and knew much about the problems of conservation and wild-life management. She has, in fact, produced a book that is a pleasure to read and one which gives the reader many new ideas. When reading about places I have visited, I recaptured old experiences in such a way that I could almost see—and smell—it all over again. New places, events, animals and plants are described so that they all seem vividly real, much more real than in the labelled catalogues which make up so many books on Africa.

Lady Huxley writes with a purpose, underlined by Sir Julian in his introduction and postscript. She shares his passionate care for wild-life conservation, and her book may well convert many less susceptible to more official publications. I would only disagree with her on one point. She implies (p. 237) that before man was dominant "species and the communities to which they belonged continued to thrive and survive". This is only partly true. The majority of animal species which have evolved were extinct before man started to modify their habitats. The danger to-day is the speed with which man acts—far quicker than new species can evolve to fill the new niches. Many types of elephant have died out all over the world in the past, but if man exterminates the present examples, no new species will ever be produced to take their place.

This book gives a vivid account of wild-life in Africa, and of what those who are concerned with it do and feel to-day. Let us hope that, in a few years' time, it will not be just a description of something which has gone for ever. Lady Huxley has made a substantial contribution to her husband's efforts to prevent this from happening.

K. MELLANBY

## COMPARATIVE GENETIC ANOMALIES OF DEVELOPMENT

## The Pathology of Development

A Study of Inherited Skeletal Disorders in Animals. By Prof. Hans Grüneberg. Pp. xiv+309+9 plates. (Oxford: Blackwell Scientific Publications, 1963.) 70s. net.

**T**HIS book, like Prof. Grüneberg's earlier one, *Animal Genetics and Medicine*, published in 1947, belongs to that rare and invaluable class which, though written by an expert in one highly specialized branch of biology, is yet both lucid and stimulating to workers in other specialized branches; not only geneticists and pathologists, but also embryologists, animal breeders and clinicians will find in it much to excite their interest.

As its sub-title indicates, it directs main attention to those genetic disorders in which anomalies of skeletal development are prominent; but it gives also much information on the concomitant non-skeletal malformations which are often also present. After a preliminary chapter on genes, pleiotropism and other general concepts, there are four chapters on systemic anomalies of skeletal development, four on anomalies of the axial skeleton, two on those of the limbs, two on sundry minor variations, and an interesting concluding chapter of general comments. Not a few of the anomalies reviewed have their human counterparts, for example, the chondrodystrophies of rodents, sheep, cattle and dogs, osteopetrosis in the rabbit, and various anomalies of the extremities. But, as the author points out on p. 92, strict homologies between similar disorders in different species are not to be expected and indeed are not genetically possible.

To many anomalies due to mutant genes, especially those without named human counterparts, breeders and geneticists have given some odd nicknames, for example, "pudgy", "loop-tail", "splotch", "kinky-tail", "fidget", etc. Prof. Grüneberg's clear outlines of what is known of the histogenesis and structural pathology of these, and of the concomitant anomalies which often coexist, should do much to lead to replacement of the nicknames by more informative pathological nomenclature. Scattered throughout the book pathologists will find many unexpected and interesting tit-bits of information, for example, that osteopetrosis in the rabbit is accompanied by enlargement of the parathyroid glands, that dental anomalies accompanying several skeletal disorders may include odontome-like masses, and that in the extreme malformational syndrome in the mouse, called by Hummel "disorganization", supernumerary limbs or parts of limbs may develop ectopically from various parts of the skeleton.

Most of the 160 illustrations are clear and informative line drawings; others are excellent photomicrographs or X-ray photographs. A well-chosen bibliography contains 350 references to British, American, German and French sources, all with full titles; and the book concludes with a comprehensive index. The clarity, succinctness and impeccable style characteristic of the author's previous works, and the freedom from misprints and other minor errors of this attractively produced volume, make it a pleasure to read.

R. A. WILLIS

## THE PROTOZOA

## Introduction to Protozoology

By Prof. Reginald D. Manwell. Pp. xii+642. (London: Edward Arnold (Publishers), Ltd., 1961.) 60s.

**I**T is always pleasant to see a new book on the beauty and fascinating variety of the organisms called the Protozoa, and Prof. Manwell has certainly dealt with them thoroughly in this book. Beginning with a chapter on their nature, variety and habitat, he briefly discusses in this chapter Dobell's conception of them as being non-cellular, but decides to adopt the conventional view that they are unicellular, although, as he characteristically puts it, "Nature evolved Protozoa before man evolved definitions", such as that of the cell, which possibly, he suggests, has less meaning nowadays than it had formerly. He also rightly points out that there are objections to classifying some of the Protozoa as animals. After discussing parasitism among them, and incidentally expressing a definition of parasitism and its relationships to symbiosis and commensalism which some readers will probably question, he briefly indicates some of the ways in which the Protozoa affect man and his welfare. Some marine and freshwater Protozoa may, he suggests, seriously influence the amount of radioactive substances in man, because