

That, indeed, might fairly be described as the purpose of the Atomic Scientists' Association; but Mr. Huxley insists that only an international organisation of men of science could work out such a policy in detail. Tentatively he indicates what such a policy would include: a world-wide campaign for greater food production, including regional self-sufficiency in food production, and, scarcely less important, self-sufficiency in power for industry, agriculture and transport. On the technical implications of such a policy he does not enlarge, although he notes that the storage as well as the production of power has to be considered, but expresses the opinion that atomic energy is, and for a long time is likely to remain, a source of industrial power that is politically and humanly speaking in the highest degree undesirable.

Mr. Huxley has ideas and suggestions that merit discussion, but whether this book of itself will stimulate such debate is doubtful. It lacks the conviction that compels to action. The critic who shatters illusions remains too much the sceptic to be the prophet or apostle of a crusade to overthrow the tyranny of which he complains and build a new world in which science will be free and used for peace.

R. BRIGHTMAN

## PALÆOBOTANY FOR EVERYMAN

Ancient Plants and the World they Lived In

By Assoc. Prof. Henry N. Andrews, Jr. Pp. ix + 279. (Ithaca, N.Y.: Comstock Publishing Co., Inc.; London: Constable and Co., Ltd., 1947.) 25s. net.

THIS book is an attempt, and a very successful attempt, to convey to the general reader an idea of the vegetation of the earth in ages long past and the indications it may give of the climates of those times. From a study of their fossil remains so many details are now known about extinct plants that it is no easy task to give a convincing description of what the vegetation was like without becoming involved in highly technical descriptions of many individual plants. The author has shown admirable discrimination in his choice of examples, and gives a clear picture of the kinds of plants which dominated the vegetation at different periods in the past. He has skilfully steered a compromise course between the Scylla of technical jargon and the Charybdis of terminological inexactitude, and the book is written in a very readable and racy style.

The author is evidently an enthusiastic collector of fossil plants and will certainly stimulate others to take an interest in them. The study of fossil plants, palæobotany, has been greatly neglected in most countries, and in very few schools of geology is any instruction in palæobotany given. Such a book as this will help to show the geologist in how many different directions the study of plant fossils leads to a widening of our knowledge of the past history and climate of the earth.

The book is admirably printed and illustrated. One very impressive illustration is of an open-cast working at Wyodak, in Wyoming, in which there is a 90-ft. seam of coal. Other illustrations include excellent views of the Yorkshire coast and other places in Britain and North America which are notable for the fossil plants which have been found there. The author gives a clear idea of the appearance and nature of fossil plants and where they may be

discovered. He explains the manner in which coal has formed and some of the methods used in investigating its structure. For those who have had no botanical education he provides a useful little appendix on the structure of living plants.

The author in the next edition should provide fuller descriptions of the illustrations and make greater use of letters with guide lines. In some illustrations (for example, Fig. 100) there is nothing to indicate the positions of the parts mentioned in the description, and the non-specialist reader will be at a loss to understand what the figure represents.

JOHN WALTON

## APPEAL OF MUSEUMS

Native Animals of New Zealand

(Auckland Museum Handbook of Zoology.) By A. W. B. Powell. Pp. 96. (Auckland: Auckland Institute and Museum, 1947.) N.p.

THE educational function of museums has been much discussed in Great Britain during the last decade but, with notable exceptions, the attractiveness of their exhibitions has not been great enough to draw in and hold many, apart from those who already have some interest in the museum contents. There are many reasons for this lack of appeal, one of them being lack of imagination on the part of museum authorities and a strange unfamiliarity with the methods by which the general public should be encouraged to compel its interest. For these and other reasons this book should be carefully studied by museum authorities; similar publications would do much to increase the attractiveness of their own institutions.

While the work primarily is meant to be a guide book to the New Zealand natural history exhibits in the Auckland Museum, the author has avoided the easy temptation of allowing it to become a mere catalogue. The book is, in fact, a popular treatise on the native fauna, providing simple descriptions, recognizable illustrations and brief but essential information concerning the better known and more interesting New Zealand animals. For ease of recognition the figures have been drawn from actual specimens and, in order to help the amateur naturalist in recognizing animals in their natural surroundings, the text is mainly concerned with external appearances, habitat and behaviour. In keeping with evolutionary theory the animals have been arranged approximately in their systematic order although, since the handbook is mainly concerned with sight identification, all microscopic animals are omitted.

A cursory glance at the 411 illustrations shows some of the peculiarities of the New Zealand fauna. The absence of land mammals is at once conspicuous, and the inquisitive reader finds a reason for this expressed in clear and interesting language. The comparatively large number of flightless birds is also readily apparent and is accompanied by a careful account of each species. Animals like the tuatara (*Sphenodon punctatus*) and *Peripatus* are given special mention, as are the remarkable summer migrations of birds like the godwit and cuckoos. Mr. Powell must be thanked for producing a work which will not only add to the attractiveness of his own museum but which should also put ideas into the heads of discriminating museum workers elsewhere.

T. H. HAWKINS