

The title of the second book, taken from a poem by A. D. Hope, refers to the dry, empty, aged continent of Australia, the last to be colonised by man. Because its interesting fauna and flora evolved in the absence of man they are ill-adapted to withstand his exotic introductions; there is also much that is worthy of conservation. The book grew out of summer schools on national parks and nature conservation held at the University of New England, Armidale, New South Wales, in 1964 and subsequently it outlines the principles of conservation; discusses flora, fauna and ecosystems; and summarises the activities of the different States in the field of national parks and nature conservation with an excellent map showing the location of parks and reserves. It is well illustrated—the cover reproduces a Russell Drysdale painting—with a foreword by the Duke of Edinburgh, and all royalties go to the Australian Conservation Foundation.

HARRY V. THOMPSON

Biogeography and Ecology in South America, 2 volumes, edited by **E.J. Fittkau, J. Illies, H. Klinge, G.H. Schwabe, and H. Sioli**. W. Junk, The Hague, US \$20.80 each.

The impressive richness of neotropical wildlife, which Alexander von Humboldt and Charles Darwin stressed a long time ago, is due to the vast expanse of this continental mass, its mighty mountain system and its incredible diversity. Landscape, climate, flora and fauna are differentiated to a much greater extent than anywhere else. Species are noticeably more numerous than in other parts of the world, and the high proportion of endemics and the absence of some groups that are widely distributed elsewhere give a marked originality to this vast region. Thirty authors contributed to these two volumes with twenty-nine papers, making it a most comprehensive contribution to a modern description of the continent's ecology and biogeography, and remarkably homogenous in spite of the variety of the approach.

Each paper is an up-to-date review and summarises the results of personal investigations by a well known specialist. Several are devoted to general themes—geography, geology, paleontological history, pedology, climate, fauna and vegetation of the whole area. Continental drift, Wegener's hypothesis made a long time ago and now accepted by an increasing number of geologists, is discussed in the light of recent researches. The main ecosystems are analysed and two chapters deal with valuable neotropical plants now cultivated all over the world and with agriculture. Other papers are devoted to biogeographical and ecological analysis of particular groups, and several are concerned with human ecology, from the Indian aborigines to European settlers; one analyses remarkably the impact of man on the environment and another the present status of conservation over the continent. Most are written in English and German, some in Spanish and Portuguese with substantial English summaries.

These papers of high standard constitute a source of first hand documentation. They are also of the highest importance for the conservationist, giving fundamental information on the present status of the most important biota. Most authors emphasise the extreme sensitivity to man's interference of the natural South American environments. A remarkable contribution, by H. O'R. Sternberg, deals with the changes due to man and their magnitude since early human history—fire, shifting cultivation, deforestation of dry woodland, changes in hydrology, weather and climate. Others insist on the rapid destruction of wildlife and habitats in modern

times in a continent which did not come within the field of Western man's activity until late. The value of this natural inheritance is immense not only for science, but also in man's own interest (notably as a gene pool of potentially useful plants, and for the preservation of specialised ecosystems well suited to local conditions). Particularly in South America man has to respect a delicate natural balance; the geographical and physical conditions are such that he cannot count on a lasting economic success if the unity and diversity of this vast area are not kept in view. Thus these two volumes, important as a source of scientific references, are also a remarkable contribution to the conservation of a continent on which a natural balance can still be saved.

JEAN DORST

A Guide to the Pheasants of the World, by Philip Wayre. Country Life, 63s.

Handbook of the Birds of India and Pakistan, by Salim Ali and S. Dillon Ripley. Vol. 3, Stone Curlews to Owls. O.U.P., £6.

The pheasants, being handsome birds, attractive to artists and their patrons, have been monographed before, most sumptuously by Beebe forty years ago, more modestly by Jean Delacour twenty years later. But both these substantial and expensive works are becoming out of date, so no further justification is needed for Philip Wayre's useful new guide, admirably illustrated in colour by J. C. Harrison. Links with the Delacour volume are strong. Not only is the artist the same, but Jean Delacour himself provides a foreword, as President of the Pheasant Trust (formerly the Ornamental Pheasant Trust), of which the author is Hon. Director, and the author acknowledges his permission to use descriptions and other material from the earlier work—all authors stand on their predecessors' shoulders, but not all are polite enough to acknowledge the fact. The result is a fine book which brings our knowledge of the pheasants up to date more succinctly—176 instead of 351 pages—and is easier on the pocket. Fifteen of the 48 species in the book are in the Red Data Book of Endangered Species, an unenviable record that can hardly be equalled by any other group, except perhaps the parrots, and the author chronicles the efforts of the Pheasant Trust to save many of these species by breeding them in captivity and returning them to the wild.

Volume three of Salim Ali and Dillon Ripley takes us nearly to the end of the non-passerines, covering the thick-knees, coursers and pratincoles, skuas (an odd group to find in the Indian avifauna, but they are great wanderers), gulls and terns, sandgrouse, pigeons and doves, parrots and owls, maintaining the high scholarly standards of the two previous volumes. One looks forward eagerly to the completion of one of the great standard avifaunas of our time. India is succeeding where North America has fallen at the first fence, no second volume for that continent yet having appeared to join the first issued in 1962. Those of us at the recent New Delhi IUCN Conference who saw the two authors driving together in the same stately motor car, feared lest some reckless driver, in a sub-continent of alarming driving standards, should deprive us of both authors at one go. Having survived this hazard, I am sure they will go on to a triumphant conclusion.

RICHARD FITTER

The Avifauna of Northern Latin America, by Helmut K. and Jimmie H. Buechner (Smithsonian Institution, \$3.25), is the proceedings of a conference held in 1966 to assess the conservation of birds migrating between North and South America.