

Wild Sanctuaries by Robert Murphy. Dutton, \$22.50.

The shrinkage of the wilderness leads to a desire to conserve wildlife. This means the creation of reserves, initially thought of as sanctuaries where nature holds full sway and man enters only as a passive observer. The longer one lives with this idea, however, the more one realises its faults. Sanctuaries are usually tiny oases of wilderness; gradually the effects of 'civilisation' penetrate the boundaries, the very isolation of the sanctuary in time causes changes in its character, and ultimately the conservation value of the wilderness within is much reduced.

Robert Murphy gives a graphic account of this process in the establishment and management of the 300 and more national wildlife refuges of the United States, administered by the Department of the Interior; they cater for the concourses of migratory birds on the four main flyways from the Arctic to the Gulf of Mexico, for small populations of buffalo, Sonoran pronghorn antelope, muskox, alligators, whooping cranes and many other threatened species – in fact a good representative sample of what remains of the primitive wilderness habitats.

Wild Sanctuaries is a handsome book written by a man who is full of the romance of wild America. His sense of history, exploratory urge and ability to communicate his ideas, combine to make it a wholesome essay in wildlife conservation. He does not claim to be a scientist yet the book contains a welter of scientific information in digestible form and is one of the best illustrated records so far of these refuges, 250 photographs and 32 maps. To some his coverage would undoubtedly be patchy, but he has marshalled the facts well for the refuges he visited and provides a summary of the 170 most important ones.

The US national parks are world-famous; but who knows about the national wildlife refuges? This book shows the needs of wildlife and man in balance: wildfowling, fishing, hunting, sailing, camping and other pursuits are seen in the background of wildlife management. In the foreword Stewart Udall strikes the key note: 'We need sanctuaries just as the animals need refuges'. Robert Murphy has sustained the theme with a fine portrait of American wildlife – diverse and beautiful – within the attractive frame of the refuges.

J. MORTON BOYD

The Zoology of Tropical Africa by J. L. Cloudsley-Thompson. Weidenfeld and Nicolson, 84s.

Professor Cloudsley-Thompson must be one of the most prolific authors amongst contemporary professional zoologists. In recent years he has produced a series of books which all transmit to the reader something of his immense enthusiasm for his subject. This one tackles the formidable task of summarising the salient features of the African ecology. He begins with a general survey of the ecological diversity, first outlining the main features of the continent's physical and natural attributes and then describing in more detail the organisms comprising the major habitats from rain forest to coral reefs. After this he considers animal numbers and the factors that may control them; migration, and the effect of physical factors on their breeding rhythms and other day-to-day activities. The last part deals with aspects of environmental physiology and the ecology of man.

It is important that, at the present time when the world is becoming increasingly aware of the interest and value of large mammals, we should realise that their preservation is entirely dependent on our understanding of the ecology of the areas in which they occur. Wildlife is an obvious feature of the African scene, but the animals themselves are merely a small part of a huge system in which the climate, man and even microscopic soil organisms all play a vital role, and it is