Book Reviews

In Search of the Red Ape, by **John MacKinnon.** Collins, £3.00

John MacKinnon tells the story of his pioneer study of the orang-utan simply and attractively; his unpretentious narrative belies his remarkable achievement. His work required him to live for three years, and often alone, in the utterly alien milieu of the Bornean and Sumatran forests, and he tells of his adaptation to the forests and to the problems of his project.

The study of wild orang-utans presents special difficulties. These apes live mostly in the forest canopy and cannot be tracked daily from the comfort of a camp. John MacKinnon's solution was appallingly simple: with notebook, polythene sheet and minimum rations, he followed the animals for days at a time, moving as they moved and sleeping in the forest where they stopped. Inevitably, he encountered many other forest-dwellers, and he writes with humour and sympathy of leeches and pythons, of gibbons and over-inquisitive elephants, and even of the semi-mythical ape-man, orang-pendek.

However, the anecdotal style can be frustrating as well as absorbing, because it describes the search without fully discussing the reward. From hundreds of hours of watching 'mawas', he gives only glimpses of the substance of his observations and his conclusions. Much new information is, of course, contained in the narrative. Thus he writes of the effects of timber-felling on the edge of a forest reserve. Subsequent orang behaviour changes indicate overcrowding, and he mentions increased population movement, increased aggression and decreased birth-rate. (Incredibly, he writes of instances of orang 'rape' in the disturbed population and, moreover, justifies his use of the term.)

Perhaps aware of this deficiency he includes an epilogue in which he begins to discuss his findings. However, having shown that he can present specialist information in a most readable way, he still writes surprisingly little about orang ecology, population density and behaviour, particularly ranging behaviour and 'migration' and even individual behaviour such as daily activity, communication and feeding.* But it would be wrong to detract from a delightful account of an extraordinary study which, for individual endeavour, probably surpasses the pioneer studies on the other great apes.

GRAEME GROOM

* These aspects of his study were described by John MacKinnon in his paper in *Oryx*, September 1971—*Editor*.

Let Them Live, by **Kai Curry-Lindahl.** Morrow, New York, $9.95.

Kai Curry-Lindahl has always stressed the practical angle of conservation, and he gives some amazing facts about the productivity of nature and the manner in which this is being needlessly undermined by human action.

For example, one food resource which men have been over-exploiting for centuries, and which consequently may not be available in future, is the meat and eggs of sea turtles. In 1650, along the Amazon river in South America there was such abundance of river turtles *Podocnemis expansa* that people 'never knew what hunger was'. In some seasons, the turtles were so numerous 'that they impeded the passage of canoes and smaller boats'. But for over 300 years a reckless harvest has gone on; no wonder this animal is now a gravely endangered species.

Yet even today there are communities that live perfectly in harmony with nature, and are sustained by its productivity. 'The pygmies of the

Congo equatorial rain forests are still in principle food-gatherers, living as their ancestors did a million years ago, utilising everything in the forest that is edible. Likewise, the bushmen of the Kalahari have depended for hundreds of years entirely on the arid bushveld for their existence'.

We might well ask ourselves whether bountiful nature can in fact support today the world's 3.8 billion human beings. Scientists like Norman Borlaug believe that unless natural processes are accelerated by artificial means humanity cannot survive, but there is an even stronger case for preserving intact those ecosystems which can be so valuable for human needs. Estuarine ecosystems, according to Professor Eugene P. Odum of the University of Georgia, are capable of providing 32 million calories per acre per year of fish and prawns and other foods, which means that an acre can support 32 human beings—considerably more than can be supported by reclamation and putting the land under crops.

This book should be read by the planners in the developing world; they might then recognise that the preservation of nature can play a vital role in raising the material standards of people.

ZAFAR FUTEHALLY

Kangaroos, by **John Gould.** Macmillan, £12

Captain James Cook's sailors, in 1770, were the first Europeans to see a kangaroo—a simple fact that would have been a fair assumption to anyone studying his voyages. But it is another thing altogether to read the description of the moment: '. . . . it bore some resemblance to a greyhound and was of a light mouse-colour'. One can understand the astonishment that a kangaroo without warning must have presented even to the most open-minded traveller, but the comment suggests that either eye-witnesses were no more reliable then than now, or that greyhound evolution in the 1770s was passing through a curious phase.

'That country (Northern Territory) contains the bones of my worthy assistant Gilbert, who fell a sacrifice to the treachery of the natives, while arduously prosecuting his researches for the advancement of science and the furtherance of the present work . . .' Set beside his engravings, the writings of Gould are the perfect harmony. There are few animal books that one may read through for joy and side interest as butter and jam on the bread of reference. The joy comes from the human description and anecdote coupled with a clinical observation of structural detail, behaviour and movement. The spotlight of scientific study suddenly shone upon the Macropodidae with word and drawing, and the first reckless description of Cook's sailors became its starting point.

Following his famous work on the birds, Gould had written a first monograph of the Macropodidae between 1841 and 1844. Published in two parts, with a total of 30 plates, it marked the beginning of his work with Richter as artist, after the death of his wife. He then set about the ambitious *Mammals of Australia*—three volumes with a total of 182 plates, completed in 1863, of which Volume 2 was devoted to the kangaroos. This included many of the plates from the previous work and also many new ones, notably the spectacular portrait studies, making up to a total of 70. The book in hand is in fact Volume 2 of the Mammals, renamed *Kangaroos.*

Taxonomy, as is its wont, had changed even during Gould's lifetime. It has continued to do so, and the ecology of the Australian continent has changed even more. So, to present not only a book of great beauty but a completely up-to-date reference of kangaroo classification and distribution, Joan M. Dixon has added today's commentaries to each species and edited the whole.