chapters is not always organised so well as it might have been, nor is it free of errors, though most of them are trivial. A fascinating account of the discovery of the various species from the sixteenth century onwards says all that needs to be said about the hideous persecution of penguins in the early days. Here and elsewhere the authors point out that there is no cause for complacency about the future of penguins, even though no species is immediately in danger.

A final chapter gives notes on each of the 17 penguin species, each with a fullpage illustration, by Robert Gillmor, in black and white, yellow and red, which gives almost the full range of colour needed. Other drawings by Robert Gillmor, in black, white and pale blue, are decorative, informative and of the high standard we expect of him, and a fine selection of photographs depicts nearly every species.

D. W. SNOW

## Birds of the Antarctic, by Edward Wilson, edited by Brian Roberts. Blandford Press, 5 gns.

Every so often throughout history a man comes among us who appears nine feet tall. Whether it be through statesmanship, inventiveness, wisdom, courage or skill, such men's greatness is never compared but accepted with gratitude for having raised, each in his individual way, the standards of the human race. Edward Wilson was one of these. Exploration, especially into polar regions, has attracted many such men, scholarly and sensitive with a degree of determination and devotion that surmounts unspeakable hardship. On Captain Scott's fateful 'Terra Nova' expedition of 1910–12, Wilson was chief scientist and doctor—Dr Bill. He was also the expedition's cornucopia, dispensing harmony, affection, encouragement, confidence and wise counsel. But there seems little doubt that his own personal reward came from his work and, in particular, his drawing.

Birds of the Antarctic is something of a personal memorial, and Brian Roberts has edited it with a sympathy only possible in someone closely involved with the Antarctic, and with its fauna as closely as with its geography, administration and exploration. Through a common interest he has made it very much Wilson's book, with the finest selection of Wilson drawings ever assembled together, extracts from his diaries, and a précis of his life and work.

The drawings have an extraordinary integrity. Many were done under hopeless conditions and show unmistakeable signs of a struggle but it is this dedication that gives them such value, for each one is an accurate record of fast moving reality. Wilson would have scorned the slick and superficial treatment that so often covers a lack of anatomical understanding. His subject was always master. One can sense a feeling of humility towards it as if accuracy were his way of paying homage to great wonders. His drawings are judged more by human standards than those of present day art. The facts of Wilson's life and work are history, but this chance to see the work of his hand and read his own field notes in his own writing, makes this quotation from Sir Charles Wright so easy to understand: 'We who knew him realised that though he kept himself as much in the background as possible, not a single man on the expedition, from Captain Scott down to myself, ever undertook any serious step without first asking Dr Bill's advice. . . . The best influence and the finest character I for one will ever meet.'

KEITH SHACKLETON

## The Mammals of Eastern Canada by Randolf L. Peterson. Oxford University Press, 128s.

Ten years in the making, this richly illustrated reference book brings together more accurately than ever before information about the distribution, classification, life-history and ecology of the mammals of Eastern Canada. Combining 300 Oryx

essential scientific facts with readable descriptions about the habits of each species, Dr Peterson's text is of interest both to the student and to the layman. Of the 122 species treated, 102 are native, nine introduced, ten domestic and one extinct (the sea mink).

By way of introduction the author includes several short essays on mammals and man, the class Mammalia, the origin and classification of mammals, the mammalian skeleton, and a key to the orders of mammals. Each species is illustrated in pen and ink drawings, followed by a short description, giving measurements, distribution, habitat and a review of the animal's biology. For many species the detailed distribution maps are the first available; the information on which they are based is often inadequate, but the author hopes that this will encourage others to fill in the gaps. For the specialist, adequate classified descriptions of the skull dimensions with superb skull drawings make this book of a standard equal to Hall and Kelson's *The Mammals of North America* (1959). For the conservationist, short notes describing the animal's status are included where applicable. The book makes a significant contribution to the existing knowledge of mammals, and is certainly well worth recommending.

PAUL JOSLIN

## Nature's Paradise by Jen and Des Bartlett. Collins, 5 gns.

'Shoot and let live' – is the motto of more and more wildlife stalkers who confront animals not with high velocity rifles but with high powered lenses. Far from festooning some baronial hall like a bizarre Madame Tussauds, the new brand of animal stalkers like the Bartletts disport their kills in fine productions like this collection of several hundred photographs of Africa's wildlife. It is divided into eight ecological sections ranging from the Coral Reef to Snow on the Equator, and one deals with conservation projects, including Operation Noah financed by the FPS.

Predictably, that gaping hippo and yawning lion are included; the book would not be complete without an angry bull elephant charging out of the pages; and those zebra are still drinking from that waterhole framed by the magnificent Kilimanjaro. Despite these clichés, the quality of the photography is unrivalled and it is perhaps an invidious task to select any for particular praise. There are beautiful portraits of a mountain gorilla and a lesser flamingo, and a snarling cheetah sprawls across two pages with every hair in sharp detail. The collection is well balanced, with a liberal scattering of landscapes; views of hideously eroded countryside contrast with fertile scenes where enormous acacias cut black rhinoceroses down to size.

The impact of the photographs will sell this book and so it is all the more surprising that those given a double page spread are spoilt by the centre creases. Why no fold-outs? Despite this criticism, many will gain immense pleasure discovering Africa's animals through the Bartletts' viewfinder.

JOHN SPARKS

## Ecology of the Alpine Zone of Mount Kenya by M. J. Coe. Dr W. Junk, The Hague, 25 guilders.

Dr Coe's eagerly awaited book will disappoint those who hoped for a broad treatment of the ecology of Mount Kenya, for it deals only with one zone, between 3,500–4,500m, below the glaciers and above the ericaceous (moorland) zone. These metric heights in themselves are suspiciously round to describe any ecological zone on a mountain so dissected and with much higher rainfall on eastern and southern than on northern and western slopes.

The alpine climate on these mountains is characterised by daily rather than