

The Environmental Revolution, by **HRH The Prince Philip**. Deutsch, £4.95.

This collection of 24 speeches by the Duke of Edinburgh, made in many countries between 1962 and 1977, deals with conservation in a wide sense, including the air, the seas, the countryside, buildings and energy as well as wildlife. Nevertheless, as he says, his conversion came about by stages through photography, bird-watching, the Wildfowl Trust and the World Wildlife Fund, before broadening out into conservation of the human environment.

As the title suggests, the main theme is the extraordinary outburst of concern for the environment in very recent years in response to the often devastating effects of the technological revolution. 'From a situation of almost total and apathetic indifference we are suddenly confronted with a massive and passionate concern for everything in and to do with nature and the pollution of the environment.' He points out that this phenomenon has occurred virtually simultaneously in almost all industrially advanced countries (and, although it is not emphasised in this book, there have been developments in their way as significant in many third world countries, despite the pressures of poverty and population). But, Prince Philip argues, twin dangers attend this otherwise encouraging change in attitudes: complacency bred of early success and extremism which could so easily produce a backlash. Somehow the claims of nature have to be balanced against the claims of man. It is therefore vitally important to establish incontrovertible facts on which acceptable policies may be based because 'emotion without facts only makes enemies'.

The Duke of Edinburgh modestly disclaims originality for his views and says he is best described as a 'front man'. Certainly he has been in the forefront of the battle for conservation, and, unlike that fictional duke, he has never led his regiment from behind.

G.T. CORLEY SMITH

Mountain Monarchs: Wild Sheep and Goats of the Himalaya, by **George B. Schaller**. Chicago U.P., £17.50.

'If it moves kill it; if it doesn't chop it down'. George Schaller quotes this comment on the ancient maxim of the human species with the same detachment and understanding that he applies to his wide-ranging observations on animal behaviour. At the same time his lucid and beautifully written books have placed him in the forefront of those who are attempting to divert mankind away from this catastrophic course towards self-destruction. In this book he turns his attention to the large mammals of the Himalaya. During a series of explorations and surveys carried out between 1968 and 1975 he brought his extraordinary energies to bear on the hoofed mammals of the high mountains and their predators, especially the snow leopard. The main emphasis here lies in his behaviour studies of the wild sheep and goats, but in addition he examined morphology and size of body and horns in the different species, pelage colours, sex ratios, mortality, population dynamics, and conservation needs.

Research by other workers on the Caprini, notably chromosome studies, has indicated that the Himalayan region was the core area from which all species of living wild sheep and goats radiated. It is therefore fitting that Schaller's central theme should be the evolution of behaviour in the group and in particular of the urial, cited as *Ovis orientalis* but more usually named *Ovis vignei*, the wild goat *Capra aegagrus*, and the seemingly intermediate bharal *Pseudois nayaur*, often called the blue sheep. It is, however, a book that needs to be read through rather than dipped into, otherwise the diversity of topics covered makes it appear confusing, and this theme is lost sight of. The evolutionary

framework is soundly based on a wide review of the literature backed by a comprehensive bibliography and index. There are 45 tables and 52 photographic plates ending with a sad picture of a dancing bear.

JULIET CLUTTON-BROCK

East African Mammals, An Atlas of Evolution in Africa, Volume III, Part A Carnivores, by Jonathan Kingdon. Academic Press, £30.

This is the fourth of a sextet on the Mammals of East Africa. It is written by a zoologist, who has grown up from boyhood in East Africa, who has learnt much of his zoology in the field unencumbered by much of the dogma of the lecture theatre, who has an eye for landscape, its history and the way it functions, and who can control not only his pen to produce words of value but his pencil to produce illustrations of even greater value and charm. The six volumes will cover the structure, function, history and setting of the mammalian fauna of East Africa. It may be many a long year before another brain capable of doing this has the chance to emerge. East Africa, as the author has pointed out, is not a biological entity but a political one (at least it was a single entity until recently), nevertheless an analysis of East African fauna has a significant bearing on understanding the fauna of the whole of Africa south of the Sahara, except of the very densest part of the Congo Basin.

When I reviewed the first of these volumes, I was critical of some of the author's technique. I do not withdraw that criticism in the sense that, had I been the author, I wouldn't have done it in the same way. What I do say now is that I couldn't have done it and Jonathan Kingdon has, and that what we are dealing with is as much the expression of one man's genius as would be a great painting. There will be many places where differences of interpretation can exist, where points have been missed and where some of us might raise our eyebrows. I have come to the conclusion that I would be helping neither prospective buyers and readers nor the author to draw their attention to such things. The value of these books is to read them, a chapter at a time, and take in the mammals in the context the author is describing.

Suffice it to say that the book leads us into the carnivores of the region with a discussion of the Miacid descent to the Viverrids, Hyaenids and Felids in Africa and the entry into the region of Canids and Mustelids from the North, and an analysis of the niches occupied by the forty odd species which now occur in East Africa. He then leads us through the species, family by family, in the conventional order from *Canis* to *Acinonyx*, from Jackal to Cheetah. Every page is fascinating, drawing on the author's understanding of published work, amply supported by his own observations.

If you have the money, these books are well worth possessing.

MICHAEL R. BRAMBELL

Ants, by M.V. Brian. Collins, £5.95.

Perhaps because of their ubiquity, ants are often ignored by naturalists. They are, nevertheless, of tremendous ecological importance, for it is not only in the tropics that they move around astonishing amounts of organic material, such as seeds, dead and dying insects and other small animals. Dr Brian's book therefore fills an important gap in the popular literature on the natural history of British insects. It is firmly based on an ecological approach, but chapters on the structure and identification of British ants reflect the author's research interests, for he has spent most of his professional life studying heathland ant communities. He describes the habitat requirements of the forty-two British species and how they interact when competing for resources; his account of the