

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

ever-changing shape and area of the colonies' foraging territories makes fascinating reading. Having elected to provide a section on the evolution of social behaviour, he might well have taken the opportunity to discuss the role of kin selection; instead he is content with an account of what might have happened, without reference to the how and why of the matter. More rigorous editing should have eliminated such infelicities of style as '*Formica transkaucaisica* . . . is a specialist bog liver'.

The sixteen pages of black and white photographs together with two colour plates by Gordon Riley, are of a uniformly high standard, and there are distribution maps, compiled by K.E.J. Barrett, for all British indigenous species. This book complements that of J.H. Sudd (1967), *An Introduction to the Behaviour of Ants*, and is a worthy addition to the New Naturalist series.

CHRISTOPHER O'TOOLE

The Herons of the World, by **James Hancock** and **Hugh Elliott**, with paintings by Robert Gillmor and Peter Hayman. London Editions, £45.

The Gannet, by **Bryan Nelson**. Poyser, Berkhamsted, £8.

British Thrushes, by **Eric Simms**. Collins, £6.50.

In the nineteenth century a fine tradition of large-scale ornithological monographs arose, probably originated by John Gould. Such colourful groups as kingfishers, rollers and jacamars were described in this way. It is good to see a return to this tradition in recent works on the birds of prey, the parrots, the rails and now, in this handsome folio volume, the herons. European, and especially British, birdwatchers, as Roger Peterson points out in his introduction, are liable to think in terms of 'the heron', as the grey heron used to be rather insularly called in *The Handbook of British Birds*. But American, and even southern European, birdwatchers have many more to hand, and will find this volume doubly welcome.

Hérons being large and conspicuous birds, though bitterns and some other species do skulk in swamps and dense vegetation, they have been much studied in recent years. So the authors had a huge mass of fresh information to assimilate, especially with such well known and widespread species as the grey heron and the cattle egret. They have done their task well, and provided admirable summaries for each species under the headings of distribution, migration, habitat, general appearance, identification, behaviour and taxonomy. There are also good introductory chapters on classification, plumage and moult, breeding, feeding, migration and dispersal, and conservation. For the Palaearctic species it is interesting to compare the entries with those in Volume I of the new *Handbook*. The latter has no literary pretensions; it is a straightforward and very business-like summary. *Hérons of the World*, however, is pleasantly discursive, and can be read, not just consulted.

In such a book the illustrations are as important as the text, and here Robert Gillmor scores the highest marks with his clear and incisive portraits, that stand out of the page as living birds. Peter Hayman's style is less sharply defined and has a faint aura of the Audubon and Gould era, when bird illustrations were not expected to look natural. In a sense it is a pity we could not have had all the paintings by one artist—either would have done the job splendidly.

Bryan Nelson has made himself Mr Gannet (perhaps a kinder appellation than Mr Booby). Starting with a stint on the Bass Rock a good many years ago, he has probably now spent more time studying the members of the family *Sulidae* than anybody else before or since. The present book is a kind of appendage to his recent major work on the