

example that Kenya's elephant numbers in 1973 were 167,000 and only 4 years later 70,000 – but that is as nothing compared with solving the problem. The problem is people – too many wanting land for agriculture, ivory for ornaments, rhino horn for dagger handles, and too many everywhere wanting a share of the trade profits. Jonathan Kingdon's book does not tell us what we can do, but it will help both to alert us to the immense problems and to tell us about what we are in great danger of losing. One thing we can do is to visit East African wildlife areas and thereby help to boost wildlife. But you will probably be too late to see rhinos, or perhaps even elephants, in Uganda again, and even this book can scarcely compare with the real thing.

BRIAN BERTRAM

The Wild Mammals of Malaya (Peninsula Malaysia) and Singapore, by Lord Medway. Oxford UP.

Nine years after its first appearance this useful volume has been revised and produced in paperback. Lord Medway, now the Earl of Cranbrook, has also recently published the second edition of *Mammals of Borneo* (reviewed in the November 1978 *Oryx*, p430), and for him to revise yet another volume is indeed praiseworthy, in view of the tedious nature of the task. Visitors to the Far East will be the main beneficiaries.

The distribution, identification, habits, voice, life-history and subspecies of 206 species of the 32 families of 10 mammalian orders occurring in Malaya are described in 110 pages, with a further 18 pages of bibliography and index. Species are considered in terms of their known habitat types, altitudinal range and temporal or spatial separation, and whether they are (a) widespread in continental South and South-east Asia or (b) on the Sunda Shelf, or (c) endemic to the Malay Peninsula. Eleven line drawings and 15 excellent colour plates depict a wider range of species than is usual in such books. There is a concise and informative introduction, a useful glossary and keys to bats, rats and civets and mongooses.

This second edition differs from the first in the addition of 48 references, two new species and its cheaper price. Of more popular appeal than *Mammals of Borneo*, this book will be even more useful for visitors, whether tourists or scientists.

DAVID J. CHIVERS

Population Dynamics: 20th Symposium of the British Ecological Society, edited by R.M. Anderson, B.D. Turner and L.R. Turner. Blackwell, £20.

The dynamic changes that take place in plant and animal populations are the means whereby natural communities evolve. Man has recently (on the evolutionary time-scale) acquired the ability to accelerate or alter the direction of these changes very greatly. Sometimes we see these alterations as adversely affecting our interests, or those of the generations to come, and it is at this point that we may wish to step in to maintain the *status quo*, restore a desired system, or regulate exploitation. If follows that conservationists, or those appointed to manage the systems that we wish to control, must be familiar with the modern approach to the study of population dynamics. This book sets out to provide an up-to-date review of this rapidly expanding field. The contributors, who include many of the foremost names in the field, give an erudite and often challenging account of their recent work. Perhaps most of the papers in this book are directed to specialists rather than to the general scientific reader; certainly some knowledge of mathematical modelling is helpful in understanding many of the arguments put forward. Despite its title, this is not a book about population dynamics as such, but rather about certain topics and recent developments in the subject.

It is not easy to pick out a central theme. What comes through most clearly is the complexity of natural systems, or as R.M. May puts it: 'the richness of behaviour latent in the simplest of non-linear equations' (a quotation that gives the general flavour of the book). As we study natural systems we discover that the simpler models are inadequate;

multi-species models are now generally considered essential to scientific management, while the fact that stable populations can exist at more than one level and that spatial patchiness has much effect on the behaviour of populations serves to make our predictions from these models less secure. It is perhaps the case in population dynamics that the more we find out, the more we realise how much remains unknown. Many ecologists (following Elton) had been brought up to believe that increased complexity in a system begets increased stability, but May shows that in 'randomly-constructed' models increasing numbers of species are associated with increased dynamic fragility. However, as he points out, real communities are not constructed randomly, but consist of a number of sub-systems loosely coupled to each other. The nature of these inter-actions, for the most part, remains to be discovered.

Much remains for the population dynamicists to do; this book shows with what vigour and application they have up till now pursued their studies.

W. NIGEL BONNER

Arctic Summer, by **Richard Vaughan**. Nelson, £6.25.

This book chronicles a five week trip to the Varanger Peninsula in the summer of 1972 to photograph and record its birds. Lying beyond the limits of the spruce and almost wholly beyond the birch, considered as a tree, it is a true wilderness, except along the southern coastline where fishing villages and two small towns line the shore of the Varanger Fjord and numerous holiday huts dot the hillsides. The author made the acquaintance of several Norwegians living in the area who supplemented his own observations, and he has also studied the relevant Norwegian and English ornithological literature. From these sources he has been able to compile a systematic list of the birds of the peninsula, which, however, he says 'must be regarded as extremely provisional'. Somewhere along the line all mention of sea eagle has dropped out of this list, which is a pity as it is one of the species visitors would hope to see.

The main text describes the author's experience and is lavishly illustrated with black and white reproductions of his photographs, which achieve a consistently high standard of excellence that is remarkable when so much had to be done in so little time. Four pages of colour plates are particularly good, a male bluethroat being quite stunning.

G. DES FORGES

For Visitors to Indonesia

Land Mammals of Indonesia (Inter.nasa, Jakarta) consists of fifty lively black and white drawings, each opposite a descriptive English text by Wendy Veevers-Carter. Some footprints are given (including tiger and rhino!) and a useful species list for each island in English, Latin and Indonesian.

Nature Conservation in Indonesia, by the same author and publisher, is a beautifully illustrated and informative guide to wildlife conservation and some of the country's superb reserves, including Ujung Kulon (last refuge of the Javan rhino) and Gunung Leuser. There are useful lists and maps and superb photographs by John Blower and Alain Compost superbly reproduced on a page (8in x 10in) large enough to do them justice.

Bird Brief

The latest New Naturalist volume is *British Tits* (Collins, £8), by Christopher Perrins, Director of the Edward Grey Institute for Field Ornithology at Oxford. So much field work has been done on our seven species of tits in recent years, particularly at Oxford, that it is high time this book was written – and an excellent and well illustrated one it is. Dr Perrins summarises and coordinates all this knowledge most ably, and at the same time shows how little we really know about the complicated lives of these attractive birds. This is a book for the ornithologist but with much to offer the birdwatcher.