Animal Populations in Relation to their Food Resources, edited by **Adam Watson**. Blackwells, £5.00.

This compilation consists of 22 papers plus some introductory and closing discussions at the Tenth British Ecological Society symposium. The main papers are divided into three sections which give an idea of the range of subjects covered: the relevance of food selection and utilisation to population processes; the importance of behaviour mechanisms in relating animal populations to the food resources; and population processes in relation to the quantity, quality and availability of the food resources. Questions raised, and the authors' answers, are also included.

The papers cover a wide field from amoebae, flatworms, insects and snails to vertebrates (one paper on fish, six on birds and six on mammals), and the subject matter varies widely from studies of rat populations in the laboratory to the energy flow in a woodland community. There is also a long review paper by Watson and Moss on the factors affecting general population limitation in vertebrates.

One important series of papers, on the grazing animals and their relations with the vegetation on which they grazed, range from the levels of sheep production on pastures, through the effects of sheep and cattle on the different grass species in a community, to the selection by herbivores of different parts of the vegetation under natural conditions. Two papers in particular will interest the conservationist: one, by D. R. Klein, deals with food preferences of North American deer, and how the deer, by grazing, may affect the food species available, and how in its turn the quality of the food affects the productivity of the deer, their body size, conception rates, fawn survival, etc.; the other, by R. H. V. Bell, shows how some of the herbivores in the Serengenti select different diets from each other and suggests reasons for the striking adaptations and different selectivity of some of the many different species there.

C.M. PERRINS

The Oxford Book of Invertebrates, by **David Nichols** and **John A. L. Cooke**. Oxford University Press, £3.

Skimming through this book will 'direct the attention of naturalists and students to the profusion of invertebrate wildlife that surrounds them'. Each of ninety-five pages of text is illustrated by a colour plate opposite it. Space is given not only to the more familiar groups but also to the less well known Protozoa, Nemertines, Nematomorphs, Cladocera, Acari, Sipunculoids, Hemichordates and so on.

The closer one looks the less satisfactory this book becomes. The authors seem to lose sight of their readers. For instance, the glossary lists 'anus', 'carnivore', 'invertebrate' and 'ovary', but leaves out so many words, such as 'diverticula', 'lumina', 'mesostigmatid', & 'theca', that I found I had hardly a 50-50 chance of guidance from it. The general introduction to all these wonderful animals uses only two pages whereas fifteen pages are given to a Classification of Invertebrates, which the 'general reader' will not need and the student will find inadequate. Likewise the reading list at the end, specifically for the 'general reader', includes works of technical solemnity such as Eales's *Littoral Fauna* and the *International Code of Zoological Nomenclature*.

The plates, by Derek Whiteley, are based on an almost stylised plan. Some are gay and good, notably those of the terrestrial snails, the