Book reviews

A Territorial Antelope: the Uganda waterbuck

C.A. Spinage Academic Press, £24.00, \$49.50

Spinage's account of his study on waterbuck during 1964–1967 in the Rwenzori National Park, Uganda, brings together the results and ideas previously reported in several influential scientific publications. Some further analysis of his own data and a few recent censuses of the study population provide a broader perspective than in the scientific papers alone, and the presentation has been enhanced by his comparisons with more recent waterbuck studies. In addition, numerous anecdotes are scattered throughout the text providing many insights into waterbuck behaviour and forming some of the most enjoyable parts of the book.

The opening chapter on the distribution and morphological variation of waterbuck is first-rate, providing a convincing pattern to the existing confusion of geographical races. Hopefully, this will stimulate others to emulate him with respect to the equal confusion in the subspecific classification of some other antelope. After a fascinating history of the study area, the basic anatomy and physiology of waterbuck are carefully described, followed by the factors influencing population growth and social organisation. An interesting theme developed is that waterbuck have specialised on a high protein diet which has led to complete dependence on daily access to water. This dietary strategy apparently promotes a relatively constant niche for waterbuck, as adult females actively encourage the dispersal of their daughters, which is an uncommon behaviour in ungulates only expected in a population frequently near its carrying capacity. A general point worth emphasising here is the need for more information on the movements and social organisation of individual female antelope of many species. Returning to the chapters under discussion, an Appendix listing some of the raw data would have been a useful addition in a text such as this which will serve as a source of reference to workers in the field.

The chapter on social organisation and the one following on buck behaviour describe territoriality and its functional significance in waterbuck. A 100

complex picture emerges of the strategies employed to gain and retain territories. Some of the explanations put forward here are amplified in the final chapter, which includes a review of territoriality in antelope. I found this section long-winded and all too often arguments based on group selection were put forward.

Spinage's book is a useful source of reference to the natural history of the waterbuck. Although written primarily with the specialist in mind, it should be of interest to a wider audience. By his careful attention to the history and methodology behind many of the procedures adopted, the author has also given us a fascinating view of field biology in Africa. It is thanks to the resourcefulness and motivation of a remarkably small number of people like Spinage that we have at least a rudimentary understanding of African ecology.

> Martyn Greer Murray, Physiological Laboratory, University of Cambridge

East African Mammals. An Atlas of Evolution in Africa. Volumes IIIC and IIID, Bovids

Jonathan Kingdon Academic Press, £49·95 each

These, the final two volumes of Jonathan Kingdon's monument to East African mammals examine the Bovids of the region. Like the earlier six tomes — on primates, small mammals, carnivores, and large mammals --- the various tribes are first introduced in general terms, principally evolutionary. Each species is then discussed in turn with details of habitat, behaviour, physiology, distribution (maps included), anatomy, and evolution. Illustrations abound, not only of animal appearance, and skeletal make-up but also whole sequences of behaviour are displayed. The drawings range from the style of a field notebook sketch to precision analysis of musculature. It is the complete interdependence of the artwork and the text which makes these books not only important biological works but also beautiful to look at.

It is also gratifying that such a detailed study should consider the topic of conservation and Oryx Vol 17 No 2

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wise husbandry. Indeed the opening paragraphs deplore our willingness to rely on just three species of bovids — cattle, sheep, and goats, while ignoring the study and fate of the many others. Indeed the choice of actual types domesticated was a consequence largely of the limited range of species available in the Middle East, an area poor in bovid diversity. A section on conservation is also added as an Appendix.

These books are a celebration of zoology and it is a great pity that their high price will make them available to so few.

> Jane Thomback, Compiler of IUCN's Red Data Book: Mammalia

The Gibbons of Siberut

Tony Whitten (Foreword by Sir Peter Scott) J.M. Dent, £9.50

This book is the result of several years of dedicated study by Tony and Jane Whitten, aided by botanist Alan House, in a remote Indonesian island off the west coast of Sumatra. The title is misleading, in that the book is not just about the ecology and behaviour of the endemic species of gibbon-the subject of his doctoral dissertation—nor the other rare primates found there, but about the local people and their struggle to survive and to maintain their cultural traditions (evolved in harmony with the tropical forest ecosystem) in the face of political and economic pressures from central government (and multinational companies). One can perhaps forgive the frequent interruption to the delightful descriptions of the forest and its primates, because of the fascinating insights he gives of the people and their way of life. Tony Whitten's and admiration of, these affection for, resourceful, stoical and friendly people comes across strongly, as does his pragmatic approach to nature conservation allied with sustained human development.

He describes their early days on the island getting to know the forest and the people and starting his gibbon study—followed by the main problems and successes in studying the elusive gibbons, all interlaced with tales of the local people and their folklore. Then they go on *Book reviews*

survey, which takes them to other, more remote parts of the island, and finally he weaves together the plight of wildlife and the people.

Siberut is facing the crisis now confronting all regions in the tropics—drastic forested degradation for short-term economic gain to the detriment of the local people and wildlife. The crucial role of forests in these ever-wet regions in soil and water balance and in ameliorating climate are being appreciated almost too late, as is their long-term potential for food, medicine and other chemicals and living materials. The remoteness and compactness of Siberut offers unusual opportunities for conserving the rain forest and improving the standard of living for the local people. This book should do much to help promote such aims; it is essential reading for anyone interested in rain forests, primates (and other wildlife) and people.

> David J. Chivers, Sub-Department of Veterinary Anatomy, Cambridge University

The IUCN Amphibia — Reptilia Red Data Book. Part 1: Testudines, Crocodylia, Rhynchocephalia Brian Groombridge (Compiler)

It would be extremely easy to write a glowing review of Brian Groombridge's compilation. There is absolutely no doubt that the 400 pages are thoroughly and accurately researched, and that the data are presented in as lucid a manner possible within the constraints of the RDBs. I could not praise it enough. But I would like to take the opportunity to look beyond the present volume.

This volume deals with Testudines, Crocodylia, and Rhynchocephalia — some of the largest, best documented species of reptiles; there are also only a few species. It will be impossible to treat the rest of the reptiles and amphibians of the world with the same degree of detail. This means that effectively the compilers of the RDBs are performing 'triage' for the conservation world. There may be dozens, if not hundreds of tropical frogs becoming extinct every year as forests are cleared, but because a decision has been made to