

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

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.

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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

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