

## Book review — Boekresensie

### Game ranch management

(completely revised and expanded edition)

Edited by J du P Bothma

1996. J L van Schaik, Pretoria, 639 pp., hard cover. Price R280.00. ISBN 0 627 02123 9.

For all practical purposes this book is almost a direct translation of the Afrikaans version, 'Wildplaasbestuur', which appeared late in 1995, and of which a review was previously published in the *Journal of the South African Veterinary Association* (De Vos, 1996). It is also a revised and expanded version of the English edition that appeared in 1989.

Over the last few decades the game (wildlife) industry in southern Africa has gained tremendous momentum. This is due not only to a fast-growing interest in nature conservation, but also to a remarkable increase in the economic value of wildlife. Earlier contact with game on farms was invariably in the form of sport hunting or in conflict situations with livestock. It is only a relatively short while ago that game in its own right has achieved a niche in agriculture. In this respect, the first edition of Bothma and co-workers in 1989 was a pioneer work in the field, and contributed significantly to the game-ranching industry in southern Africa. It is still the only comprehensive textbook on this subject available for southern African conditions.

With escalating game ranching activities, demands are increasingly being made on veterinarians in the field to tend to wildlife. With little emphasis on wildlife-related subjects during pregraduate years, veterinarians qualifying from Onderstepoort or Medunsa have inadequate background knowledge to cope with this specialised field, and are forced to acquire the necessary knowledge afterwards. For veterinarians not wishing to enrol in a postgraduate course at the Wildlife Unit, Faculty of Veterinary Science, University of Pretoria, the first edition of the book by Bothma proved to be a good companion. The revised edition will be even more valuable.

As can be expected from a pioneer work, the previous English edition has become outdated. Although the latest edition attempts to update knowledge on game ranch management, it must be emphasised that much of this is still based on assumptions and extrapolations that are rapidly changing as new information is gathered. A surprising number of changes, some of them radical, have been made since the Afrikaans

edition appeared in 1996, e.g. gestation period for kudu changed from 210–240 to 260–280, and the composition of diet for eland changing from grass - 70 %, trees/shrubs - 12/9 % and herbs - 9 % to grass - 30 %, trees/shrubs - 70 % and herbs - 10 %. There are many more examples. These striking differences are unacceptable and cannot be explained only by a young and fast-expanding science. We hope that more stability has now been reached in the present edition.

The latest edition was written by Prof. J du P Bothma (editor), Director of the Centre for Wildlife Management at the University of Pretoria, and 27 co-workers, all acknowledged as authorities in their respective fields in South Africa. A few are also acclaimed internationally. Eight of the authors are veterinarians, which further accentuates the value of the book from a veterinary point of view. The book comprises 639 pages and 62 chapters, arranged in nine parts, namely: 1. General guidelines and principles. 2. Game ranch planning. 3. Game. 4. The management and utilisation of game. 5. The management and utilisation of rare and other types of animals. 6. The diseases and parasites of wild animals. 7. Habitat management. 8. Game ranching in arid regions. 9. Sustainable use of natural resources and rural development. There are also short sections on selected subjects, a selected glossary and an index. It has 48 tables and 159 figures. It covers a very wide spectrum and the impression is gained that an attempt has been made to cover the entire field of game ranching, resulting in superficiality. It would have been better to prioritise and delete fields that are not really important and/or that are covered better elsewhere in the literature, and give more attention to subjects that are vital to game ranching. A chapter such as *Economic aspect* provides a good coverage of the general principles of economic farming, but is not specifically directed at game farming, and has been well covered elsewhere. Although the chapter *Game capture* provides a good summary, veterinarians assisting with immobilisation procedures should rather consult the textbook by McKenzie (*The capture and care manual*, 1993). There are many more examples.

*Continued on p. 70*

The first four parts of the book cover general principles and procedures, with the following chapters providing worthwhile information: *Important ecological principles*: this chapter provides a good background for the veterinarian who has had virtually no exposure to ecological principles during pregraduate training. Reproductive, longevity and other vital characteristics are tabulated in an easily accessible form. *Biomes, veld types and game ranching regions of South Africa*: vital information on the presence of herbivores in different ecological regions are tabulated. *Game fences*: fences are important, not only as ranch boundaries, but also as disease control mechanisms. The basic information is provided in these chapters. *Water for game*: water requirements are tabulated and various water hole (trough or dam) designs are given. *Bomas and holding pens*: veterinarians are often required to work in these surroundings and offer advice. This chapter is well illustrated with examples (12 figures). *Suitable game*: useful tables and figures are provided on habitat characteristics, feeding spectrum, growth and development, age determination and dressing percentages of various species. *Condition of game*: an important aspect, but covered too superficially. Characteristics for specific animals, such as rhino, are not provided. *The natural diet of game*: very informative, although a bit theoretical. *Biological diversity*: minimum and mean herd sizes are provided. *Game counts*: good background information is provided. Repeatability of counts is stressed. *Harvesting game*: strong on harvesting quotas, but virtually nothing on harvesting methods. *Transporting game*: the most basic guidelines and specifications for crates are provided. Tranquilliser dosages are tabulated. *Buying and selling game*: prices given to 1995. *Handling trophies*: an excellent

review. Rowland Ward and Safari International standards and South African records are provided.

Nine further chapters are devoted to specialised management procedures for individual species, such as elephant, buffalo, rhinoceros, hippopotamus, predators, ostrich and game birds.

The five chapters on diseases and parasites of wild animals provide excellent background material. It is a pity, however, that a vital aspect such as disease and parasite control has been skimmed. No mention is made of commercial applicators for tick control.

*Veld management* is probably the best and most important chapter in the book. Good veld management forms the basis of disease and parasite control under free-ranging conditions.

Nine chapters are dedicated to game ranching in arid regions. Being marginal to livestock farming, these areas are going over to game ranching at a high rate and merits special attention. This was provided, albeit rather superficially.

The book has wide application; from the scientist on one hand to the student, game ranch manager and even lay conservationist on the other. The index increases accessibility and the bibliographies enhance its value as a reference book. The greatest value of the book, however, lies in the considerable amount of information in tabular form, although the voluminous nature of the book makes it difficult to find this information. The authors should consider printing a condensed version of the book, containing mostly the tables; something that field workers can carry around with them.

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