

## Book reviews

### **Javelinas and other peccaries: their biology, management, and use.**

By LYLE K. SOWLS.

ISBN 0-89096-717-2, 1997, XXIV + 325 pp., Second edition, No. 21: The W.L. Moody jr Natural History Series, 36 B & W photos, 32 line drawings, 43 tables, hardback, price US \$ 49.95.

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Not being a peccary specialist, I approached this book with great expectations: I believed it was the definitive authority on the subject, describing in depth this group of species. Because of the probable interaction with man, their wide distribution and their presence in at least one first-world country, I supposed peccaries were very well known. I was therefore surprised by the paucity of data on several facets of their biology. Even very basic aspects of their biology, like the present distribution, are incompletely known.

The book is divided in 18 chapters, organized in four sections: (i) an introduction on the basic biology, external and internal morphology, physiology and genetics of the three species (four chapters); (ii) an in-depth description of the collared peccary, covering the distribution with hints on its determinants, diet, reproduction, mortality, population dynamics, behaviour (divided in "general" and "social") and communication (eight chapters); (iii) descriptions of white-lipped and Chacoan peccaries (two chapters); and (iv) the relationship between peccaries and man, including ethnological reports (four chapters).

The book is a mine of information for those interested in peccaries, because it collates a sparse bibliography (several of the cited papers are not easy to find) on many aspects of the biology and management of the collared peccary, with more limited information on the white-lipped and just a few notes on the almost unknown Chacoan peccary. In reading the book I was annoyed by many inconsistencies, of which I report just a few:

— peccaries may eat large quantities of cactus, which results (for reasons not clearly explained) in diarrhoea; thus, it seems meaningless to estimate the quantity of cactus necessary to meet normal (i.e., without diarrhoea) water requirements (pp. 83-84);

— in most mammals, cementum annuli are deposited every year in the cementum of the teeth; thus, it is unclear how the age of peccaries may have been estimated at 9, 10 or 11 months;

— I could spot several circular sentences like "[young peccaries] continue to depend partly upon mother's milk until weaning" (p. 93).

Also several repetitions of information of limited value are disturbing (e.g. date of first record of gestation period, reported in the first two sentences of p. 91), as is the colloquial nature of language (e.g. "just over half a kilogram" for "600 g", p. 93; "drops its fawns" instead of "gives birth", p. 95; "probably much more common than previously reported", p. 102, etc.). Statistical tests are never used, and many information are purely anecdotal or not quantified. Often statements are not followed by adequate references (e.g. the collared peccary "has poor long-range vision", p. 160).

The figures are sometimes of poor quality (e.g. the distribution map at p. 7) and of limited information value (like many of the drawings and several photographs). The tables are not always clear, and I would have preferred charts (never used throughout the book) in most instances. Many terms are

not defined (e.g. "blank behavior" in Table 10) and several misprint are apparent (e.g. "\$" instead of "%" in Table 9).

Even more seriously, I found very rarely a critical interpretation of data, and a superficial description of the principles of modern behavioural ecology. In particular, no evolutionary reason is analysed for the social behaviour of peccaries (a very notable trait of these animals). The effort in finding general trends is very limited (e.g. the limits to distribution are mentioned as related to climatic factors, but no test have been done). I cannot comment on the ethnographic chapter (ch. 15), but I found the term "Indians" disturbing. In summary, I believe this book may be useful for those seriously interested in peccaries (particularly the collared one), but of very limited interest for the general public.

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