

CARNIVORE BEHAVIOR, ECOLOGY, AND EVOLUTION

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In sharp contrast to the caring and often sentimental approach of the South African public to dogs and cats, there is a marked ignorance about free-ranging carnivores. Misconceptions about the latter are often fostered by anecdotal accounts of ferocity and cunningness, especially of species like wild dogs, leopards and black-backed jackals. Veterinarians who make a living by providing health care services for dogs and cats, could potentially help to increase public awareness and understanding of the carnivores as a group of mammals. Reading a text like "Carnivore behavior, ecology, and evolution" could provide some of the essential background needed in trying to defend the case of carnivores.

This book presents some of the recent advances in research on selected aspects of carnivore biology. It also highlights existing gaps in our knowledge and in doing so, indicates future research prospects. Following on a general introduction to carnivores, the text is presented in 3 sections, namely behaviour, ecology and evolution. The section on behaviour includes chapters on acoustic communication by fissioned carnivores; the role of odor in the social lives of carnivores; the behavioural development of terrestrial carnivores; the comparative behavioural ecology of hyenas; intraspecific variation in canid social systems; the mating tactics and spacing patterns of solitary carnivores, and carnivore group living. The section on ecology includes contributions on the feeding ecology of giant pandas and Asiatic black bears, adaptations for aquatic living; ecological constraints and predation by large felids; the advantages and disadvantages of small size to weasles; basal rate of metabolism, body size and food habits; and patterns of energy output during reproduction in carnivores. The last section contains contributions on locomotor adaptations by carnivores, carnivore dental adaptations; delayed implantation; molecular and biochemical evolution of the carnivora; the phylogeny of the recent carnivora and the fossil history of the terrestrial carnivora.

This work was most likely not compiled with the veterinarian in mind as a possible end-consumer. Most veterinarians would also probably regard most of the information as esoteric in nature. I am of the opinion, however, that veterinarians should never lose sight of the fact that the dog and cat are, in the first instance, carnivores. This should help considerably in an understanding of nutritional and behavioural disorders.

This book is also likely to broaden the outlook of the small animal veterinarian. Instead of simply regarding retrovirus infections in cats as "frustrating hopeless-prognosis" entities, these endogenous chromosomal DNA infections may be perceived as having helped to confirm the monophyletic aspect of the genus *Felis* and the "Domestic cat lineage".

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