

is much more complicated and internally contradictory than the rose-tinted version portrayed by the popular press: this chapter provides a useful dissection of its many facets.

Several chapters mention the long-running controversy over whether dogs living in groups form dominance hierarchies: for example (from Chapter 3 by Robert Bonanni and Simona Cafazzo) “there have been many claims that dogs’ social relationships cannot be *described* in terms of a dominance-subordination paradigm” (my italics). No self-respecting ethologist would claim that no attempt should be made to *describe* relationships within any social group in hierarchical terms but by ethologists who understand that their ‘hierarchy’ is a mathematical abstraction and not a *de facto* invitation to mete out punishment. The more important questions are: is a hierarchical system the most comprehensive way of summarising how the group typically interacts (with dogs, the answer may be sometimes, but by no means always); and, are the animals themselves aware of their position in any ‘hierarchy’, and if not, whether training methods based on ‘status reduction’ are (a) likely to be effective and (b) cruel?

The remainder of the book may be of less interest to animal welfare scientists, but contains some useful summaries of several research areas. The chapter on vocal communication is particularly well constructed, both in its coverage of the literature and in considering various contentious issues, such as which aspects of human language the average dog might or might not comprehend, and how the basic canid repertoire of vocal calls may have been modified by domestication. Hence, it’s a pity that coverage of visual and especially olfactory communication is notable by its absence. Other chapters betray the anthropocentric biases in much cognitive testing of dogs, such as the need to make comparisons with the capabilities of human infants of different ages (why would anyone expect the canid brain to develop in parallel with the human brain?) and the use of the Ainsworth Strange Situation Test (why is it so important to demonstrate that dogs use familiar adult humans as a ‘secure base’ in the same way as children do, when their attachment to their owner is, according to Chapter 1, likely derived from canid pair-bonding?). Chapter 9 rehashes the dubious conclusion that when dogs yawn they are displaying ‘emotional contagion’, despite other authors considering that it can be an indicator of motivational conflict and hence stress, or (in pet dogs) a behaviour that is regularly repeated because it has been rewarded by the owners’ attention.

Research into canid cognition is still a fast-growing field, but perhaps because it is often the subject of much media interest, individual studies can be given far more emphasis than perhaps even their authors intended. It can therefore appear to advance as a progression of ‘breakthroughs’, each of which may, with hindsight, turn out to have been somewhat overblown, even misleading. *The Social Dog* provides a useful snapshot of several aspects of the field as it was a few years ago, but those interested in a more rounded version of the behavioural biology of dogs might

also wish to consider the long-overdue second edition of James Serpell’s *The Domestic Dog: Its Evolution, Behaviour and Interactions with People* (Cambridge University Press), or for those with deep pockets, Alexandra Horowitz’s *Domestic Dog Cognition and Behavior* (Springer).

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John Bradshaw,

Highfield, Southampton, UK

Common Diseases of Companion Animals, Third Edition

A Summers (2014). Published by Elsevier Mosby, Elsevier’s Health Rights Sciences Department, Philadelphia USA. 602 pages Paperback (ISBN 978-0-323-10126-4). Price £44.99.

Now here’s a bold statement: “the era where individual clinical expertise across all topics and all species is assumed for veterinary professionals is dead”. Let’s repeat and rephrase that one: veterinary professionals no longer need to pretend or even aspire to know everything about everything. Omniscience is no longer a fundamental veterinary requirement in the modern world. Nowadays, there are just too many things to know; keeping up-to-date and mentally retaining every new development is no longer possible. Once upon a time, the public assumed that every veterinary professional, be they a veterinary surgeon or a veterinary technician/nurse, could be relied upon to instantly know the answer to any and every medical question thrown at them. But we are now in the new digital age where the volume of data available on the matrix of species/diseases/diagnostics/treatments is ever-widening. This means that it is far more sensible for individuals to retain a working core of clinical facts and to rely on recourse to a reliable reference source to confirm and extend these facts as and when needed. Consequently, veterinary patients will always receive the best possible clinical care and every new clinical case offers a new learning opportunity to the clinical team (Haynes *et al* 2002).

However, for the modern veterinary technician/nurse, this raises the thorny question about where to find the optimal source of information that is relevant and reliable for the

majority of veterinary caseloads. Using general internet searching can offer an answer to virtually every question but that is not the same as saying that these answers can be trusted. A safer internet method may be to take an evidence-based veterinary medicine (EBVM) approach whereby simple and single clinical questions are researched as critically appraised topics (CATs) to provide more reliable answers (Vandeweerd *et al* 2012). While this system is much stronger in terms of reliability, the limited list of previous reported CATs and the time costs to run new CATs, once a clinical case has already presented, mean that the suitability of this alternative to answer the many immediate clinical questions for veterinary technicians/nurses is very limited.

Fortunately, the latest edition of *Common Diseases of Companion Animals* offers a faster and wholly more extensive solution. This book excels by using the latest communication methods in order to provide the reader with exactly the right pieces of information needed for effective diagnosis, treatment and general advice on the most common diseases across a wide range of companion animal species seen in general practice. I do not think that any other book exists that quite fulfils this need as good as this one. The book is aimed at those veterinary technicians/nurses working in practice or still training as students but could also be hugely useful to most other members of the practice team or even to well-informed owners. One of the gifts of this book is that it is perfectly balanced to provide enough information to enhance the clinical capability of veterinary technicians/nurses while not becoming so technical that it becomes overwhelming and demotivating.

Veterinary technicians/nurses are the backbone of any successful veterinary practice and are embedded within specific clinical functions as well as being the interfaces between these functions within practice. Veterinary technicians/nurses are therefore expected to have a good working understanding of the nature of most diseases across the breadth of species treated in practice, including pathology, diagnostics, treatments and owner advice, as well as the welfare implications and contraindications therein. This book provides a ready resource in an accessible and understandable format for all these necessary pieces of information that any veterinary technicians/nurse might need on a daily basis. The book especially benefits from the use of multimedia instruction; using text, pictures and colour results in optimal meaningful learning outcomes. Meaningful learning implies deep understanding where the material is mentally organised into a coherent cognitive structure and integrated with relevant existing knowledge so that it can be effectively applied to new situations and to solve problems (Mayer & Moreno 2003). The creative layout and formatting used in this book makes searching for specific data easy and enhances the subsequent learning.

The book is divided into colour-coded sections covering the major companion animal species: dogs and cats; ferrets, rodents and rabbits; birds; snakes, iguanas and turtles; horses; sheep and goats. Those sections that cover the less common species also begin with an excellent overview of

that species, explaining basic but essential aspects, such as purchasing advice for prospective owners, husbandry, anatomy and handling. Each species' section is then broken down into diseases of various body systems, such as the cardiovascular system, digestive system and the eye. These organ system chapters follow a standard pattern, beginning with key terms, learning objectives and anatomy before leading on to subsections on the major relevant diseases. The layout for each disease follows a logical and repeated pattern covering basic anatomy and pathology before providing information on clinical signs, diagnostic methods, treatment and information for clients. The consistent colour coding for diseases and subsection headings throughout the book subconsciously lead the reader logically through the sections and enhances learning and understanding.

Although not overtly stated as a priority of the book, welfare enhancement does seem to be a key element of the text. The animal-care messages given throughout strongly promote good welfare education for both veterinary technicians/nurses and owners. The book does not shy away from making strong statements about responsible pet ownership where these are needed. For example, the owner information section on myiasis in dogs and cats begins with the unnuanced statement that 'myiasis is a disease of neglect' before proceeding to give good advice on how to prevent its occurrence. The thorny issue of the timely use of euthanasia to prevent animal suffering is also dealt with head-on. For many of the more severe disorders, criteria are provided to assist and optimise euthanasia decision-making. For example, the owner information section on degenerative myelopathy in dogs, states that euthanasia should be considered when the dog can no longer support its own weight. Welfare advice is not just limited to the immediate patient but also covers breeding advice for those diseases that may have heritable components. For example, dogs that have shown demodicosis are advised not to be used in future breeding programmes. The prognostic advice provided for owners in the 'information for clients' can be especially useful towards encouraging a shared decision-making process encompassing both the veterinary team and also the owner (Barry & Edgman-Levitan 2012).

Warnings about critical points that may affect animal welfare, diagnosis, iatrogenic harm or treatment are highlighted as orange-coloured Tech Alerts with relevant sections. This format makes it easier for the reader to identify and take note of these crucial details. For example, the section on spinal disease in rabbits has a Tech Alert that reminds the reader that the rear quarters should always be supported during lifting and handling to avoid fracture of the vertebral column.

The book is beautifully illustrated throughout. The author has selected and reproduced key drawings, photographs, photomicrographs and radiograph images to complement the text and that are almost all in colour. Examples include images that highlight restraint techniques, such as how to safely restrain a ferret, that aid clinical recognition, such as the image of a lingual ulcer in a cat with calicivirus

infection, that aid diagnosis, such as the lymphosarcoma photomicrograph from a fine needle aspirate in a ferret and that teach basic anatomy, such as the colour drawing of canine skin and subcutaneous tissue in the integumentary section for dogs.

Each chapter ends with a short multi-choice quiz that reviews the information given in the preceding section and should assist the veterinary technician/nurse to consolidate their learning and also indicate areas that may require further attention. Another nice feature of the book is the attempt to bridge the language divide between technical and common-use terminologies by showing some common terms in parentheses beside the technical terms. For example, ulcerative keratitis is also identified as corneal ulcers, and haemochromatosis is also explained as iron storage disease. And where further explanation of terms is required, the book usefully offers a glossary at the back.

However, no book can be perfect in all respects. This book will be useful to veterinary technicians/nurses anywhere in the world but has been written from a US perspective. Consequently, and understandably, the diseases and treatments that are featured are those that are used in the US. Many of these drug compounds may be unavailable outside of the US or may be licenced under different trade names. For example, a US product called Revolution (Zoetis) is listed as

a treatment for sarcoptic mange in dogs but this product is registered as Stronghold (Zoetis) in the UK. Also, for readers who would like further information on the topics covered, the book has a very limited bibliography of supporting references. However, these are minor detractors from a most excellent text that is a gem to use and should become a standard item owned by both training and working veterinary technicians/nurses everywhere. Bravo to Alleice Summers.

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*Dan O'Neil,
Petts Wood, Kent, UK*