BOOK REVIEWS

The Domestic Dog: Its Evolution, Behaviour and Interactions with People

Edited by James Serpell (1995). Cambridge University Press: Cambridge: 268pp. Paperback. Obtainable from the publishers, The Edinburgh Building, Shaftesbury Road, Cambridge CB2 2RU, UK (ISBN 0 521 42537 9 paperback, 0 521 41529 2 hardback). Price £14.95 paperback, £40 hardback.

According to the publisher: this unique book seeks to expose the real dog beneath the popular stereotypes. Its purpose is to provide a comprehensive, state-of-the-art account of the domestic dog's natural history and behaviour based on scientific and scholarly evidence rather than hearsay. Anyone with a serious interest in *Canis familiaris*, its evolution, behaviour and its place in our society, will find *The Domestic Dog* an indispensable and fascinating resource. Too much promised? Not in the least!

This book evolved out of a conference held in Cambridge in 1991, which I was fortunate enough to attend as a session chairman. 'Evolved' is the correct word in that it is NOT simply a proceedings: each of the contributions, by experts in their respective fields, was peer-reviewed, selected or rejected, and carefully edited by Serpell. The result is a readable, well-documented compendium that will become, and remain a standard reference work for years to come. In appearance and composition it resembles *The Domestic Cat* (also published by CUP), currently being considered for a second edition.

The Domestic Dog is divided into three parts: I) Domestication and evolution with two chapters; II) Behaviour and behaviour problems in eight chapters; and III) Human-dog interactions with six chapters. J Clutton-Brock provides a critical review of the archaeological evidence linking Palaeolithic wolves and humans and discusses the probable process of wolf domestication. R Coppinger and R Schneider discuss the evolutionary mechanisms involved in transformation of the early wolf dogs into the working breeds we know today.

M Willis considers the genetics and inheritance of working ability in several breeds, whereas B Hart looks more generally, though not less rigorously, at breed and sex differences in behaviour. J Serpell and J Jagoe review the vast literature on ontogeny of behaviour, in particular on the effects of early experience. C Thorne then concentrates on the development of feeding behaviour, considering both early experience and inherited predispositions. Differences between wolves and dogs in social behaviour and communication are reviewed by J Bradshaw and H Nott in the next chapter, also presenting classical ethological analyses of social interactions. The ethology and epidemiology of canine aggression (towards humans; biting) are then discussed by R Lockwood.

R Mugford provides an interesting and accurate overview of canine behaviour therapy methods in the next chapter, although one might argue that this would have been better placed in the third part of the book. The same holds for V O'Farrell's consideration of the effects of owner personality and attitudes on dog behaviour. L Hart explores the physical and psychosocial benefits that humans can derive from canine relationships in the first chapter of part III, whereas R Hubrecht presents an excellent review on the welfare of dogs in human care in the next one.

At this point the book turns more to socio-ecological and ecological themes with chapters by D Macdonald and G Carr (Variation in dog society: between resource dispersion and social flux) and L Boitani et al (Population biology and ecology of feral dogs in central Italy). Both chapters differ from previous ones in that more original and unpublished data (and in some cases interesting, though unnecessary study area maps) are presented, giving

Animal Welfare 1996, 5: 316-333

many readers new insight into these fascinating aspects of feral canine social life. J Serpell, himself, closes the book with a consideration of the extreme differences that can (have) exist(ed) in human attitudes toward dogs; and in the final chapter, gaps in our knowledge about dog behaviour and human-dog relationships that still need filling by further scholarly research.

The Domestic Dog has an attractive appearance with excellent, theme-related line drawings at the front of each chapter and several black and white photographs (some reproduced too small). This offsets the 'heavier' impression the layman might obtain browsing over the many tables and data figures. But again, the text is very readable and with just a little effort, the seriously interested lay reader will find a wealth of information. Each chapter is followed by a list of the appropriate references (as opposed to a composite list at the end of the book), and a detailed subject index for the entire book is provided.

In summary, I consider *The Domestic Dog* to be the best reference work currently available on the topic (at least on the English and German-language market) and of interest to zoologists, anthropologists, animal behaviourists, ecologists, human-animal bond specialists, small animal veterinarians and companion animal friends desiring well-founded information about their pets.

Dennis C Turner
Institute for applied Ethology and Animal Psychology
Hirzel. Switzerland

The Frankenstein Syndrome: Ethical and Social Issues in the Genetic Engineering of Animals

Bernard E Rollin (1995). Cambridge University Press: Cambridge. 241pp. Paperback. Obtainable from the publishers, The Pitt Building, Trumpington Street, Cambridge CB2 1RP, UK (ISBN 0 521 47807 3 paperback, 0 521 47230 X hardback). Price £11.95 paperback, £35 hardback.

This book is a plea to take seriously the risks of genetic engineering. The author, who is qualified in philosophy, physiology and biophysics, rejects the view that all that counts is the product and not the process. He believes that it does matter which process is used, traditional selective breeding or genetic engineering. He argues that the new technology presents us with new problems. Among the risks he cites are unpredictable and unwelcome consequences of selection 'in the fast lane', the acceleration of the impoverishment of the gene pool, the release of animals which are genetically engineered disease models, the creation of new pathogens, ecological disasters and military uses. As a response to these dangers he proposes a system for democratic control of genetic engineering. Like most everything else it is too important to be left to the experts!

Despite his misgivings, he is unsympathetic to any view that rejects genetic engineering in principle. He dismisses in turn species integrity, the inviolability of nature and environmentalist mysticism as a basis for such an absolute position. His determination to take a utilitarian approach, however generously interpreted in relation to animal welfare, means that these views get a less than sympathetic hearing. It is possible that just as anthropocentric moralities displaced theocentric moralities, a new ecological ethic is emerging. Rollin,