Reduction is covered largely in the chapters on the genetic control of laboratory animals and on nutritional factors in animal experimentation. There are, somewhat surprisingly, no specific chapters on experimental design nor on the use of healthy, disease free animals, although these two approaches to Reduction are mentioned briefly in many of the other pieces. Refinement is mainly dealt with in an extensive and most interesting chapter on the husbandry of laboratory animals and in the several pieces on the assessment, prevention and relief of pain and distress.

The book is completed by two chapters by the editors which sum up the present situation and predict the way the subject could develop. There is unfortunately no index. This is a pity, as there is an immense amount of information, much of it not readily available to the non-specialist, scattered throughout the book.

This is a scholarly, up-to-date and important account of both the present situation and the possibility in the future regarding the application of the Three Rs to biomedical research. It can most profitably be read by those working in the biomedical field and by those wanting to understand the possible role and probable limitations of the Three Rs approach to the relief of animal suffering.

Roger Ewbank UFAW Potters Bar

Know Your Cat: an owner's guide to cat behaviour

Dr Bruce Fogle (1991). Dorling Kindersley: London. 128 pp. Obtainable from the publishers, 9 Henrietta Street, Covent Garden, London WC2E 8PS, UK. ISBN 0 86318 644 0. Price £12.99.

Rarely have I seen a popularly written cat book that is so informative and well illustrated as *Know Your Cat* by veterinarian Bruce Fogle! It is a treasure trove of factual information presented in such a way that the reader does not realize he or she is being taught a great deal about these fascinating companion animals.

The work borders on being a 'picture book' with the general text and photo legends being kept to a minimum. The photographic work produced by Jane Burton on special commission is of the highest quality and truly illustrates just about everything cats do and just how they do it. It is unique to see such informative photos all in one book. Bruce Fogle's text explanations are short, to the point and almost always in tune with the latest scientifically based findings on cat behaviour. I constantly found myself comparing his information with that contained in the scientific compendium on the biology of cat behaviour (Turner & Bateson, The Domestic Cat, Cambridge) and I must admit, he has 'got it down right'.

Fogle is obviously an astute observer of animal behaviour even though his formal training is in veterinary medicine. Perhaps the latter excuses his personification of these domestic animals and anthropomorphic statements such as 'I don't think we're safe here let's move on' beside the photo of a mother moving her offspring. But that is exactly

Animal Welfare 1992, 1: 300-308

how most cat owners think their cats think, and is certainly allowed in a popularly written book.

The book begins with a section on understanding the natural behaviour patterns and personality types of domestic cats, including sections on reading body language, cats' facial expressions, their vocalizations, marking behaviour and spatial organization. This is one of the few places in the book that I would have preferred a more modern interpretation than that given to urine marking and roaming behaviour, as 'staking a claim' or 'owning a territory'; many cats simply leave urine marks as 'calling cards' in areas shared, albeit not simultaneously, by many individuals. This marking regulates, rather than eliminates, traffic in that area.

The next section is an excellent treatment of mostly human-cat relationships with many useful hints on care and handling of today's cats. Fogle also includes several pages on training your cat, especially in the correction of some disturbing behavioural patterns. This may, however, give some readers the incorrect impression that there are simple recipes for correcting most behavioural problems, and neglects the need to search for the causes of the problems. A covered litter tray is also shown which, from my experience as a companion animal behaviour therapist, is more often a cause of, rather than a solution to elimination and/or marking problems.

The following two sections accurately describe and beautifully illustrate pregnancy, birth, the mother-offspring relationship and growth and behavioural development of the kittens. I do, however, feel that fostering by human substitute mothers has been overrated ('it is a natural feline behaviour') and the reason for its appearance among cats, that were originally solitary, misinterpreted, when Fogle writes that it 'evolved to allow some mother cats to leave the den to hunt while others took over the nursing.' This behaviour is probably a more modern adaption to rich, spatially concentrated food sources. And it neglects the fact that human foster-raised kittens, at least those fostered from a very early age, are more likely to develop particular behavioural problems. The topics of socialization (with conspecifics and humans) and the development of natural hunting skills are well handled.

The next to last section on the mature cat offers useful and interesting information on feeding behaviour, the cat's senses, grooming behaviour, 'the mating game' and the effects of neutering. Unfortunately, the importance of neutering for the cats' own good, especially within free-roaming colonies, was not mentioned. The last section deals with the 'taming of the cat', its domestication and some of the more recent adaptions of cats around the world.

Bruce Fogle ends his delightful book with a look at different cat personality traits (which other authors, including the reviewer, have indeed now been able to demonstrate) and a questionnaire to help him analyse the personality of the readers' cats - assuming the owners fill it out and send it in to him. To get a statistically significant sample, though, he's going to need a lot of replies. But the book *Know Your Cat* is so well done, that he might just get enough to be successful!

He closes with a number of useful addresses and a subject index, but unfortunately no bibliography of other reference works. Nevertheless, I recommend this book highly -not only to all cat lovers - but also to all cat experts as informative and delightful reading.

Dennis C Turner

Institut für angewandte ethologie und tierpsychologie

Zurich, Switzerland

Cats

Peter Neville and Bradley Viner (1992). Colour VHS 65 minutes. Obtainable from BNP Publications, 4 Quarry Cottages, Chicksgrove, Nr Tisbury, Salisbury, Wiltshire SP3 6LZ, UK. Price £13.99 including postage.

This video will give great pleasure to all who love cats and also much food for thought to those who are weighing up the advantages and disadvantages of offering houseroom to one. The photography is a delight, it shows cats of every size, shape and colour taking part in a wide variety of activities and demonstrates the broad range of both expression and behaviour seen in the average domestic feline.

Much useful information is given verbally and where necessary combined with practical demonstrations. The visual aids are used not only to demonstrate the actual performance of the action being described but also to reassure the anxious owner that such procedures as anaesthetization and neutering are not horrific experiences for their pet.

There is an introduction explaining the very varied characteristics of the average cat. This is followed by an interesting section on the different pedigree breeds available; a description of the equipment obtainable; the advantages and disadvantages of cat flaps, different types of litter and the various toys on sale - these latter ranging from the very expensive to the simple pingpong ball. There is also information on feeding, dosing and grooming and a very useful section on the risks of poisoning from common household and/or garden products.

The producers claim to include all you need to know about cats but while the material given is good there are a number of omissions. There is very little advice on how to acquire an ordinary cat, whereas there is a disproportionate amount of coverage on the pedigree breeds. This is of course both interesting and of value, but time spent on the problems likely to be met when acquiring an 'ordinary' cat would have been more helpful for a great number of potential cat owners. Information is given regarding the likely character of various pedigree animals but no suggestion is made that the character of the individual parents might influence the behaviour of their kittens. No advice is offered on introducing a cat to a new home, training a cat to go on a lead or taking one on a long car journey. This is an attractive production, full of useful information and perhaps the omissions can be incorporated into a follow-up tape.

Mary Brancker

Consultant Zoo Veterinary Surgeon, Sutton Coldfield

Animal Welfare 1992, 1: 300-308