

The book quite correctly starts with a general consideration of the origins, evolutionary history and domestication of cattle. This is followed by chapters on particular areas of behaviour (ie maintenance, social, reproductive, feeding and maternal and calf behaviours). There are then four general chapters on behavioural responses to management systems, human-cattle interactions, the training of cattle and on behavioural problems and solutions. There are some 750 references – mainly from the English language literature – and a well-organized, efficient index.

Each of the chapters is illustrated with clear, appropriate photographs and with tables, graphs and diagrams from various published papers. This book, however, is not just an annotated listing of what has been published: it is a fascinating, well-written, integrated and calmly critical account of what is known about the behaviour of domesticated cattle. There is greater coverage of the dairy animal than the beef animal. This, I think, is not so much an effect of the known interests of the first-named author but is more to do with the fact that much more has been published on the behaviour of dairy cattle than beef cattle. Of course, in the opinion of this reviewer, certain bits of behavioural information have been left out and the interpretation of some of the data is open to argument. This is inevitable in a book of this nature. What is remarkable is how much has been included and how well it has been included.

My only slight criticism is that the book ends somewhat abruptly after the chapter on behavioural problems and solutions. This is a pity. There is, perhaps, a need for a short section here on the way ahead. Much is known but much more needs to be known. A comment on the areas of our ignorance and the steps that should be taken to overcome this ignorance might have been appropriate. The authors, and especially the senior author from his long experience, could also have briefly mentioned possible future developments in animal husbandry, the ways in which these changes might put a strain on the behavioural adaptive capacity of cattle and the possible means by which these problems might be overcome. After all, to quote Jack Albright (not from the book but from life): 'Cattle are wonderful creatures and deserve to be treated well.'

All in all this is a good and trustworthy volume. It will be used extensively by the many people who need to know about cattle behaviour. In due course it will, I am sure, be found on the shelves of all agricultural, veterinary and behavioural libraries and in the personal possession of many of those who are interested in or are working with cattle. I suspect that this book has a long life in front of it and that it will become a classic and go through many editions.

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Basics of Aseptic Surgery and Anesthesia of Rodents

PennState Media Sales (1995). Pennsylvania State University: Pennsylvania. VHS PAL or VHS SECAM colour videotape. 21min. Obtainable from the producers, 118 Wagner Building, Pennsylvania State University, University Park, PA 16802, USA. Price US\$110 (plus \$15 for PAL versions).

This short video aims to provide basic instruction in aseptic surgical techniques in rodents. It is accompanied by a short user guide, written by Dr Gary Borkowski, who also appears in the video. As well as providing additional commentary, the guide provides a series of multiple-choice questions which can be used for course assessment. A short bibliography, list of

suppliers and full script of the video is also provided. With the growing emphasis on training new research staff, instructional aids such as this videotape are always welcome and, overall, the program will be useful to course organizers and tutors.

The tape commences with brief overview of the principles of asepsis, and then proceeds to give an outline of anaesthetic techniques for rats. Induction of anaesthesia with ketamine/xylazine, methoxyflurane and isoflurane are all demonstrated. It was good to note that the use of an assistant was recommended and that this recommendation was repeated on several occasions throughout the program. The need for effective gas scavenging when using volatile anaesthetics is emphasized, and isoflurane delivery using a precision vaporizer is recommended. This is followed by a brief but helpful description of anaesthetic monitoring. Surgical preparation and clipping of the animal is then demonstrated, although little explanation is given as to the correct techniques for using electric clippers. The procedure for preparing and sterilizing a glove pack is then described, followed by the technique for scrubbing hands prior to surgery.

The surgical procedure itself is then briefly discussed, with emphasis given to the importance of a clear operative field, and techniques for draping the surgical site. The need for using sterilized instruments is explained, and use of a hot-bead sterilizer is illustrated. Finally, the video emphasizes the importance of post-operative care, and the need for continued monitoring of the animal for several days following surgery; regrettably, it makes no mention of post-operative analgesia.

The main problem that will be encountered when using this tape in training courses, is that local practices vary considerably between different research institutes. For example, the surgeon may choose to wear a hat and gown, as well as the mask and gloves shown in the program, and in many units sterile gloves will be purchased pre-packed. The scrub-up procedure illustrated is not carried out at a sink with correctly sited elbow taps. While these may be unavailable in some units, perhaps mention could have been made of their advantages. Although the video illustrates techniques for coping with more than one surgical site in a single animal, the problems posed when surgery is to be carried out on several animals in succession are not dealt with.

In summary, this is a well-produced video, which may be of use as part of a training programme for new research workers who intend to carry out surgical procedures in rodents. Course tutors must, however, be prepared to provide their own commentary if local practices differ from those shown.

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Attack of the Genetically Engineered Tomatoes

N Hamilton (1998). Whittet Books Ltd/Nemesis Press: Stowmarket. 143pp. Paperback. Obtainable from the publishers, Hill Farm, Stonham Road, Cotton, Stowmarket, Suffolk IP14 4RG, UK (ISBN 1873580398). Price £7.99.

I was immediately attracted by the book's cover, depicting giant tomatoes causing havoc to vehicles and pedestrians in a high-rise-lined street. Even the neon sign flashed 'Panic'! I wondered how this would square with the cover notes that promised '...a balanced overview of the latest advances'. The acknowledgements, presentation and cartoons have a homely, if somewhat amateur, feel to them – but there is an endearing quality too. These were the