

There are good summaries of the captive conditions required for each group of animals. These also include reference to enrichment work, ie the innovative methods currently being used to increase the activity of captive animals and to design activities that replace the time that would be spent foraging in the wild. The chapters also mention the importance of keeping animals in similar social groupings as that found in nature to encourage a normal behavioural repertoire. The chapter on behavioural considerations in the captive management of birds is remarkably comprehensive. Interesting facts are pointed out like the fact that sandpipers need vertical space to carry out their behavioural aerial displays during the breeding season. There is also an interesting section on the use of artificial parents in hand-rearing.

There is much information on the welfare of animals in captivity; this is covered mainly in the sections on enclosure design, diet, animal health, enrichment work and captive environment. However, there was less discussion on welfare in the section on marine mammals. This section would have benefited from a more detailed discussion of captive environments for marine mammals and welfare as this is a particularly controversial issue at present. Similarly the section on elephants, while commenting that not many have been born in captivity, does not address the current controversy of the keeping of elephants in captivity and the provision of suitable environments.

No one volume can comprehensively cover such a vast subject, and the book does provide a useful reference volume for the areas it covers. Certainly it will be a useful addition to the library of anyone working in the field of keeping species in captivity.

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Proceedings of Animals in Science Conference: Perspectives on Their Use, Care and Welfare

Edited by N E Johnston (1995). Monash University: Clayton. 262pp. Paperback. Obtainable from the Research Ethics Unit, Monash University, Clayton, Victoria 3168, Australia (ISBN 0 7326 0636 5). Price AUS\$30.

This book presents the proceedings of a conference held at Monash University, Victoria, Australia in 1995. The conference set out to address perspectives on the use, care and welfare of animals in science. The editor of the Proceedings, Dr Noel Johnston, says in his introduction that one of the goals of the Organising Committee was that people would leave the conference with new procedures to try and new thoughts to think. The conference was undoubtedly innovative, and one that anyone interested in laboratory animal issues would wish to have attended.

The meeting was international with participants from Australia, the United Kingdom, mainland Europe, Scandinavia, the USA, Canada and New Zealand. The speakers represented a wide range of backgrounds and opinions within the laboratory animals field. They included members of animal ethics committees, researchers, animal technicians, members of animal welfare organizations, veterinarians, teachers, students and interested members of the public.

A very wide range of topics was covered, starting with a series of complementary papers on the overall theme of ethics. These examined, for example, the many ethical issues arising from the use of animals and the different levels at which these can be discussed, the way that animal ethics committees can assess research project applications, and the importance of involving the public in ethical decision making. Practical ethics – implementation of the 3Rs of replacement, reduction and refinement, and the need to ensure best practice at all times – was a general theme thereafter.

The elements of good training and their contribution to achieving ethical awareness and application of best practice were emphasized. Communications systems were explored in an overview of the relative importance of the various Internet tools, a useful contribution for those of us not yet familiar with the opportunities provided by the ‘information superhighway’.

A number of authors presented papers specifically on refinement, examining the recognition and assessment of adverse effects, control of pain, and the post-operative care of small animals, as well as providing some practical ideas for refinement with experiments. These are very welcome contributions since there is a dearth of information in this area.

Animal husbandry was addressed, with papers on environmental enrichment and innovative housing systems. Individual topics such as transgenic animals, euthanasia, restraint and discomfort associated with retro-orbital puncture were also covered. Finally, there was a series of papers concerning animal use and alternatives in education in the biomedical sciences.

If I had to single out one paper it would be that by Lynette Hart and Amy Mitchell from the School of Veterinary Medicine, University of California, who drew attention to the significant role of mice in scientific studies, and considered the cultural view of the species and their uses in the laboratory. Their concluding paragraph states ‘Given the great contributions of mice to human welfare, one could argue that it is within the sphere of responsibility of scientists to enhance the quality of life of mice whenever possible. The efforts to improve the lives of mice should reflect the magnitude of their contributions’. Exactly.

A limited amount of discussion between the speakers is published but the level of audience participation is not recorded. The conference provides a good model for future debates and since the public are listed as participants it would have been interesting to hear how the conference was received by them.

The papers presented here are practical and intended to encourage thinking and progress beyond the status quo. I hope they succeed in this objective. This book should certainly help in getting them to a wider audience.

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