

the selection process for committee members, lists its current membership, and briefly explains how the committee operates. There is a short chapter on Codes of Ethical Conduct and another on Animal Ethics Committees. The year's issues, which included transgenic animals/xenotransplantation, assistance for Animal Ethics Committees, inspectors appointed under the Animal Welfare Act 1999, and liaison with other bodies, are reviewed and discussed.

Chapter eight in the report is entitled 'Statistics' and it summarises figures for animal usage, sources of animals, status of animals, outcome for the animals, organisation type, animal re-use, purpose of animal manipulations and grading of these manipulations. It is interesting to note that the animal types most commonly used in 2001 were fish, mice, sheep and cattle and that there was a small decrease in the number of animals manipulated — from 324 395 in 2000 to 318 583 in 2001. Although there is a slight decrease in the total number of animals used, there is a much more significant decrease, from 47 583 in 2000 to 17 265 in 2001, in the 'severe suffering' and 'very severe suffering' categories of experiment. The number of transgenic/genetically modified animals reported as manipulated during 2001 totalled 1556 — the lowest number in the last five years.

Finally, towards the end of the report there is a small section with some examples of successful implementation of the 3Rs. These include the development of accurate mathematical models of electrical activity of the heart; the development of equipment for remote monitoring of the cardiovascular system; the use of cell culture methods to develop, test and characterise potential cancer treatment drugs isolated from sponges; ongoing development of tissue culture veterinary vaccine, which replaces the use of animals in the vaccine production process; and ongoing development of computerised teaching models to replace the use of animals in undergraduate teaching programmes.

The report will make interesting reading for anyone wishing to find out basic information about the NAEAC or statistics relating to records required under New Zealand's Animal Welfare (Records and Statistics) Regulations 1999.

National Animal Ethics Advisory Committee 2001 Annual Report (2002) Published by the National Animal Ethics Advisory Committee, c/o Ministry of Agriculture and Forestry, PO Box 2526, Wellington, New Zealand. 30 pp. A4 paperback.

Methods and welfare considerations in behavioural research

The United States National Institute of Mental Health, together with other bodies of the United States National Institutes of Health, has prepared a handbook entitled '*Methods and Welfare Considerations in Behavioural Research with Animals*'. It is intended for use by Institutional Animal Care and Use Committees in their reviews of protocols on research in animal behaviour and cognition; it is also intended to assist investigators when planning their experiments.

The handbook contains a description of, and references for, commonly used behavioural research methods and associated animal welfare considerations, the first of which is 'fundamental contributions of behavioural research'. Within this chapter, there are, amongst other things, brief reports of research on animal welfare, pain, stress and effects of early experience. Following this, there is a chapter on 'general considerations' that should be taken into account when planning or assessing experiments. Topics mentioned include the role of training, monitoring, evaluation of new procedures and the track record of individual investigators; observation of experimental animals; and the importance of species used and relevant ethological considerations.

The remaining chapters cover manipulation of food and fluid access, experimental enclosures and physical restraint, pharmacological studies, aversive stimuli, social variables, ethological approaches, and teaching with animals. All of the chapters include extensive reference lists.

The handbook will be a useful tool for researchers planning behavioural experiments; it is a useful reminder that there are many methods available and it provides guidelines for further reading. It will be especially useful to relatively inexperienced experimenters prior to commencement of their careers and is likely to continue to be of use to them subsequently as a reference guide.

Methods and Welfare Considerations in Behavioural Research with Animals: Report of a National Institutes of Health Workshop (2002) Edited by Morrison A R, Evans H L, Ator N A and Nakamura R K. NIH Publication 02-5083. Published by US Government Printing Office, Washington DC, USA. Available at <http://www.nlm.nih.gov/research/animals.pdf>