a 'point-counterpoint' session at the conference, presenting a spectrum of opinions and positions held by various advocates. This includes papers which argue the case for animal research for the benefit of humans, other animals, science, and for the environment respectively.

Introduced species are a major threat to the indigenous fauna and flora of New Zealand and ethical dilemmas associated with pest control and other aspects of human/wildlife interactions are discussed in several of the papers including Sir Colin Spedding's introductory overview 'The environment and animal welfare: ethical issues'. As Professor Neville Gregory points out in his paper on 'Rationale for controlling vertebrate pests', in the control of introduced species that threaten indigenous species with extinction, it is often the case that 'a majority has to die in order to save a minority'. This is an emotive issue, and the data that are needed for informed debate on the ethics of such cases, namely the welfare costs of control methods and the benefits of the control, are rarely as clear and comprehensive as many would wish. There is mention of the fact that in New Zealand, the Animal Welfare Advisory Committee (AWAC) makes recommendations about humane control agents. This illustrates another striking difference between New Zealand and many other countries(including the UK): there is no UK counterpart to New Zealand's AWAC, ie a body that is concerned with the welfare of all animals including wildlife, although there must be many advantages in having such a national body.

In his paper 'How can animal-based scientists demonstrate ethical integrity', Professor David Mellor argues that scientists have tended to be ethically naive and, until recently, 'have left fundamental ethical issues to be explored by others'. This volume is indicative of the current interest in the ethics of animal-based science and it provides both a great deal of valuable information and also many interesting perspectives on the subject.

Ethical Approaches to Animal-based Science. Proceedings of the Joint ANZCCART/NAEAC Conference held in Auckland, New Zealand, 19–20 September 1997. Edited by Mellor D, Fisher M and Sutherland G (1998) 159pp. Paperback. Obtainable from The Royal Society of New Zealand, PO Box 598, Wellington, New Zealand (ISBN 0908654839). Price NZ\$35.00 (in New Zealand) or US\$35.00 (overseas).

Guidance on the Welfare of Animals (Transport) Order 1997

These guidance notes have been produced to aid consistency of understanding and enforcement of the Welfare of Animals (Transport) Order 1997. The Order is long and complex and these notes provide a useful interface and considerable help with its interpretation. It is clear that a lot of effort has been made to try to make the complexities of the law as accessible and unambiguous as possible. The notes take the reader through the articles, explaining and expanding as appropriate, in an orderly and thoughtful way. The text is well written and good use is made of bullet points, tables and diagrams to help convey the essential messages. For example, boxes are provided containing flow diagrams to take the reader through the necessary steps to decide whether, for a given transport event, a Route-Plan or an Animal Transport Certificate is required, and to help unscramble the rules for transport involving journeys through markets. Rules concerning journey times are set out in tables.

The booklet is divided into two parts. Part 1 covers guidance on the Order and includes: scope and exemptions; general provisions (eg on space allowances and fitness to travel); a long and detailed section on feeding, watering, travelling times and rest periods; accompaniment by competent persons; duties and responsibilities of transporters; and various aspects of certification and authorization. Part 2 contains technical advice on vehicles and their operation for road transport, on the transport of animals on roll-on roll-off vessels, and on the transport of animals by air. The layouts of the various forms used to certify and record the transport of animals are

presented in annexes to the text and there are various appendices, one of which gives worked examples of domestic and overseas journeys.

The Order is not completely free of ambiguities and there are some with which even these guidance notes cannot help. For example, the Order covers the transport of all vertebrate animals (other than man) and other cold-blooded animals. However, the Order does not define 'other cold blooded animals' and the guidance notes are unable to help. It seems quite ridiculous that the internationally accepted taxonomic conventions are still frequently ignored in the drafting of laws concerning animals and that vague, undefined or poorly defined terms such as 'cold-blooded animals' remain prevalent in modern legislation. However, this is not the fault of those who prepared these guidance notes, who have done a good job. These notes will be helpful to transporters and to those responsible for enforcing the law. Ministers are committed to a review of the Welfare of Animals (Transport) Order 1997 later in 1998, and it is possible that these guidance notes may have to be subsequently revised.

Guidance on the Welfare of Animals (Transport) Order 1997. Ministry of Agriculture, Fisheries and Food; Scottish Office Agriculture, Environment and Fisheries Department and Welsh Office Agriculture Department (1998). 93pp. Paperback. Obtainable from Animal Welfare Division, Ministry of Agriculture, Fisheries and Food, Government Buildings (Toby Jug Site), Hook Rise South, Tolworth, Surbiton, Surrey KT6 7NF, UK. Free.

Ethics of genetic engineering

The Ethics of Genetic Engineering is the latest volume in a series whose aim is to offer up-to-date information about important issues in the world. This volume looks at the cloning debate, genetically modified foods and genetic testing. It is assembled almost entirely of articles reprinted from newspapers, scientific journals and special interest groups. A list of organizations from which further information can be obtained is included and the whole booklet is indexed.

This booklet could be a useful teaching resource, for example, to contribute to project work up to sixth form level and as an introduction to the subject for non-scientists. Being based largely on newspaper articles, inevitably the focus is mostly on the more sensational aspects of genetic engineering. This makes for somewhat patchy coverage but there is, nevertheless, a reasonable overall balance and in the brief introduction the reader is encouraged to critically evaluate the material presented, to judge whether the articles included represent facts or opinions, and to look for biases.

Surprisingly, there is little mention of animal welfare issues – and what small, scattered contributions there are on the subject, do not contribute substantially to the debate. This is a regrettable shortcoming. However, the book is intended as a starting point only, and could no doubt be used effectively in this context by good teachers.

The Ethics of Genetic Engineering. Volume 12 of Issues for the Nineties. Edited by Donellan C (1998). Independence Educational Publishers: Cambridge. 44pp. Paperback. Obtainable from the publishers, PO Box 295, Cambridge CB1 3XP, UK (ISBN 1861680430). Price £6.45 (plus post and packing).

Recommendations and minimum standards for the welfare of dogs

This document is about the welfare of dogs kept as pets. In publishing the code, the New Zealand Animal Welfare Advisory Committee has indicated that it hopes to promote better dog welfare by providing assistance for Inspectors under the *Animal Protection Act 1960* and through the education of dog owners. The aim is to provide owners and handlers with principles for the care and use of dogs. Following a brief review of the laws relevant to dog welfare in New