

Reports and Comments

A CD-based animal welfare syllabus

'Concepts in Animal Welfare' is a CD-ROM resource aimed at facilitating the teaching of animal welfare to students at veterinary institutes. Specifically, the aim is stated as being "to introduce the concepts of animal welfare into the veterinary faculties of developing countries". The resource includes 30 teaching modules. The first 18 of these are grouped under the heading 'General principles' and include material on: introducing animal welfare; welfare assessment and the Five Freedoms; indicators of animal welfare; introducing animal ethics; the role of the veterinary profession; and legislation. In the second section, the modules deal with specific examples, including: farm animal welfare assessment, farm animal transport and markets, livestock slaughter, working animals, animals used in experiments, companion animals, euthanasia and wild animal management.

Navigation through the CD-ROM is straightforward (but does require prior installation of a non-standard NewsGothic font, which is provided on a separate floppy disc in the package). From the title page of each module, single-clicking the appropriate icon takes the user either to a Microsoft PowerPoint presentation on the theme of the module or to Microsoft Word files which provide, respectively, ten questions (with answers) for use in assessing students' understanding, three discussion topics, and five project topics on the theme. The PowerPoint presentations include notes for the presenter that expand briefly on the points introduced in the slides. In some cases, these notes also provide references to further literature on the subject. The slides and the accompanying text are generally well produced and make their points clearly and succinctly. The resource also includes a list of suggested reading and a list of websites at which further information may be found; these are present both on the disc and in the accompanying booklet.

Each module starts by setting out the learning objectives and a summary of the content of that part of the course. It is suggested in the introduction and explanatory notes that, used together as a comprehensive animal welfare course, the package provides approximately 30 h of teaching.

This is on the whole a very good piece of work: some modules are well balanced and excellent. The CD-ROM is likely to prove very valuable to those engaged in establishing new animal welfare courses. There are some areas in which improvements could be made. One important issue that appears to receive little attention is the debate about the distribution of sentience among animal taxa (including where the lines are currently drawn and why). Another aspect that could be improved is the provision of supporting references for the material provided. This seems rather patchy and, in places, not well focused. For example, in the text accompanying the slide on 'Reduction' in the experimental animals module, no references are provided to sources of information on statistical methods or experimental design relevant to this. It appears also that, in some places where references are

provided (eg in the notes accompanying the slide on 'Refinement' in the experimental animals module), only author name and date are given, with no details of the title of the paper or the publication in which it was published.

In the press release announcing the publication of this teaching resource, John Callaghan, Education and Training Director of the World Society for the Protection of Animals (WSPA), in introductory comments about this initiative says: "Regrettably, animal welfare hasn't traditionally received the priority and attention it deserves from the veterinary profession." This mild veterinary profession bashing is aired again in the Preface to the booklet accompanying the CD: "For many years animal welfare organisations, like WSPA, have taken the lead in bringing about improvements in animal welfare as well as helping to change attitudes towards animals. Unfortunately the veterinary profession has often lagged behind in its support for reform...". On behalf of all those vets who have devoted their lives to prevention, alleviation and treatment of many problems that have caused major animal suffering, some may feel that it is regrettable that this rather curious analysis is presented here. However, it is unlikely that any will disagree that the education of veterinarians should include a good grounding in animal welfare. Material in this production by WSPA and the University of Bristol will be of interest and value both to veterinary students and to others involved in animal welfare.

Concepts in Animal Welfare (October 2003). A syllabus to assist with the teaching of animal welfare in veterinary faculties. CD-ROM plus associated booklet listing an outline of the syllabus. Produced by WSPA in collaboration with the University of Bristol. Published by and available, free to *bona fide* educators, from: WSPA, 89 Albert Embankment, London SE1 7TP, UK. Also available at: <http://www.wspsa-international.org>.

Refinement and reduction in the production of genetically modified mice

The sixth of the series of reports on refinements in laboratory animal research by the joint working group of the British Veterinary Association Animal Welfare Foundation, the Fund for the Replacement of Animals in Medical Experiments, the Royal Society for the Prevention of Cruelty to Animals and UFAW has recently been published. It addresses welfare issues relating to the methods of production of genetically modified (GM) mice and to the effects of the modification.

Since the first report of the genetic modification of mice in 1980, there has been a very dramatic growth in the use of GM mice. These animals are used in exploration of the roles and action of genes, in the generation of models of human diseases, and in the investigation of possible treatments. While there has been a long-term trend towards reduction in the numbers of non-GM animals used in scientific procedures in the UK, because of the rapid rise in GM research, this trend shows signs of being reversed.