

- that establishments should have designated animal welfare officers and nominated veterinary surgeons
- that the Animal Welfare Bill that DEFRA is presently drafting should include provision for statutory regulation of establishments which hold out to undertake such activities (but from which individuals who may occasionally rescue, keep and re-home individual animals would be exempt).

The case for regulation is clearly set out in a separate chapter. This deals in detail with many of the complexities that will be faced in the drafting of legislation, including definitions, and proposals regarding methods of registration and licensing. The report also deals with legal and other issues relating to the ownership of displaced animals.

This is a very useful, dispassionate and well-balanced review. It makes many sound recommendations towards high standards of animal welfare in all these establishments. There has been a growth of interest in such animal rescue in many countries and this CAWC report is likely to be helpful widely.

The Report on Companion Animal Welfare Establishments: Sanctuaries, Shelters and Re-homing Centres (February 2004). Companion Animal Welfare Council Report. 58 pp A4 paperback. Published by and available from the Companion Animal Welfare Council, c/o The Donkey Sanctuary, Sidmouth, Devon EX10 0NU. Email: cawc@cawc.freemail.co.uk.

InterNICHE publishes their policy on the use of animals and alternatives in education

InterNICHE is the International Network for Humane Education. It aims to promote high quality, fully humane education in biological sciences, and veterinary and human medicine. It supports progressive science teaching and the replacement of animal experiments by working with teachers to introduce alternatives, and with students to support freedom of conscience.

The ‘Policy on the Use of Animals and Alternatives in Education’, which was first published in the book ‘From Guinea Pig to Computer Mouse (2nd edition, 2003)’, has recently been put online by InterNICHE; it can be found on their website <http://www.interniche.org>. The document aims to address all aspects of work with animals and alternatives in life science education. The article consists of ten sections, beginning with the InterNICHE Position Statement. This is followed by a definition of alternatives in education and a definition of harm. The document then outlines policies on animal dissection; sourcing of animal cadavers and tissue; live animal use for clinical skills and surgery training; live animal field studies; and the use of live animals, animal cadavers and tissue for making alternatives.

The position statement says that *‘InterNICHE supports a high quality humane education within the life sciences, and the use of alternatives to meet teaching objectives. InterNICHE is against all harmful use of animals in education, including the harming and killing of animals for their cadavers and tissue, for live experimentation and skills training, for ethology and field studies, and for making alternatives’*.

Within the context of the InterNICHE position statement, the policy on animal dissection states that animal dissection can be a useful tool for knowledge and skills acquisition, and may encourage an appreciation of life, when certain conditions are met. For example, the animal cadaver must be ethically sourced, the dissection should be carried out at no lower than the university level, instructors are ethically aware and responsible and have appropriate training and competence for all activities and procedures that involve animals.

With regard to sourcing animal cadavers and tissue, InterNICHE would recognise an animal cadaver or tissue as ethically sourced only if nine conditions are met. These include: that the animal was not captured, bought, bred, kept, harmed or killed to provide the cadaver or tissue, that the animal died from natural causes or an accident, or was humanely euthanased secondary to natural terminal disease or serious non-recoverable injury, and the decision to euthanase was made by a veterinary surgeon based on the interests of the animal and not motivated by practical or financial interests.

The policy on live animal use for clinical skills and surgery training lists 14 conditions that must be met before the use of animals for these purposes is considered acceptable. These conditions include: that clinical skills training is beneficial or neutral to individual animals, that the training should be supervised by a qualified instructor at all times, and that ethics, including animal rights and welfare, animal use, alternatives, and the human-animal bond are explored openly and fully.

The InterNICHE policy provides substantial material for those working in this field to consider when embarking upon the use of animals in education. A list of some other sources of information on the subject of the use of animals in education is also available at the InterNICHE website.

InterNICHE Policy on the Use of Animals and Alternatives in Education (2004). Available at: <http://www.interniche.org>.

Farm animal welfare in the UK National Curriculum

The Compassion in World Farming Trust (CIWF Trust) has produced a report entitled ‘Educating Humane Citizens: Farm Animal Welfare and the Curriculum’, which examines how well the educational curriculum helps young people in England to understand both the factual and ethical aspects of animal farming. The report has reviewed how these issues are tackled in the National Curriculum, in relevant GCE Advanced level courses and in associated textbooks. Proposals are made for the development of the existing curriculum.

The CIWF Trust argues that the curriculum should include greater detail on animal farming since a majority of people make use of animal products on a daily basis and because humane education should be an essential part of education for sustainability; furthermore, animal welfare interests and concerns most young people. It is suggested that much more needs to be done to ensure that students have a better under-

standing of animal welfare in modern farming practice. The report details educational issues associated with animal farming, including economics, environmental impact, food safety, diet and human health, consumer knowledge and ethics. It shows how these issues are relevant to different areas of the curriculum and defines ethics with regard to animal farming. The CIWF Trust proposes reforms to the content of the curriculum for 14–19 year old education to incorporate closer ties between academic and vocational studies. It is suggested that topics on farm animal health, husbandry, welfare, environmental impact and ethics should be included in both science and vocational education.

The document looks at the role ‘education for sustainable development’ has in the curriculum and how farm animal welfare could be incorporated into it (it is not covered at present). It is argued that teachers and students need to have ready access to sufficient factual information on farm animal welfare to enable reasoned ethical evaluation. The report then details where information on animal farming already exists in the curriculum and where opportunities to include it have been missed. The final section covers what the CIWF Trust believes is needed in the way of additions to the current curriculum, courses and textbooks. For example, CIWF would like to see the issue of humane and sustainable animal farming included in the core curriculum for all relevant educational areas at primary and secondary level; these would include all life sciences, food science, animal science and agriculture, environmental sciences, geography and citizenship.

The document goes into detail about the points in the present curriculum at which information about farm animal welfare could be added. It could be a useful tool for educators when they are developing the UK education system, since it provides good ideas about how and where to improve the current system and it points out areas where there are large omissions.

Educating Humane Citizens: Farm Animal Welfare and the Curriculum (2003). Report compiled by Dr Jacky Turner. 18 pp A4 paperback (ISBN 1 900156 27 X). Available from Education and Research Department, Compassion in World Farming Trust, 5a Charles Street, Petersfield, Hampshire GU32 3EH, UK.

Training non-human primates using positive reinforcement techniques

The Research Animals Department of the RSPCA and the University of Stirling co-organised a symposium at the XIXth Congress of the International Primatological Society, 4–9 August 2002, Beijing, China. The symposium brought together individuals involved in primate training in zoos and laboratories to discuss and disseminate information on this subject. The symposium papers, along with additional contributions, have now been published in a special issue of the *Journal of Applied Animal Welfare Science* (see details below). The papers provide quantitative data on the costs and benefits of positive reinforcement training and practical guidance on its application.

The issue contains an introductory paper from the guest editors in which they outline their views and current thinking

regarding positive reinforcement training. They stress that training primates to cooperate voluntarily, using positive reinforcement training techniques, is one means of significantly reducing the adverse impact of routine procedures and husbandry techniques on them and, therefore, acts as a refinement. The guest editors felt that, at the time of the symposium, it was timely to consider what use was currently being made of positive reinforcement training to train primates and how it can be used in the future. They stressed the importance of considering the possible outcomes of training prior to undertaking such work, otherwise the wrong behaviour could be reinforced inadvertently to produce unwanted changes in behaviour or health. In addition, they emphasised that the advantages and disadvantages of positive reinforcement training techniques as applied to primates in the laboratory deserve more extensive exploration, both for the sake of the primates involved and the quality of scientific data obtained.

All the articles in the special issue illustrate benefits to animals from positive reinforcement training, with some papers providing empirical data for assessing its effectiveness and value. Also, significant refinements are described; for example, a protocol for cooperation with blood collection that does not feature the cage squeeze-back mechanism, training for leaving and returning to the home cage that has replaced the use of the pole and collar system, and a method for in-homecage collection of urine. There are eight papers in addition to the introductory article. These are ‘Use of positive reinforcement training techniques to enhance the care, management and welfare of primates in the laboratory’; ‘Positive reinforcement training as a technique to alter nonhuman primate behaviour: quantitative assessments of effectiveness’; ‘Working with rather than against macaques during blood collection’; ‘Training nonhuman primates to cooperate with scientific procedures in applied biomedical research’; ‘Training common marmosets to cooperate during routine laboratory procedures: ease of training and time investment’; ‘Effects of training on stress-related behaviour of the common marmoset in relation to coping with routine husbandry procedures’; ‘Primate training at Disney’s Animal Kingdom’; and ‘The development of an operant conditioning training program for new world primates at the Bronx Zoo’.

As a result of the symposium, many questions were identified for future consideration, including what are the best and most humane training techniques for particular species or tasks, and what is the optimal length of training sessions for particular species, tasks and group sizes. The guest editors hope to encourage further and wider application of positive reinforcement training to primate management, care and use, and to help laboratory animal care staff, scientists, research students, veterinarians, and zoo keepers in applying positive reinforcement training safely and effectively. The report would be a useful starting point for those interested in finding out more about positive reinforcement training and is a must for those already working in this field.

Training Non-Human Primates Using Positive Reinforcement Techniques (2003). Special Issue edited by Prescott MJ and Buchanan-Smith HM. A5 paperback. *Journal of Applied Animal Welfare Science* 6(3): 157–261.