The authors acknowledged that the results might, in part, be related to the methodology of the study (the committees showed a bias toward harsher second opinions), but this effect did not fully account for the results. As the authors state, others have noted that "the regulatory structure of human and animal research depends upon the ability of IACUCs to make reliable judgements about which research to approve and which to disapprove". Their results suggest that there may be low inter-committee agreement and they suggest that enhanced reviewer training and standardisation of the review process may be the way forward.

Plous S and Herzog H 2001 Reliability of protocol reviews for animal research. Science 293: 608-609

Report of the UK Animal Procedures Committee for 2000

The function of the Animal Procedures Committee (APC) in the UK is to provide the Home Secretary — the government minister responsible — with independent advice about the Animals (Scientific Procedures) Act 1986 and his functions under it. The members are experts from a wide variety of backgrounds. The Committee can set its own agenda but must also deal with questions referred to it by the Home Secretary, and the law requires that, in its deliberations, it must take account both of the legitimate requirements of science and industry and of the protection of animals against avoidable suffering. The work of the APC and its sub-committees during the year 2000 is outlined in the Report published on 19 July 2001 (see details below).

The Research and Alternatives subcommittee advises the Home Office about the allocation of grants to sponsor scientific work on the three Rs (replacement, reduction and refinement) and to develop and promote awareness and use of alternatives to animal procedures. The projects currently being supported are listed. The budget made available (£265,500) was a modest increase on that of the previous year. The Committee "strongly believes that the Government should not only maintain, but also substantially increase its financial support for these initiatives". The Education and Training sub-Committee's work was largely concerned with training for Named Care and Welfare Officers (NACWOs). A draft syllabus for a proposed compulsory introductory course for NACWOs is given in one of the Appendices. In December 2000, the Cost Benefit Working Group issued a public consultation paper. One of the aims of this Working Group is to produce an authoritative statement on the validity of animal experiments and to explore how the present cost-benefit assessment process might be improved. The Group hopes to produce its report in 2001.

Among the other issues considered by the APC during 2000 were 'openness' in the conduct and administration of research using animals (the balance of the advantages for better public understanding against constraints of personal security and commercial confidentiality), the use of primates in research, and solutions to the problem of over-production of animals for use in research.

Report of the Animal Procedures Committee for 2000 (July 2001). Published by The Stationery Office Ltd, London, UK. 41 pp. A4 paperback. Available from The Publications Centre, PO Box 29, Norwich NR3 IGN, UK. E-mail: book.orders@theso.co.uk. Price £8.70.

The state of animal protection in North America and worldwide 2001

'*The State of the Animals 2001*' (see details below) examines the way in which the welfare of animals has changed during the last 50 years. The editors, Deborah Salem, Director of the Humane Society Press, and Andrew Rowan, Senior Vice President for Research, Education and International Issues at the Humane Society of the United States (HSUS), have gathered together a collection of 13 essays that provide a mine of information on animal welfare issues. Chapter

Animal Welfare 2001, 10: 445-452

titles include: A social history of post-war animal protection; Farm animals and their welfare in 2000; Progress in livestock handling and slaughter techniques in the United States 1970–2000; Animal research — a review of developments 1950–2000; and Urban wildlife. Reasonably enough in an HSUS publication, the USA holds centre stage throughout much of the book — most discussion of law is focused on US law, for example — but many of the essays discuss their subjects and their history in a global context. The standard of writing is very high. The issues are presented in a stimulating and thoughtful way, and there are plenty of interesting and useful illustrations, charts and histograms (ranging from changes in world populations of livestock species to numbers of annual citations in the scientific literature to Russell and Burch's *Principles of Humane Experimental Technique* 1959–1999).

Although not all of the stories here are of improvements during the last half-century and the contributors do not shy away from identifying the many areas in which serious problems remain, there is a pleasingly upbeat, optimistic and positive tone throughout much of the book. Through recognising the many advances that have been made and the ways in which they have come about, the book is likely to encourage further advances. Some of the essays are better balanced than others, and perhaps few will agree with all of the views expressed. However, it provides a very good introduction to the state of animal protection at the present time and deserves to be widely read.

The State of the Animals 2001. Edited by Deborah J Salem and Andrew N Rowan. Published by the Humane Society Press, 2100 L Street, NW, Washington DC 20037, USA. 212 pp. Letter paperback. Price \$29.50.

EU pig welfare rules: recent reports

On 19 June 2001, at the Agriculture Council in Luxembourg, EU agriculture Ministers agreed a revision to the welfare Directive 91/630/EEC. Member States are required to implement the new Directive by 1 January 2003. The new Directive confirms an EU-wide ban on individual sow stalls and requires that sows and gilts shall be kept in groups from four weeks after service to one week before the expected time of farrowing. The group pens must have sides greater than 2.8 m in length. When for less than six individuals, the pens must have sides greater than 2.4 m in length. In addition, when they are group housed, the following minimum space allowances must be provided for sows and gilts: the total unobstructed floor area available to each gilt after service and to each sow must be at least 1.64 m^2 and 2.25 m^2 , respectively; and, when groups comprise 40 or more individuals, the unobstructed floor area may be decreased by 10 per cent. However, sows and gilts raised on holdings of fewer than 10 sows may be kept individually during this period, provided that they can turn around easily in their boxes.

The new Directive also includes more stringent requirements for floor surfacing in pens. At least 0.95 m^2 of floor area per gilt after service and at least 1.3 m^2 per pregnant sow must be continuous solid flooring, of which a maximum of 15 per cent can be reserved for drainage openings. When concrete slatted floors are used for pigs kept in groups, the maximum width of the openings must be 11 mm for piglets, 14 mm for weaners, 18 mm for rearing pigs and 20 mm for gilts after service and sows. The minimum slat width must be 50 mm for piglets and weaners and 80 mm for rearing pigs, for gilts after service and for sows.

The Directive also requires that sows and gilts to have permanent access to manipulable materials. Furthermore, sows and gilts kept in groups must be fed in a manner that allows each individual to acquire enough food even when competitors are present. In addition to high-energy food, all dry pregnant sows and gilts must be given a sufficient quantity of bulky or high-fibre food to satisfy their hunger and their need to chew.