The WVA Animal Welfare Committee decided that in a further attempt to promote the subject within the profession these papers should be published. The present volume is the result.

The twenty-four papers vary enormously in theme and style. They range from general reviews of such matters as the assessment of well-being in animals to detailed accounts of opioid receptors in pigs and the use of alpha-2 adrenergic medication for seditation/analgesia. There are papers on animal use and alternatives in the life sciences and on the horse in Crow Indian culture. All in all this is a fascinating volume - it shows how widespread the concept of animal welfare is and how deeply involved many veterinarians are in the subject.

Animal Welfare Proceedings of the Animal Welfare Sessions, XXIV World Veterinary Congress, Rio de Janeiro 1991 Edited by J H Seamer and F W Quimby (1992). Animal Welfare Committee of the World Veterinary Association: London. 237pp. Paperback. Obtainable from T G Scott Subscription Services, 6 Bourne Enterprise Centre, Wrotham Road, Borough Green, Kent TN15 8DG, UK (ISBN 0 9518614 09) Price £25 including postage within UK; overseas surface mail £30; overseas airmail £40.

## Blood removal from laboratory animals

In 1989 the British Veterinary Association; the Fund for the Replacement of Animals in Medical Experimentation; the Royal Society for the Prevention of Cruelty to Animals, and the Universities Federation for Animal Welfare set up a working party to run a series of workshops on the ways in which common scientific procedures could be refined to minimize any pain or distress caused to laboratory animals. Any reduction in these adverse effects not only has the potential to improve the welfare of the animals; it could also improve the quality of scientific research, in that suffering can often result in physiological and other changes which are likely to mask or interfere with the experimental results.

This first report, reprinted from *Laboratory Animals 1993 27*: 1-22, is on the techniques used for the removal of blood from laboratory mammals and birds. In many ways it is an account of best current practice, with emphasis being put on the welfare of the subject animal.

The publication should be basic reading for anyone applying for a personal or project licence under the *Animals (Scientific Procedures) Act 1986*. The implementation of its recommendations could, in many cases, ensure that minimum pain and/or distress is inflicted upon the animals that man is using for the acquisition of biological knowledge.

Removal of blood from laboratory mammals and birds First Report of the BVA/FRAME/RSPCA/UFAW Joint Working Group on Refinement BVA/FRAME/RSPCA/UFAW (1993). Laboratory Animals: London. 22pp. Paperback. Obtainable free of charge from RSPCA, Research Animals Department, Causeway, Horsham, West Sussex RH12 1HG, UK.

Animal Welfare 1993, 2: 361-365