

Searching for information on replacements to the use of animals in research

Russell and Burch's '3Rs' principles of humane experimental technique – replacement, reduction and refinement – have been accepted widely throughout the world. Researchers generally recognize the need for a thorough search for, and wherever possible use of, alternatives to using live animals. Evidence that such searches have been undertaken is expected by ethical committees responsible for judging applications for research, and is required by law in the UK and some other countries. As written in the UK Animals (Scientific Procedures) Act 1986, '*the Secretary of State shall not grant a licence unless he is satisfied (a) that the purpose of the programme to be specified in the licence cannot be achieved by any other reasonably practical method not entailing the use of animals ...*'. There have been developments in many fields of science in finding alternatives to the use of animals and a great deal of information has been published on the subject. However, this information is scattered widely in the scientific literature and because of this, and the relative scarcity of good reviews, searching for information on alternatives in particular fields can be difficult. The world wide web now provides the potential for obtaining information on almost any subject very rapidly but the value of this remarkable resource is, as all of us have come to discover, limited by the capacities of the available machinery for searching and finding. The 'web' is like a colossal encyclopaedia with entries of very variable quality and a misleading and fragmentary index. Considerable efforts are being made by a variety of organisations to develop improved methods for extracting reliable and complete information on 3Rs alternatives and this book published by FRAME (see below) is a very useful review.

The book covers the basics of constructing search profiles for searching on-line databases and for use on internet search engines, the development of strategies for searches on alternatives, overviews of internet search engines and key relevant databases (with particular information on free Medline on the internet), and provides names and addresses of other organisations and information services that may be helpful. It is clearly written and presented and is likely to prove to be a very valuable resource for those seeking information – and guidance on how to find information – on non-animal replacements for research (and for the other two Rs also).

Searching for Information on Non-animal Replacement Alternatives: A Guide to Search Techniques, Databases and Specialised Resources. 1999. Krys Bottrill. Fund for Replacement of Animals in Medical Experiments: Nottingham, UK. 52 pp. A4 paperback. Obtainable from the Fund for Replacement of Animals in Medical Experiments, Russell & Burch House, 96-98 North Sherwood Street, Nottingham NG1 4EE, UK (E-mail: frame@frame-uk.demon.co.uk). Single copies available free of charge.

Humane Killing of Livestock using Firearms

With the correct equipment and technique, shooting is a quick and humane method of despatch and it has particular application in the humane destruction of casualty animals. This booklet published by the Humane Slaughter Association describes the principles and practice of using free-bullet firearms for the humane killing of large farm animals. It provides a very valuable source of information for veterinarians, slaughtermen, police firearms officers, and others who may be directly or indirectly involved in humane killing of livestock. After sections on anatomical considerations, physical principles (eg the calculation of muzzle energy) and the physiological effects of shooting including clear information on the signs of an effective shot, brief reviews are provided on types of firearm and ammunition with guidance as to their suitability for various purposes. There are then four pages describing the correct shooting positions (location and angle of entry) for humane despatch of cattle, deer, horses, sheep, pigs and goats. These are clearly illustrated, using photographs of midline sections through heads,

to show the position and size of the brain in relation to external features. The booklet also contains information on the selection of appropriate firearms and ammunition, safety aspects, carcass disposal and routine maintenance of equipment. It is written clearly and concisely in handbook style and is well illustrated. With the exception of the information on legislation (which deals specifically with UK law), the subjects covered are relevant to humane despatch of livestock anywhere in the world and the booklet is highly recommended for all who may be involved in this work.

Humane Killing of Livestock using Firearms: Guidance Notes No. 3. 1999. Humane Slaughter Association. 23pp. A4 paperback. ISBN 1871561116. Obtainable from the Humane Slaughter Association, The Old School, Brewhouse Hill, Wheathampstead, Herts AL4 8AN, UK (E-mail: info@hsa.org.uk). Price £3.50.

Stray Dog Control

Control of stray and feral domestic dog populations is a problem in many parts of the world. These animals can be a threat to human health and a threat to wild animals, and their own welfare is often a matter of concern. The World Society for the Protection of Animals' (WSPA's) new booklet on stray dog control provides a compendium of information on various aspects of the subject. It is intended, so the introduction informs us, as a supplement to the *Guidelines for Dog Population Management* published jointly in 1990 by the World Health Organisation and WSPA.

The booklet provides brief introductory reviews of various aspects of stray dog control followed by eight annexes which form the meat of the publication. These annexes include descriptions of the stray dog control programmes of the Waltham Forest Council (on the outskirts of London) and of Dundee District Council (Scotland), reviews of equipment for dog control and of identification systems and kennel design, and tips on dog catching. There is also an annexe on 'suggested legislative provisions for companion animals' based on the Council of Europe's Convention on the Protection of Pet Animals, and one presenting the Federation of European Companion Animal Veterinary Association's policies on neutering and mutilations and its position statement on dangerous dogs.

Although subtitled 'a practical guide to stray control programmes for dogs', the booklet is not a step by step account of how to do this. The material provided in the annexes is relevant as practical information or background but, by itself, it does not comprise a complete do-it-yourself guide. Problems of controlling feral dog populations in rural areas are given little attention here, the focus being on stray dogs. The introduction states that dog registration and identification are essential requirements for the successful implementation of a dog control programme but, whilst this may be the ideal, one wonders how feasible it would be in many parts of the world. The booklet is a valuable contribution to the literature on stray dog control and can be recommended for all those involved in the development and implementation of these programmes.

Stray Dog Control: a Practical Guide to Stray Control Programmes for Dogs. 1999. World Society for the Protection of Animals. 53 pp. A4 paperback. Obtainable from the World Society for the Protection of Animals, 2 Langley Lane, London SW8 1TJ, UK Single copies available free of charge.

Managing African Elephants

The background to the production of this publication – *Managing African Elephants* – by the Elephants Managers and Owners Association (EMOA) is outlined in the foreword. EMOA was formed in 1994 following recognition at a workshop in South Africa in 1994 of the need for a