## Horse care in winter

The aim of this publication is to provide guidance on the relationship between winter weather, shelter and nutrition so that the health, welfare and management of horses kept for recreation can be improved. The booklet explains the theory of climatic energy demand (CED) and shows its importance to the rational management of equines in wintertime. The text outlines the relationship between body-weight and feed requirement and discusses the relative merits of using rugs and field shelters to protect horses and ponies from the weather. By explaining the science, the booklet will help owners understand why certain husbandry practices are recommended and others are not.

The information is well presented and easy to read with good use being made of the scientific data to back up practical husbandry advice. The main points are conveniently repeated in a closing summary; this should encourage readers to put the knowledge gained into practice.

The Horse in Winter - shelter and feeding by the Centre for Rural Building, The Scottish Agricultural College in consultation with the Aberdeen Association for the Prevention of Cruelty to Animals (1991). 16 pp. Obtainable from AAPCA, 6 Bon Accord Square, Aberdeen AB9 1XU. ISBN 0 901766 83 6. Free on receipt of an A5 sae.

## Cattle training

This is a simple, well illustrated, practical guide to the procedures used at the Tropical Cattle Research Centre to train cattle for animal experiments. The general point is made that frightened or badly trained and handled cattle are not only a danger to those who have to work with them but are themselves in a state of distress and will thus usually give wrong or misleading experimental results. The publication's emphasis is on the gentle and gradual application, over time, of well-tried restraint methods. The cattle thus become used to and relax into the method of restraint, ie the animals are humanely trained to co-operate with the experimenter and are not just forced to conform with what is required of them. Co-operating animals will be less distressed than those which do not co-operate — whatever the scientific procedure that is used on them. There is also an indirect welfare bonus in that the animal users will treat such animals especially gently as there is usually a great wish to keep the animals' co-operation.

Training can be seen as a *refinement*, in the sense of Russell and Burch's 3R's approach (replacement, reduction, refinement) to diminishing or removing the inhumanity inherent in some forms of animal experimentation.

Training Cattle for Scientific Experiments by J A Dickfos (1991). 21 pp. Commonwealth Scientific and Technical Research Organisation. Obtainable from CSIRO Division of Tropical Animal Production, P O Box 5545, Rockhampton Mail Centre, Queensland 4702, Australia. Price Economy Air to UK \$A12.50.