

The articles are accompanied by 12 schedules which provide detail on the construction and maintenance of vehicles and receptacles (transport accommodation), transport protocols regarding loading, disinfection, labelling etc, watering and feeding intervals, and regarding authorizations. There is also a schedule on 'framework of competances' which specifies the areas of knowledge required by people responsible for the welfare of animals during transport.

This Order applies to the commercial and, to a lesser extent non-commercial, transport of all animals. It is therefore very important reading for all of the wide range of persons involved in and responsible for animal transport.

The Welfare of Animals (Transport) Order 1997. Statutory Instrument 1997 No 1480. The Stationery Office Limited: London. 31pp. Obtainable from The Publications Centre, P O Box 276, London SW8 5DT, UK and other usual HMSO sources. Price £5.60.

EC report on the welfare of laying hens

This Report, which reviews current scientific evidence on the welfare of laying hens under various systems of housing, was presented to the European Council in autumn 1996 by Mr F Fischler, the Commissioner for Agriculture. It was prepared by an international panel of experts under the chairmanship of Dr H K Blokhuis of the Netherlands and was approved by the Scientific Veterinary Committee of the European Commission. It is an update of a 1992 report produced under Article 9 of Council Directive 88/166/EEC (on minimum standards for the protection of laying hens) but on which no action was taken at the time.

This is a wide-ranging and quite comprehensive Report comprising 12 chapters followed by 35 pages of references. The chapters cover definitions and measurement of welfare, housing systems, specific aspects of housing (space allowances, light, perches, drinkers etc), physical health aspects, productivity, egg quality, labour, environmental issues, economics, evaluations of different production systems, ongoing research on the welfare of laying hens, and conclusions. These chapters provide valuable reviews of the literature pertinent to the subjects and are well laid out and written.

There is a list of 22 conclusions. It is noted that these were based primarily on bird welfare considerations and that although other aspects such as production costs and environmental effects were taken into account, welfare did take precedence. Some of the conclusions are very basic but, in using the word 'must', provide firm rules, for example, that laying hens 'must have at least daily access to food and water at all times. Others are less forceful. For example: 'Light should be sufficient to allow behaviours which the birds are highly motivated to perform' (no light intensities are specified), and 'There should be selection of strains which are better adapted to other (non-battery) systems'. On the subject of battery cages, it is concluded that the battery cage as used at present has severe disadvantages for hen welfare and that 'to retain the benefits of cages and overcome most behavioural deficiencies, modified enriched cages are showing good potential in relation to both welfare and production'. Minimum space requirements are not given because of the difficulty of defining them. Looking further ahead, the final two conclusions are that high standards of hen welfare can only be sustained if the EU market is protected against imports of cheaply-produced eggs from third world countries and that further research is needed in

some areas, notably into feather pecking and cannibalism. This list of conclusions is a useful summary but it remains to be seen how the points will be translated into action.

The Report was written to provide guidance to the European Council. It is a good review of current knowledge of laying hen welfare and the associated problems. It will be of particular interest to those involved in development of welfare legislation in Europe or elsewhere.

Report on the Welfare of Laying Hens. Scientific Veterinary Committee Animal Welfare Section (1996). Commission of the European Communities: Brussels. 147pp. Paperback.

Pig space requirements

The new space allowances for weaners and rearers specified by Schedule 3 of the *Welfare of Livestock Regulations 1994* (implementing EC Directive 91/630) come into force in the UK on 1 January 1998. The *Welfare of Livestock Regulations 1994* also include the ban on close confinement stalls and tethers which come into effect on 1 January 1999. In answer to requests from pig producers, the Agriculture Departments of England, Scotland and Wales have produced guidelines on the enforcement of provisions on space requirements set out in this legislation.

These guidelines (which are non-statutory) help with the interpretation of various points contained in Schedule 3. For example, they elaborate on the definition of 'being able to turn around without difficulty' which, in future, all pigs must be free to do at all times. The guidelines also expand on the calculation of pen sizes for compliance with minimum pen size regulations and explain exemptions which allow for continued use of close confinement stalls or pens under certain situations (eg for feeding or under free-access). A graph clearly shows the relationship between minimum space allowance and body-weight for finishers and it is made clear that infringements of this allowance will lead, at least, to immediate enforcement action. Extracts from Schedule 3 of the *Welfare of Livestock Regulations 1994* are included as an annex to the guidelines.

Pig Space Requirements: Guidelines on Section 3 of the Welfare of Livestock Regulations 1994. Ministry of Agriculture, Fisheries and Food, Scottish Office Agriculture, Environment and Fisheries Department and Welsh Office Agriculture Department (1997). MAFF Publications: London. 9pp. Single copies obtainable free from MAFF Publications, London SE99 7TP, UK.

Farmed ratites in Europe

In April this year the Standing Committee of the European Convention for the Protection of Animals kept for Farming Purposes adopted a Recommendation (a 15 page document) on the management of farmed ratites (ostriches, emus and rheas). In accordance with Article 9 of the Convention, the Recommendation will enter into force on 22 October 1997. Twenty-four Articles covering a variety of subjects: general provisions, biological characteristics of ratites, stockmanship and inspection, enclosures, buildings and equipment, management, changes in phenotype or genotype, killing and arrangements for review of the Recommendation. Appendices are included which cover topics to be included in the training of ratite farmers, technical details for the catching and handling of ratites, general provisions for ostriches, emus and rheas, and guidelines for size of bedding or fodder chop.