Poultry Environment Problems: A Guide To Solutions

D Charles and A Walker (2002). Published by Nottingham University Press, Manor Farm, Main Street, Thrumpton, Nottingham NG11 0AX, UK. 88 pp. Paperback (ISBN 1897676 97 2). Price £20.00.

Thanks to David Charles and his co-workers at ADAS Gleadthorpe, poultry producers in Britain and around the world have a thorough understanding of the climatic requirements of poultry and of the environmental control systems to meet these ends. This booklet, which is only 88 pages long, comprehensively reviews the physiological and production responses of hens, broilers and turkeys to heat and light. These, in turn, are translated into guidelines for building design and management using profit as the deciding criterion. This approach to the practical questions of environmental management is in the best tradition of applied poultry science and has provided a model for other species.

The booklet comprises four reviews; each is well referenced and illustrated and the authors pay respectful tribute to the early pioneers of their field. I particularly liked the blend of sound poultry science with practical solutions to problems of building design and operation, confident that these authors have a proven track record in the field. This guide is not the sermon of the ivory-tower academic, who has rarely, if ever, set foot in a poultry shed. Many poultry farmers have adopted these solutions since they were first proposed in the 1970s.

Bearing in mind the interests of readers of *Animal Welfare*, some will be disappointed by the minimal coverage of poultry welfare in the context of environmental management. It is not that the authors have paid lip service to this topic or that they believe the topic to be unimportant: the introduction states that many aspects of welfare are well covered elsewhere in authoritative texts. Nevertheless, some consideration of the bird's perspective would have added balance and shown where dilemmas may arise between commercial and welfare objectives. I was also a little frustrated that design details were not always stated (eg dimensions of air inlets) and that the broader issues of environmental emissions, which surely impinge on building design and management, were not given the attention that legislation now demands.

This, then, is the guide for the farmer, consultant or researcher who needs to know the climatic requirements of poultry and practical ways to satisfy them.

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The Design of Animal Experiments: Reducing the use of animals in research through better experimental design. Laboratory Animal Handbooks No. 14.

M F W Festing, P Overend, R Gaines Das, M Cortina Borja and M Berdoy (2002). Published for Laboratory Animals Ltd by The Royal Society of Medicine Press Ltd, 1 Wimpole Street, London W1G OAE, UK. Distributed by Marston Book Services, P O Box 269, Abingdon, Oxfordshire OX14 4YN, UK, or Balogh International, 1911 North Duncan Road, Champaign, Illinois 61822, USA. 112 pp. Paperback (ISBN 1 85315 513 6); price £14.00/\$28.00.

The book is clearly written for a broad range of biomedical and veterinary scientists and students with some basic knowledge of statistics. Dr Michael Festing and colleagues have produced a