The badger

A great deal of up-to-date information is packed into this welcome addition to the Mammal Society series. Appearances, senses, signs of presence, distribution, habitat, social life, behaviour, food, breeding and population density are all dealt with.

Badgers are much commoner than was thought 20 years ago, and the British population is estimated to be around 250,000 adults, living in 45,000 social groups. As our largest carnivore (up to 17kg), and a powerful animal, an adult badger has no natural enemies in Britain apart from man – but the annual mortality in the adult population is still some 30 per cent. About 47,000 adults and cubs are killed on roads every year, and a further 10,000 are victims of the cruel and illegal practice of badger digging and baiting. Cubs may be killed by dogs, foxes or other badgers; many die in the summer when food is scarce, and fewer than 50 per cent survive their first year. Few badgers live more than six years.

Bovine tuberculosis is not a major cause of mortality in badgers, but since the 1970s this species has been recognized as the main wildlife reservoir of the disease. The government programme of killing badgers in areas where tuberculosis-infected cattle are slaughtered and badgers are believed to be implicated in spreading the disease, is described rationally. But there is no suggestion that killing badgers is the remedy for the tuberculosis problem, which may indeed be aggravated by the disruption of badger populations. The Ministry of Agriculture's efforts to develop a tuberculosis vaccine for badgers is thought to be a more likely solution in the long-term.

A final section on conservation deals sympathetically with the legislation that protects badgers and their setts, the licences available for removing or killing badgers for legitimate reasons, the problems involved in relocating badgers and the reduction of road mortality.

The booklet is well illustrated by photographs, mostly taken by the author, and drawings by Frankie Woods.

Michael Woods (1995). The Mammal Society: London. 24pp. Paperback. Obtainable from the publishers, 15 Cloisters Business Centre, 8 Battersea Park Road, London SW8 4BG, UK (ISBN 0 906282 31 4). Price £2.50 plus 50p postage and packaging.

Broiler welfare

Each year in the UK some 700 million broiler birds are reared, killed and eaten. The size of this broiler industry ensures that if there are welfare problems then they have the potential to be on an immense scale.

It is recognized that the modern broiler chicken does not need to have its beak trimmed to control feather pecking/cannibalism and that it can be kept on a littered floor with freedom to forage. These are both positive welfare points. However, there is a problem with the bird growing beyond the capacity of the legs to support its heavy body. This can lead to the development of painful breast and leg lesions. This genetic selection for rapid growth in the young animal can also result in adult breeding stock having to be kept on short rations, ie in a state of chronic hunger, to stop them becoming seriously overweight.

The gathering-up, transport and slaughter of broiler birds is also thought, at times, to cause serious welfare problems.

The Alastair Mews Memorial Trust recently held a seminar on welfare aspects of broiler production. Some 27 experts drawn from the broiler industry, from academia and from various welfare interests, met together at the Ammerdown Study Centre near Bath. They looked into the technical and social/economic aspects of broiler welfare with the intent, if possible, of finding consensus views on the causes of the problems and to suggest possible solutions.

It was suggested that the industry should act immediately to introduce nutritional regimes designed to minimize leg health problems. The evidence presented at this seminar suggests that this would be a cost-effective way of reducing the problem. Urgent action is also needed to eliminate chronic hunger in the broiler breeder flocks. It was also recommended that greater importance should be attached to health and welfare criteria within the genetic selection programmes.

The proposal was made that an independent economic analysis should be undertaken to indicate which groups in the broiler supply chain have the greatest financial flexibility, and are therefore best placed to invest in improvements in broiler welfare.

It can be argued that the consumer has benefited greatly from the increased efficiency of the broiler industry and that perhaps, in fairness, improvements in welfare should be at least partly funded by a modest increase in the price of the product in the market place.

The printed proceedings of this seminar will be of considerable use to all those who want to gain some understanding of the complexity of welfare problems associated with broiler birds in the UK.

Practical Approaches to Broiler Welfare. Edited by M Baxter, D B Morton and A C Mews (1995). 24pp. Paperback. Obtainable from the Department of Biomedical Sciences and Biomedical Ethics, University of Birmingham, Edgbaston, Birmingham B15 2TT, UK (ISBN 1 872166 58 X). Price £5.

Overpopulation of dogs and cats

In the USA the overbreeding of domestic dogs and cats with the subsequent problem of what to do with the largely unwanted offspring, is regarded as a substantial welfare issue.

Some of the puppies and kittens are retained by the breeders; some are sold; many are placed with animal shelters in the often vain hope that they can be found good homes; and some are abandoned, to die or to join the sometimes substantial populations of stray/feral dogs and cats.

In response to this welfare challenge a large number of small voluntary organizations, plus one or two larger regional/national groups have been set up to

- a. educate the general public of the problem
- b. encourage local government authorities to set up stray dog and cat control schemes
- c. run animal shelters to take in and home the unwanted animals. Unfortunately this often means humanely killing many of the animals as good homes cannot always be found.
- d. establish low-cost dog and cat neutering schemes. This demands cooperation from the local veterinary profession but offers the only real long-term solution.

These organizations and groups are scattered across the United States and are often unknown to each other. This lack of contact means that local hard-bought experience and expertise is not shared as it should be. To overcome this communication barrier *The Fund for Animals* has published a substantial 268 page *Companion Animal Overpopulation*

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