Contents and Preface (pre-publication copy)

Contents

Preface

Acknowledgements

Introduction, concepts and methods
1. Introduction, concepts
2. Describing, recording and measuring behaviour

Fundamental processes
3. Experience, learning and behaviour development
4. Motivation
5. Evolution, optimality
6. Welfare assessment

Organisation of behaviour
7. Behaviour towards predators and social attackers
8. Feeding
9. Body care
10. Locomotion, space occupied
11. Exploration
12. Spacing behaviour
13. Rest and sleep

Social and reproductive behaviour
14. General social behaviour
15. Human-domestic animal interactions
16. Seasonal and reproductive behaviour
17. Sexual behaviour

Early and parental behaviour
18. Foetal and parturient behaviour
19. Maternal and neonatal behaviour
20. Juvenile and play behaviour

Welfare topics
21. Handling, transport and humane control of domestic animals
22. Welfare and behaviour in relation to disease
23. Abnormal behaviour 1: stereotypies
25. Abnormal behaviour 3: addressed to another animal
26. Abnormal behaviour 4: failures of function
27. Abnormal behaviour 5: anomalous reactivity

**Welfare of various animals**
28. Welfare of cattle
29. Welfare of pigs
30. Welfare of poultry
31. Welfare of farmed and pet fish
32. Welfare of animals kept for fur production
33. Welfare of horses
34. Welfare of farmed and pet rabbits
35. Welfare of dogs
36. Welfare of cats

**Glossary**

**References**

**Author index**

**Subject index**

**Preface**

All of those who have an interest in livestock production or companion animal management and breeding including every farmer, pet-owner and veterinary surgeon need to know about domestic animal behaviour in order that they can carry out their jobs and care for their animals properly. All of these people and all consumers of farm animal products have to consider their moral stance in relation to domestic animal welfare and require precise information about that welfare in order to do this. This book is a comprehensive guide to the behaviour of domestic animals that provides practical information for those involved with farming, pet animals and veterinary work. It also reviews the scientific information that is available concerning the assessment of animal welfare, and the evaluation of the effects on animals of genetic selection and of different management methods and housing conditions. Such assessment necessarily involves measurement of physiology, disease state and production as well as behaviour.

Farm animals are very good subjects for behaviour studies so many important advances in our understanding of fundamental aspects of animal behaviour have come from farm animal behaviour studies. Concepts concerning social structure, behaviour development, learning, cognition, parent-offspring relationships, sexual behaviour, and the role of behaviour in coping with adversity have depended greatly on evidence obtained from farm animal studies. Studies of companion animals have also been important in these areas and the rapidly developing field of anthrozoology, which includes interactions between humans and other species, has depended greatly on studies
involving pets. If evolutionary questions are being asked the changes in the species during domestication must be taken into account, but domestic animals have the same range of behaviour as wild animals. It is easy to obtain data about behaviour from farm animals; they are available in large numbers and are often genetically very similar to one another. Companion animals are especially suitable subjects for work on learning, behaviour development and social interactions with conspecifics and humans. Our understanding of domestic animal behaviour and welfare, however, is much enhanced by ideas based on studies of the behaviour of wild animals, laboratory animals and man. The results of work on a variety of species helps us to have an adequate appreciation of the mechanisms underlying domestic animal behaviour.

Precise scientific studies on animal welfare are now sufficient to form an important part of the evidence upon which laws can be based. In these circumstances, those who are learning about, keeping up-to-date with, or legislating upon livestock farming, veterinary medicine or applied biology need a source of information about the current state of our knowledge of domestic animal behaviour and welfare. This text provides that information in a way which is easy for the beginner to understand but which includes discussion of complex topics and reference to the literature relevant to that area. Hence, as well as being useful to breeders, farmers, agricultural advisors, pet owners, pet trainers and veterinary surgeons, it is suited to a comprehensive university or college course on behaviour science applied to domestic animals.

This book substantially extends the coverage of the third edition in that information is provided about the behaviour and welfare of dogs, cats, rabbits, animals kept for fur production, farmed fish, turkeys, ducks and geese. Hence all major farmed animals and companion animals are considered. The text revision has been carried out by Donald Broom with photographs from Andrew Fraser and Donald Broom. After introducing the concepts of behaviour and welfare, behaviour management, animal marking, learning, motivation, evolution and welfare assessment are considered. There follow sections on the various aspects of individual, social and reproductive behaviour. The humane control of domestic animals, welfare and disease, and the various kinds of abnormal behaviour are then described. In the final nine chapters, the welfare of different species is discussed. We should acknowledge scientific pioneers so the references in the text include those who had key ideas, even if they were published many years ago. The book is illustrated with many photographs and includes a comprehensive reference list and a glossary.

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