

## BOOK REVIEW

*Ingvar Ekesbo and Stefan Gunnarsson: Farm Animal Behaviour Characteristics for Assessment of Health and Welfare. Second edition. CABI Wallingford, Oxfordshire, UK, 2018. 341 pages, with innumerable photo illustrations. 18 × 24 cm. ISBN-13: 978 1 78639 139 1. Price: 60 €*

Anyone who has ever authored a book, be it scientific or a piece of polite literature, knows that the hardest part of the business is to find the shortest, most expressive and catching title. In this case the title is a direct hit. These ten words condense the goal and explain the essence of teaching farm animal behaviour to all interested readers, primarily veterinary undergraduates and practitioners, animal breeders and stockmen, and especially to those who like to consider themselves animal welfare fighters. This brilliant piece of work gives a detailed description of the behavioural pattern of domesticated mammals and birds as well as non-domesticated but farmed animals. On this basis the authors outline the causes and most frequent forms of malbehaviour (abnormal behaviour) with special reference to their connections to housing, feeding and stockmanship conditions, and illustrate the way that leads to clinical manifestation of diseases. All this information will explain the reader the basis of animal welfare, set scientific foundations for animal welfare rules and acts and describe welfare indicators which enable us to draw well-balanced views on welfare issues. Therefore, the reviewers have the strong opinion that all those who dare to write, lecture or, horrible dictum, intervene in codification or shaping of public opinion on animal welfare issues should first compulsorily have to prove that they have read this volume.

If nothing else, the authors' names themselves offer guarantee for the disciplinary and scientific quality of this book. The first author, Professor Ingvar Ekesbo is a world-renowned scientist in the field of farm animal ethology. For a long time, his observations and research have focused on the relationship between innate behavioural characteristics and environmental conditions. In the mid-1980s he was among the first to study the development and aetiology of environment-related diseases of livestock and poultry which then vastly contributed to the ever broadening research in the field of the so-called multifactorial diseases (also known as management-/production-related diseases) that have overwhelming responsibility for the about 30% gap between the implementation of genetically coded production traits and what we at present realise in commercial animal production. His skills and knowledge enabled him to take a leading position in the continuous reshaping and upgrading of the consecutive and exemplary Swedish Animal Welfare Acts. As teacher and long-time head (between 1977 and 1993) of the Department of Animal Hygiene (now called Department of Animal Environment and Health), Veterinary Medical Faculty, Swedish University of Agricultural Sciences in Skara, he bestowed his knowledge upon thousands of veterinary undergraduates in an amiable way, and created and led a strong research group for a long time. Besides his active role in the work of the International Society of Applied Ethology, he was actively involved in the foundation of the International Society of Animal Hygiene (ISAH, 1970, Budapest, Hungary) and at present he is the last of the Mohicans among the highly esteemed scientists founding the Society. In his early nineties he is, thank God, still active. His co-worker, Associate Professor Dr. Stefan Gunnarsson, his successor in the above-mentioned department, is his worthy disciple.

This 341-page book richly illustrated with overwhelmingly colour photos is complemented with a useful glossary, 39 pages of relevant references and an index that helps the readers find certain issues of interest.

The setup of each chapter of the three sections follows (wherever possible) the same pattern: description of the way of domestication of a given farmed animal is followed by a detailed description of innate and learned behavioural patterns, and then the authors deal with the assessment of health and welfare.

The first part (Domesticated mammals) includes horse, swine, rabbits, cattle, sheep and goat. The second section (Domesticated birds) gives information on domestic fowl, turkey, goose and domestic duck. In its final section the book provides information on non-domesticated farmed animals including fallow and red deer and ratites (ostrich, rhea or nandu and emu).

The well-written, highly readable text everywhere expresses the authors' strong view on animal welfare issues with which the reviewers readily agree. However, when expressing their views on force-feeding of geese, the authors are very cautious and fail to state whether or not cramming represents cruelty, making it liable for banning. Another sensitive issue, feather plucking, is not addressed in this book.

In summary, both of us wholeheartedly recommend this book to all interested readers who have something to do with farm animal production.

*Pál Rafai and Viktor Jurkovich*