

emerging equine science

BSAS Publication No. 32

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The importance of the equine industry to the rural economy is now beginning to be recognised. Because the horse is not treated as an agricultural animal, little money has been put into research. Nevertheless, many organisations have been increasing research activities, and this book pulls together the results of recent thinking. Based on presentations given at a conference organised by the British Society of Animal Science and the British Grassland Society, and including several overseas contributors, this volume is an authoritative European text.

The research findings are grouped into five main topics:

Health, welfare and behaviour • Breeding and genetics • Nutrition •
Grassland and equine business management • Exercise physiology

Contents

Foreword by HRH The Princess Royal • Metabolic responses of muscle to exercise • Muscle morphology heterogeneity: control, significance for performance and responses to training • The mechanics of equine locomotion: a review of progress in our understanding of the mechanical basis of locomotor performance and disease • Breathing and bleeding - the problems of being big and running fast • Causal factors of equine stereotypy • The putative reward function of equine stereotypic behaviour • Equine neutrophil elastase 2A concentrations in tracheal wash preparations and synovial fluid as a potential objective marker for inflammatory airway and joint diseases in horses • Development and application of modern breeding technologies to the horse • Mapping the grey gene in Thoroughbred horses • Factors influencing placental and fetal development in the mare: important considerations for the selection of embryo recipients • Towards a common equine rationing system across the EU • Partitioning degradation of feeds between different segments of the equine digestive tract • Exploiting dietary fibre in equid diets • Effects of airway inflammation, ozone and exercise on the pulmonary antioxidant capacity of the horse: a war on nutrition • Equine forages and grassland management • The challenge of attracting and retaining sponsorship in eventing • Posters • Index

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 **NOTTINGHAM**
University Press



British Society of Animal Science

(formerly British Society of Animal Production)

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Animal Science, published six times a year both on-line and in print, is a major scientific journal of international repute, publishing fundamental and applied research including all aspects of the sciences relevant to an understanding of animals, their function and performance and their relationship to the social and physical environment. Research at the molecular, cellular, organ and system levels are all included along with research involving whole animals, production systems and mathematical modelling. Papers, both invited and submitted include areas covering breeding and genetics, nutrition and digestion, physiology and endocrinology, reproduction, lactation, health, behaviour, ethology and welfare, environment and housing, food evaluation and animal products.

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