

farm animal genetic resources

BSAS Publication No. 30

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This book provides an overview of developments in the conservation and sustainable utilisation of Farm Animal Genetic Resources. It is based on presentations given at a conference on this subject co-organised by the British Society of Animal Science, the Department for Environment, Food and Rural Affairs, the Rare Breeds Survival Trust and the Sheep Trust.

The book covers a range of developments including:

Policy issues, including the growing international effort, led by the Food and Agriculture Organisation of the United Nations, to co-ordinate conservation of Farm Animal Genetic Resources • The growth in scientific knowledge in areas relevant to conservation, especially the quantitative and molecular genetic basis for conservation and reproductive techniques to support conservation • Methods of conservation and examples of conservation in practice.

Contents

Conservation of farm animal genetic resources - a global view • The conservation of animal genetic resources - a European perspective • Conservation of farm animal genetic resources - a UK national view • Evolution of Heritage GeneBank into The Sheep Trust: conservation of native traditional sheep breeds that are commercially farmed, environmentally adapted and contribute to the economy of rural communities • The UK Government policy on farm animal genetic resource conservation • Genetic variation within and among animal populations • Managing populations at risk • Experiences from plant GR conservation • Managing genetic resources in selected and conserved populations • The value of genome mapping for the genetic conservation of cattle • Conservation genetics of UK livestock: from molecules to management • Role of reproductive biotechnologies: global perspective, current methods and success rates • Role of new and current methods in semen technology for genetic resource conservation • Oocytes and assisted reproduction technology • The integration of cloning by nuclear transfer in the conservation of animal genetic resources • Biosecurity strategies for conservation of farm animal genetic resources • The role of rare and traditional breeds in conservation: the Grazing Animal Project • Use of molecular genetic techniques: a case study on the Iberian pig • UK rare breeds: population genetic analyses and implications for applied conservation • A UK conservation success story: Longhorn cattle, a case study • Conserving animal genetic resources: making priority lists of British and Irish livestock breeds • Index

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