

Ramifications of the reproductive management of animals in zoos (2004). Proceedings of the World Association of Zoos and Aquariums Symposium organised jointly by ZooSchweiz, OZO and Zoos in Bavaria, at Goldau-Rigi, 27 February–1 March 2003. 85 pp A4 paperback. Published by and available from the World Association of Zoos and Aquariums, PO Box 23, CH-3097 Liebefeld-Berne, Switzerland. Price £12 plus postage.

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Strategy for British pig health and welfare

In response to the 'Outline of an Animal Health and Welfare Strategy' published by the Department for the Environment, Food and Rural Affairs (DEFRA), the Scottish Executive and the Welsh Assembly in 2003, the British pig industry has devised a specific strategy for British pig health and welfare. This outlines the measures the industry believes need to be taken in order to achieve a demonstrable and sustainable improvement in pig health and resulting welfare that will contribute to the recovery of the industry and a sustainable rural economy. Ben Bradshaw, Animal Health and Welfare Minister, has contributed a foreword congratulating the pig sector for being so quickly off the mark in developing this strategy.

In his introduction, Stuart Houston, Chairman of the British Pig Executive and National Pig Association, states that improvement in the health and welfare of pigs is one of the most important factors that will determine the sustainability of the sector in the next 10 years. It is estimated that pig disease costs British producers at least £50 million a year. Measures to tackle this will result in welfare improvements and cost savings. The strategy identifies 9 priority areas for action and these are listed below.

- 1) Establish a national structure to provide the focus, drive and planning for a national pig health improvement programme.
- 2) Establish the present health, welfare and disease status of the British pig herd.
- 3) Enhance disease surveillance information available to pig producers.
- 4) Undertake intervention studies on disease control and eradication, and support health improvement programmes with advice.
- 5) Develop nationally recommended biosecurity protocols.
- 6) Develop national protocols for new disease prevention and eradication programmes.
- 7) Quantify risks and consequences of emerging pig issues.
- 8) Enhance training in disease identification and treatment.
- 9) Increase the programme of targeted pig disease research.

In keeping with the opinion expressed in the section on targeted pig disease research, that "welfare and welfare research have in the past been viewed as separate issues to animal health and a more holistic viewpoint is required",

where this document addresses welfare improvements it focuses largely on those that will come from reducing the incidence of disease. Plans are outlined for benchmarking the current health and welfare status of the British pig herd through the collection of data, including population statistics, disease status, the use of medicines and health status. Possible approaches to assessment of other aspects of welfare are not mentioned specifically.

Despite the identification of a large and wide range of topics that need to be addressed in pursuit of benefits for pigs, their farmers and wider society, there is an up-beat, optimistic tone to this strategy. It performs a valuable role in helping to establish priorities for improvement.

A Strategy for British Pig Health and Welfare (February 2004). Jointly published by BPEX (British Pig Executive), NPA (National Pig Association), PVS (Pig Veterinary Association) and MLC (the Meat and Livestock Commission). 19 pp A4 paperback. Available free of charge from BPEX, PO Box 44, Winterhill House, Snowdon Drive, Milton Keynes MK6 1AX, UK; <http://www.bpex.org/technical/diseaseManagement/pdf/bpexstrategy.pdf>

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Controlled atmosphere stunning of poultry: an integrated approach

In June 2004 a workshop was held at Silsoe Research Institute on controlled atmosphere stunning (CAS) of poultry. The 38 invited participants came from academia, UK government departments, welfare organisations and the poultry industry (UK: 23; continental Europe: 4; USA: 1). Fifteen short lectures covered the biology, technology, legal aspects and commercial experience of CAS with perspectives offered by representatives of the UK Farm Animal Welfare Council (FAWC) and the Humane Slaughter Association (HSA). Three breakout sessions were organised which covered the acceptability of CAS in terms of bird welfare and wider societal issues, including legislation. The workshop was sponsored jointly by the HSA, the Universities Federation for Animal Welfare (UFAW), Stork PMT BV and Yara International ASA.

The primary focus of the workshop was poultry welfare during CAS. The critical questions addressed were: what are the most important criteria by which to judge welfare during CAS; are any gas mixtures preferable and should some be forbidden; and how humane is CAS, particularly compared with electrical stunning? The specialised anatomy and physiology of the avian respiratory system, which is highly adapted for efficient gaseous exchange, makes poultry extremely sensitive to inhaled gases and therefore makes it vital that CAS is demonstrated to be humane. The four main types of CAS gas mixtures stun birds by different mechanisms: anoxia (eg N₂ or Ar with < 2% residual O₂), hypercapnic anoxia (eg 70% CO₂ and