

dead at the slaughterhouse, must be kept and retained for at least three years.

The proposal also sets out stricter standards for the use of higher stocking densities (30 kg liveweight per square metre of useable area). Requirements include the keeping of detailed technical details of the establishment, its equipment, production targets and management practices, which must be made available to the competent authority on request. Specific regulations are proposed for the environment of the establishment including an upper limit on the concentration of ammonia and carbon dioxide of 20 ppm and 3000 ppm respectively, at the level of the chickens head. When the outside temperature measured in the shade exceeds 30°C, the inside temperature must not exceed this by more than 3°C, whereas when the outside temperature is less than 10°C, the relative humidity inside the establishment must not exceed 70%. In the case of these higher stocking density establishments it is proposed that the competent authority shall carry out inspections to verify, amongst other things, whether the equipment and management of the establishment are suitable to ensure an acceptable welfare level.

In addition to these environmental requirements, the Directive also sets out stricter standards for the training and guidance of stockpersons, the labelling of chicken meat, and penalties for infringements. The document proposes that Member States shall comply with this Directive by December 2006, and will be sent to the European Parliament and Council for discussion. It will not apply to parent stock or free-range birds.

Reference

European Commission (2000). *The Welfare of Chickens Kept for Meat Production (Broilers)*. Report of the Scientific Committee of Animal Health and Animal Welfare. Adopted 21 March 2000. http://europa.eu.int/comm/food/fs/sc/scah/out39_en.pdf

Proposal for a Council Directive laying down minimum rules for the protection of chickens kept for meat production (May 2005). Communication from the Commission to the Council and the European Parliament on the protection of chickens kept for meat production. Published by the Commission of the European Communities. 26 pp A4. http://www.europa.eu.int/comm/food/animal/welfare/farm/proposal_EN.pdf

K Parkes

UFAW

World Association of Zoos and Aquariums launch new Conservation Strategy

On 2 May 2005 the World Association of Zoos and Aquariums (WAZA) launched its new Conservation Strategy, *Building a Future for Wildlife: The World Zoo and Aquarium Conservation Strategy*, at the joint Annual Conference of Australasian Regional Association of Zoological Parks and Aquaria (ARAZPA) and South East Asian Association (SEAZA). The new strategy strengthens and develops the ideas of the first World Zoo Conservation Strategy, which was published in 1993 by the World Zoo

Organisation (IUDZG) and the Captive Breeding specialist Group of the World Conservation Union (IUCN).

As stated in the document itself, the strategy "... is intended to provide a future blueprint for urgent local and collective action by zoos and aquariums worldwide through directed policies and a series of accompanying manuals containing more detailed procedures and examples of good practice".

The Strategy begins with a foreword by the Director General of the IUCN, and a preface by the President of WAZA and the Chair of the WAZA Conservation Committee, in which the purpose and aims of the document are outlined. Following the introduction, which details the history behind this document and reasons for its inception are nine chapters concerned with 'Integrating Conservation', 'Conservation of Wild Populations', 'Science and Research', 'Population Management', 'Education and Training', 'Communication: Marketing and Public Relations', 'Partnerships and Policies', 'Sustainability', and 'Ethics and Animal Welfare'. Each chapter contains a series of boxes where additional pertinent information can be found such as a definition of 'conservation', examples of co-operative research efforts between zoos, a summary of the European Association of Zoos and Aquaria's (EAZA) education standards, and the WAZA code of ethics and animal welfare.

Each chapter begins with a summary of the topic in question and a set of goals, before moving on to discuss specific issues. With the exception of the introduction, each chapter concludes with a set of recommendations. Specific animal welfare related recommendations include that all zoos and aquaria should have their own ethical codes and animal welfare policies and should comply with legal requirements, but emphasises that legislation only defines minimum standards and that the zoos and aquaria should aim for even higher standards. The Strategy recommends that all establishments provide environmental enrichment and should aim to develop and expand current and future enrichment techniques, and that more use should also be made of evidence-based objective welfare assessments, with the results being used to improve the environment in collections. It is also recommended that all establishments become more familiar with the relevance of ethics and welfare issues in their conservation activities, and that they should increase their efforts to educate and involve staff and the public. In addition, all zoos and aquariums should have an ethics committee and an ethical review process for all aspects of their operations.

The document is well illustrated throughout with both examples and photographs. It concludes with a number of appendices, including a list of acronyms of the various organisations mentioned in the text along with their website details, a glossary of terms, acknowledgments and a list of the illustrations used.

The Strategy is essential reading for all zoos and aquariums, but will also be interest to anyone with an interest in biodiversity and conservation. Foreign language versions of the Strategy are currently in preparation.

Building a Future for Wildlife: The World Zoo and Aquarium Conservation Strategy (2005). Produced by the World Association of Zoos and Aquariums (WAZA). Published by WAZA Executive Office, 3012 Bern, Switzerland. Available to download at <http://www.waza.org/conservation/wzacs.php>. Hard copies available from the WAZA secretariat (email secretariat@waza.org) priced €12 plus postage for non-WAZA members.

K Parkes

UFAW

World Organisation for Animal Health agrees new animal welfare standards

On 24 May 2005 delegates of the World Organisation for Animal Health (OIE) voted unanimously to adopt new animal welfare standards during its annual general meeting. These new guidelines, brought about through amendments to the OIE's Animal Health Code, represent the first global standards on animal welfare and will take immediate effect within the OIE's 167 member countries.

The aim of the Animal Health Code is to provide "standards, guidelines and recommendations designed to prevent the introduction of infectious agents and diseases pathogenic to animals and humans into the importing country during trade in animals, genetic material and animal products". Of particular significance is the chapter on animal welfare, which contains new guidelines for the slaughter of animals for human consumption, for the transport of animals by land and sea and for the humane killing of animals for disease control purposes.

The guidelines on the slaughter of animals for human consumption address the need to ensure the welfare of food animals both during pre-slaughter and throughout the slaughter processes. They cover a range of topics including personnel, animal behaviour (eg flight zones in relation to getting an animal to move), moving and handling animals, lairage design and construction, care in lairage, the management of fetuses during slaughter of pregnant animals and stunning methods. The latter chapter includes a useful table summarising acceptable slaughter methods for each species and the associated animal welfare issues. A second table in which acceptable handling and restraining methods are presented according to each species and the method of slaughter used is also presented, in which the associated animal welfare issues are discussed in terms of requirements and possible areas of concern.

The guidelines for the transport of animals by land and by sea both contain recommendations related to responsibility, competence of animal handlers, journey planning (including duration, vehicle and container design and maintenance, space allowance, rest, water and feed, control of disease, emergency procedures and special provisions for transport on roll-on/roll-off vessels), documentation, the pre-journey period (including the selection of compatible groups, the holding area, the effect of travel, fitness to travel, and species-specific requirements), loading (including facilities and the use of goads), the travel period (including methods of restraint, regulation of the vehicle

environment, water and feed requirements, and sick, injured and dead animals), and unloading and post-journey handling (including sick and injured animals, disease risks, and cleaning and disinfection). In the case of transport by sea, actions in the event of a refusal to allow the import of a shipment are also discussed. Species-specific issues have yet to be developed for the transport of animals by land, but brief a section is included in the guidelines for the transport of animals by sea.

Subjects addressed in the guidelines for the humane killing of animals for disease control purposes include responsibility (both at the national and the farm level, including the role of veterinarians, animal handlers, slaughterers, farmers etc) and operational guidelines (planning the humane killing of animals). The requirements, advantages and disadvantages of using of free bullets, and penetrating and non-penetrating captive bolts are also considered. Other methods of killing discussed include maceration, the application of an electric current, carbon dioxide/air mixture, nitrogen/inert gas mixed with carbon dioxide, nitrogen and/or inert gasses, lethal injection, the addition of anaesthetics to feed or water, and killing methods for unconscious animals (cervical dislocation, decapitation, pithing, bleeding).

These new guidelines largely reflect existing EU legislation, and although they are advisory and do not have legal status, they may form the basis of legislation or best practice standards in countries where none currently exist.

OIE Terrestrial Animal Health Code (2005). Produced and published by the World Organisation for Animal Health. 73 pp A4 paperback. http://www.oie.int/download/sc/2005/animal_welfare_2005.pdf

K Parkes

UFAW

EU survey on attitudes of consumers to the welfare of farmed animals

A new EU-wide survey, commissioned by the European Commission's Health and Consumer Protection Directorate General, has recently been published in which the attitudes and opinions of citizens of the 25 Member States to the welfare of farmed animals are revealed. The survey focused on three main themes:

- the welfare of farmed animals;
- purchasing behaviour and the welfare of farmed animals;
- animal welfare at the European level.

The first section aimed to identify and determine consumer knowledge about the production systems of different food species and the welfare and protection afforded to them. The survey revealed that people who have visited farms where animals are raised for food have a greater awareness and concern for animal welfare and are more likely to accept a price increase based on welfare-friendly production systems. However, there appears to be a marked difference in attitudes towards perceived levels of care for different species; a majority of those surveyed (66%) regard the welfare and protection afforded to dairy cows as positive,