

non-consumptive use of whales [eg whale watching], cruelty of killing methods, and the Faroese pilot whale hunt). Attention is drawn to specific concerns about some species including dolphins and porpoises (eg incidental killing in set gill net and pelagic trawl fisheries, the impact of driftnet and purse seine fisheries, deliberate catches, and commercial exploitation), seals and walrus (culling methods), marine turtles (by-catching and slaughter methods), and animals trapped as pests or for fur (the type of trap used).

With regard to the use of animals in scientific procedures, the protection of animals used in experiments (basic scientific research and education), genetic manipulation of animals in research (including welfare concerns regarding mutagenesis, cloning, and xenotransplantation), animal tests and cosmetics, alternatives to animal experiments, and the use of animals in general chemical testing are all discussed.

Each topic within these major sections begins with an overview of the main areas of concern, including details of specific reports, evidence, or incidences supporting the claims. In certain cases, details are given of how the general public have voiced their concerns, such as street demonstrations about the transport of calves and lambs over long distances. Relevant legislation, at the national, Council of Europe, EU, and international level, is referred to throughout. Each topic concludes with a section entitled 'Areas for future action', which includes specific recommendations, such as maximum journey times in the case of transport, as well as more general measures which should be taken, such as better enforcement mechanisms and greater efforts to fully apply specific legislation.

As well as the animal welfare issues that are regulated at EU level (see above), the document also addresses several key issues that do not fall under EU control, because of a lack of legal basis in the EU Treaty. These include the welfare of companion animals and animals in entertainment, including the welfare of animals in zoos, the use of animals in circuses, greyhound racing, traditional events involving cruelty to animals, bullfighting, cockfighting and dog fighting. The document concludes with sections on animal welfare and the European Union treaty system, and animal welfare and the World Trade Organisation. The first of these details the legal basis of community legislation for animal protection including its history and how it works and what future action is required, whilst the latter discusses the problems concerning international trade between countries where welfare standards differ.

As with any publication that aims to encompass such a wide subject area, this review is not particularly comprehensive on each issue. It will, however, be a useful tool for those requiring a brief overview or reference guide of the major animal welfare issues.

Analysis of Major Areas of Concern for Animal Welfare in Europe (July 2004). Published by Eurogroup for Animal Welfare. 131 pp A4 paperback. Available from Eurogroup for Animal

Welfare, 6 rue des Patriotes, 1000 Brussels, Belgium; Tel: 32 2 740 08 20; email: info@eurogroupanimalwelfare.org. Price €60.

K Parkes

UFAW

An action plan for the sustainable management of wild deer populations in England

In December 2004 a new strategy and action plan to encourage and support the sustainable management of wild deer in England was launched. Unifying a range of policy initiatives, the strategy provides a coherent framework for wild deer management by setting out the action which Defra, the Forestry Commission England, English Nature, the Rural Development Service and the Countryside Agency intends to take over the next three years.

The document opens with a foreword by Ben Bradshaw MP, Minister for Nature Conservation, outlining the necessity for such an action plan. This is elaborated upon in the following section which discusses the negative impact of wild deer (both native and introduced species), including the disturbance of activities such as farming and woodland management, injuries to people, the possible transmission of Lyme's disease to humans by ticks, and importantly, in terms of animal welfare, traffic accidents.

The action plan includes a number of sections that are relevant to welfare:

- Ensuring high-quality coordinated advice.
- The modernisation and revision of the law relating to deer management — amendments explicitly aimed at improving deer welfare include (a) the modification of Section 6 of the Deer Act 1991, which relates to actions to prevent suffering, to bring it in line with the Scottish legislation, such that "a person shall not be guilty of an offence in respect of any act done for the purpose of preventing suffering", (b) the introduction of a closed season for Chinese water deer (CWD) in order to improve the welfare of dependent fawns (to be applied to both sexes since they can be difficult to distinguish), and (c) making the release of CWD into the wild an offence (but allowing for the consideration of an exemption to "allow for the immediate release of CWD at the site of capture where there is no practical means of humane dispatch"). Time permitting, it is hoped that some of these changes will be implemented by the end of 2006.
- Training and education — the plan recognises that "high quality training and education are essential for [the] safe, humane and effective management of deer". A number of proposals are made, but, in terms of welfare, the aim to explore ways to improve and consolidate standards of assessment for stalkers and deer is of particular importance.
- Disease control — this section of focuses primarily on reducing the risk of transmission of Lyme's disease to humans and the possibility of increased risk of TB in wild

deer where they are concentrated as a result of supplementary feeding.

- Research, evaluation and monitoring — in particular, the Highways Agency and the Deer Initiative are to continue with their research and ongoing monitoring of road traffic accidents involving deer, and non-lethal methods of management.

Other sections include the venison market, linking grants to sustainable deer management, management of public estate land, regional and local strategies, and implementing and reporting progress.

The Sustainable Management of Wild Deer Populations: An Action Plan (December 2004). Published by Defra and the Forestry Commission. 7 pp A4 paperback. Available at [http://www.forestry.gov.uk/pdf/deerstrategyengland301204.pdf/\\$file/deerstrategyengland301204.pdf](http://www.forestry.gov.uk/pdf/deerstrategyengland301204.pdf/$file/deerstrategyengland301204.pdf)

K Parkes

UFAW

Improving lamb survival

About 15% of lambs are lost each year in the UK; a significant proportion of the national stock. In addition to the associated morbidity being a matter of serious welfare concern, this also has major financial implications. The main causes of lamb death are exposure, starvation, infectious diseases, congenital defects, predators, and misadventure, all of which will invariably involve a certain degree of suffering and a reduction of welfare. This booklet aims to increase survival rates through better planning, better organisation of lambing routines and facilities, and good stockmanship.

Much of the booklet focuses on measures that ensure lambs are born in the best possible condition; topics covered include practices prior to servicing and during pregnancy (including ram management), health and welfare programmes for the ewe from weaning to lambing, condition scoring, and ways to reduce stress. Many of these measures not only benefit the lamb, but also help to improve the welfare of the ewe. For example, excessive handling or disturbance and excessive use of dogs should be avoided where possible, as stress can impair maternal behaviour; measures to reduce stress will also benefit the ewe in her own right.

A number of easy-to-use reference guides are provided throughout the text, including a comprehensive table outlining the feed requirements of both lowland and hill sheep at various stages of late pregnancy (single and twins), a list of the basic housing requirements (with particular attention paid to heat stress), and a checklist for turnout to ensure that the lamb is ready (ie has it sucked?; has the navel healed?; has it been fed colostrum?). Symptoms of hypothermia and a flow chart of what action to take in such an event are also presented.

There are several appendices listing details such as (1) what provisions should be stored (including parturition equipment, veterinary supplies, survival kit, surgical

equipment and miscellaneous items); (2) how to feed colostrum (including quantities) using a stomach tube; (3) a diagram of a lamb warming box; and (4) when and how to give a glucose injection. The need to develop strategies in conjunction with appropriate veterinary and technical advice is mentioned throughout, as are various codes of recommendations and guidance leaflets, whilst readers are directed to more specific Defra publications on a number of topics on which further information is required. This booklet will be very useful to those responsible for the care and management of sheep.

Improving Lamb Survival (2004). Published by Defra. 24 pp A5 paperback. Available at <http://www.defra.gov.uk/animalh/welfare/farmed/sheep/pdf/lamb Survival.pdf>

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UFAW

Refining dog husbandry and care

According to this report, which is concerned with the issue of refining laboratory dog husbandry and care in order to avoid or minimise suffering and improve welfare, an estimated 140 000 dogs are used in research and testing worldwide every year. It is the eighth in a series of reports produced by Joint Working Groups on Refinement convened by the British Veterinary Association Animal Welfare Foundation (BVA/AFW), the Fund for the Replacement of Animals in Medical Experiments (FRAME), the Royal Society for the Prevention of Cruelty to Animals (RSPCA), and the Universities Federation for Animal Welfare (UFAW).

The report is split into six main sections, each concerned with a particular aspect of laboratory dog welfare, along with relevant background information, advice, and recommendations where applicable:

- (1) Background information on the use of dogs in research and testing, including data on the numbers and breeds used, the purpose of use, source, and existing legislation.
- (2) The natural history and behaviour of the dog in relation to its husbandry and care, including discussion of ancestry and dominance, senses and communication, interpreting dog signals, aggression, abnormal behaviours, stereotypies, and temperament.
- (3) Management of laboratory dogs, including housing and the physical environment eg pen size, stocking density, group versus single housing, the provision of outdoor areas, lighting, temperature, ventilation, noise, facility design and construction, and husbandry practices. Food and feeding, health and hygiene, identification and record keeping are also discussed in detail.
- (4) Breeding, including breeding systems, the selection of breeding stock, care of the whelping bitch, and balancing supply and demand.
- (5) Practices employed for, during, and after experimental use, including socialisation, habituation and training,