

Reports and Comments

FRAME launches new initiative: Perspectives in Laboratory Animal Science (PiLAS)

The Fund for the Replacement of Animals in Medical Experiments (FRAME) is a charity dedicated “to the development of new and valid methods that will replace the need for laboratory animals in medical and scientific research, education, and testing”. FRAME works towards ultimately ending the use of all animals in laboratory research whilst recognising that it is not currently feasible to end the use of animals at present. Where animal use is necessary, FRAME advocates a Three Rs approach.

The Three Rs approach was originally put forward by William Russell and Rex Burch when working for UFAW in the 1950s. In 1959, their work culminated in the publication of the now world-renowned book, *The Principles of Humane Experimental Technique* in which they described the Three Rs philosophy: the Replacement of sentient animals in biomedical research where possible, Reducing the numbers of animals used to no more than necessary to achieve objectives, and Refinement of the care and techniques used on animals so as to minimise risks of harm to their welfare. The Three Rs have since been adopted internationally to improve the welfare of laboratory animals through changing the way in which laboratory animal experiments are designed and carried out.

One of FRAME’s latest initiatives is: ‘Perspectives in Laboratory Animal Science’ (PiLAS). PiLAS aims “to improve the quality of discussion about animal experimentation and alternative approaches, by offering bio-scientists in all relevant fields an opportunity to share their expertise, knowledge and ideas concerning these and other issues raised by laboratory animal use”. PiLAS will be circulated as a supplement in each issue of FRAME’s scientific journal, *Alternatives to Laboratory Animals* (ATLA) and the articles will also be freely available online at: www.atlaorg.uk.

Articles featured in the first edition of PiLAS include: A risk assessment approach to severity classification in animal research; Animal use in veterinary education – the need for a Fourth R: Respect; Automated homecage behavioural analysis and the implementation of the Three Rs in research involving mice; and, The concept, sources and incidence of inhumanity and its diminution of removal through implementation of the Three Rs.

As well as hosting a number of informative and interesting articles, the website also features sections on: Current dilemmas; Discussions; The wisdom of Russell and Burch; Points of view; News; and Comments and feedback. Users of the website are encouraged to offer feedback on articles and discussions published and comments may be submitted through an online form.

PiLAS welcomes articles for consideration and submissions may be sent by email to: susan@frame.org.uk, or by post to: Susan Trigwell, FRAME, Russell & Burch House, 96-98 North Sherwood Street, Nottingham NG1 4EE, UK.

Perspectives in Laboratory Animal Science (PiLAS) (2012). A stand-alone supplement to be published in each issue of the ATLA Journal published by FRAME and an online resource, website available at: www.atlaorg.uk.

E Carter,
UFAW

Improving farm animal welfare through innovation and market forces

The Raad voor Dierenangelegenheden (RDA, Council on Animal Affairs) is the body in The Netherlands which provides advice to the Minister and State Secretaries of Economic Affairs, Agriculture and Innovation on issues of animal welfare, animal health and animal ethics. The RDA’s latest Report (details below) addresses the role of market forces in progress in farm animal welfare. In her introductory letter to the Minister, the Chairperson, Frauke Ohl, says the aim of this opinion “is to give new impetus to the societal issue of animal welfare in livestock farming in The Netherlands”.

The RDA takes the position that “The future of the strongly export-oriented Dutch livestock sector does not lie in conventional bulk production for prevailing world market prices” but, “in finding, serving and expanding market segments that place greater value on sustainability, including a high standard of animal welfare”. To do this, the RDA concludes, will involve marketing innovative (high-welfare) products and stimulating new consumer perceptions about these and the need for them. It believes this will be best achieved by stimulating private initiatives in an open market, and lists ways in which the government can do this, including: “working towards the realization of one well-implemented hallmark for animal welfare, which subsequently can be developed further at the European level”.

The RDA clearly apportions tasks between government and industry. “Ideally, government will focus on promoting dissemination of knowledge and raising awareness among livestock farmers and consumers, among others, and... create an innovation-friendly environment in the area of animal welfare and the marketing thereof”. And, the agri-food sector’s role is to develop animal welfare-friendly products that “in an international context offer good economic prospects for all links in the production chain”. The report recognises the challenges, pointing out that animal welfare is not at present a major factor in what consumers purchase: “If two products differ only in price, the customer generally chooses the one that is least expensive” and discusses approaches to animal welfare education.

These issues are being grappled with in many countries around the world and, in addition to its role in The Netherlands, this Report is a valuable, interesting and upbeat contribution to the debate more widely.

Profitable Welfare: Improving Farm Animal Welfare by Facilitating Innovation Processes and Using Market Forces (2012). A4, 26 pages. Raad voor Dierenaangelegenheden (Council for Animal Affairs), PO Box 20401, 2500 EK, The Hague, The Netherlands. Available at: http://www.rda.nl/home/files/profitable_welfare_rda_2012.pdf.

JK Kirkwood,

UFAW

A snapshot of beef and dairy cattle health and welfare in Great Britain

The Cattle Health and Welfare Group (CHAWG) is an industry-led organisation that seeks to inform and represent the interests of both the beef and dairy sectors throughout Great Britain. Its members include government bodies (from England, Wales and Scotland), charity organisations, and industry groups, amongst others. Financial support is provided by the beef and dairy levy boards, EBLEX and DairyCo. CHAWG has four main priority areas in which it hopes to enact positive change: farm health planning; Bovine Viral Diarrhoea (BVD); surveillance and reporting; and the Dairy Cow Welfare Strategy.

Periodically, CHAWG publishes reports to inform both government and industry and the latest is an annual Report on the health and welfare of beef and dairy cattle in Great Britain. CHAWG intends this to be the first in a series of annual reports which will enable the industry to track cattle disease and welfare issues and to gauge the success, or otherwise, of any initiatives currently in operation.

The Report opens with two lists which feature the ‘top ten’ health and welfare concerns for beef and dairy cattle across Great Britain. These lists have been generated through liaising with cattle sector organisations. The disorders causing most concern to both beef and dairy farmers are very similar. Those which are considered a priority in both sectors are: fertility, mastitis, BVD, Johne’s Disease, nutrition, calf pneumonia, calf scour, and parasitic gastroenteritis/lungworm. The two industries differ in the following: the beef industry is concerned about Infectious Bovine Rhinotracheitis and liver fluke, whilst dairy farmers find Bovine Tuberculosis (TB) and the genetics of today’s dairy cow greater issues.

The issues listed provide the backbone of the Report and each is discussed in turn (although bovine TB is considered outwith the scope of this Report). Many reviews and studies are drawn upon to give examples and figures relating to each concern and organisations and working groups active in the areas are mentioned. Additionally, information is provided about relevant industry- or government-led initiatives attempting to tackle the problems, such as ‘Control of worms sustainably’ (COWS) which aims to manage cattle endoparasites.

A major problem in both industries is calf mortality and CHAWG notes: “In 2008, approximately 1 in 7 dairy calves and 1 in 13 suckler beef calves were dying on-farm”. To reduce this, the National Youngstock Association (NYA) was formed in 2011 to provide farmers, veterinarians, industry organisations and researchers within the dairy and beef sectors with relevant information, education and research findings. CHAWG comments on recent NYA

findings which showed that “8% of all calves are born dead or die within 24 hours whilst only 86 out of every 100 dairy heifers born alive make it to first calving. Of those who do, 15% are culled before their second lactation”. Data from other sources are reviewed and CHAWG lists the most common conditions discovered at ante and post mortem inspection of calves aged up to 6 months: ante mortem inspection found pneumonia/respiratory disease, diarrhoea/scours and lameness to be the most common conditions, and post mortem examinations revealed kidney lesions, pleurisy/pneumonia and abscesses.

Breeding and genetics is another very important area of interest and both the dairy and beef industries have systems in place to develop the genetic potential of cattle breeds. In adult cattle, particularly dairy cattle, CHAWG notes that: “The breeding of a more robust cow with a longer potential lifespan is a key goal of the industry following what was widely recognised as a disproportionate emphasis on production in the 1990s”. Since 2007, the Profitable Lifetime Index (a means of guiding breeding programmes within the dairy industry) has put more emphasis on fitness and a lifetime breeding goal, rather than production and an annual breeding goal. It is believed that this change in emphasis has already had an effect on dairy cow health and welfare with recorded improvements in udder health, longevity, lameness, and female fertility.

Although it has been recognised that focusing solely on production can have a negative effect on health and welfare, the language of the Report does tend to focus on monetary and production gains/losses. For example, when considering mastitis, the cost of treatment (ranging from £28.90 to £1,418 depending on severity) and reduction in milk production is described but the effect of clinical mastitis on welfare is not mentioned. Likewise, when lameness is discussed, the costs of a case of lameness is given (average cost = £323.47) and the subsequent effects on an animals’ performance are discussed (eg reduced milk yield, high medicine and culling costs, increased calving interval and fertility problems) but the Report does not comment on the protracted pain and discomfort that may be experienced by a clinically lame cow.

There is remarkable fluctuation in the prevalence of lameness and CHAWG uses figures from a report by Baker and others (2010; *Journal of Dairy Science*) of 205 dairy farms among which prevalence ranged from 0 to 79.2%, with an average of 36.8%. CHAWG considers this “... broad range demonstrates that some farmers are successfully managing their cows to maintain minimal lameness in their herds”. CHAWG also mentions the DairyCo Healthy Feet Programme which aims to help tackle and control lameness within its herd. One hundred and forty farms have registered with the programme to date.

Towards the end of the Report, the importance of horizon-scanning is touched upon and three tables summarise what are considered to be the most likely future disease threats (Schmallenberg virus infection, bovine psoroptic mange, Foot and Mouth Disease, Bluetongue and Rift Valley Fever),