

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),

other potential threats (antimicrobial resistance, large herds, climate change, cattle movements and EU Animal Health Law), and potential positive influences (herd health planning, climate change, potential for improved control of salmonellosis, BVD eradication and surveillance).

The Report closes with fourteen conclusions that cover areas CHAWG considers to be of key importance. Data quality is one issue which arose throughout the Report and CHAWG concludes that “there are large gaps in availability and consistency of current data” and that data consistency could be improved through the use of standard templates and by private companies pooling pre-competitive data. Additionally, CHAWG considers that many sources of useful information remain under-utilised, such as the data collected via the Cattle Tracing Scheme (CTS), the British Cattle Movement Service (BCMS), the National Fallen Stock Company and abattoir data.

On the whole, the Report provides a very good overview of a number of important issues affecting the dairy and beef industries and if, as intended, the Report is the first in a series of annual reports, then these should provide useful benchmarks for monitoring progress and identifying where more research and effort may be required. However, although the report is intended to cover both health and welfare, and it is generally successful in relating the effects of various disorders on health, it is not always clear about effects on welfare. It would perhaps be helpful if future editions began with a description of what the authors consider welfare to be, and if each section clearly explained impacts on welfare.

Annual Report 2012: First Annual Report (September 2012). A4, 45 pages. GB Cattle Health and Welfare Group. Available for download from the Cattle Health and Welfare Group website: www.chawg.org.uk.

E Carter,
UFAW

Welfare implications of commercial livestock breeding and breeding technologies

Over the past 20 years there have been various reviews of the positive and negative effects that breeding techniques and technologies may have on the welfare of farmed animals. The latest publication on this topic is the ‘Opinion on the welfare implications of breeding and breeding technologies in commercial livestock agriculture’, of the Farm Animal Welfare Committee (FAWC). FAWC regularly publishes short reports to inform UK Governments (the Department for Environment, Food and Rural Affairs in England, the Scottish Government, and the Welsh Government, and other Government Departments and Agencies) on issues relevant to farm animal welfare and FAWC last considered the welfare implications of animal breeding in 2004. The new Report aims to provide updated, independent advice on the impact of conventional and novel breeding technologies on farm animal welfare.

The livestock sectors considered in this project include: dairy cattle, beef cattle, sheep, pigs, meat chickens, laying

hens, turkeys and salmon. FAWC notes that, although other sectors are not covered in detail, the issues discussed may be applicable to them. FAWC states that within the UK, over one billion farm animals are reared every year (excluding fish). The effect of breeding on welfare is therefore an important subject.

The Opinion begins by outlining relevant background issues. There is a section on welfare concerns, contentious issues and opportunities to improve welfare, followed by a brief consideration of the numbers of animals involved, and the duration and extent of poor welfare or suffering.

In the past, FAWC was concerned about the focus on breeding for productivity, because of negative effects on health (eg through skeletal and metabolic disease, lameness and mastitis). However, FAWC notes that, more recently, selective breeding has increasingly incorporated other traits, including health, fitness and welfare. Encouragingly, FAWC is now of the view that, although there are still some concerns with regards to livestock breeding, many breeding goals now address animal welfare to some degree (eg through selecting for disease resistance), which is a positive step forward.

FAWC mentions various initiatives which are now in place, including, the Farm Animal Breeding and Reproduction European Technology Platform (FABRE TP) which, in 2006, produced a vision for livestock breeding in 2025. New breeding technologies, used in some livestock sectors, are described in the Report, including whole genome single nucleotide polymorphism (SNP) technology and genome-wide selection (GWS). Advanced genomic tools allow a much greater rate of genetic progress and one concern voiced by FAWC is that “‘easy to measure’ (largely production) traits are being implemented in advance of those for functional fitness, due largely to lack of good data on health and fitness traits. If a breeding programme does not include both types of trait the non-production traits will fall behind in selection and lead to poorer animal welfare”.

FAWC also comments that the genetic modification (GM) of commercially farmed animals is currently not permitted within the UK. This may be hindering progress for animal welfare, for example, towards finding solutions to disbudding and de-horning — two mutilations that are widely believed to cause pain and distress that are regularly carried out on large numbers of calves. If the DNA coding for polledness could be inserted into horned populations there would be no need to disbud or de-horn.

The legislation that covers animal breeding is also touched upon, as are international considerations. Within Europe, the European Forum of Farm Animal Breeders (EFFAB) has developed a ‘Code of Good Practice for Farm Animal Breeding and Reproduction Organisations’ (CODE-EFABAR), which is widely endorsed by animal breeders. CODE-EFABAR seeks to address issues of food safety and public health, product quality, genetic diversity, efficiency, environmental impact, animal health, animal welfare, and breeding and reproduction technologies. The Code is intended to be complementary to legal or national obligations and is updated every two years.