Farm Animal Welfare Committee
Opinion on the welfare of animals in the beef industry

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I am writing on behalf of AHDB and the comments contained here represent the combined views of DairyCo and EBLEX (Divisions of AHDB representing dairy, beef and sheep sectors).

Thank you for the opportunity to comment on animal welfare issues in cattle involved in beef production as part of the FAWC study considering issues relating to animals in the beef industry, including male calves and veal, which will lead to a FAWC Opinion.

We have considered your specific questions and address these below. We would like to comment from the outset, however, that it is our view that the welfare of cattle in beef productions systems is generally very high and while there are health issues, there are rarely major problems.

1. What animal welfare issues do you recognise in the beef industry?

As we have stated, the welfare of beef cattle is generally very high. Nevertheless we see the following aspects of beef production as those that pose the potential to compromise animal welfare:

- Mutilations – dehorning and castration
- Diseases (see question 2)
• Stress from multiple movements and mixing of groups of animals
• Management at slaughterhouses pre-slaughter (handling and mixing)
• Feed availability, linked to the wider issue of weather related problems that have been particularly evident in the recent past. Extremes of weather such as drought or flooding, or unusual growing seasons (for feed crops) have big impacts on farming systems and can impact on welfare
• Lack of reinvestment in farm buildings and handling systems, because of low profitability
• Lack of availability of stock-people can result in reduced supervision of cattle at critical times, such as at calving or undertaking TB testing
• Lack of veterinary input on some farms
• Inadequate intake of colostrum at birth, particularly for dairy bull calves
• Calving difficulties caused by inappropriate choice of sire (or embryo for transfer) – prioritising growth rate and conformation over calving ease and fertility

In all cases, good farm and stock management will avoid these issues from compromising animal welfare.

2. What health/disease issues have the greatest impact on the production and welfare of beef cattle?

EBLEX/AHDB commissioned ADAS in 2013 to undertake a review of the economic impact of health and welfare issues in beef cattle and sheep. This identified the following top 5 diseases of Beef cattle:
• Respiratory disease (IBR, PI3 and BRSV)
• BVD
• Liver fluke
• Johne’s
• Diarrhoea (calf scour)

The Cattle Health and Welfare Group has also published its top ten priorities for beef cattle health as follows:
• Infectious Bovine Rhinotracheitis;
• Calf Pneumonia
• Bovine Viral Diarrhoea
• Liver Fluke
• Johne’s Disease
• Calf Scour
• Fertility
• Mastitis
• Parasitic Gastroenteritis /Lungworm
• Nutrition

(note: these lists have been re-ordered to rank the top 5 in descending order of cost from the ADAS review. The CHAWG priorities are therefore not in the order presented in their report)

In addition, bovine tuberculosis clearly has a significant economic and health impact in the livestock sector but as this is subject to specific separate discussions it was excluded from the considerations by these two groups.
3. What opportunities exist to improve animal welfare in the beef industry?

Opportunities to improve beef cattle welfare fall into three main areas: animal health, animal breeding and animal nutrition.

**Animal health**
Improving animal health on beef farms can be achieved through a more proactive approach to health issues. This can be seen as better health management (including quarantine and biosecurity) to reduce the need to treat disease. An example would be taking action to reduce pneumonia incidence rather than relying on treatment when it occurs.

To encourage this approach we consider it is important to increase farmers’ awareness of the main diseases affecting beef cattle and provide them with the latest scientific information to tackle the diseases. Animal health therefore forms an important part of both the EBLEX Better Returns Programme and DairyCo knowledge transfer programmes to farmers.

A priority in this area is the provision of real-time meat inspection data to producers sending animals for slaughter. This would give very tangible evidence to farmers of their current health issues impacting on carcase quality/yield but also on animal performance and welfare.

**Animal breeding**
There are several opportunities to breed animals suited to high welfare in modern production systems. Clear examples are:

- selection for polling (absence of horns)
- selection for docility – animals that are less prone to stress and are easier to handle
- better use of estimated breeding values to select animals for easy calving with good growth and carcase traits

**Animal nutrition**
To ensure adequate feed is available to provide for the welfare of stock on farms, better feed planning and risk management is needed to plan for the extreme events which would have previously been considered unexpected or infrequent (eg flooding, drought).

In addition to these three key areas, ensuring best practice in animal handling on farm, and in collection centres, markets and abattoirs is vital to optimise the welfare of cattle.

4. What are your views on current breeding technologies, including embryo transfer, in beef cattle?

Breeding technologies widely used in other livestock sectors are not prevalent in the beef sector. It is noteworthy, however, that breeding technologies may be used in the dairy sector with the aim of producing calves better suited to beef production.
Such technologies are available to farmers and pose few welfare problems if applied appropriately. As is often the case, it is the inappropriate use of technology that can lead to welfare problems.

Both artificial insemination (AI) and embryo transfer (ET) provide opportunities for farmers to bring superior genetic material into their herds. As with natural service, the selection of the appropriate genetics must include a consideration of the calving ease of the resulting progeny. It is a particular risk with ET (where the calf is not directly related to the recipient dam) for the calf to be of a size that cannot be delivered by natural parturition and therefore caesarean section may be needed. On the positive side AI and ET provide the opportunity to specifically select genetics that reduce the risk of calving difficulties in heifers, or indeed cows with a known history of calving difficulty.

Synchronisation of female animals for breeding involves multiple handling and the administration of exogenous hormones. These can pose welfare issues if managed inappropriately. Multiple handling is not an issue if animals are familiar with being handled and therefore do not get stressed by handling. Exogenous hormones can result in exaggerated reproductive behaviours. On the other hand, a major benefit of synchronisation is that the resulting tighter calving period gives the opportunity for better planning for supervision and therefore quicker provision of calving assistance where/if required.

ET recipients and donors are generally given special attention and bespoke rations so overall welfare is usually high.

5. What are your views on the different rearing systems currently used in the beef industry?

In England, there are many different rearing systems which all have to comply with UK and EU animal welfare legalisation. The most important factor for any system, is the management of the animals, as this has the greatest impact on welfare. Automatic systems that use EID allow more calves to be looked after by fewer staff but still rely on good stockmanship. This can be enhanced by use of the information available from the system which can provide indicators of problems before the stockman observes changes (eg feeding behaviour).

6. What are your views on the finishing systems currently used in the beef industry?

Many different finishing systems exist in England. As with the rearing system, it is the management of the system rather than any inherent characteristics that has the biggest effect on welfare (positive or negative). EBLEX promote the message that cattle should be managed in three distinct phases; a rearing, a growing and a finishing phase. The finishing phase should be a short period of feeding with a high energy diet which promotes high growth rates to achieve the required carcase classification (fatness) and carcase weight. Very often the growth phase of beef cattle involves a grazing season and/or feeding of conserved home grown forage. Often finishing is done in a building where greater control over the diet is possible. Well balanced diets are crucial to animal health and welfare at all
stages of their lives. With appropriate management and nutrition, all the systems currently employed can deliver high animal welfare.

7. Have farm assurance schemes improved the welfare of beef cattle?
We do not have specific evidence of the effect of the assurance schemes, however, they do provide a demonstrable commitment to levels of welfare on the behalf of members of the schemes. In addition, assurance schemes do provide a frequent reminder of the required standards ensuring that requirements and best practices are never far from farmers’ minds.

8. What are you views on:
   a) Transport and movements?
   b) Markets and abattoirs?

In both these areas, like systems of production, it is the management of the animal that is important. We have very detailed legislation in these phases of the animal production cycle to protect welfare. Specifically under the separate headings:

   a) Transport and movements?
   It is important that these are managed in a manner that minimises any risk of spreading disease.

   b) Markets and abattoirs?
   In some cases better animal handling facilities would reduce stress and improve welfare. It is also important to ensure that the risk of disease spread is minimised in these environments.

9. What is the impact of EU / international activities on beef animal welfare?

From an England perspective, there is a strict set of animal welfare legislation in place which is comparable to, and in some cases exceeds, that required by EU regulations.

10. What are your views on current veal production methods?

Again management is the most important factor in UK approved veal production units. Modern pink veal production systems are generally high welfare with a good proportion of forage in the ration.

11. What is your opinion on dairy calves euthanized at birth?

While we accept that euthanasia of animals at birth can be distressing for those involved and poses an ethical question to some, it is not an issue to animal welfare per se, provided it is undertaken professionally by a trained person.
EBLEX works to provide producers with information to show them how to rear and finish pure-bred dairy bull calves to make a profit. In fact these cattle have as much potential as, if not more than, other beef enterprises for generating a positive net margin. Absolute margins are very dependent on calf prices, feed costs and carcase values. It is also important that all calves receive adequate levels of colostrum at birth otherwise they are more likely to suffer health problems and never perform to their potential.

12. What are the challenges of making good use of small or extreme dairy type calves?

Dairy breeds do tend to produce carcases with lower conformation scores than beef breeds. It has been clearly demonstrated, however, that the beef is of equivalent eating quality and it is really only a question of yield from those carcases. As noted above these cattle have a high potential to make profit through rearing for beef.

In evaluating calves for their potential for growth for beef production, however, the critical factors are not size as such, but whether they are small and thin due to ill-health or lack of colostrum.

An EBLEX/AHDB study in 2010 looked differences in performance and financial returns from a range of pure dairy bull calves of apparently different carcase conformation potential (assessed by experts) finished intensively for beef production.

The hypothesis was that calves can be selected at approximately 10 days old on the basis of their future performance and the value of the final carcase they will produce.

The key conclusions were:

1. Lighter weight calves appeared to have poorer conformation but this did not result in statistically poorer conformation carcases at slaughter
2. Both weight and conformation are likely to reflect early management of calf on the dairy farm – a good start to life is vital, and this is where colostrum quality and intake is so important
3. Weight for age would seem to be a useful predictor of calf health and performance potential and worthy of further investigation
4. The main losses of lighter weight, poorly conformed calves tended to be during the rearing phase
5. Veterinary treatment during the rearing phase can enable cattle to achieve good performance in the finishing phase
6. Growth rate during the finishing phase was similar for both groups

It is also worth noting that some niche dairy breeds, such as the Jersey, pose a larger challenge in terms of beef systems as their slow growth rate, small size and very poor conformation makes it difficult to rear them profitably. In the Channel Island breeds fat colour also tends to be an issue, with the more yellow fat being avoided in some markets (although this is only a visual effect and other quality parameters are not impaired).
Thank you once again for inviting our comments on this issue. We would welcome the opportunity to be consulted on other matters related to the welfare of farm animals in the future. In closing I would like to emphasise that, with good management, we believe that all beef production systems in use in England can provide for excellent welfare of the animal being reared.

Your faithfully,

Kim Matthews
Head of R&D (EBLEX Division)