



Module 10

Livestock Welfare Assessment (Part 1)

Student Activities

Questions

1. What are the three major inputs that affect livestock animal welfare?

(3 marks)

- Husbandry (environment)
- Genetics
- Stockmanship

2. Studies have indicated that farmers often do not recognise lameness in dairy cows. Give two reasons why this might be.

(2 marks)

- Farmers do not have time to observe their cows walking
- Farmers do not know the signs of lameness

3. Give three examples of why dairy calves might experience negative emotional states.

(3 marks)

- Anxiety due to early separation from mother
- Frustration at social isolation or inability to suckle
- Mixing at markets
- Inability to express species-typical behaviours:
 - no suckling
 - no grazing/eating roughage
- Rough handling by humans

4. List two examples of the negative effects of economic subsidies and/or low market prices for animal welfare.

(2 marks)

- Increased stocking density when the subsidy is linked to flock size and when market prices are low
- Reduction of vaccination programs, worming, etc.
- Reduction in numbers of stockpeople

5. Using the four criteria in the Welfare Quality® project framework, identify the main welfare problems for dairy cows.

(4 marks)

- *Area 1: Nutrition*
Prolonged hunger
- *Area 2: Housing comfort*
Inadequate resting area
Movement not easy (e.g. getting up)
- *Area 3: Health*
Injuries (slippery floors)
Disease: painful diseases (such as mastitis, foot disorders)
Disease: metabolic diseases
Painful procedures (tail-docking)
- *Area 4: Behaviour*
Negative emotional states (such as loss of calf, frustration, tiredness)
Expression of other species-typical behaviours: no grazing, crowding/bullying
Human–animal relationships – rough handling

6. Though lameness in dairy cows is always a welfare concern, what else can it affect?

(2 marks)

- Fertility (reduced)
- Milk yield (reduced)

7. In terms of behaviour, beef cattle in an intensive farm system can experience a range of negative emotional states that can impact their welfare. Give examples of three such emotions associated with beef cattle and a causative reason behind each.

(3 marks)

- Fear due to crowding/bullying, mixing with other cattle
- Frustration due to inability to express other species-typical behaviours such as grazing
- Distress/fear due to rough handling by humans

In-class activity

Role play

Allow 30 minutes for this activity.

This discussion will focus on the design of a checklist to audit the welfare of livestock in a particular context.

Notes to lecturer:

Separate students into small groups. Tell them that they are to prepare a checklist based on the Five Freedoms and Welfare Quality® project framework to assess the welfare of animals in one of these three scenarios:

1. A free-range egg farm with a colony size of 4,000 and total flock size of 16,000 birds.

Key prompts: mortality rate, feather condition scoring, feather pecking, vent pecking, records of bone fracture from slaughter house, foot lesions, beak trimming/amputation, flock size, stocking density in house, cover on range, vegetation on range, predator-resistant fencing, use of range, pop-hole (exit door for birds) dimensions and distribution, litter area and type, litter quality/friability, nest box:bird ratio, perch length per bird, perch specification (separation between perches, material, diameter), stockperson:bird ratio, light levels, photoperiod, drinkers:bird, drinker type, feeder space per bird.

2. A dairy farm, where cows are at grass for six months of the year and housed in cubicle housing for six months.

Key prompts: levels of lameness, mastitis, summer mastitis, reproductive failure, laminitis, assisted calvings, cull rate/average number of lactations, condition scores, flight distances, cubicle dimensions (step height, length, lunge space, side partitions – height and flexibility, bedding/floor type, slurry removal), cubicle:cow ratio, water trough length per cow (also on field), feeder trough length per cow, concrete condition, condition of paths and fields (especially around troughs), shelter in field, handling facilities, foot baths, milking machine – frequency of service/lining change.

3. A pig breeding and fattening farm, where sows are group-housed on a partially slatted system without straw. Sows are fed a wet food.

Key prompts: see general structure applied to dairy cow assessment above.

Students may wish to divide their checklist into sections, which might include equipment fixtures and fittings; animals; management and documentation; and personnel training and competence. They may also wish to discuss appropriate methods for scoring each issue.

Applied Learning Opportunity

Welfare visit

Select a species of animal farmed in your country. Find out the two principal husbandry systems used for the animal you have chosen and examine the principal welfare problems for each system by visiting local farms and talking to the farmers.

- Is welfare regulated by law or code of practice?
- Do welfare problems exist?
- Do these welfare problems occur on all the farms in your region? If not, why do you and the farmers think welfare problems do not occur on some farms?
- How do you think that you could alter the way that animals are housed in each of the two husbandry systems to eliminate the problems that you have identified?

1. Background information

A brief introduction to the establishment visited. Identify the animal species involved and how many animals are present. The history and some data about the scale of this industry should be included along with the objectives of the individual establishment.

2. The daily routine of the animal establishment

Outline the system of production and management employed including information about daily and other cyclical routines and how resources are distributed (diagrammatic representation of this may be useful). Identify the inputs and outputs of the system.

3. Evaluation of the current environment

Provide an overview of the extent to which the establishment and its management system replicate the natural environment of the animal species concerned. Use the framework of the Five Freedoms and explain how the animal's behaviour and welfare is positively or negatively affected by the system in which they are living (referencing scientific literature where possible). Provide answers to the questions outlined above.

4. Evaluation of ethical issues

Identify and comment on the potential ethical issues associated with the way the animals are used and managed in the establishment.

5. Summary/conclusion

Bring together all the strands discussed in the report to summarise the experience, the establishment and the experience for the animals concerned.