

Stock welfare

This chapter discusses the key elements of animal welfare for SHD farmers.

The main points in this chapter

- There are five basic freedoms for livestock: freedom from hunger and thirst, from discomfort, from pain, to express normal behaviour, and from fear and distress.
- It is important that facilities and equipment are well designed and maintained.
- Stock should always be provided with adequate feed and water.
- Herd management practices should always minimise stress, injury and disease.
- If necessary, stock should always be humanely euthanased.
- Staff should be adequately trained or experienced in good animal care.
- Special attention should be given to stock selected for sale and transport.
- Calves are very susceptible to stress, injury and disease, so management practices should be undertaken with this in mind.

Throughout the world, public perceptions of farm animal welfare issues have the potential to markedly affect the sustainability of livestock industries, with national and international pressures likely to have increasing roles in determining how animals are managed. Because farm animal welfare is largely part of good animal and farm management, paying close attention to their day-to-day management should also ensure acceptable welfare.

11.1 The five basic freedoms of livestock

The welfare of cattle can be summarised using the ‘five basic freedoms’ as follows:

1. Freedom from hunger and thirst, through ready access to fresh water and a diet to maintain full health and vigour.
2. Freedom from discomfort, through provision of appropriate shelter and comfortable resting areas.
3. Freedom from pain, by prevention and, when sick, rapid diagnosis and treatment.

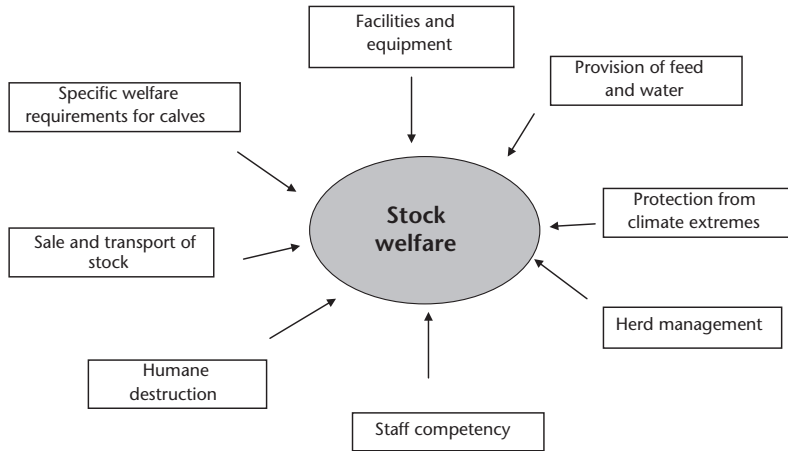


Figure 11.1. Considerations for stock welfare on the dairy farm

4. Freedom to express normal behaviour by providing adequate space, proper facilities and the company of other animals.
5. Freedom from fear and distress by ensuring conditions and treatment that avoids suffering.

All management and housing systems should be designed, constructed, maintained and managed to assist with these five freedoms.

11.2 The six basic elements of stock welfare

Specific to dairy herd management, Edge *et al.* (2006) have broken dairy welfare down to six basic elements as described in sections 11.2.1 to 11.2.6.

11.2.1 Facilities and equipment

These should be well designed, maintained and operated to ensure a high level of animal welfare, minimal stress or chance of injury. This includes:

- protection from extremes of weather
- provision of sufficient space with minimal possibility of injury
- flooring designed to minimise slipping, falling and lameness
- milking machinery maintained regularly to ensure minimum stress to cows
- facilities for water, feeding, milking and restraint that are appropriately designed and maintained
- laneways, tracks and gateways designed to minimise stress and injuries
- equipment for euthanasia clean and in good working order.

11.2.2 Provision of feed and water

These should be provided with consideration of environment, age, body condition and stage of lactation that ensures their health, wellbeing and productivity. That is:

- Stock should have access to feed and water of appropriate quality and amount.
- Stock should be fed rations formulated and balanced to provide the necessary nutrients for their desired level of performance.
- Short- and long-term plans are in place to manage feed and water shortages and drought.
- Practices should be in place to reduce the potential risk of toxicity or contamination during storage.

11.2.3 Herd management

Dairy cattle should be routinely managed and handled to minimise stress, injuries and disease and promote good health and welfare. Such procedures should ensure that:

- Reproductive practices should be carried out competently to ensure good animal welfare and reproductive outcomes.
- Other routine husbandry procedures, such as calving induction, dehorning and castration, if required, are carried out to minimise pain.
- Systems to manage disease and other animal health disorders should optimise the planning, prevention and monitoring of dairy herd health.
- Disease, injury, illness and stress should be identified and treated promptly, with suitable expert advice sought as required.
- Animals are regularly inspected to monitor their health and welfare.

11.2.4 Humane destruction

Weak, ill or injured cattle and calves should be identified and treated appropriately or humanely destroyed using approved methods:



Dehorning of calves should take place within their first 2 months.

- Stock requiring humane destruction should be identified and promptly euthanased.
- Competent staff must be available to carry out humane destruction, using approved methods.

11.2.5 Staff competency

All staff responsible for managing and handling dairy stock should be competent in their tasks and aware of their responsibility for good animal care. That is:

- Staff carrying out routine husbandry, surgical procedures, reproductive procedures, administering health treatments and handling and transport of cattle must be appropriately trained or experienced.
- All staff handling stock must be able to identify signs of illness, abnormal behaviour or stress and ensure appropriate action is taken.
- A competent person must either be available on site or can be contacted to handle emergencies and humane destruction when necessary.
- Staff must behave in a manner to minimise fearfulness in cattle.

Stockmanship, plus the training and supervision necessary to achieve required standards, are the key factors in the handling and care of livestock. A management system may be acceptable in principle, but without competent, diligent stockmanship, the welfare of animals cannot be adequately safeguarded.

11.2.6 Preparation, selection, sale and transport of stock

Stock should be selected and appropriately prepared for transport to ensure they are fit for the intended journey:

- Preparation for sale and transport includes appropriate actions for feed and water curfews, identification and handling to minimise stress.
- Stock must be selected for transport with consideration of age, class and condition to ensure they are fit for the intended journey.
- Any weak, ill or injured stock must not be transported until deemed fit by a competent operator.
- Stock should be handled with care during loading and unloading.

11.3 Other general principles of stock welfare

Whether housed in cubicles, straw yards or cow sheds, in order to maximise performance and ensure satisfactory standards of welfare, the accommodation must provide for the stock's basic needs. As an absolute minimum, the housing must provide a comfortable, clean, well-drained and dry lying area, together with shelter from adverse weather. It must allow the animal to move freely around without risk of injury.

Cows at pasture choose to lie down for 12–14 hr each day, so a similar target should be achieved with stock in sheds. If cows spend less time lying down, they are likely to spend more time standing in loafing or feeding areas, which can adversely affect hoof



Tethering of stock in the sun can become an animal welfare issue (Pakistan).

health. Sheds should provide a minimum loafing area of 3 m² per cow with at least 3 m between rows of cubicles.

Most farmers believe that animal welfare is just good cattle husbandry. The major welfare issues facing dairy farming include:

- housing and cow comfort
- castration
- dehorning
- branding
- transportation
- slaughter.

Lameness can be a major problem, both from the point of animal welfare and farmer profits. Farmers frequently only recognise 40–50% of lameness problems and these are often well advanced, making them difficult to treat. The cow's environment, both social and physical, and her ability to cope with it ultimately determines how bad lameness can become.

Early separation of calves from their dam is another welfare issue that is practised for animal health reasons, to improve the likelihood of calves receiving sufficient quality colostrum in their first 24 hr of life.

It is important to maintain animals in good body condition, house them in social groups in clean environments with adequate space to move around and rest comfortably, maintain feed, medication and production records and compassionately handle animals

undergoing management practices, such as dehorning or castrating, and those that are injured or ill.

Most Western countries have strict codes of animal welfare covering transport, housing, handling and feeding. Farmers purchasing dairy stock from such countries may be expected to abide by the principles of that country's animal welfare codes. This is particularly the case with young stock, with the following section detailing Australia's welfare code for dairy calves.

11.3.1 Problems of confinement

Dairy stock imported from Western countries have almost invariably been reared under grazing conditions, hence have never been exposed to a continual shed environment, as is common on most small holder farms. Compared with grazing, confinement creates specific problems such as:

- restricting opportunity to seek comfort; for example, if only provided with cement floors
- creating problems of high humidity, which can be more detrimental than high temperature
- limiting opportunity for exercise, hence the need for routine hoof trimming
- increasing exposure to infectious diseases
- other health issues, such as mastitis and uterine infections, when hygiene is poor during milking and calving
- creating problems of heat detection for artificial insemination
- requiring greater sanitation
- magnifying problems of social dominance
- increasing capital investment

Many of these issues are covered in other chapters in this manual.

11.4 Australian welfare codes for calves

Of all the classes of dairy stock, the welfare of milk-fed calves has received the closest scrutiny. The following summarises the current codes for their health welfare and wellbeing (Moran 2002).

11.4.1 Housing

- Housing should be hygienic, with adequate ventilation, climate control and lighting. Flooring should be well drained with adequate dry lying space for each cow. Flooring and internal surfaces should not cause injury and should allow easy cleaning.
- Calves should be given access to sufficient bedding or appropriate flooring that ensures comfort and a clean, dry place to lie.
- Feeding systems should be designed to permit easy access and reduce bullying.
- The floor area must be sufficient to enable each calf to freely turn around, stretch and lie down comfortably. A floor area of at least 1.5 m² should be provided for each calf individually housed in pens or cribs. Pen heights should be a minimum of 1 m with provision of additional height to allow for ventilation space.

- Calves, being social animals, seek the company of other calves, so should be able to see other calves during early rearing.
- Where large numbers of calves are reared, they should be grouped by age and size to reduce competition for food and to allow closer observation and management.

11.4.2 Feeding

- Calves require at least 2 L fresh or preserved colostrum within the first 12 hr following birth. Calves should continue to receive colostrum for the 3 days after birth.
- Thereafter they should be fed at least daily on liquid milk, or milk replacer, in sufficient quantities to provide essential requirements for maintenance and growth.
- Hay, calf concentrate or high-quality forage should be available to calves no later than 3 weeks of age to help in the development of their digestive tract and to ease the stress of weaning.
- Calves should be weaned off milk or milk replacer onto rations providing all essential requirements only when their ruminant digestive systems have developed sufficiently to enable them to maintain growth and wellbeing.

11.4.3 Management practices

- Restraint should be the minimum necessary to perform management procedures efficiently.
- Procedures and practices that cause pain should not be carried out if painless and practical methods can be adopted to achieve the same result.
- Special care should be given to the practices of castration, tail docking (if undertaken) and dehorning.
- Any injury, illness and distress should be promptly treated.
- Appropriate preventative measures should be implemented for diseases likely to occur in the herd. A suitable vaccination, and internal and external parasite control plan should be devised and followed for each farm.
- Internal medication, such as vaccines and drenches, and external medications, such as dips and pour-on formulations, should be stored and given in strict accordance with the manufacturer's instructions and recommended methods of administration. Overdosing may harm cattle while underdosing may result in failure of the medication. Expiry dates and withholding periods should be strictly observed.
- The preferred method of humane destruction (euthanasia) of cattle should be by overdose of anaesthetic or using a gunshot.
- Killing day-old calves may also be achieved by a heavy blow to the crown of the head to stun the calf prior to bleeding out.

11.4.4 Transportation of calves

- Transportation of stock should ensure that they reach their destination as speedily as possible, within the confines of the road law, and in a condition not significantly less than when assembled for loading. The possibility of either injury or illness during transport should be reduced to a minimum.

- Handling of calves should be carried out in a manner that will avoid injury or unnecessary suffering. Calves are not to be kicked, beaten, pulled, thrown or prodded with any sharp instrument. The use of electric goading devices or dogs when handling, driving, drafting, weighing, loading or unloading is not an acceptable practice.
- Facilities should be constructed to permit safe loading and unloading of calves.
- Places where calves are held should have facilities and/or contingency plans to feed calves in the event of delayed removal or slaughter.
- Calves should be fed at least every 24 hr and have access to drinking water.
- The driver of the vehicle is responsible for the care and welfare of all animals during transportation.
- Animals that either become ill or weak, or are injured during transport should receive appropriate attention and treatment; if necessary, they should be slaughtered humanely.
- Vehicles used for transportation should be thoroughly cleaned prior to loading and at the end of the journey.
- Transport operators should check calves en route at least every 3 hr.
- Calves should be loaded at a density so as to allow all calves to lie down while being transported.