This chapter discusses the classes of stock on the dairy farm that are sold to generate income.

**The main points in this chapter**

- Milking cows can be culled because of poor performance, chronic animal health problems, such as mastitis, or acute injuries, such as broken limbs.
- Bull calves are frequently sold as week-old animals.
- Dairy beef from bulls or steers, particularly purebred or crossbred Friesians, can be quite profitable.
- Their feeding management is similar to that of dairy heifer replacements, which was discussed in Chapter 4.

Small holder dairy farms can generate income additional to the sale of raw milk and value-added dairy products. These include:

- cull cows
- excess dairy stock, such as bull calves
- dairy stock specifically grown out for beef, called dairy beef
- manure
- excess fodder
- grass cuttings for planting material on other dairy farms
- biogas, from dairy effluent.

This chapter deals specifically with managing stock surplus to the milking herd.

### 10.1 Cull cows

Milking cows are normally sold when the farmer considers them uneconomic to try and mate to produce milk in future years. For example, they could be culled from the milking
herd because of acute animal health problems, such as acute trauma or acute sickness. They could also be culled because of chronic disease problems, such as infertility or mastitis. They may be selected for sale because their milk production is minimal. They may be sold because the farmer needs the space or the feed for more productive stock. He may also need additional finances to purchase other stock or for personal reasons, such as a family celebration.

If the cull cows show symptoms of acute disease, care must be taken to reduce the likelihood of that disease spreading to other stock on the farm. They should be isolated from all stock and when transported to the saleyards, the vehicle should be thoroughly cleaned and sterilised. The major objective should be to remove them from the farm as rapidly as possible.

It is unlikely that farmers will want to improve the body condition of any cows culled because of chronic animal health problems, although the farmer may want to keep them on the farm if their sale price is likely to improve in the foreseeable future. If they are still milking, their diet should be the same as other milking cows and, for say infertile cows, they can be milked for as long as the farmer considers their returns from milk are greater than their feed and other farm costs they may incur. If non-lactating, they should be fed sufficient nutrients to at least maintain their body condition, so their sale price is still maintained.

If cows are culled because of acute injuries, such as a broken limb or dislocated joint, they should be sold quickly and with as little additional stress as possible to ensure the animals’ welfare is not compromised. Farmers should, and mostly do, fulfil their obligations to the wellbeing of their livestock.

Another class of cull stock are young calves that have a history of chronic or acute health problems and are unlikely to ever become productive cows in the herd. Such decisions are value judgements, but there is much evidence that such heifer calves are likely to be culled from the milking herd much earlier in their life than would calves that did not suffer the growth setbacks in their early life. It is worthwhile recording which
calves suffer from chronic disease in early life and noting their longevity in the herd. This information will assist farmers with their value judgements as to which of these calves should be culled. Selling them just passes the problem onto other farmers who may want to buy them, so it would be better to euthanase them rather than transport them to the saleyards.

10.2 Excess dairy stock
Low-producing cows would also be classified as excess dairy stock, but this class refers more specifically to male calves and potentially poor performing heifer calves. These are normally sold within a week or so of birth.

In Australia, animal welfare regulations stipulate that these animals must be more than 4 days old and should weigh more than 23 kg. Newborn calf age is usually determined by the state of the umbilical cord, or the string as farmers frequently call it. If it is moist, it is likely that the calf is less than 4 days old.

10.3 Dairy beef
Growing out bull calves for slaughter at 18 months or more, is frequently a major generator of income for dairy farmer. These stock can be kept entire and grown out as
bulls, or they can be castrated at an early age and grown out as steers. Bulls grow faster than steers but, when they reach puberty, they can become a nuisance with milking cows on heat. Feeding management for dairy heifer replacements was discussed in Chapter 4, and these guidelines could also be used for growing out dairy beef bulls or steers. Target growth rates should be at least 0.5 kg/day. There may be additional recommendations with regards to vaccinations and other health management issues, and such information should be sought from local animal health specialists.

Purebred or crossbred Friesians are preferred over Jerseys or local breeds and generally return more money per kg live weight when sold for dairy beef, so the breed of the bull calf should be considered when deciding on its future fate on the farm. On the whole, milk generates more income per kg fresh grass grown on the farm than does beef, so it is important to ‘do the sums’ on dairy beef production when farm stocking rates are high. Acceptable growth rates are unlikely if the major part of the ration is very low-quality forages, such as rice straw. As with milking cows, green grass is the best forage to feed dairy beef animals.

It is important to plan the finishing (or fattening) strategy for dairy beef. Target live weights should be used in any feeding program, so using a chest girth tape to estimate live weight is worth considering. Friesians are later maturing than other dairy beef animals, meaning that a higher level of concentrate feeding will be required to produce a
suitable sale animal: namely one with a good degree of finish (or some cutaneous fat cover over the ribs).

10.4 Imported cows in lactation anoestrus

Another class of surplus stock are healthy dairy cows that do not cycle. This can be due to poor feeding management during early lactation and, unfortunately, this is becoming more common with imported high grade dairy heifers. Such animals may be imported as pregnant heifers, have their calf and then fail to cycle. Their genetic propensity to preferentially use body reserves to produce milk means that they are in continual negative energy balance on farms with very poor feeding management, hence suffer lactation anoestrus. In some tropical regions, these can represent up to 20% or 30% of imported dairy stock, which have been imported at very high cost. This makes for very expensive dairy beef!