



Beef cattle: castration

What is castration?

To castrate a male animal means that the functioning of the testicles is stopped by preventing production of male hormones so that the animal is unable to reproduce.

Why are beef calves castrated?

Beef calves are castrated for the following reasons:

- To prevent them from mating after they have reached puberty. It is, however, best to separate steers (oxen) and heifers, because steers often mount heifers that are on heat.
- Steers are usually more docile and easier to control than bulls. Special fences and handling equipment are needed for bulls.
- Steers are finished sooner than bulls because fat deposition occurs at a faster rate than in bulls.

When to castrate

- Castration can be done at any age up to 12 months.
- It is, however, better to do it when the animals are very young (before 2 months of age).
- Although the animals grow better when they have not been castrated, the shock of castration is greater the older they are.
- It is also easier to handle the animals when they are very young.

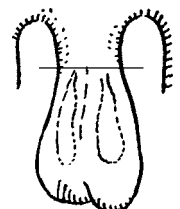
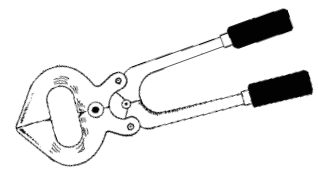
Methods of castration

Burdizzo

- With this method the spermatic cord and the blood vessels leading to the testicles are cut.
- The testicles tend to swell for a while and then stop functioning and degenerate.
- Calves can be castrated when the spermatic cord can be clearly felt, that is, from about 1 month onwards.
- They can be castrated when standing in a crush or when lying down.
- One spermatic cord should be clipped at a time. It is important to clip the 2 cords at different levels so that the scrotal sack will receive enough blood otherwise it will become gangrenous.
- Make sure that the spermatic cord is between the Burdizzo blades.

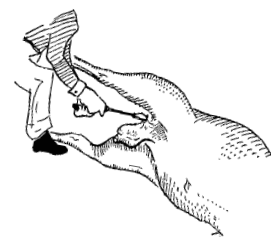
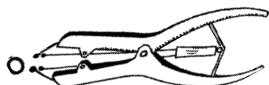
Advantages

- The method is bloodless.
- Infection or maggot infestation seldom occurs.



Rubber rings (elastrator)

- The rubber rings are put on (using an instrument called an elastrator) between birth and about 10 days of age.
- If applied later, calves could get tetanus or a general infection. The animals also feel more pain and this impedes growth. Ensure that both testes are descended into the scrotum before applying the ring.

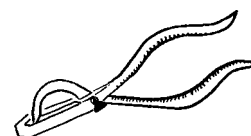
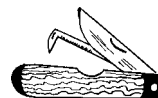


Advantages

- Calves are handled easily and little labour is involved.
- It is a bloodless method.

Open wound castration (emasculator or knife)

- Before the operation, the person doing the operation must wash his hands well, the instruments must be boiled and the scrotum disinfected thoroughly with iodine or another suitable disinfectant.
- Apply antibiotic powder to prevent infection, and a fly repellent.
- A sharp knife is used to remove the lower third of the scrotum, and each testicle is removed from its supporting membranes. Do not remove too little of the scrotum otherwise it will not drain well.
- The emasculator has a cutting and a crushing surface. The instrument is placed on the spermatic cord and the vascular supply closed so that the testes are removed while excessive bleeding is prevented by the action on the vascular tissue.
- If the knife is used, the cords should not be cut "cleanly". The instrument is held at an angle, and scraped over a distance of about 30 mm, until the cord breaks. This prevents too much blood flow.
- It is better to use the emasculator rather than the knife.



Advantage

- Castration is irreversible because the testicles are removed.

Short scrotum method

- Rubber rings are used to hold the testicles in the body cavity after they have been pushed up.
- This means that the testicles continue to produce hormones but do not produce live sperm.
- Be careful to push the testicles well up into the body cavity before putting on the rings otherwise some live sperm may be produced.

Advantage

- When this method is used the calves will grow into sterile bulls with better growth and feed conversion rates than steers, but may have behaviour problems (lively, aggressive).

Aftercare

- Watch cattle closely for about 10 days after castration.
- Beware of blowfly attacks and infection especially with the emasculator method. Treat wounds with wound aerosol which discourages fly attacks.
- If swelling and pain are severe and if the animal develops a temperature, a suitable antibiotic should be injected.



If these methods are not executed properly, castration could be incomplete

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