Castration, stated simply, is the unsexing of a male animal. The practice of castrating males, in animal species used for food production purposes, is universally practiced and is probably one of the oldest surgical operations known to man.

The purpose of castration is not only to prevent reproduction, but to improve the fattening and meat production capability and to make the animal more docile and easy to handle.

In farm animals, other than horses, the job of castration usually involves simple surgery wherein the testicles (male reproductive glands that produce male reproductive cells and a hormone) are removed. Horse castration will not be discussed here, except to mention that with the horse, in addition to the testicles, special attention must be given to the removal of certain tissues adjacent to the testicles, to prevent the animal from exhibiting a level of false sexual activity sometimes referred to as being proud cut.

Castrating Calves and Lambs
Edward A. Leviness

Elastrator — instrument designed to spread and secure a small rubber ring around the spermatic cords, thus stopping blood supply.

Burdizzo — instrument that crushes the spermatic cords inside the scrotum, thus stopping the blood supply, causing eventual atrophy of testicles.

Wound Dressing — medicinal preparation used to prevent infection of wounds and cuts.

Age: It is recommended that bull calves not needed for breeding be castrated sometime between 4-10 weeks of age.

Season of Year: Spring and late fall are the best times of year to castrate calves. This time not only coincides with customary ranch herd roundups, but also is a time when the chance of wound infestation from flies is reduced.

Position of Animal: Young calves, 4-10 weeks old, should be thrown to the ground and held in a recumbent position. If it is necessary to castrate calves 8-9 months of age or older, these animals, when properly restrained, can be castrated in a standing position.

Calf Castration

Equipment That May Be Used:

Jackknife — a cutting device with one or more cutting blades.

Emasculator — instrument designed to crush the tissue before it cuts them, and thus prevents serious hemorrhage.
Methods of Castration:

1. **Surgical** — involves cutting into the scrotum, removing the testicles and severing the spermatic cords. This is commonly referred to as “cutting the calf.”

2. **Burdizzo** (bloodless castration) — in this method, the scrotum is not cut, but by the use of a special pressure-leverage instrument, termed a burdizzo, the spermatic cords are crushed and severed inside the scrotum. In using this method, it is necessary to “work” a cord to the side of the scrotum and then clamp the instrument about 1-3/4 inches above the testicle. The instrument should be held in this position for 3-5 seconds. Repeat the same procedure with the other cord, making sure the instrument is clamped about one inch below the point where the first cord was clamped.

3. **Elastrator** — by the use of a special hand leverage device, called an elastrator, a strong rubber ring, about 3/4-inch in diameter, is stretched open and slid over the scrotum and testicles and around the spermatic cords. When the device is removed, the contracted rubber ring remains and squeezes the spermatic cords to the point that no nutrients can again reach the testicles. This results in an atrophy, or wasting away, of the testicles.

Of the three methods of castration mentioned here, surgical castration is the one by far the most commonly used. A description of how surgical castration is used on calves is given in the following.

**Procedures:**

**Step No. 1** — The bull calf is thrown to the ground and securely held in a recumbent position with the hind legs spread apart to permit access to the scrotal area.

To “throw” a calf, a team of “flankers” is used (Figure B). In practice, one member of the team reaches across the animal’s back and simultaneously grasps the calf’s right leg below the knee with his left hand and the rear flank with his right hand. He then quickly “lifts” the animal with his hands and exerts force under the animal’s abdomen with his right knee. This action will throw the calf off-balance and cause it to fall to the ground, resting on its left side (Figure C). The team member now grasps the right (top) leg near the ankle with both hands and flexes it backward and, at the same time, exerts force into the calf’s shoulder with his right knee. This team member is able to spread the calf’s legs longitudinally, allowing access to the scrotal area.

**Step No. 2** — Sanitation is important, so dirt or manure in the area of the scrotum should be removed.
Although in regular ranch operations the scrotum is not washed or cleansed, care should nevertheless be taken to keep the area as clean as possible.

Step No. 3 — Force the testicle upward in the scrotum and cut off the lower one-third length of the scrotum with a jackknife. This will expose the testicles from below. Grasp both testicles and pull them out clear of the scrotum. Next, open the jaws of the emasculator, place them around the spermatic cords and slide the instrument up the cords toward the scrotum. When approximately two inches of the cords are visible, close the jaws of the emasculator firmly, and hold the instrument in this position for 3-5 seconds. By the function of the emasculator, the spermatic cords will be severed by a crimping and cutting action. This crimping of the cords tends to reduce bleeding and enhances the healing process (Figure D).

Step No. 4 — Apply a wound dressing and fly repellent to the scrotal area.

Customarily, several other management practices such as dehorning, branding, ear marking or vaccinations are carried out while the animal is in this recumbent position. If and when these practices are completed, the animal can be released.

**Note:** Though the surgical method described in the foregoing is the one most commonly used, some stockmen choose to use a slightly different surgical technique. This technique consists of squeezing the testicle tight against the scrotum and then cutting through the scrotum to expose the testicle. Next, a small slit is cut in the membrane (tunic) covering the body of the testicle; when this is done, the exposed testicle emerges instantly. The testicle is then pulled out and the spermatic cord is severed by the emasculator. The same procedure is followed to remove the second testicle.

**LAMB CASTRATION**

**Equipment That May Be Used:** Same with cattle.

**Age:** Male lambs not to be used for breeding should be castrated anywhere from one to two weeks of age.

**Season of Year:** Same as for calf.

**Position of Animal:** The animal is held in sitting position with the hind legs extended upward.

**Methods of Castration:** Same as with calf.

**Procedures:**

**Surgical Castration Method** — The steps in surgically castrating a lamb are the same as those followed in castrating a calf.

**Elastrator Method** — The elastrator castration method is probably used more with lambs than with any other farm animal. The method is quick, bloodless and very effective, if used properly. A review of the procedure follows:
Step No. 1 — Hold the lamb in a sitting position on a table, with animal’s hind legs spread apart and pointing upward.

Step No. 2 — Place the specially designed rubber ring in the elastrator. Stretch the ring open and place it over the scrotum and testicles and around the spermatic cords. Care should be taken to insure that the ring is released well above the testicles and approximately one inch from the abdominal floor (Figure E).

Step No. 3 — If other management practices are to be done at this time, such as vaccination and docking, these can be done and the animal then released.
FROM:
Arizona Ranchers' Management Guide
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Arizona Cooperative Extension

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