



Cattle Producer's Handbook

Management Section

752

Spaying Heifers

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Spaying (ovariectomizing) female cattle is the surgical removal of the ovaries, or female castration. This removes the primary source of estrogen, the hormone that causes estrus. It also removes the source of ova, which combine with sperm cells after mating to initiate pregnancy and the production of the progesterone hormone.

Heifer spaying is a management tool with several advantages that outweigh the few disadvantages.

Advantages

1. Maintaining stocker and feeder heifers in an "open" or neutered status.
2. Early detection of pregnant stocker heifers accidentally bred at a young age.
3. Prevention of pregnant heifers in a feedlot situation with all the associated complications, such as cesarean surgeries, vaginal/uterine prolapses, down and dying heifers, and frustrated feedlot personnel.
4. Elimination of feeding estrous suppression feed additives (for example, MGA), saving \$2.00 to \$4.00/head during the feedlot phase of production.
5. Elimination of the need to pregnancy check (palpate) heifers upon arrival at feedlots, saving \$1.50 to \$2.00/head plus labor costs.
6. Elimination of the need to test stocker heifers for brucellosis and/or tuberculosis when marketed to out-of-state feedlots, saving \$1.50 to \$3.00/head plus labor costs.
7. Improved average daily gain and feed conversion when spayed heifers are implanted vs. intact implanted heifers.
8. Ability to graze or feed heifers and steers together.
9. Ability to graze spayed heifers near cow-calf herds with bulls present.

Disadvantages

1. Surgery is irreversible, therefore, spayed heifers are no longer candidates for being breeding replacement heifers.
2. Typical cost is \$5.00 or \$6.00/head depending on the number being spayed at a particular location.
3. Minimal risk of death loss related to the surgery, depending on expertise of surgeon.

Spaying Techniques

Flank Spaying—Once a common technique it is now rarely used in the U.S. An incision is made in the left flank of the heifer, and the two ovaries are surgically removed through the incision.

Flank spaying is much more labor intensive and costly than the modern vaginal methods now used. Flank spaying also incurs occasional incision site infections. Scarring at the incision site is common, which interferes with the hide pulling process at harvest. This results in excess carcass trimming.

Vaginal Spaying Techniques—Two instruments are commercially available: the Kimberling-Rupp (K-R) and the Ovarian-Drop. With the K-R instrument, which is a tube within a tube mechanism, the ovaries are excised and removed from the heifer. With the Ovarian-Drop method, a small diameter stainless steel rod with an arrowhead shaped end open in the middle is used. The ovaries are excised and allowed to drop in the abdominal cavity where they are absorbed by the body. Harvest examination of numerous groups of heifers has revealed no re-attachment of excised ovaries within the abdominal cavity.

Vaginal spaying is a much faster and less stressful technique for the heifers and lessens the likelihood of