

Avoiding Calving Problems

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Beef heifers experience calving difficulty, or dystocia, more frequently than do mature cows. Dystocia is characterized by prolonged or difficult labor due to heavy birthweight and/or small pelvic area of the dam. Death of these calves, and sometimes their dams, is a result of injuries received during difficult delivery. This obviously reduces calf crop and potential profits. Cows that experience dystocia also have lower rebreeding rates than animals that have normal, unassisted deliveries. Consequently, producers should make every effort to avoid dystocia.

Causes of Dystocia: There are a number of factors that influence dystocia; fortunately most of them can be controlled through good management practices.

One factor is improper selection and development of replacement heifers. Small, underdeveloped heifers generally have a higher incidence of dystocia than properly developed heifers because they have smaller pelvic openings. Select heifers that are heaviest, and feed them to ensure proper growth (1.5 to 1.75 pounds of gain per day). At this rate of growth, the heifers should weigh between 65 and 70 percent of their expected mature weight by 14 months of age (first breeding). Gain during gestation should average about 1 pound per day, provided that this allows for enough fat cover, or body condition, at the time of calving. Much research has been done to determine the effect of feed level prior to calving on the incidence of dystocia. From this research one can conclude that feed levels during gestation do not influence dystocia as much as we once thought. Excess energy during gestation is not as much of a problem as excess protein. The latter increases birth weight of the calf and the incidence of calving difficulty. Therefore, pay particular attention to the amount of protein fed to heifers during gestation. The best experiments in this subject show the need to feed a balanced ration that affords proper growth. As cows mature and their pelvic openings grow larger, the incidence of dystocia decreases. Knowing this, many producers calve their heifers first at 3 years of age rather than at 2 years. This helps, but never totally eliminates dystocia. Furthermore, calving heifers first at 3 years of age is not recommended because it increases the costs of production per individual animal and can reduce their total lifetime productivity. Improper calf posture (breech, head or hoof turned back) during delivery can cause problems, but this can be corrected simply by giving assistance at birth. We know that calf posture can change, even during the early stages of delivery.

It is a common belief that exercising the dam during gestation can reduce dystocia. But an experiment in which heifers were forced to move and travel during gestation revealed that no advantage was gained through exercise.

The main cause of calving problems is heavy birth weight. As birth weight increases, so does the degree and intensity of dystocia, especially when heifers also have small pelvic openings.

Causes of Heavy Birthweights

Three major factors influence birthweight:

- Sex of the calf (bull calves are heavier)
- Nutrition level of the dam during gestation
- The genetic influence on birthweight by the sire

Obviously, sex of the calf can not be easily controlled. Nutrition level of the dam during gestation can be controlled, but efforts to reduce dystocia through excessive nutritional restriction have been futile. The most prudent and effective way to reduce birthweight is to use a bull that is known to sire calves with light birthweights. Mating this type of bull to properly developed heifers has, in many experiments, almost entirely eliminated calving problems except those associated with improper calf posture.