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COLLEGE OF AGRICULTURE & BIOLOGICAL SCIENCES / SOUTH DAKOTA STATE UNIVERSITY / USDA

Fenceline Weaning for Beef Cattle

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Weaning time can be stressful for cows and calves. Under traditional weaning systems, changes in environment, diet composition, and pathogen exposure can reduce animal performance and result in health problems. In response to these challenges, interest in fenceline weaning has grown in recent years.

Fenceline weaning is a management system in which the calves are removed from their dams but are allowed to see, hear, and smell their dams. Depending on the fencing used, physical contact may also be possible. Fenceline weaning has the potential to reduce stress related to transport, changes in environment, and diet adaptation. It may also reduce labor demands and costs associated with drylot facilities.

Calf Behavior

Research investigating fenceline weaning has demonstrated a reduction in behavioral signs of stress in young calves. Price et al. (2003) observed that calves that were separated from their dams—but allowed to see, hear, and smell them—spent more time eating and less time walking and bawling than their counterparts that were completely separated from their dams. The behavior of calves that had been fenceline weaned was more like that of their non-weaned counterparts.

Calf Performance

University of California-Davis researchers observed an advantage in average daily gain of calves that had been fenceline weaned onto spring (May) pasture when compared to contemporaries that had been completely separated from their dams and placed in either pastures or drylot pens (Price et al. 2003). The performance advantage was observed at 2 weeks and 10 weeks after weaning.

In a 3-year study at South Dakota State University, differences in the weight gain of heifers that were fenceline weaned on grass pasture in October compared to heifers weaned in drylot were dependent on year-to-year differences in pasture conditions (Pruitt et al. 2005).

Post-weaning performance is highly dependent on the quality and amount of feed that is available to young calves once they have been removed from their dams. Early in the post-weaning period, calves weaned onto high-quality pastures would be expected to gain more relative to calves weaned into a drylot. In years where forage quality and(or) quantity is lacking, calves weaned and placed into a drylot with high-quality feeds (i.e. good quality hay, silage, grain, by-products) may gain better than cattle weaned on pasture.

The decision to provide supplemental protein or energy to weaned calves can be made based on quality and quantity of the forage available.

Calf Health

Research suggests that reducing stress on a calf can help improve immune function and reduce morbidity. Fenceline weaning has been shown to reduce the signs of behavioral stress (Price et al. 2003). In the South Dakota State University study, the incidence of disease symptoms and the acquisition of immunity following vaccination was similar for pasture weaned and drylot weaned calves (Pruitt et al. 2005).

Considerations

 Fencing should be substantial enough to prevent the calves from nursing and keep the cows and calves separated.

Producers have used various combinations of electric and non-electric, and high-tensile, barbed, and woven wire fencing. Gerrish (1998) suggests that, for cattle that have not been exposed to electric fencing, either woven wire or at least 5 strands of electric fencing will likely be necessary. If the cattle are familiar with electric fencing, three strands will likely be sufficient.

Yet another option is to utilize 4 to 5 strands of barbed wire combined with a single strand of electric fence offset from the main fence.

Pasture the cows and calves together in the pasture where the calves will be after weaning. One week in the pasture allows time for the calves to become familiar with the fences and water source. At weaning time, return the calves to the same pasture and move the cows to the adjoining pasture.

- 3. Some producers have found it useful to use a yearling or a cow without a calf in the weaning pasture to lead the calves to the water source.
- 4. Performance of the weaned calves is highly dependent on forage quality and quantity. Options to provide high quality forage in the weaning pasture are:
 - a. Graze early in the season and allow adequate regrowth prior to weaning.
 - b. Harvest hay and then graze at weaning time.
 - c. Plant ryegrass, small grains, or other annual forages to provide high quality forage.
- Fenceline weaning fits well into a management system where maximizing gain is not important (replacement heifer development or backgrounding calves).
- 6. The need for supplementation of calves weaned on pasture depends on forage quality and quantity and the desired average daily gain.

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