



Early Weaning Beef Calves

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Traditionally, calves are weaned at six to seven months of age. In typical spring calving herds in the northern Great Plains, this is usually October or November. However, during drought, forage is generally limiting and early weaning should be considered as a management tool. Time of weaning will have impacts on cow and calf performance as well as health and productivity of the native range or pasture.

Advantages of Early Weaning

- **Improved cow body condition.** Lactating cows can lose body condition due to the increased nutrient requirements associated with lactation. When drought conditions exist, this situation is usually made worse by lack of forage in drought stressed pastures. By weaning early, the cow's nutrient requirements for lactation are eliminated and cows are able to maintain or increase body condition prior to the fall and winter feeding period.
- **Improved calf performance.** During a drought, calves may not be able to successfully compete with cows for adequate forage. By weaning early and providing a highly nutritious diet, calves can reach their growth potential. Early weaning, coupled with feeding a high concentrate diet, has resulted in increased quality grade a slaughter, and according to research conducted at several universities.
- **Improved conception rates.** Weaning early can result in improved conception rates, provided the calves are weaned during the breeding season. This would require weaning calves at a very young age (calves need to be weaned at 45 to 105 days of age to allow increased conception rates). When weaned early enough, cows have a greater opportunity to rebreed in an optimum time frame and an increase in conception rate can be expected.
- **Improved forage availability for the cow.** Early weaning reduces the cows dry matter intake and also eliminates the demand on the forage from the calf. Consequently, the cows remaining on the pasture have access to more forage and demands on the pasture are reduced, which can enhance sustainability and forage production in the future.

Disadvantages of Early Weaning

- **Increased attention to management is required.** Early weaning requires greater attention to proper health, nutrition, and management practices.
- **Increased cash costs.** Weaning calves earlier will result in increased cash costs for the rancher or beef cattle producer. Instead of pasture and their mother's milk, early weaned calves will eat high quality grains, hays, protein supplements and/or commercially prepared feeds. In addition, beef cattle producers must have facilities to feed calves or hire a custom backgrounder or feedlot to do this work.

Reducing Nutrient Requirements of the Cow Herd

Lactation represents the greatest nutrient demand for cows during a year-long production cycle. Lactation increases demand for energy, protein, and other nutrients. One of the simplest ways to reduce nutrient requirements is to wean the calf. This practice can cut nutrient requirements by one-third to one-half depending on milk production of the cow. Early weaned calves can achieve adequate rates of growth if given access to a high quality ration. By the time calves are 3 to 4 months of age, they are consuming significant amounts of forage. At 6 to 7 months of age, calves will consume approximately half the amount of forage as a mature cow. Following weaning, dry cows will eat less forage than lactating cows, further reducing demand placed on the pasture. By removing the demands of lactation, acceptable pregnancy rates and calving season length can usually be maintained.

Producers may consider early weaning only a portion of the herd. In that case, logical candidates for early weaning are cows nursing their first and second calves. These animals have nutrient requirements for growth in addition to maintenance and lactation. The nutrient requirements for lactation and growth are given higher priority than the need to reproduce. By removing the demands of lactation on nutrient requirements, growth and reproduction will receive a greater proportion of the nutrients available. Producers may also consider early weaning for cows that are in thin or poor condition.

How Early Can Calves Be Weaned?

Calves have been successfully weaned as early as two months of age. However, this is not practical under most ranch conditions. Weaning March and April born calves in late July or early August is generally preferable to earlier time frames.

Special Health Considerations

To ensure the health and well being of early weaned calves' beef cattle producers must provide an excellent health and vaccination program. Be sure to work with your local veterinarian to properly design a health program which will work on your ranch. The following are general recommendations to follow:

- Castrate, dehorn and brand calves 10 to 14 days prior to weaning.
- Vaccinate for clostridial (7-way) and viral (4-way) infections. Work with your local veterinarian to develop a specific program. Follow the label recommendations and re-vaccinate if necessary. Administer all vaccinations in the neck area to avoid injection site blemishes.
- Treat for internal and external parasites.
- Provide protection from flies.
- Provide a good quality trace mineral and vitamin (A, D, E) supplement to all calves.
- Consider using growth implants. They will increase weight gain and improve feed efficiency. Do not implant potential replacement heifers.
- Provide access to adequate quantities of good quality, clean water. Clean watering equipment on a regular basis.
- Monitor calves daily for symptoms of respiratory disease, digestive disturbances, scours, coccidiosis, and intake level.

Bunk Management: What's Best for the Calf?

Early weaned calves should consume 2.75 to 3.25% of their body weight in dry feed daily. Rations should be palatable and free of dust. The most nutritious rations won't work effectively if calves don't consume them.

Offering a creep feed three to four weeks prior to weaning will help the calves adjust to eating processed feeds and make the weaning transition period less stressful. Commercial creep feeds, byproducts such as wheat middlings, barley malt sprouts, soy hulls, or whole oats all make excellent creep feeds.

Initially, calves should be offered long stem grass hay. Top dress the commercial feed or concentrate mix over the long stem hay for the first three to five days. Once the calves are consuming these feeds readily, begin offering mixed rations. Gradually adjust the calves to greater levels of grain and/or concentrates. Adding a liquid supplement such as molasses, condensed distillers solubles, or commercial liquid supplements will help control dust, improve palatability, and reduce sorting.

Do not start calves on silages and other fermented feedstuffs. The fermented odor and flavor of these feeds can cause feed aversion in freshly weaned calves. Wait until the calves are consuming the ration adequately and then begin blending in these feeds.

Facility Requirements

Place calves in a small, secure, well-sheltered pen or pasture after weaning. If possible, sort calves by weight into smaller pens so that small calves and large calves are not competing for the same feed and water.

During extremely dry conditions, dust can become a problem. Consider using sprinklers to control dust in pens if necessary.

Waterers and feed bunks should be placed along the fence line to allow calves to find feed and water easily. Freshly weaned calves will tend to walk the fence line. Placement of feed and water in the center of the pen make it more difficult to find.

Summary

Drought conditions are a periodic occurrence in the northern Great Plains. Early weaning is one management option which should be considered during drought. Early weaning will be more successful and less stressful when adequate attention to nutrition, health, management, and facilities is considered. Early weaning should be considered as part of a normal drought management strategy.

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