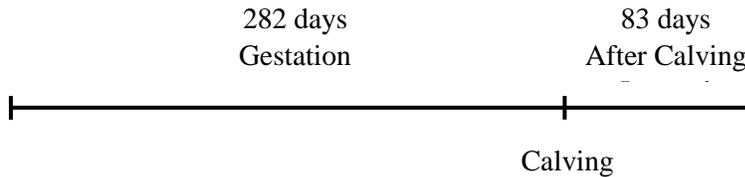


More than Milk: Cattle Nutrition during Lactation
Chris Shelley, Golden Plains Area livestock agent

Beef operations strive to have every cow give birth each year. We think of this as a one-year system, but in reality, the cow must be ready to breed before this time. Average gestation length for cattle is around 282 days, leaving 83 days for cows to recuperate and be ready for breeding time. This short period from



calving to breeding is called the postpartum interval.

A two-year-old heifer that has just had a calf for the first time will take longer to reach estrous again and be ready for breeding than older cows. These young mothers are going through their first lactation and still trying to grow themselves. Estrous cycles will be more likely to resume sooner if cattle have proper nutritional management.

Lactating cows require 35-50% more nutrients to produce the important milk for their calf. Restricting or limiting feed intake can reduce high feed costs but may not prove beneficial at this production stage. Researchers have found that if cattle do not get enough feed during lactation, they will have lower conception rates. Likewise, inadequate nutrient intake during lactation can decrease weaning weights.

Be sure to start body condition scoring your cows now. Beef cattle are body condition scored on a scale of 1 to 9. Cattle with a score of 1 are extremely skinny, where those that are a 9 are extremely obese. Researchers have found that moderation really is best. Moderate body condition scores, of either 5 or 6, will be the best for achieving highest conception rates. One study found that if moderate body condition scores cannot be achieved before breeding season, it is still better for them to be in a positive energy balance than a negative energy balance. This means that they are eating enough to gain some weight. Animals decreasing in body weight had 59% survival of the embryo as compared to 76% survival by those increasing in body weight. Neither percentage is acceptable, but 76 is better than 59. It is within reason to achieve desired conception rates for cattle in a positive energy balance at a moderate condition score. A thin body condition may also increase the length of the post partum interval, increasing the calving season length.

Many cattle producers will save some of their best feeds for this time to ensure desired conception rates. Low quality forage alone will typically not be adequate to meet the requirements of cattle in this situation. However, feeds that are low in quality can be used in rations balanced to meet nutritional requirements. The following table will help give an idea of the differences in a lactation diet and a diet following weaning. These data are estimates and it is always best to balance a ration to meet the production goals that you have for your animals. Over feeding can raise your feed costs while under feeding may hurt the productivity of your herd.

Estimating Hay Needs	
Livestock Species	Approximate lb (hay/head/day)
Dry, pregnant cow	15 - 20
Cow with calf	25 - 28

These are merely estimates and true requirements will vary due to animal size, hay quality, weather conditions, etc.

For help with balancing a ration or assessing body condition of cattle, contact me at (970) 332-4151 or your local extension office.