

Early Weaning as a Form of Risk Management

Early weaning (EW) has received a great amount of attention as a tool to decrease feed costs, particularly in response to declining forage supply and/or drought. Late summer and early fall are periods of time when dams have high metabolic requirements which must be met by declining forage quality. As a result, cow body condition score and milk production may suffer. At this point calf growth potential for spring-born calves is the highest, but at 100 days of age, rate of calf gain is limited by amount of protein and energy supplied by the dam's milk, which in return is supplied by and limited by forage. It is more efficient to feed the calf to gain than it is to feed the cow in hopes of increasing milk production. By early-weaning the calves, the dams have the ability to increase BCS prior to winter and decrease cost of feed without detrimental effects on calf performance.

Calf Performance

Early-weaned calves are more efficient at converting TDN into calf gain. They have been reported to have better overall gains from birth to rail and have been harvested with better quality grades than traditional weaned calves. Yield grade is typically a function of feeding management and has been reported to be similar to those that were weaned at a traditional age.

Post-Weaning Nutrition

Early weaning has proven to be a tool in which to increase dam BCS without detrimental effects on calves. However, it must be noted that EW also increases total concentrate fed to calves from time of weaning to harvest when placed directly into a feedlot post weaning as the diet supplied is typically from 70-100 % concentrate and 12-16%. High concentrate diet can increase feed expense if cost of ingredients is high. However, early weaned calves can be placed in high quality pasture with acceptable performance. This high quality diet usually will not affect long-term reproductive performance. The choice of the most appropriate EW diet should be based on the calf producer's feed costs and marketing criteria.

Economic Considerations

When early weaning is adopted in response to emergency situations, profit on early weaned calves could be slim. Researchers have typically found that if calves were sold at weaning, profit potential would be greatest for the late-weaned calves, followed by normal-weaned calves and then EW (assuming forage is not limited). This may be explained by the fact that most of the cow cost is incurred by the time the calf is 150d of age. Furthermore, if the calf is sold at weaning, EW calves will receive less total money because calf weight is less than later weaned calves. Even though price/unit of weight is usually greater for lightweight calves, money generated does not usually offset cow cost. This implies that the EW calf should be retained after weaning to increase profit potential. However, if forage production is severely inhibited, EW will not only be acceptable for calf performance, it may be crucial for young cows to be able to regain body condition score and breed back the following year. Early weaning may be crucial to limit damage to dryland pastures by reducing nutritional requirements of the cows and potentially decreasing total forage intake by the herd. Removing suckling calves from the dams also lends opportunity to cull any open cow and again reducing forage requirements. Before adopting any production scheme, the producer should realize that age of calf at weaning causes costs to shift from one enterprise in the operation to another (if calves are retained on the ranch post weaning). Early weaning affects profit through feed costs, marketing of cull cows, heifer development costs, and time of year calves are purchased in the feedlot and finished. Make sure your pencil all your options out.