



Ridin' Herd

► by **Rick Rasby**, Extension beef specialist, University of Nebraska

Should I creep-feed my calves?

This is a question that is commonly asked as producers try to line up spring and summer management considerations, budgets and calf-marketing options. The primary objective of this management practice is to put additional weight on the calf before weaning without making the calves fleshy, especially if sold at weaning. Fleshy calves are discounted in market price. To creep or not to creep really boils down to whether it can be accomplished economically to increase the profit potential for the cow-calf enterprise.

Type of creep feeds

The most common creep feed is high in energy and about 16% crude protein (CP). Data would suggest that high-energy creep feeds will result in the greatest weight gain. Calves will eat about 3.2 pounds (lb.) per head daily (range: 0 lb. to 6.5 lb.; depends on length of the creep-feeding period), a gain-to-feed ratio of 1 lb. of gain per 6 lb. of creep (range: 1:4.2 to 1:10), and an increased average daily gain (ADG) of 0.3 lb. (range: 0.15 lb. to 0.65 lb.) compared to calves that were not creep-fed.

There are creep-feeding diets that are high-protein formulations, greater than 30% CP. These formulations are mostly soybean meal or a combination of soybean and cottonseed meal. Intake is controlled by inclusion of salt. Overall weight gain is less than energy creep feeds. Daily consumption is about 1.25 lb. per head per day (range: 0 lb. to 2.5 lb.), and gain-to-feed ratio of 1 lb. of gain to 4 lb. of creep (range: 1:3 to 1:7).

Creep-grazing calves appears to be most beneficial when the forages cow-calf pairs are grazing are low in quantity or quality and high-quality creep forage can be grown more inexpensively than conventional creep feeds can be purchased. To implement creep grazing, a producer could plant small pastures of high-quality forage adjacent to pastures grazed by cow-calf pairs. Forages suited for use in a creep-grazing system are high in forage quality and readily available.

If the growth of the forage being used as creep forage becomes excessive, allow cows to graze it until the forage reaches a level manageable by the calves alone. Another option in a "cell grazing" situation is to allow access to the next pasture in the rotation to the calves before allowing the cows access.

When to creep-feed calves

There are data suggesting that creep-

When determining costs for creep-feeding, include not only feed costs, but equipment (creep feeder, tractor, and wagon with an auger to fill the feeder if not done by the creep supplier), and labor costs.

feeding has a positive effect on carcass quality. The effect of creep-feeding on carcass quality is influenced by the length of the creep-feeding period and type of creep feed fed. If calves are sold at weaning, creep-fed calves will be heavier than calves that were not creep-fed; therefore, more calf weight can be sold. The key is, can this management practice be accomplished economically and increase the profit potential of the cow-calf enterprise?

When determining costs for creep-feeding, include not only feed costs, but equipment (creep feeder, tractor, and wagon with an auger to fill the feeder if not done by the creep supplier), and labor costs.

Fall-calving herds in the Midwest are challenged because of low nutrient quality of the forage resource when lactation occurs. The concern, in my opinion, is heifers to be selected as replacements and the challenge for them to have ample weight at weaning, and it may be difficult to develop them at a rate that a producer would be comfortable with to get them to reach puberty and cycle before the start of the breeding season. In this situation, creep-feeding may be warranted.

What is the weight gain worth?

As calf weight increases, value is less on a dollars-per-pound or a dollars-per-hundredweight (cwt.) basis. In other words, there is a price slide down for calves that weigh 500 lb. compared to calves that weigh 400 lb. This is important to understand, because the added calf weight from creep-feeding cannot be priced at market value, but should be priced at something less than market price.

As an example, a price for a 500-lb. calf at \$1.00 per lb., or \$500 total. If there is a \$5.00-per-cwt. price slide, a 560-lb. calf would be worth \$0.95 per lb., or \$532 total. Therefore, the extra 60 lb. returns an extra \$32. The value of each added pound was worth \$0.53 ($\$32 \div 60 \text{ lb.} = \0.53 per lb.).

In 1995, with poorer calf prices, a 500-lb. calf would bring about \$68.00 per cwt., or \$340 total. There was a less severe price slide, and the heavier 560-lb. calf sold for \$66.42 per cwt., or \$372 total ($560 \times \$0.6642 = 371.95$). Again, the extra 60 lb. brought \$32 and the value of each pound of added gain was \$0.53.

Obviously, not all situations result in exactly \$0.53 per lb. of added gain. However, it is amazing how often the value of added gain is between \$0.45 and \$0.65!

The dollar return for creep-feeding can be calculated. If the cost of the creep feed is \$10 per cwt. and the calf eats on average 3.5 lb. per day, in a 90-day creep-feeding period, the calf will eat 315 lb. The cost of feed for the 90-day creep-feeding period is \$31.50. In this scenario, the net return from creep feeding is \$0.50 ($\$32 \text{ income} - \$31.50 \text{ feed costs} = \0.50) per calf. The return from creep-feeding in these calculations only includes the feed and no labor and equipment. Do the calculations with your numbers.

Final thoughts

When making decisions about supplementing nursing calves, take into account cost and availability of feed and forage options to creep-feed the calves, calf prices, and calf marketing plans. The cost of creep supplementation depends on the cost of creep feed and calf feed conversion.

E-MAIL: rrasby@unlnotes.unl.edu

Editor's Note: "Ridin' Herd" is a monthly column written by Rick Rasby, professor of animal science at the University of Nebraska. The column focuses on beef nutrition and its effects on performance and profitability.