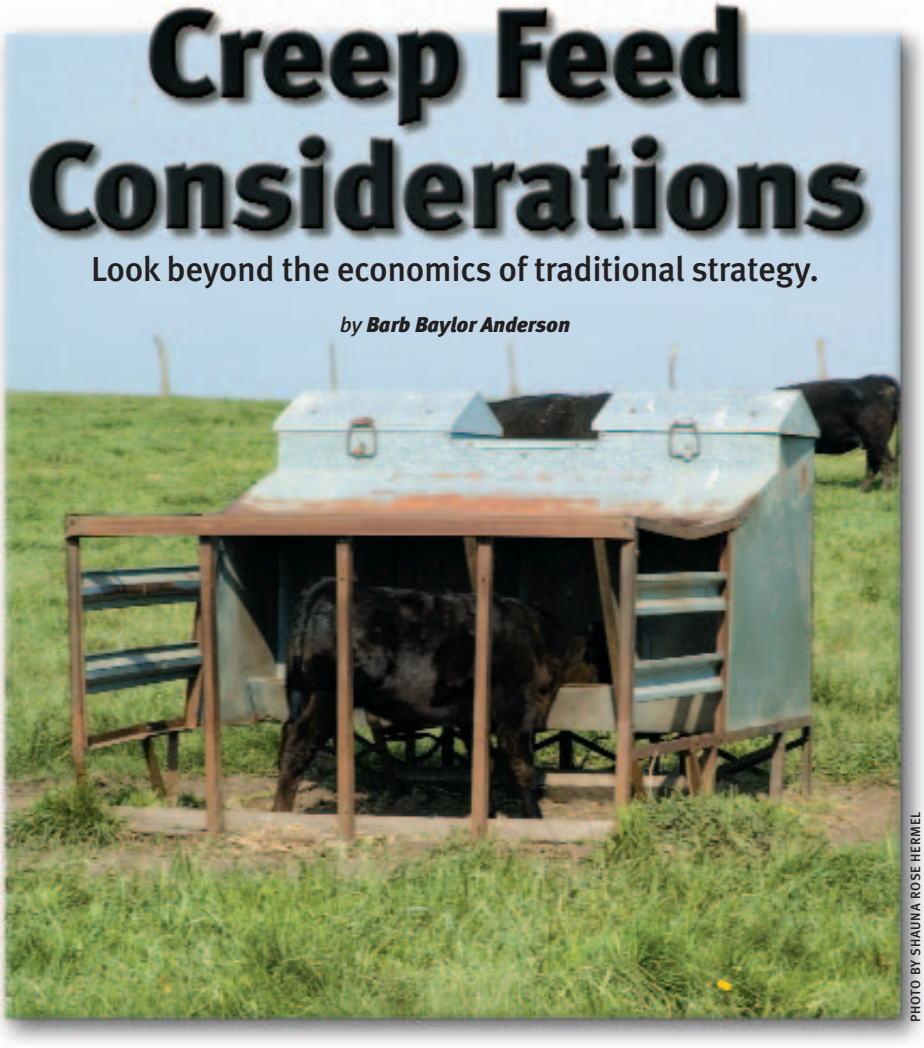
Creep Feed Considerations

Look beyond the economics of traditional strategy.

by ***Barb Baylor Anderson***



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►**Left:** "Creep-feeding is more profitable when calves are relatively expensive and feed is cheap," confirms Dan Eversole, Extension animal scientist with Virginia Tech University.

Sending calves on pasture to the creep feeder is often considered the best solution for providing supplemental feed to improve preweaning average daily gains (ADGs) of calves. In a year like 2006, with predictions for relatively strong fall calf prices and "reasonably priced" corn, beef specialists say producers can push the pencil and find profitability. But, they also caution that creep-feeding must help meet the rest of your goals to really pay.

"Creep-feeding is more profitable when calves are relatively expensive and feed is cheap," confirms Dan Eversole, Extension animal scientist with Virginia Tech University. "There are some years when calf prices may exceed $1 per pound (lb.), and virtually any practice that increases weaning weights will generate more income for the producer. This economic situation does not occur that often."

Justin Sexten, beef cattle specialist with University of Illinois Extension, Mount Vernon, Ill., agrees, adding that many other factors can also affect the profitability of creep-feeding. He encourages producers to add to their list of considerations such factors as feed efficiency, forage quality and availability, and planned length of ownership.

Sexten recommends producers first estimate feed efficiency by determining the cost of the additional weaning weight to decide whether creep-feeding is viable.

"The best economic advice regardless of the year is to use a feed efficiency calculation to see if creep-feeding pays initially," he stresses. "Predicting fall calf prices may be the most difficult part of the equation. After your initial feed efficiency calculation, then the issues related to reduced calf pasture intake, increased marbling and the suppression of replacement heifer milk production should be factored into the equation."

Sexten explains that calves generally require 10 lb. of creep feed for each pound of additional weight gain, a feed efficiency ratio of 10-to-1. To determine if creep-feeding can be profitable in your herd, he suggests converting costs into dollars per hundredweight (cwt.). For example, creep feed priced at $180 per ton would cost $9 per cwt. Multiply the creep-feed cost per cwt. ($9) by the feed efficiency (10) to get a cost of gain — $90 per cwt. of calf, in this example.

If the cost of gain in dollars per cwt. is less than fall calf prices, then creep-feeding is initially profitable.

"Remember the calculation does not include the cost of the creep feeder, any feed delivery charges, labor or potential calf price discounts due to fleshy calves," he says. "You have to account for all of these costs as well, and adjust calculations according to your operation when you are deciding whether or not to offer creep feed."

Creep or forage?

Reduced calf pasture intake is one of those considerations. Sexten says an average cow will produce 11-14 lb. of milk per day two to three months after calving — not enough to provide the energy calves need to support weight gain. Supplementation can be accomplished through creep-feeding and/or through pasture forage.

"When forage supplies are limiting, providing calves with creep-feed will reduce calf forage intake and, therefore, provide greater forage availability for cows," he says.

Jane Parish, Extension beef cattle specialist with Mississippi State University, concurs that creep supplementation may be more attractive in situations of low forage quantity or quality where calf nutritional needs to support acceptable growth are not being met.

"Time of year and forage conditions can impact effectiveness of creep supplementation," she explains. "Forages well-suited for use in a creep-grazing system

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should be high in forage quality and readily available. If creep forage gets ahead of the calves, mature cows can be turned in on the creep forage until grazed to a level manageable by calves."

High-quality pasture is the best and most economical source of required nutrients during this period of insufficient nutrient intake, Eversole explains. Unfortunately, in spring-calving herds, the shift from milk to grass to meet nutrient requirements of calves frequently comes at a time when the availability and quality of pastures are declining.

"When creep feed is offered to these calves, they will eat the creep feed and reduce their forage intake. Milk intake is usually not affected," Eversole adds. "No research is available to document that creep-feeding can be used to reduce nursing frequency and intensity. Most evidence suggests that calves will nurse to capacity before consuming creep feed or forage. Calves generally prefer milk first, palatable creep feed second and forage third. When forage and milk are available, creep feed is substituted for forage."

Maximize marbling

For calves that will be retained beyond weaning, Sexten says creep-feeding can provide producers using corn-based creep feed the opportunity to improve the quality grade of finished cattle. Research at the University of Illinois shows calves given corn-based creep feed had better quality grades than calves fed fiber-based (soy hulls) creep feed.

Sexten notes research indicates starch is the most important input for enhancing

quality grade. Higher creep protein levels also help boost final carcass weights and quality grade, as well as appear to lead to better animal health through lower morbidity rates.

Consider replacement heifers

For those producers whose focus is on developing replacement heifers, Sexten says the decision to creep is no longer a simple profitability calculation.

"Regardless of profitability, creep-feeding negatively influences future milk production of replacement heifers. Creep-fed heifer calves will generally produce 25% less milk as cows due to increased fat deposition during the critical mammary development period," he says. "Creep-feeding replacement heifers is not recommended."

Sexten explains that reduced milk production due to creep-feeding has been observed in many operations when the creep-fed heifer calves gained faster during the prepubertal mammary growth period. Heifer calves creeped prior to weaning produced lighter calves and less milk over three lactations than non-creep-fed controls.

"In research, Angus cows creep-fed as calves produced fewer and lighter calves over a 10-year period, resulting in lower lifetime productivity," he explains. "Other research shows lower milk production and calf weaning weights from creep-fed heifer calves."

Bottom line, Parish says, is that the decision to feed creep should be based on whether the value of improvements in calf gains and marketability offsets cost of supplementation.

"Look at creep supplementation as a management decision that is evaluated with each calf crop," she says, "instead of as a management practice conducted each year."