Creep Feeding

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Creep feeding is a management practice used to provide supplemental nutrition as feed or forage to nursing calves. In practice, supplementation with feedstuffs is the most used form of creep feeding in Alabama. Creep feeding is often done using a self-feeder with a creep gate, or a creep gate in the fence with access to a small paddock where feed is provided. Creep grazing is also a strategy to provide the calf access to high-quality grazing; however, the focus of the article today will be on using feed to add additional calf gain.

The idea behind creep feeding is that we are providing additional nutrients in the animal's diet to support growth. A lactating beef cow can supply about 50% of the nutrients needed by a three-to-four-month-old calf to maximize growth. Depending on the quality of the nutrition program being provided, forage may not be able to make up the "other" half of calf nutrient needs. This "other half" nutrient deficiency is more prevalent in drought years when pasture availability is low, or when cow-calf pairs are provided low quality forage-based diets (i.e. late summer grazing or low-quality hay during the winter). Creep feeding may help make up some of these deficiencies from forage or environmental conditions.

One common assumption about creep feeding is that it will take some pressure off the nutrient demands of the cow. This is because we think that by feeding the calf, we are reducing some of the milk consumption from the cow. If we reduce milk consumption from the cow, we are reducing some of her energy needs to support lactation. However, studies that have tracked cow weight change and calf milk consumption show that calves will still consume all of the milk available, whether they are creep fed or not. Thus, creep feeding does not help the cow from a nutritional standpoint.

Another big question for Southeast US producers is if creep feeding is economically efficient. The answer for cow-calf operations is often "not in most circumstances." If free-choice feed is provided in a creep feeder, calves will often consume more than the recommended feeding rate would be in a hand-feeding scenario. This drives up the feed-to-gain ratio. A review of 40 creep feeding research trials reported that feed conversion ranges from 3:1 to 20:1! This is a huge range! In general, the greater the plane of cow nutrition, the worse the conversion is for feed-to-gain. In other words, if cows are provided a good quality, forage-based diet to meet nutritional needs, the calf has access to both milk from the dam, and the forage diet being provided to the cow. They may eat creep feed, but their gain is primarily coming from the nutrients provided from the cow and the diet we are providing to the cow/calf pairs.

Creep feeding has been shown to add an average of 50 pounds per head. As an example of the value of gain, let's use an average value for calves in Alabama. Using current prices, a #1 steer weighing 550 pounds would generate $1502/head (550 x $2.73), whereas a creep fed steer (550 pounds + 50 pounds of added gain) would be worth about $1572/head (600 x $2.62). Thus, the additional gain is worth about $1.40 per pound ($70/50 lb). This means that it must cost less than $1.40 to add 1 pound of gain. For example, current Alabama prices for bulk soyhull/corn gluten pellets average close to $250 per ton. This would mean that if the calves average an 8:1 feed conversion, it would cost approximately $1.00 per pound cost of gain ($250/2000 * 8). This seems to work, but what if you don't have the capacity to use truckloads of feed and buy bagged feed. These bagged feed prices will be closer to $400 per ton making the cost of gain of approximately $1.60 per pound ($400/2000 * 8). This also assumes that the feed conversion is going to be pretty efficient, like when we are in drought years or cattle otherwise are on a low-quality diet. So, does it make sense to creep feed? It depends!

Notice that we said not in "most" circumstances but not "all" in the paragraph above. When may creep feeding fit? If a producer plans to retain ownership on calves through the feedyard, this may improve feedyard performance. A producer who wants to maximize gain and genetic potential for growth may choose to creep feed to meet performance goals whether it is economical or not.

Introducing feed to calves prior to weaning to help the transition of the calf post-weaning is not the same as creep feeding. Two weeks to one month prior to weaning, some producers may begin hand-feeding calves using a paddock with access via a creep gate. This helps calves 1) learn how to physically eat feed and 2) familiarizes them with the producer, 3) teaches them the "system" for how things will operate post-weaning. This has benefits from both a nutrition, stress, and animal behavior standpoint. If a producer plans to retain calves post-weaning for a backgrounding phase, this practice can help with this transition. The feeding rate of calves during this transition is often low, with no more than 0.5% of animal body weight per day provided in supplemental feed. The idea is more about training the cattle than supporting gain during this period.

There are several "hearsay" thoughts about creep feeding and its benefits in the cow/calf operation. Producers should evaluate feed costs, expected gains, and value of the added gain based on calf market prices.

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