



Creep Feeding Calves

Dr. Alfredo DiCostanzo and Ms. Beka Gill, University of Minnesota Beef Team

Creep feeding is a way to provide suckling calves with supplemental nutrients. The type of creep feeds commonly fed are in the form of grain, protein supplements, high quality forages, or commercial calf creeps. The decision to creep feed along with what nutrient to utilize can vary from year to year. Also, what is profitable for one operation may not be for another. Producers should carefully consider their marketing objectives and evaluate the economics of creep feeding in order to determine whether or not it will be profitable? If the market endpoint for a producer is at weaning, the producer would be inclined to supplement calves most years in order to maximize weight gain prior to weaning. One can expect weaning weight gains from creep feeding to be in the range of 30 to 60 pounds. However, the consideration to supply supplemental nutrition to calves that will be marketed at weaning must be based on both forage supply and economics. For example, when given the choice, calves will continue to suckle and consume creep feed preferentially over consuming grass. Thus, when experiencing severe drought, creep feeding presents a less drastic alternative to preserving forage for use by the mother cows than early weaning, at least temporarily. The following set of guidelines can be used to weigh the advantages or disadvantages of creep feeding within a given year:

A list of situations (Ritchie, 1987) when creep feeding may be advantageous is provided:

1. Calf prices are high relative to feed prices

2. Fall-born calves
3. Drylot cow operations
4. Calves from first-calf heifers
5. Forage for cows is limited
6. Milk production is limited
7. Maximum weight or “bloom” is desired
8. Male calves
9. Large-frame, late-maturing calves
10. Calves will be finished by the cow-calf producer on a high-grain diet

On the other hand, creep feeding may be less apt to be advantageous when:

1. Feed prices are high relative to calf prices
2. Heavy milking cows
3. Forage is abundant
4. Heifer calves
5. Smaller-framed, earlier maturing breeds
6. Spring calves
7. When calves are to be backgrounded on a high-roughage diet

8. When creep-fed calves are severely discounted

Even when weather conditions are normal for the Upper Midwest, forages experience a summer slump (Mathison, 1999) in yield and quality. This occurs as calves are relying less on milk, and their growing needs are increasing. However, the efficiency of utilization of supplemental feed for gain by calves is highly variable and depends on the quality and quantity of feed offered. The efficiency of conversion of supplemental feed to gain is from 5 to 15 lb creep feed/lb gain over un-supplemented calves. At relatively low creep feed price (\$.04/lb) and relatively high feeder price (\$1/lb), poor efficiencies (10 or 15 lb creep feed/lb additional gain) of conversion are yet sufficient to yield positive returns to investment in creep feed. However, when either price of feed is high, or price received for feeder is low, there will be negative returns to investment in creep feed.

Determining the appropriate nutrient supply is as important in determining price of creep feed as it is being aware of feeder cattle market conditions. Under most circumstances in the summer, producers should seek creep feed formulations that contain at least 70% TDN and 12% CP. However, in fall born calves, quality of creep feed is a greater issue. Winter forage supply is usually of lower

quality than summer grass. Therefore, fall-born calves need to be supplemented with carefully balanced creep feed to overcome this challenge. Under most conditions, producers should seek supplement formulations with 75% TDN and 14% CP. Local feed alternatives may include rolled oats, grain screenings, dried beet pulp, distillers grains, or wet corn gluten feed, especially, if a premix containing an ionophore or bambermycins is included along with vitamins and minerals to meet the calves' requirements.

If economic and forage conditions favor creep feeding, be sure to place the creep feeder in an area that is well exposed and frequented by the cow herd. Calves generally hang around their mothers and placing the creep feeder near watering areas or places where salt and mineral is provided for the cows will ensure that calves are utilizing the creep feed.

When market endpoint is beyond weaning, creep feeding can result in enhanced adaptation to feedlot or backgrounding conditions only if ADG greater than 2.2 lb/d are projected and better performance during the feedlot or backgrounding phase (Ritchie, 1987). Therefore, creep feeding must almost always be considered when retaining ownership beyond weaning.