



# LSU AgCenter Beef Factsheet

## Economics of Creep Feeding

Currently, with regard to beef calves, heavier calves are retaining a considerably higher percentage of their value when compared to their lighter counterparts. For instance, there may be only a ten to fifteen percent difference in the price/lb between a 450 and 750 lb calf. Many beef cattle producers are therefore exploring means to add additional weight on their calves economically and at the same time not placing too much expense involved with infrastructure (pens, water's, feed troughs, etc). In the last two weeks, I have received 4 phone calls from folks who are contemplating creep feeding calves. According to DiCostanzo and Gill (2008) creep feeding is a way to provide nursing calves with supplemental nutrients. Typically creep feeds refer to mixed feeds, grain byproducts, and of course, high quality forages. A review of the literature would suggest creep fed calves weigh 40 to 60 pounds heavier than calves not offered any feed. At face value, this seems attractive because of calf prices, however, the most imperative factor to consider when creep feeding is the cost of gain involved with creep feeding. Dr. Harlan Ritchie, Professor Emeritus, from Michigan State University summarized creep feeding in the eighties, and offered examples of when to and when not to creep feed (adopted from DiCostanzo and Gill, 2008).

A list of situations when creep feeding maybe economically beneficial:

1. Calf prices are high relative to feed prices
2. Fall-born calves
3. Dry lot cow operations
4. Calves from first-calf heifers
5. Forage for cows is limited
6. Milk production is limited
7. Maximum weight in calves is desired
8. Male calves
9. Large-frame, late maturing calves
10. Calves will be finished by the cow-calf producers on a high-grain diet

A list of situations when creed feeding should be highly scrutinized:

1. Feed prices are high relative to calf prices
2. Heavy milking cows
3. Forage is abundant
4. Heifer calves
5. Smaller-framed, early maturing breeds
6. Spring calves

7. When calves are to be backgrounded on a high-roughage diet
8. When creep-fed calves are discounted (fleshiness)

Relative to the above, the primary issue all should have currently with creep feeding is the fact that feed prices are historically high relative to calf prices. A question that has been asked often is what kind of feed:gain would one typically see when creep feeding. Oklahoma State researchers summarized 31 trials of free-choice creep feeding (Table 1.).

Table 1. Summary of 31 trials with free-choice creep feeding

	<u>Creep</u>	<u>No Creep</u>
Total Gain, lbs	279	221
Daily Gain, lbs	1.83	1.45
Total creep/calf lbs	524	-----
Lb creep/lb added gain	9.0	-----

With regard to gain, creep fed calves outperformed non crept calves by 58 pounds and had a 0.4 lb advantage in average daily gain. Based on the data presented, on averages calves were crept for 5 months. The importance of this table is the amount of consumed feed necessary to put on a pound of gain. In this research summary, 9 pounds of feed was necessary to put on the added weight gain. Based on \$250/ton feed (perhaps a low estimate) in order to add the extra 58 pounds, \$65.50 is the approximate input cost, or in other words, a cost of gain \$1.12/lb. Using these figures, creep feeding in 2008 is a losing proposition.

Realize, however, that this data is compiled from free-choice creep feeding systems and not ones that are limit-fed. Reports do suggest that the economics are considerably more advantageous when using a limiter. Data from Oklahoma State suggest that a high protein creep fed at one pound per day (cottonseed meal with 10% salt) enjoyed an efficiency of 3.3 lbs of feed to one pound of gain, although limited creep fed calves only gained 30 lbs more than calves not receiving creep for a 133 day period. Dr. Wayne Wyatt, Iberia Research Station, Jeanerette, Louisiana, reported similar results on creep feeding fall born calves. Dr. Wyatt also included Bovatec to the creep feed and reported no additional gain using the ionophore.

One positive to creep feeding is short term post-weaning performance of calves when compared to calves not receiving any creep. Creep fed calves gain 0.2-0.3 lbs more than non creep fed calves. However one report also documented greater shipping loss in calves receiving creep.

In all, producers are beginning to understand that in order to be profitable; they must put as much weight as possible on their calves before marketing. However based on documented research, high feed costs and just marginal advantage in limit-fed systems, creep feeding is not economically feasible at this time.