

Bunk Management

Bunk management is one of the most critical components of cost effective beef production. It means simply matching the amount of feed delivered to the amount of feed the cattle can handle. Any system or strategy employed relies on the “gut feel” or “masterful eye” of the experienced bunk manager. Poor bunk management is at the root of many disappointing closeouts. Luckily, we have many tools and data points that can help us become better bunk managers.

Getting off to a Good Start

All newly arrived cattle should have free access to fresh, clean water. If possible, the starting ration should include adequate amounts of high-quality, long-stem hay or be placed on top of long-stem hay. Good rules of thumb are:

Starting Intakes Chart

| | 1st Day Feed %BW DMBasis | 1 st Day Hay %BW DMBasis | 14 th Day Feed %BW DMBasis | 21 st Day Feed %BW DMBasis |
|----------------------|-----------------------------|--|--|--|
| Calves, High Risk | 1.0 | 0.5 – 1.0 | 2.0 – 3.0 | 3.0 – 3.5 |
| Calves, Low Risk | 1.0 – 1.5 | 0 – 0.5 | 2.5 – 3.0 | 3.0 – 3.5 |
| Yearlings, High Risk | 1.5 | 0.5 – 1.0 | 2.0 – 3.0 | 3.0 – 3.5 |
| Yearlings, Low Risk | 1.5 – 2.0 | 0 – 0.5 | 2.5 – 3.0 | 3.0 – 3.5 |

Consistency: The Name of the Game

The first thing to remember is that cattle are self propelled fermentation vats. Fermentation vats like everything to stay constant. Consistency means providing a consistent diet in consistent amounts at consistent times. Variation is the number one enemy of good bunk management. The key to managing two of the three is simply having good, accurate scales under your feed wagon. The second major point to keep in mind is that cattle do not know how much to eat. If they did, founder and acidosis would be unheard of. This is a consequence of our dietary energy manipulation. Third, it can take two to three days for mistakes or digestive upsets to become evident. Records are a critical tool to understand why problems exist, where cattle are heading, and what pitfalls to avoid.

Use a feed and aggression scoring system to understand the historical feeding pattern of cattle you are managing. Erratic intakes lead to feed wastage and digestive upsets. A clean-bunk strategy is critical to understand the consumption pattern and true intake of each pen of cattle. If cattle are never out of feed, individual animal variation will decrease average performance of the pen. If bunks are always slick in the morning, then it would be difficult to determine if cattle are being challenged to maximize consumption, hence performance. Both of these increase the amount of feed required per unit of gain; thus affecting cost of gain. The key to solving the problem is simply bunk management. For example:

Bunk Feed Scoring Chart

| Feed | | Ideal Feed | | Feed | |
|--------|------------------|------------|--------------|--------|---------------------|
| Scores | Definition | Scores | Definition | Scores | Definition |
| FFF | >20% Residual | F | <5% Residual | SSS | >12 hrs Slick, Lick |
| FF | 5 – 20% Residual | C | Clean | SS | 3 – 12 hrs Slick |
| | | S | <3hrs Slick | | |

Having feed truck drivers record aggression scores at the time of feed delivery is a good means of monitoring your morning bunk calling methods. This helps to determine which pens are going to have large changes in the cattle’s behavior between the time of bunk calling and the time of feed delivery. An explanation of aggression scores follows:

Bunk Aggression Scoring Chart

| Aggression | | Ideal Aggression | | Aggressive | |
|------------|------------------|------------------|-----------------|------------|-------------------|
| Scores | Definition | Scores | Definition | Scores | Definition |
| LLL | 0% Active, Empty | L | 10 – 25% Active | HHH | >75% Active, Full |
| LL | 1 – 10% Active | A | 25% Active | HH | 50 – 75% Active |
| | | H | 25 – 50% Active | | |

The fact that cattle are creatures of habit is extremely useful in bunk management. By establishing good eating habits for the steers you can provide the constant conditions that help fermentation. Providing consistent amounts and mixes of feed is crucial.

Bunk Management

Prescribed Variation: Managing Transitions

The starting program should prepare the cattle for their remaining stay at the feedlot. Regardless of situation, cattle will very rarely remain on one single ration for their entire stay at the feedlot. A decision to move a pen of cattle to the next ration should be based on the combination of several factors: 1) type and age of the cattle; 2) consistent consumption within the target dry matter intake range; 3) consistent bunk scores; 4) consistent animal health; 5) consistent weather factors; and 6) consistent bunk management. If any of these factors are in question, it is most likely best to hold the cattle on their current ration until you feel comfortable that these factors are satisfied. When switching rations, using a 2-day blend-over and ration dry matter adjustment can be very helpful.

Ration Blend-Over

A ration blend-over is described as a period of 2-3 days where you alternate feeding the two rations that you are switching from and to. For example, when switching from Ration 1 to Ration 2:

| | Blend-Over Days | | | |
|-------------------|-----------------|----------|----------|----------|
| | 0 | 1 | 2 | 3 |
| Morning Feeding | Ration 1 | Ration 1 | Ration 1 | Ration 2 |
| Afternoon Feeding | Ration 1 | Ration 2 | Ration 2 | Ration 2 |

During the blend over period, it is extremely important to make the correct dry matter adjustments (see Dry Matter Adjustments). Also, cattle should be fed the new ration for a minimum of three days acclimation period before the next transition. Ration adjustment factors can be used to perform the same transition in one day, as this can be helpful on shorter-fed cattle.

Dry Matter Adjustments

Making the correct dry matter (DM) adjustments to the feed offered to the cattle insures that the cattle receive equal amounts of dry feed during the blend over period (see Bunk Management) and prevents restricted dry matter intake or feed overload. For example, assume that the cattle are consuming 22.5 lbs of as-fed (AF) feed as a 7-day average. When switching from Ration 1 to Ration 2:

| | Ration DM | Calculation | DM Intake | As-Fed Feed Offered |
|----------|-----------|---|-----------|---------------------|
| Ration 1 | 75.10 | $22.5 \text{ lbs AF} \times 0.7510 \% \text{ DM} = 16.9 \text{ lbs DM}$ | 16.9 | 22.5 |
| Ration 2 | 48.44 | $16.9 \text{ lbs DM} \div 0.4844 \% \text{ DM} = 34.9 \text{ lbs AF}$ | 16.9 | 34.9 |

The use of ration adjustment factors can also be beneficial in simplifying your ration switches (see Feed Intake Sheet, Ration Adj. Factors). Using the same example from above, when switching from Ration 1 to Ration 2:

| | Ration Adj. Factor | Calculation | As-Fed Feed Offered |
|----------------------|--------------------|---|---------------------|
| Ration 1 to Ration 2 | 1.55 | $22.5 \text{ lbs AF Ration 1} \times 1.55 = 34.9 \text{ lbs AF Ration 2}$ | 22.5 34.9 |

Maintaining a consistent dry matter intake will insure that you don't "lose" the cattle during the blend-over period. During the two days in which the rations are blended, feed 50% of the total dry matter feed in the morning feeding and the remaining 50% of the total in the afternoon feeding.

Summary

In a feedlot, it is important to have a good starting program to introduce cattle to the new feeding system, establish a consistent intake, and improve overall health. A decision to move or transition a pen of cattle to the next ration should be based on the combination of several factors, with consistency being the key. Use a bunk calling system to establish a pen's feeding pattern, optimize consumption, and maximize performance. Score aggression to understand where feed calls are heading. Following these guidelines and work with your Suther's representative to minimize the chances of inconsistent intakes, digestive upsets, and disappointing closeouts during any situation.

Bunk Management

Bunk Management Supplement

Certain situations exist when adjustments need to be made to the normal feeding management protocol. All of the following circumstances will alter the feeding behavior of the cattle and, therefore, adjustments must be made to compensate.

Limit Feeding

Calves should not start on the limit feeding program until they have been on full feed for at least 28 days. The number of days that it will take to start a set of cattle on the limit feeding program will depend on several factors, including stress, feed intake, and overall animal health during the starting phase. Target intakes for the prescribed daily gain should be provided on a limit intake sheet provided by your Suther Nutritionist and should be increased or readjusted at least every two weeks. Once a month, the calves should be check weighed to evaluate the previous month's performance and to determine more precise adjustments to the calves' feed intake. When feeding limit fed calves, it is important to deliver feed at approximately the same time each day and to follow that initial feeding two hours later with the remaining feed. This method is used to control and monitor the calves' feeding aggressiveness. If the calves are overly aggressive, then adjustments need to be made. If the calves are out of feed approximately four hours after their second and final feeding, then increase their target intake by 10%.

Processing or Sorting Days

Sorting and processing cattle are direct causes of a daily reduction in feed intake or increased aggressiveness. This is because the cattle are physically removed from their comfort zone or pen and away from their feed. The degree of reduced feed intake or increased aggression is directly related to the time the cattle spend at the processing barn or in the sorting alley and the amount of stress incurred. If you know in advance, that a pen of cattle are scheduled to be sorted or processed on any given day, the adjustments need to be made before delivering feed. On the day of the sort or processing, decrease the feed delivered to the pen by 5 to 10%. If the pen has a bunk score of C, S, or SS the next morning, then give the pen back the 5 to 10% on the next feeding.

Storms or Equipment Failure

Storms present a unique problem for cattle feeders, largely because they are very unpredictable in occurrence and duration. Environmental stresses have the ability to increase the animal's need for feed to cover increases in maintenance requirements. This usually translates to an increase in feeding aggression and feed intake. Equipment failure usually produces the exact same response in cattle by altering their feeding schedule. The longer they stand and wait for feed, the more aggressively they will attack the bunk once feed is placed in front of them. In the event of a storm or equipment failure that lasts long enough to alter the cattle's feeding behavior, all pens should be moved to the storm ration or next lowest ration, if no storm ration is available, on the ration cover sheet provided by your Suther Nutritionist. Remain on the lower ration for two days after the conclusion of the storm or major equipment failure. If the cattle become overly aggressive during the storm, particularly with limit fed cattle, increase their intake by 10%. After the holding period, move the cattle back up to the previous ration at the level of intake before the storm. Make the proper dry matter adjustments when moving the cattle from each ration.