

Feedlot Bunk Management: Beyond the Basics

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Feedlot bunk management is essential to be profitable in the feedlot industry. There are several factors that can affect bunk management. Though each is quite simplistic in nature by itself, the combination of all these factors can make bunk management as much art as science. This article will briefly touch on the factors related to bunk management.

One of the basic items to consider is bunk space. Limiting bunk space will result in increased competition and may result in poor performance for more timed animals. Typical linear bunk space ranges from six inches to twenty-four inches. Limited bunk space may also be associated with multiple feed deliveries per day, smaller calves, and/or low roughage rations. Increased bunk space is more common for receiving cattle, low bulk density rations, backgrounding diets, and/or once-a-day feed delivery. Bunk space is often overlooked when it comes to expansions or new construction.

Frequency of feed delivery can be a method to overcome bunk space limitations. In the upper Midwest, feed delivery frequency is commonly once a day to reduce labor associated with feeding. Use of high moisture feeds can increase the tendency for rations to heat in the bunk. This issue is of greater concern during the warmer months of the year. Multiple feed deliveries over the day can also reduce sorting. Cattle are also easily trainable and curious by nature. Cattle may visit the bunk when they observe the feed truck/wagon out of curiosity enticing them to eat. When managing bunks with a slick bunk or restricted intake protocol it is important to maintain consistency when reading bunks and timing of feed delivery.

Restricted intakes can result in improved feed efficiency through a small reduction in feed intake while maintaining gain. However, drastic intake restrictions can result in a reduction of performance. Typical intake restrictions are near 90%-95% of ad libitum. Using the slick bunk management protocol, it has been shown that about 70% of the bunks were slick in comparison to approximately 40% for bunks managed for ad libitum consumption. Restricting intake can be successfully employed to also start cattle on the finishing ration immediately after arrival to the feed yard.

When to deliver feed is sometimes questioned. Early research from the late 1960's and early 1970's revealed that the majority of cattle frequented bunks early morning and late afternoon through evening with minimal activity during the night. More recent research would support these earlier findings and this basic understanding can be important when determining the best time to read the bunks. Cattle eating behavior can be slightly altered with timing of feed delivery but with limitations. Cattle will still preferentially consume feed at times they are most comfortable. Factors such as heat and cold stress can play a significant role. Cattle are more likely to consume feed earlier in the morning and later in evening during summer when compared to winter. University of Nebraska researchers investigated the timing of feed delivery in relation to alleviating heat stress. Their trials

would indicate some potential to reduce heat stress by shifting feed delivery to evening feeding. However, they acknowledged issues regarding limited labor and resource availability associated with equipment failure during this time frame. Canadian researchers have also investigated responses to evening feed delivery as a method to capitalize on the metabolic heat to reduce cold stress. Findings have been mixed on these responses and effects may be greater with dairy breeds which have increased maintenance energy requirements during the cold due to thin hides and minimal backfat covering.

Feed delivery is often associated with cattle coming to the bunks and eating. New technological advances have allowed for more in-depth studies related to frequency of bunk visits and time spent at the bunk. Canadian researchers have reported that on average, cattle may visit the bunk 10 times a day. Another interesting number reported is that the average daily bunk attendance corresponds to approximately only 1.5 hours/d. West Virginia University researchers indicated that some bulls visit bunks in excess of 80 times over the course of 24 hours, however, these animals were not necessarily the most efficient or fastest gaining bulls. Additionally, this new technology is being utilized to examine the behavior of morbid cattle. Sowell and co-workers observed that morbid cattle came to the bunk less frequently and spent less time at the bunk than healthy cattle. These results were supported by Texas researchers in which sick cattle were observed to have fewer eating bouts and spent less time eating soon after arrival but this response was reversed from 28-57 days post-arrival. Missouri researchers have been able to illustrate the impact of management effects on intake. For instance, they captured intake data electronically demonstrating a suppression of intake when there was a lack of water availability quite clearly. Variability in daily intake is readily observed using this new bunk technology.

When making feed changes, it is important to follow a systematic approach. Rapid diet changes can result in more harm than good. However, it is also important to get feedlot cattle up to the final ration as soon as possible to reduce time spent in the yard and associated yardage expenses. Cattle typically have a lag response to diet changes and increases in feed offers. This response is often seen three to four days after the change. Therefore, feed changes and increases in feed delivery should be made every 3-4 days when cattle are near ad libitum intake and the final ration. More aggressive steps can be made with higher roughage rations and earlier in the feeding periods. There are a couple different old school recommendations when it comes to increasing feed deliveries. The first is not more than one pound of grain while the second is to not increase more than 10% of amount of feed delivered. Increases would occur again in 3-4 days if cattle are slobbering the bunk. It is important to observe the cattle. Fecal consistency can aid in determining sub-acute acidosis. Realize that the ration can also impart some effects on fecal consistency. For example, high dietary protein may result in loose stools and can often be observed when high quality legume hay is offered to newly placed feeder cattle.

Feed quality is also an issue when it comes to bunk management. Research has shown that as the percentage of spoiled corn silage increases, dry matter intake and diet digestibility declines. Corn silage with large parts of cob may result in sorting by cattle leaving the cob behind. Cattle have an ability to sort feed. Consider this when attempting to manage feed delivery and formulating rations. Restricting intake to force cattle to clean up unpalatable, low quality feed can result in lost performance due to reduced feed intake.

Feedlot bunk management can not be taught in a single article or presentation. Like many other things in life, it is one that requires hands-on experience seeded with recommendations from others. The art of managing feed bunks is learned from feeding cattle and for some takes several hundred head to refine the skill.