

Precision Feeding the Beef Herd

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Precision agriculture can be many different things. Using precision agriculture management practices frequently results in minimizing inputs and saving dollars. While there are few new technologies available to allow beef producers to more precisely feed the cow herd, established methodologies have existed to do just that.

Dairy producers have the same tools available as beef farmers, however they more fully utilize those tools to maximize production without overfeeding or wasting feed. Dairy cow rations are typically created as a balanced total mixed ration. Rations are balanced on a percentage basis and fed at levels greater than expected daily intake. Feed bunks are evaluated and cleaned out daily. The excess feed is frequently used in other rations on the farm, such as dry cow or heifer rations. Feed is delivered into a bunk to protect the feed from animal trampling and defecation.

Beef producers implement a number of different feeding strategies that frequently involve feeding of hay as the main ingredient of the diet. Some producers feed hay free choice in bale feeders. Others feed hay by rolling out bales on the ground for consumption. An increasingly popular feeding method is to utilize a feed mixer with cutting screws that have the ability to cut large bales of long stem hay into smaller particles. These feed mixers allow for other ingredients to be added to the ration to more precisely meet nutrient requirements of the cow. Feed loss or waste has not been well documented with this feeding method, but producers implementing this strategy probably believe waste is minimal. If beef cows are fed on the ground, feed refusal is not weighed for accurate assessment of feed refusal.

As opposed to the dairy cow feeding goals to maximize intake, beef cows are fed with intentions of meeting a specific level of nutrient intake. Beef cows are typically fed to maintain body weight and condition. However, they could be fed at a quantity to allow for weight gain if cows are below recommended body condition or to lose weight if over conditioned. As opposed to the dairy cow, evaluation of the daily ration is most easily performed over a period of time by body weight or body condition.

Investing in the equipment to feed a total mixed ration and near perfectly meet the dairy cow's nutrient requirements makes good economic sense. Capital investment for the beef cow herd isn't quite as clear cut. Some feed mixer wagons are designed to cut and mix large hay bales into a total mixed ration. Precisely meeting the requirements of the beef cow will offer better performance and less feed loss. These factors certainly may allow for capital investment to be cost effective, particularly on larger cattle operations.

Feed costs are the highest production costs associated with raising beef cattle. Feed costs have risen drastically over the past few years. Prices associated with various feedstuffs have bounced up and down over this time frame. Finding cost savings in the feed budget can have greater impact than any other expense. Finding methods to more precisely meet the nutrient requirements of cows may have the greatest impact on feed costs and profitability.

We have tools and resources available to help producers with evaluation and development of rations. Contact me if you would like assistance.