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Will Cows Eat Corn Stalk Bales?

The corn fodder "debate" can go many different directions, in various settings. What's best agronomically? What is the benefit to livestock? Do economics work for both sides of the equation? Graze or bale or leave for the soil? The questions are many and probably no one answer is right for each situation. As a livestock guy who is not in love with iron, my preference is always to let the animal graze, process and distribute nutrients. You may choose not to graze fodder for any number of reasons; perhaps fields lack fencing or water, field proximity to the operation, or an established market for harvested forages or bedding. Baling corn stover is another option worth considering.

Cows will preferentially eat grain, husk, leaves and then stalk/cob. If bales are placed in a feeder or unrolled, the animals WILL sort and not utilize a significant portion of the stover bales - mostly stalks. Grinding or processing the bales will help with utilization, but reduce the nutrient quality of the stover. This generally means the ground stover will need to incorporated into a total mixed ration (TMR) or at the very least, protein supplementation is required to get the most effective utilization.

University of Nebraska round bale feeder research shows, 1300 lb cows ate about 15 lbs of dry matter (18 lbs as-fed), only meeting about half of the energy and one third of her protein requirement in mid pregnancy. The energy and protein requirements increase for cows in late pregnancy resulting in even more supplemental energy and protein needed if feeding corn residue in a round bale feeder.

Corn stover bales can replace a good percentage of good quality hay in a feed ration when supplemented with additional protein. If stover bales are fed free-choice anticipate feed refusal of less palatable components. UNL research indicates that 45 percent of the bale is wasted in sheeted, round bale feedrs. Bale feeders can be moved to allow cattle to access and utilize refused feed as bedding, which can be a win-win if bedding is needed in wet or snowy conditions. Plan for losses of material related to storage and feeding.

Work at the University of Minnesota illustrated that finishing steers in a feedlot operation can be fed a ration with up to 20 percent corn stover on a dry matter basis without significantly affecting performance. Ration balancing is critical when factoring stover into cattle diets. Proper energy, protein and minerals must be provided to meet cattle nutrient requirements and performance goals. Many ration balancing tools are available to producers and most Extension offices have someone on staff who can help with ration balancing.

What are other factors that need to be considered with corn stalk bale feeding? Economics is surely one that comes to the top of list. If a forage source is available the requires less or no protein supplementation, for less cost, use it! Failed corn crops due to drought may have high nitrates, so know what the crop conditions were like. Initial moisture of stover at harvest and storage conditions can influence dry matter retention and nutritional composition. If you are purchasing bales, ask about the conditions at the time of baling. Dry matter loss is one thing, molds and other toxins related to too much moisture are another. Aflatoxins in the grain, get attention in years of drought, hail damage and other environmental conditions. This could be a problem if the corn crop was damaged and has whole corn ears remaining, but generally is not considered to be a problem in residue alone.

There are many considerations to evaluate when utilizing baled corn residues, but in general this is a good forage source that can be a part of winter cow herd nutritional management. There is a wealth of University research publications that can help guide decisions. Some to consider are: North Dakota State's Utilizing Corn Residue in Beef Cattle Diets; University of Nebraska's Crop Watch; and Michigan State's Corn Stover Project to name a few.