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Harvesting Crop Residues

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As the amount of corn planted increases, the opportunity is great for extending the brood cow grazing season well into fall and perhaps winter with corn crop residue. While corn residues offer a considerable amount of digestible energy and fiber, it's always good to review the palatability and practicality of utilizing residues resulting from corn or soybean harvest as a significant feed source. This is especially true as one considers baling and hauling the residues to the cows.

Of the two, certainly soybean stubble bales must be viewed as a last resort unless you have a bale processor and feed it in limited quantities to "dilute" other high quality feeds in the ration. In fact, if the vision for utilizing soybean residue is simply placing bales of the "feed" in bale feeders, it's probably not worth the time, fuel, wear on the machinery, and effort it takes to gather it. While it can have 35-40% TDN and nearly 4% protein, this is less than wheat straw. Simply put, as soybeans increase in maturity they increase in lignin and lignin is not digested well in the rumen. Soybean stubble might make marginal bedding, but twigs gathered from the trees in your yard might make comparable feed.

Since corn residue can have 65% TDN and 6.5% protein it would have much more merit than soybean residue as a feed source and may be viewed as comparable to average grass hay. However, palatability of the stalks can be a problem. The husks and kernels of corn that fall during the process of harvest are the most palatable, and will be readily consumed IF they get to the bale ring. Corn residue lends itself nicely to grazing as being by far the best method of harvesting corn residue, whereas, baling will likely cause significant loss of the kernels.

When it comes to baling and transporting corn residues, consumption versus waste becomes a consideration worth pondering. The husk, leaf, and any kernels in the bales will likely make up less than one third of each bale, but will be readily consumed. If a bale processor is used, that might allow many of the stalks to be more palatable. However, if you're simply placing corn residue bales in bale rings, the abundance of corn stalks which will remain after the more desirable parts of the bale are consumed will likely become bedding. If you must feed baled corn residue in bale rings, consider simply pushing the chopper or spreader on the back of the combine forward and dropping the residue that comes through the thresher in a "windrow" and then bale only those windrows. The resulting bales will be a much higher percentage of the palatable portions of the corn residue.

As you consider baling and transporting baled corn residue to your cows, carefully consider the harvest and transportation costs involved on a "per consumable and digestible ton of dry matter" basis. Keep in mind that a bale of crop residue seldom weighs the same as the same size bale of hay. In many cases, simply feeding shelled corn may be more cost effective. Also, as you look at the economics of harvesting and hauling corn residues, consider the fertilizer nutrient value you will be removing from the corn field and possibly leaving in a pile at the bottom of your bale ring. By my calculations, it suggests there's roughly $12 worth of P and K in a ton of corn residues. Soybean residue would only be slightly less at perhaps $10/ton at today's fertilizer prices.

The bottom line is pretty simple . . . managed grazing is by far the best way to utilize corn residue, and soybean stubble probably isn't worth the effort or expense it takes to harvest or transport it.