

News Column

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GRAZING CROP RESIDUE

When our house was brand new I fenced the front yard so the sheep could graze it and I wouldn't have to mow. The only thing my wife asked was if I could put a panel across the front steps to keep the sheep off the porch.

New house. Happy wife. Sheep in the front yard where I could admire them every morning,... and I hadn't seen a property tax bill yet. Life was good!

The sheep are back in the front yard again this month. Sort of. The corn stalks and soybean stubble near the house – but across the driveway – are fenced with a hot wire. I can look out the dining room window each morning and watch our sheep happily grazing in the corn stubble, searching for corn that escaped the combine.

One of my farmer friends mentioned last week that he was concerned about having too much corn residue to plant through next spring, and he was thinking about discing his corn fields. I scoffed at the idea, telling him I was sure his planter could handle it, and his neighbors were making it work without tillage.

Having always been more of a livestock guy than a crops guy, I asked why he didn't just rent his stalks to a cattleman and let the cows remove some of the residue. I assured him that the research shows no compaction issues if cattle are removed by early February.

Compaction wasn't his concern though. We agreed that cattle weren't going to compact the ground this fall unless it rained. For now, the soil is too hard and dry to compact.

Instead, his concern was the nutrients the cattle would remove. Wouldn't they be taking nitrogen and phosphorus off the field when they consumed the corn stover?

Yes. Cows will remove a small amount of nitrogen that could have eventually cycled back to be available for plant growth. However, the number is way smaller than you might guess. Two pounds.

That's right. Two pounds.

I didn't do the math myself to arrive at the two pound per acre nitrogen removal number,...and I won't attempt to explain it in detail. However, an important part of the equation is that a dry cow is basically at equilibrium – not growing and gaining weight – and would excrete most of the nutrients consumed right back on the field.

A pregnant cow would retain more of the nutrients she consumes, to feed the calf growing inside, and that's where most of the two pounds of N per acre goes, to the growing fetus.

Essentially, no calcium, phosphorus, or potassium is removed by cows grazing corn stalks. Cows are usually given a mineral supplement, resulting in a slight net gain of calcium and phosphorus to the soil.

The bottom line here is that if you are grazing, and not baling the stalks and feeding them somewhere else, then the majority of nutrients consumed by cows are deposited back on the field.

Grazing corn or milo stalks won't lead to a bigger fertilizer bill next spring.

If you have questions, you can reach me at the Riley County Extension Office at 785/537-6350. Or, you can send e-mail to gmclure@ksu.edu.

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