

Week of October 24th – 28th 2016

POST ROCK EXTENSION ANSWERS

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K-State Research and Extension

We are blessed in this area to be well diversified with some of the best grazing country around and highly productive farm ground. A great portion of this farm ground is planted to corn and grain sorghum yearly. When the grass dries up, crop residues are an excellent option for a feed source. With the high grain prices in the past years, we saw pasture ground being converted to farm ground to generate more revenue off of the land. Now, grain prices have taken a drastic turn for the worse, creating difficulty in generating a profit off of farm ground. Grazing crop residues is an excellent way to capture extra revenue off of farm land.

What is nutritive value of crop residues?

While some have concerns from the agronomic side about grazing crop residues, there are many great benefits to consider. As long as cattle have grain and leaves to select from, corn and grain sorghum residue is comparable in nutritional value to grass hay {52-56 TDN (*Total Digestible Nutrients*) and around 7 percent crude protein}. Excess grain is usually the first to be consumed in fields followed by the leaf for milo fields, and the leaf and husk for corn fields. The stalk is lowest in protein and palatability leaving good reason for cattle to be removed before they are forced to eat the stalk. It is important to note that as the residues deteriorate over time, so does the nutritional value, thus supplementation may be needed through the winter months. Once the grain has been utilized by the cows, proper protein supplementation should be provided. The leaves and husks, on average, provide about 5.5 percent crude protein which is deficient for a mid to late gestation cow. Be sure to provide mineral supplementation as well.

What should I be aware of when grazing crop residues?

Along with the benefits of grazing crop residues, comes some risk that producers should be aware of. I have been on my nitrate and prussic acid pedestal for the past month but, here it is again. Nitrates can develop and accumulate in corn and sorghum during, or after periods of stress. Prussic acid can develop in sorghum plants, but will usually disappear around ten days after the first hard freeze. Nitrates develop in the lower portions of the stalk, compared to prussic acid which develops in the leaves of the plant. If you suspect either of these to be present in your field I recommend sending in a sample of each to be tested. Nitrate and prussic acid tests each cost eleven dollars. We are able to assist you with both of those tests at the extension office. I once had a teacher that said, “If I say something more than once, it must be important”.

Another concern for grazing residues is too much grain left in the field for grazing. Because of the hard outer coat, the grain in a sorghum stubble field is not well digested by cattle, yet when there are large amounts of grain available, founder can occur. One grain sorghum head has about 0.12 lbs of grain, and

about 466 sorghum heads would equal 1 bushel of sorghum (1 bushel = 56 pounds). Caution should be taken when fields approach 10 bushels left in the field to avoid founder. Too much intake of corn in a short period of time can cause acidosis. Caution should be taken when excess of 8-12 bushels per acre of corn, is left in the field.

Crop residues are a cost effective way, to maintain and or improve the body condition of your cowherd before calving season. Harvested feed represents the largest cost associated with a cowherd. Whenever the grazing season can be extended, you should experience cost savings. Even though there can be some intensive labor involved, with fencing, hauling water, and transporting the cattle, the nutritional benefits and cost savings make the hard work worth it.

Post Rock Extension District of K-State Research and Extension serves Jewell, Lincoln, Osborne, Smith, and Mitchell counties. Neil may be contacted at ncates@ksu.edu or by calling Beloit 738-3597, Lincoln 524-4432, Mankato 378-3174, Osborne 346-2521, Smith Center 282-6823. Visit our website at www.postrock.ksu.edu and follow our blog at: postrockextension.blogspot.com. Also follow us on Facebook at: Post Rock Extension