

Post Rock Extension District Column

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Tips and guidelines for using crop residue for your cowherd!

Kansas has an abundance of crop residue available for grazing in late fall and winter. However, the location of fields in relation to cattle, the lack of shelter or appropriate fencing, and water availability often prevent grazing of many fields. Despite these limitations, crop residue grazing has become an integral part of many cattle operations, primarily as a feed resource for maintaining the breeding herd during winter or putting weight on cull cows.

Weather can be the most important factor in successfully grazing crop residue. Snow cover can reduce or eliminate access to crop residue. Mud may make grazing difficult and may result in decreased performance and greater waste of forage due to trampling. Corn stalk fields grazed shortly after harvest are higher in nutrient content than fields grazed 60 days after harvest. This indicates that there is some weathering loss of nutrients. The greatest nutrient loss appears in the husk and leaf and the loss is primarily a loss in energy content.

Cows grazing corn stalks will consume 25 to 30 percent of the available residue in 30 to 100 days, depending on stocking rate. This can leave enough material to prevent soil erosion. Cattle will select and eat the grain first, followed by the husk and leaf, and finally the cob and stalk. Also, as the stocking rate (number of cows per acre) is increased, the nutrient content of the remaining residue declines much quicker because the grain and husk are being removed at a much faster rate.

Salt, phosphorus, calcium, and vitamin A supplements are recommended for all cattle grazing dormant winter range and crop residues. These supplements can be supplied free-choice to the cattle.

As long as cattle have grain to select in a cornstalk field, **they will consume a diet that is probably above 7 percent crude protein and as high as 70 percent TDN.** This will exceed the protein and energy needs of an 1100-pound cow in mid-gestation. Spring calving cows are at mid-to-late gestation during fall and early winter; therefore, their nutrient requirements match well with a crop residue grazing program.

Lactating cows, such as fall calving cows grazing crop residue, need to be managed carefully. As long as lactating cows have grain to select in the field, their energy needs should be met. If the breed type has a high milk potential, protein supplementation is necessary even if the cattle have grain to eat.

The question that always arises, is the concern with compaction as a management component. Grazing livestock can cause soil compaction, **but generally the compaction is shallow and temporary**. Soil moisture and soil type are the two main factors which affect the severity of the compaction. Moist soils with significant clay content are most prone to compaction and are often referred to as “tight” soils. Completely saturated soils or dry soils do not compact. The winter freeze/thaw and spring tillage will eliminate most compaction created by livestock.

On average, the energy and protein in the leaves of **milo stubble** appear adequate for cows in mid-to-late gestation, but not for heifers in late gestation. Monitor body condition of mature, gestating cows grazing milo stubble. **If they appear to be losing condition, supplement protein.** Because of the milo grain’s hard outer coat, it is not utilized as well as corn grain by the cow, but cows can still experience acidosis (founder in milo fields that have excess milo heads left in the field after harvest).

K-State Research and Extension has an excellent (free of charge) resource, “KSU Forage Notebook” available. This is an extensive resource for managing a wide variety of forages with topics such as grasses/legumes, management guidelines, summer annual forages along with musk thistle control and grazing corn residue, just to name a few. This is available online or at any of our Post Rock Extension District Offices.

If you have further questions on grazing crop residue, contact Sandra at any Post Rock Extension District Office in Beloit, Lincoln, Mankato, Osborne or Smith Center.

Post Rock Extension District of K-State Research and Extension serves Jewell, Lincoln, Mitchell, Osborne, and Smith counties. Sandra may be contacted at swick@ksu.edu or by calling Smith Center, 282-6823, Beloit 738-3597, Lincoln 524-4432, Mankato 378-3174, or Osborne 346-2521. Join us on Facebook at “Post Rock Extension” along with our blog site at postrockextension.blogspot.com. Also remember our website is www.postrock.ksu.edu and my twitter account is @PRDcrops.