

# Beef Tales

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This beef newsletter is made possible through a contribution to OSU Extension from the Butler County Cattlemen's Association. If you are a member, thank you. If you are not a member, you would benefit from joining. Contact Jim Booker at 513-738-1147.



## Greetings from OSU Extension, Butler County!

The Butler County Cattlemen's Association has planned a meeting you will not want to miss. The enclosed flyer gives you all the details.

We will need your reservation by November 8th. So we can purchase enough refreshments.



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### Using Corn Residue—Used from OSU Extension Beef Team Letter. Article by Stan Smith.

While corn stover has much more merit than soybean residue as a feed source and may be viewed as comparable to average grass hay, 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. This lends itself very nicely to grazing as by far the best method of harvesting corn residue, whereas, baling residue will like cause loss of the kernels.

There is enough feed remaining on corn fields after harvest to significantly increase the grazing days for ruminant livestock. The use of corn residue offers producers increased flexibility for fall and winter pasture and helps reduce the overall feed costs.

Ideally corn fields should be used immediately after harvest for 30-60 days to take maximum advantage of the feed value of the residue. Grazing corn fields for an extended period, even all winter, is also an option if supplemental feed is provided and the fields remain dry.

Livestock will selectively graze the most palatable portions of the residue first, starting with the grain, leaves, and husks and then the cobs and stalks. Generally, animal grazing will leave 75-80% of total residue in the field, especially if animals are rotated to new areas before much of the cob and stalk material is consumed. With this in mind, one acre of corn residue will yield approximately 60 animal unit grazing days. This means that one acre of corn residue will provide 60 days of grazing for a 1,000 pound animal, or 30 days for two animals.





## Beef Tales

### *Using Corn Residue, Continued*

**Grazing corn residue can be an important part of many livestock operations. One acre of corn residue can supply enough forage to sustain a 1,000-pound cow or animal equivalent for 1.5 to 2 months.**

Limiting access by strip grazing will allow for an increased stocking rate and greater utilization of the residue. This can be accomplished by using portable electric fencing. Either a single break wire to the front, or double wires, with one in front and one to follow, can be used effectively, depending on the layout of the field and water sources. However, if strip grazing practices are used, and snow cover arrives before the field is grazed through, some of the best feed may be lost if the grain

and husks cannot be recovered.

The easiest fit for grazing crop residue is with non-lactating, mature beef cows or ewes that are in the middle trimester of gestation and are in desirable body condition. Animals that have grain to select will consume a diet that is probably above 7% crude protein and as high as 70% Total Digestible Nutrients (TDN).

If corn is visible in the manure, supplementation with anything other than vitamins and miner-

als is probably not needed. However, when most of the grain has been consumed, or little grain was left in the field, protein supplementation will probably be needed. Several studies have shown that dry cows will at least maintain body weight and may gain up to 1.0 pound per head daily while grazing corn stalks that have grain, husk, and leaves to select.

### **Drought Stressed Pastures—Used from OSU Extension Beef Team Letter. Article by Jeff McCutcheon.**

Fall is a critical time for cool season perennial forages. In the cooler temperatures, leaf growth is slower while photosynthesis does not slow down. This increases the reserve carbohydrates in the plant. Cool season forages in the fall store reserve carbohydrates and use them to develop new tillers and roots. Carbohydrate storage, new tiller and root development can only happen if there is enough leaf area for photosynthesis. These three things are accomplished with little additional leaf growth. Making management decisions that negatively impact this development will hurt survival over winter and growth next year.

The first thing is keep from overgrazing. Overgrazing occurs when you keep animals in a field too long, or bring the animals back before the forages have recovered.

Overgrazing can be avoided by paying attention to forage residual, grazing time and rest. You should leave at least 1200-1500 lbs. of DM per acre or 2-3" of green forage when you pull animals from a field. You should remove the animals before the forage starts to re-grow. The pasture should recover to above 2400 lbs. of DM per acre or 6-8" before turning the animals into a field.

How can we avoid over grazing when we are running out of a limited supply of hay? One option is grazing corn residue as suggested earlier in this newsletter. Corn harvest has started and the residue that is left in the field is not a bad feed for about 60 day after harvest.

## ***Drought Stressed Pasture, Continued***

Another option is limit feeding corn. If you have to buy feed this is the least expensive option. Check out the next article from Steve Loerch.



We can help our pastures by fertilizing. Fall is an excel-

lent time to apply fertilizer to

winter. Proper soil pH and adequate soil nutrients will enhance forage competitiveness. Take a soil test and follow the recommendations.



Nitrogen can be applied in fall. Late fall applications of nitrogen, from October through November, will increase grass tillering,

root growth, and energy storage. This will help with spring green-up and improve competition against weeds. Apply after grass growth has slowed, but before the plant has gone dormant.

## **Corn As an Alternative to Hay—Used from OSU Extension Beef Letter. Article by Steven Loerch.**

Corn grain is the least expensive harvested feed per unit of digestible energy available to producers in Ohio. The most common feed used for wintering cows is hay. This is despite the fact that hay cost 50 to 100% more than corn, per unit of energy. Corn priced at \$3.00 per bushel is worth \$107 per ton. Because hay has only about half the energy value as corn grain, the breakeven price for hay on an energy basis would be approximately \$54 per ton. To add needed supplement to the corn brings the breakeven price to \$62 per ton. In many situations it is economically advantageous to use corn rather than hay to meet the energy requirements of cows.

If corn is used to provide most of the energy, then intake has to be restricted so the animals don't get fat. We have developed a limit-fed, corn-based nutrition program which has been tested with sheep and cattle. The procedures we used to meet the nutrient needs of gestating and lactating cows is outlined below. Some forage has to be fed to maintain a healthy rumen.

1. Feed 5 pounds first cutting hay, supplement and 12 pounds whole shelled corn (per cow basis). The protein and mineral supplement should be similar to that used for feedlot cattle fed a high-grain diet. An example is give below.
2. Feed corn whole. Ohio State research shows that whole corn works better than ground corn when daily hay intake is limited to less than 5 pounds.
3. Adjust corn intake to achieve desired weight and/or body condition score. Cows will need about 1% of their body weight during cold winter months and as they enter lactation.
4. When starting the program, take 7-10 days adjusting the corn and decreasing the hay to the 5 pound level. Make sure bunk space is adequate so all cows get their share and that cows are in securely fenced area.



“CORN IS THE LEASET EXPENSIVE HARVESTED FEED PER UNIT OF DIGESTIBLE ENERGY AVAILABLE TO PRODUCERS IN OHIO.”



5. Example supplement (feed at 2 pound per cow per day).

	%
Ground Corn	32.1
Soybean Meal	45.6
Urea	4.1
Limestone	7.8
Dicalcium phosphate	4.3
Trace mineral salt	3.2
Dyna K	2.3
Selenium premix (200 ppm)	.4
Vitamin premix (Vit A, 15,000 IU/gram; Vitamin D, 1,500 IU/gram)	.2
Rumensin 80 (192 mg Rumensin/hd/d)	.12



NOTE: This supplement contains the following nutrients: Crude protein, 36%; Calcium, 3.76%; Phosphorus, 1.00%. If using commercial supplement, feed according to bag instructions.

6. Example Start up:

- Day 1 and 2 Feed 4 lbs. whole shelled corn + 1 lb. supplement + 12 lbs. hay
- Day 3 and 4 Feed 6 lbs. corn + 1 lb. supplement + 8 lbs. hay
- Day 5 and 6 Feed 8 lbs corn + 1 lb. supplement + 5 lbs. hay
- Day 7 and 8 Feed 10 lbs. corn + 1 lb. supplement + 5 lbs. hay
- After day 8 Feed 12 lbs. corn + 1 lb. supplement + 5 lbs. hay; adjust corn based on cow condition (cold weather; pre- and post-calving). Adjust up or down 2 lbs. if cows are getting too thin or too fat.

Supplement should be 30-40% protein (protein source doesn't matter; NPN is ok), 4-5% Calcium, and should contain Rumensin or Bovatec. Hay quality is not important; straw, stalks, or poor quality first cutting hay is fine.

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**Growing crops, children, families and communities through education**

**Vision**

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