Grazing Bites

November 2022

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Whether we like it or not, weather has a significant impact on forages and forage-based systems and most life. I won't revisit this year's weather, except to just say that rainfall does quite often balance itself out. That doesn't mean it would be the way we prefer it, but wet spells are usually eventually balanced out with dry spells and that is what happened in my neck of the woods this year. While the extremely dry autumn created one of the most perfect harvesting seasons we've seen in a while, it wasn't as perfect for fall forage growth.

Grazing stalks allows needed deferment of pastures and is decent feed.

Dry weather kind of has a way of sneaking up on you. I was enjoying the ability to get some things done without interruptions of rain and realized at one point – hey, it's getting pretty dry! October is normally still a decent forage growth month though the rate is certainly slower. When it is exceptionally dry new growth pretty much comes to a screeching halt and that is what happened this fall.

I saw the forage growth slowing down, but with ample green forage still present I assumed incorrectly that there was still some growth. The last few allocations of forage were not bouncing back and instead seemed to be standing still. Continuing to graze could possibly mean two things – the last grazing of the year and reduced spring growth.

Droughty weather in the fall can put forages into a dormant state. This is very similar to the dormant state that we want post several nights of very cold weather indicating the true end of the growing season. Once dormant, livestock can graze stockpiled forage without the concern of tapping into plant root energy reserves that will be needed for overwintering and spring growth. Dormancy cause by drought is not as clear cut as the freezing dormancy, though, and can be easily interrupted with the return of sufficient moisture.

I've mentioned in the past that it wasn't a crime to feed some hay in August to prevent overgrazing of pastures until rains returned. That same scenario can also work in the fall. Let's think about this for a moment.

You could continue to graze drought induced dormant forage, but if sufficient moisture is present and regrowth does occur, then that regrowth should be left alone until the "freezing" dormancy is complete before grazing it again. If not, there is the risk of tapping into root energy reserves that need to be left in that bank account.

You could also remove the livestock from the pasture and feed hay and wait for the freezing dormancy before initiating grazing again. You could also possibly feed hay on pasture to supplement existing forage, but the hay will have to be better than existing forage to get them to slow down the grazing and avoid overgrazing. The main advantage of feeding in the field is the ability to put nutrients back where they can be utilized next season instead of where they will have to be hauled. I chose, at least for the time being, to feed hay in the dry lot.

The stockpiled forage isn't going anywhere and is just "standing hay." The cows are content and will be delighted to return to graze in a short while with possibly a little more growth available with some rain.

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That said – if you have any annuals or corn residue that can be grazed, that also allows for the same deferment of the pastures until later. Every day the livestock are out ingesting some corn residue, they are not grazing forages that could be used later after corn residue has lost its merit.

Corn residues normally are best utilized within 60 days of harvest and also allocated out in portions to reduce waste. In general, corn stalks have a crude protein value of about 8 percent and a total digestible nutrient value of about 70 percent. The nutritional value falls over time to about 5 percent crude protein and to about 40 percent digestibility. This reduction can be two-fold. First, if livestock are not managed in such a way to allocate the residue out over time, they will eat their dessert first which is the most palatable, and leave the broccoli for later. Second, nutrient content decreases over time as the residue weathers and soluble nutrients leach out. Stalks are best utilized for spring calving cows due to lack of sufficient energy for lactating or growing animals, especially over time, unless winter annuals or brassicas have been added.

As a rough estimant, corn stalks should be stocked at the rate of 1,000 pounds live weight per acre per 30 days. Though it can vary a lot, most corn produces about 56 pounds of residue per bushel. So, a 200 bushel corn crop should yield about 11,000 pounds of residue. Of that residue, about 40 percent is leaf and husk, the part that is most readily consumed. So in this example, there are about 4,400 pounds of desirable grazable fodder available or about 75 animal unit days at 50 percent harvest efficiency; and yes, they are going to waste some. One animal unit, which is 1,000 pound live weight, will consume about 3 percent of their weight in dry matter per day or roughly 30 pounds of fodder. You can do your own math from there using your livestock numbers and acres that can be grazed. Certainly, if annuals are also part of the picture, then there is even more available.

Crop residue should be tested for nitrates if there was crop failure or chance that applied nitrogen was not normally utilized. Livestock water should also be readily availble and ideally moved with the livestock to new allocations of stalks.

If by chance there is very much johnsongrass present in the corn field, be aware that johnsongrass produces a cyanide compound when frosted and during droughty periods causing the production of the prussic acid. This forage should be brown dry after freezing before grazing. Regrowth from the base of the plant after a frost can also be very high in prussic acid. If in doubt about nitrates or prussic acid, test before grazing!

Lastly, it is important to know how much forage, stockpiled forage, stalks, hay and other feed stuff is available for this winter. Weigh this against what is going to be needed for all the ruminant livestock on the farm. Do you have enough feed items until spring? Remember, on average, most ruminant livestock will utilize at least 3 percent of their body weight in dry matter per day (1,000 pound cow = 30 pounds of dry hay, not adjusted for moisture).

If you are short on forages and stored feed for this winter then now is the time to think about animal numbers. Do you have some that could or need to be culled? The quicker those animals leave the farm the better. There is a good price upswing possible that might justify finding extra hay if that is the game you want to play. Remember, it's not about maximizing a grazing event, but maximizing a grazing season! Keep on grazing!

Reminders & Opportunities

More pasture information and past issues of Grazing Bites are available at https://www.nrcs.usda.gov/wps/portal/nrcs/in/technical/landuse/pasture/

Heart of America Grazing Conference – February 20-21, 2023 – Ferdinand, IN

Southern Indiana Grazing Conference – March 29, 2023 – Site and agenda pending.

Please send comments or questions to grazingbites@gmail.com.

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