

Grazing Bites

October 2020

Victor Shelton, NRCS State Agronomist/Grazing Specialist

I've not been on the road as much lately and it's been nice to watch minute, daily changes in things as the days shorten and the nights become cooler. A few spiny pigweeds in the barn lot were one of the first things to catch my eye. They first quit growing, then with each additional cool night you could see a darkening of the leaves and more maroon showing. They don't like the cooler weather; I don't like the lack of sufficient moisture.



What four inches of good residual should look like.

It is late September as I write this, and so far this month I've had a total of two-fifths of an inch of rain up until today. Some oats and turnips I planted over three weeks ago have barely broke ground. They won't provide much grazing at this rate. Sadly, there are areas of Indiana that are in even worse shape moisture wise, especially parts of the northeast. That area has suffered from lack of sufficient rainfall most of the summer and those areas with gravelly outwash subsoils and sandy loam topsoil have suffered the worst.

If you have been diligent about maintaining cover and not overgrazing this summer — at least for most of the state where there has been a little better moisture — then at least you are doing everything you possibly can do to conserve moisture. I grazed a couple fields just a bit closer than I should have in advance of this dry late summer/early fall period. It was supposed to rain! It didn't. Fields with closer to six inches of residual left behind bounced back better.

It would probably be dangerous if we could predict the weather far enough in advance to make a better impact on pastures, but we can be more proactive and remain in somewhat of a contingency plan mode. I have to remind myself that the next drought period could be only two weeks away and to keep a game plan in check to help reduce the negative impact if it occurs. There are limits though.

What could have you done differently? Sometimes nothing, but for future ruminations here are a few options. Maintain soil cover. You don't want to see any bare ground and you want a good dense stand of forage and residue to keep the soil cool and reduce evaporation. Maintain good stop grazing heights, you know, the live leaf and stem material that is left behind after a grazing event. That is the shortest amount left, not the tallest. For most cool-season forages, that is four inches so to have the shortest be four inches, there will be at least one third of the forages of at least six inches or more.

Let's think a bit more about that last statement. That stop grazing height is a good average guide to stick to, but there are always exceptions to the rules. On rare occasions, especially under ideal moisture conditions and with lots of forage present, you can occasionally remove slightly more forage, but it's generally best not to. Removal of too much leaf area will slow photosynthesis and regrowth, but if only done on rare occasion on only single paddocks or small parts of a pasture, it won't be too detrimental. If there is a lot of growth present, removal can be misleading due to a fair amount of forage being laid down rather than consumed. If that happens, it may not be consumed by the grazing livestock, but some of it will be consumed by the microflora of the soil livestock and that is never a bad thing they need fed too.

When we are in a timeframe of decreasing moisture and especially if growth is slowing down, then we need to adjust that stop grazing height, leaving slightly more behind and not grazing as close. Moving livestock after

Natural Resources Conservation Service ~ Helping People Help the Land
USDA is an equal opportunity provider, employer and lender.

Issue 153

removal of just the top one third of available forage is probably ideal under these conditions instead of the traditional mindset of graze half and leave half. You want to leave slightly more behind for the same reasons we started discussing earlier and if you do so, you will normally keep forages growing a lot longer and be rewarded with a little more production.

You may not have been short on forages at any point and time or at least it didn't appear that way, but I like to go back and consider animal bite size. To start with, how does a cow eat? If she can, she will take her tongue and reach out with it and wrap it around a nice mouthful of forage tearing it off in the process and pulling it into her mouth. To adequately get a full bite, forages need to be at least six inches tall, eight to ten inches or more is better. When forages become less than six inches, the swath of forage becomes increasingly more challenging to tongue harvest and cows turn into horses and bite off forages rather than graze as they prefer. It is estimated that shifting from tongue harvest to biting harvest can reduce forage intake per bite by two-thirds.

You would think that if they had to take more bites to meet their requirements, they would do so, but that quite often doesn't happen. Ruminant livestock spend only about one-third of their day grazing, then approximately one-third of the day ruminating and the rest just resting. Sounds like a heck of a life if the buffet isn't limited!

Smaller ruminants are less impacted by bite size, mainly due to their ability to be more selective in their grazing and/or browsing, but shorter forages for them impact forage diversity and can also certainly impact parasite loads to a degree. Grazing/browsing taller forages is preferred and better.

Well, like normal I ran down an unexpected rabbit trail; where was I? Oh, could you have done anything different this year to boost fall grazing? Though not conventional by any means and also hard to swallow and do, there are sometimes timeframes, especially during droughty periods, when forage growth has slowed down so much that it is no longer keeping up with livestock needs. If you continue to allow it to be grazed, photosynthesis is usually hampered even more, root growth doing the same, energy stores reduced, and the potential for regrowth quite often severely sabotaged. This was very evident after the drought of 2012. But, where forages were not overgrazed or taken below the stop grazing heights and let to sit dormant until rains replenished needed moisture, they rebounded with compensatory growth!

How do you accomplish that? You shut the gates and feed hay. Like I said, easier said than done, but it sure can have a lot of benefits. That said, animal numbers always need to be assessed along with stored feed on hand with a sharp pencil looking at what is going to be needed ahead. The earlier in the late summer or early fall that this is done the better because the later it gets the shorter the days get, and it all impacts potential forage regrowth yield and even quality. I'm thankful for the little rain that I'm getting as I finish this on the last days of September, but the rain would have been so much more beneficial two or three weeks earlier.

Be slow to graze these fields even after they start to rebound; they are already weakened from the conditions so it will be important to try and wait until they are dormant to graze them if possible or risk slower spring growth, reduced yields and potentially increased weed pressure next season. So, if you have corn stalks, hay aftermath or annuals that can be grazed, that may provide you more opportunity to defer those fields longer, and with a little rain possibly grow even more stockpile or feed hay now and graze later after the dust settles.

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/>