

Grazing Bites

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I took the time to walk through most of my pastures a few days ago. I recommend doing this fairly often to keep a mental forage inventory. It is best to record the findings. Some use fancy electronic data sheets, some track on paper charts, some just have notes in their pocket datebook or smart phone. I use a combination. I like the paper charts for long term planning, but for a quick assessment, I like a white board.

I have a white board, you know, one of those new-fangled chalk boards that you use erasable markers on. I took 1/8-inch black tape and used it to outline the boundaries of all the fields. If I get present yield estimates taken, I put those numbers on the board with the date collected. But I use the board more for tracking grazing patterns and, more importantly, rest.

Animal groups are color coordinated and enter and exit dates are marked on the board. If animals are strip grazed across the field, then an arrow is included to show the move. I can now look at the board and quickly see how long it has been since the field was last grazed and/or how many days it has been rested.

Rest is very important; really important! If a pasture is continuously grazed, how much rest does the pasture get? None if the animals are never removed. If you divide the pasture up into four permanent paddocks and rotate through them, seventy-five percent of the paddocks are at least getting some rest. Is it ideal, no, but it is still better than no rest. If we increase the number of paddocks to say, twelve and rotate through them, then ninety-four percent of the paddocks are getting some rest while the six-percent portion is being grazed.

How much rest is really needed or ideal? Early in the growing season when forages are growing fast, it can be pretty short, but normally never less than 14 days. As forage growth starts to slow down a little, then rest should be at least 30 days. When summer heat and drier conditions kick in, cool season grasses then benefit from longer rests, quite often 45 and up to 60 days. To keep it simple, just remember when forages are growing fast, move animals fast (no running, a gentle walk from pasture to pasture is sufficient), and when forages are growing slower, move animals slower.

After grazing is initiated in the spring, I generally recommend continuing to graze around the system until the first paddock is ready to graze again. You can then move back to that paddock and start over. The paddocks that you skip can then be stockpiled for summer grazing or cut for hay. If forage growth starts slowing down quicker than expected, say from lack of rain, then you can always jump back to the paddocks you skipped. If you plan ahead, especially if you have been tracking moves for a few years, you can estimate what field(s) you may want to skip this year in the first rotation. If you have fields that could benefit from longer rests due to being used hard the previous year or overwinter, or one(s) that could benefit from some extra carbon, then this is a chance to provide some extra rest and recovery.

I've said this before, but I'll say it again. It is best to not start the grazing season in the same field every year. Those first fields often get grazed before ideal conditions. This short time abuse, done year after year, can increase problem weeds and reduce diversity of forages, especially desired forages.



More residual left and more rest; more roots, more production and animal performance.

Forages can't rest while being bitten off by ruminants. They only rest when they are allowed to regrow in peace! I often talk about stop grazing heights. It takes grass to grow grass! We need to move the animals to maintain an effective solar panel. Only green, growing leaves carry out photosynthesis! Most tall cool season forages, such as orchardgrass and tall fescue, need at least four inches of live leaf matter left for collecting solar energy for rebuilding roots, reserves, and then regrowth.

The grazing or harvest event of forage removal has a direct correlating effect on root growth. Research shows that we can remove up to fifty percent of the forage plant with little or no impact on root growth. If we removed more than that fifty percent, then root growth is drastically slowed down. Once we remove seventy percent or more of the plant, which is approaching hay removal levels, root growth comes to a screeching halt. It will now take a longer rest period. There is approximately equivalent live growth above and below ground. When we remove plant leaf matter, roots respond similarly because they are supported by those leaves. Therefore, there is dieback of roots when not enough leaf matter is left for maintenance.



The old adage, or rule of thumb, of “take half and leave half” is actually not a bad rule as long as the starting point is enough! More importantly, when we allow animals to graze too close, we slow down regrowth, require longer recovery, and reduce year around production. For the highest production, most tall cool season forages do the best when grazing is initiated at eight to twelve inches and ended at four to six inches as the stop grazing height. Stop grazing height, or residual height, is not the tallest forage left behind after a grazing event, but the shortest! The shortest forages should be at least four inches tall. Animal intake is also influenced by the amount of desirable forage present, especially height. Intake can be reduced when a full bite is not possible.

Longer rests periods and more live residual left behind mean more roots. More roots support quicker regrowth of grazable material and increase drought tolerance. The more growth there is above ground means there are more live roots below ground. As longer, deeper roots move downward through the soil profile, they bring moisture and nutrients upward. Shallow root systems have no drought tolerance. It certainly doesn't appear right now like the lack of moisture could possibly be a problem, but we are always only about sixty days from a drought. Drought management should always be a part of our contingency plan.

Forages need rest. Rest influences forage yield, persistence and, therefore, animal performance. No or little rest results in lower forage yields and poor persistence of desirable species due to depleted root reserves and roots. On average, most forages benefit from at least thirty days of rest between grazing events. How productive would you be if you worked 24/7 with no rest?

Enjoy the new grazing season and keep on grazing!

Reminders & Opportunities

- **Using Native Warm-Season Grasses in a Grazing System** – Agency In-Service Day – **June 20th, 2019**. Producer/Landowner Day - **June 21st, 2019**, Southern Indiana Purdue Ag Center. No registration fee, but registration required by June 7th. RSVP to jhodge34@utk.edu.
- **Grazing 102** – June 21-22, 2019, Southern Indiana Purdue Ag Center. Grazing 102 is a program designed to help producers understand important concepts needed to make a management-intensive grazing program work for their own operation. Contact Jason Tower at towerj@purdue.edu or 812-678-4427.
- More pasture information and past issues of Grazing Bites are available at <https://www.nrcs.usda.gov/wps/portal/nrcs/in/technical/landuse/pasture/>