

Grazing Bites

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You will probably note, as you walk or drive your ATV around your fields, that there may be differences in growth. The reasons for those differences can vary but include irregularities in fertility, last autumn's stop grazing heights, soils, compaction, rest after grazing and the forages themselves.

Back in February, I talked about how fall management influences spring forage growth. Pastures that are continuously grazed throughout the winter, and especially those grazed continuously from the end of the last fall growth prior to going dormant, usually have compromised energy reserves. If kept grazed close with no deferment or rest, they will also have reduced root mass. This automatically reduces energy storage space and later resilience to droughty conditions. Short roots have little reserve.



Forages are really starting to grow; fall management does impact growth but not much on this plot with four inches of residual.

I planned on placing some forage cages out prior to any spring growth, but only achieved getting them flagged. I measured the residual at that time and planned on looking at yield differences this spring at some point to assess the impact that residual post grazing forage heights had on yield. The differences in forage residual in this case has more to do with what I would call zone grazing. Zone grazing occurs when one end of the pasture is grazed heavier than the other. It is common with pastures with longer walking distances to shade, mineral or water, or a combination. The pasture, or rather forage, closest to the desired facility is almost always shorter than the part that is the farthest away and more frequently grazed.

It grants an opportunity to evaluate the impact of overwintering residual height on spring growth and yield. I will eventually dig, observe and note root presence on each site and any other noteworthy features. For now, I have only measured and estimated the dry matter present but will assess more later. Please note, for the most part, the plots are similar cool-season forages, managed the same way, and in the same field with only location influencing residual grazing heights.

Three areas were marked with end of the grazing period residuals of: one inch, two and a half inches, and four inches. The dry matter per acre inch ranged from 220 to 264 pounds. Recent measurements have compressed average forage heights of five and a half inches, nine inches and 15 inches. I use compressed heights for ungrazed forages for assessing average over all height and that number also corresponds well with average dry matter per acre inch estimates. The compressed average height is easily obtained by just laying a light clipboard on the forage and measuring from it to the ground. On average, and I say this somewhat tongue in cheek, most cool season grass stands that are not thin are about 250 pounds per acre inch. Using that figure, if you have eight inches of condensed cool season forage, then you could estimate that you have about 2,000 pounds of dry matter present. Denser, heavier stands certainly could have 300 or more pounds of dry matter per acre inch. The only way to really know is to clip, dry, and weigh.

Back to the marked areas. The regrowth dry matter per acre inch ranged from 245 to 255 pounds per acre inch. Dry matter totals per location were as follows: original, overgrazed one inch plot yielded 1,348 pounds of dry matter on the April 27; moderately, overgrazed two and a half inch residual plot yielded 2,295 pounds of dry matter; and the four inch residual plot regrowth yielded 3,675 pounds dry matter per acre. The two and a half inch residual plot yielded 170% over the one inch. The four-inch residual plot yielded 273% over the one inch.

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After also noting the dominant forage species that were in each plot, this has probably been an issue for more than one season.

Residual	1/29/2021			4/27/2021			Increase over 1"
	Ave Height	Total DM	DM/Ac/in	Ave Height	Total DM	DM/Ac/in	
1 inch	1	220	220	5.5	1348	245	
2.5 inches	2.5	600	240	9	2295	255	170%
4 inches	4	1055	264	15	3675	245	273%

The shortest plot was dominated

by bluegrass, naturalized white clover and a little tall fescue. The middle-sized residual plot was dominated by red clover, tall fescue, and some bluegrass and forbs. The plot in the middle of the field was dominated by orchardgrass, tall fescue, and red and ladino clover. The shortest plot is closest to the main watering facility. The species that were the most tolerant to closer grazing are now the dominant species present. This too had an impact on the yield. Additional watering facilities would help to further reduce differences.

I suppose that the main point I would like to make here is; pastures that are grazed tightly, especially prior to forages going dormant in the fall, will have reduced spring growth and most likely reduced seasonal growth than pastures where ideal residual heights were maintained and most closer grazing occurred post dormancy. Keep at least three to four inches of growth at all times on most cool-season forages. That's the shortest height you leave behind, not the tallest!

Hopefully that didn't bore you all to tears. I found it quite interesting for some quick and dirty anecdotal data.

Most forages have already surpassed normal start grazing heights. Starting early and making sure to maintain minimum grazing heights for the forages is really the critical issue, but it also helps to keep the forages from getting too far ahead of you before you graze them again. Staging forages helps you keep more of the paddocks in better condition longer, with less need of haying or clipping.

I would still promote grazing for short periods, keeping the animals moving and never grazing closer than three to four inches whenever possible. If the forages start getting ahead of you, consider making the paddocks slightly larger and grazing the areas for shorter periods of time, letting the animals top graze to help slow down seed head production. The goal should be to maintain as much pasture as possible in what I've referred to in the past as "stage two" growth, quality vegetative leafy growth prior to seed head production. This quality forage with good intake will ensure good growth on growing animals, milk for lactating animals and also help to flatten the growth curve some, providing quality forages a little longer into the season.

Any fields that have to be "skipped" can be clipped for later use, cut for hay or baleage, or left as is for maintenance animals. You need to try and keep the paddocks as vegetative as possible for growing animals. If you wait too long to re-graze them you may get frustrated quickly in trying to play catch-up. It's better to skip one and deal with it later.

Quite often there is no set ideal grazing pattern or set timeframe in trying to maintain quality forages. Instead, it is more of a game with changing rules, tactics and plays to try and overcome the challenges of the season. Every year is different. We need to be prepared with more than one tool in the toolbox. When forages are growing fast, rotate fast. When forages are growing slower, graze slower. Maintain as much as possible in vegetative form and deal with the excess wisely. We'll talk about that more next time.

Remember, it's not about maximizing a grazing event, but maximizing a grazing season! Keep on grazing!

Reminders & Opportunities

Indiana Forage Council Grazing Schools – June 4-5 at SIPAC (Southern location), June 11-12 Rossville, IN (Northern location), Both sessions will be Friday 1-6 p.m. and Saturday 8 a.m.-4:30 p.m.. Attendees are being limited; register early. Southern school: <https://bit.ly/3g8zWRV> Northern school: <https://bit.ly/3ulnYlg> or call (812)678-4427.



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