Grazing Bilic June 2023

Victor Shelton, Retired NRCS Agronomist/Grazing Specialist

It's June. Well, at least the calendar says it's June. The temperatures have felt like they were about a month behind schedule while the forages have appeared to be at least a couple weeks ahead of schedule and I'm just trying to maintain some type of schedule!

If you look at growing degree days (GDD) around the state for the last month, we have been a little behind the average. The season didn't start that way. We had several really nice, warm days early this year.

I've talked about GDD's before. Growing degree days are calculated by taking the average between the daily maximum temperature and daily minimum temperature and subtracting the base comparable temperature for each day. Days are then added together to compare periods. It is probably the most common way of assessing where we are in plant growth compared to other years, since weather is different from year to year.



"It's not a normal forage year so far." – Victor Shelton

Growing degree days provide a "heat" value for each day. The values added together can provide an estimate of the amount of growth plants have achieved. Some people use GDDs to predict when plants will reach a certain growth stage. The developmental stage of most organisms has its own total heat requirement. I like to utilize it to compare different years.

I've received several questions or comments about forage growth this year. Forage growth in many fields and pasture hasn't been quite up to par. A lot of producers are very disappointed in the growth for grazing and most certainly for the first hay cutting. Pastures are not able to be grazed as much before livestock need to be moved and many hay fields are way below average yield. I've been told of several fields only yielding about one large round bale (approximately 1,300-1,500 pounds) per acre, half or more of the normal.

So, is it fertility? Is it the slight reduction of growing degree days? Did the stars not line up quite right? Why is forage yield so reduced in some areas?

First off, it's not your imagination. Forages went from being purely vegetative to seed heads a little earlier than normal. Not only was seed head production early, but the quantity of seed heads was also higher. Grass plants tend to react to stress factors by initiating their survival mode. This generally means they initiate seed production and may also produce more seed.

I believe the real kicker this year was the late freezes. New spring growth was a little early this year and there was quite a bit of growth present, actually a lot in some locations, and then temperatures dropped to below freezing – in some location's multiple times. The focus for many at that point was on early row crops that had been planted, fruit trees that were blooming or tender transplants in the garden, and not on heavy frost/freezes on forages.

Cool season forages prefer cool, moist growing conditions. That's one reason they are called "cool season" because they initiate growth under fairly cold temperatures and generally don't like the hot, drier summer conditions often creating a summer slump in growth. They are pretty tolerable to frosts. Freezing conditions

Victor Shelton is a retired Agronomist/Grazing Specialist with the Natural Resources Conservation Service (NRCS). He continues to write Grazing Bites in his spare time from his property in southwest Indiana. - Issue 185

can be a little more detrimental. I noticed light colored tips and even some whitening on orchardgrass that later turned brown.

The plants quickly appeared to grow out of this with no ill effects, but I believe that the late freezes on that tender fast growing forage growth this year was the major stress factor trigger. This set the stage for earlier and heavier seed head production, likely with more energy going to seed production than for leaf growth. Frosts don't bother cool season forages at all, but temperatures in the mid to upper 20's can have negative impacts and I believe that is what we are seeing the repercussions from now.

The earlier maturing of forages along with drier weather conditions in many areas did create the opportunity for a lot more hay to be cut this spring in a much timelier manner. This usually indicates higher quality hay – but not necessarily this year. Good hay drying conditions including sunny skies, a nice breeze and dry surface soil have helped to dry hay and get it put up with good moisture (ideally 16%), which makes higher quality hay that keeps well and doesn't mold. The lack of normal leaf production and earlier seed head production probably did have a slightly negative impact on quality, but most certainly quantity.

Keeping forages more vegetative this year may be more challenging. Because of forage stress factors that were pretty much out of our control, most of us will find ourselves behind the eight ball. What are some options?

The first option could be to do high intensity, short duration grazing, which is higher numbers of livestock on a small allotment for a very short period of time. The high animal numbers in a smaller area, often sometimes reaching 100,000 pounds live weight per acre or more, creates a lot of competition between animals, increases intake and reduces pickiness. This removes a high percentage of grazable forage in a short period of time with little or no refused areas. This generally does require that the pasture gets a longer deferment period prior to being grazed again. What they don't consume is laid down on the ground.

You could also graze in a slower fashion, understanding that they will avoid more and thus create more mismatched forage growth and selection. The longer they are in one spot, the more noticeable the differences in grazed and ungrazed will be. Too long and there will be overgrazed areas and areas that are totally avoided. If this is the case, then you are probably better off balancing the forages by clipping. Ideally, if you have to clip, mow only short enough to even out the forages and remove seed heads. If there are a lot of overgrazed spots, then a longer deferment may be needed prior to grazing again.

Lastly, you might consider cutting a few paddocks that you would normally graze for hay. I'm not a huge fan of this, but you have to look at every present circumstance and condition and make the judgement call. If hay fields are not yielding as normal, then this could help make up some of the difference and reset the staging for those pasture fields, allowing you to concentrate your grazing management on less acres and hopefully giving you a bit more control of the situation. If you do mow it for hay, quickly return fertility to the field to promote new growth for the season and to maintain that fertility bank.

It's leaning more toward the drier side now, especially in some areas. Maintain soil cover and good stop grazing heights to keep that solar panel working and retaining as much moisture as possible and reducing evaporation. If you hay it, promote growth and let it fully express itself prior to grazing. If forage is really thin, check fertility and provide a lot longer rest.

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

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

Victor Shelton is a retired Agronomist/Grazing Specialist with the Natural Resources Conservation Service (NRCS). He continues to write Grazing Bites in his spare time from his property in southwest Indiana. - Issue 185