

Grazing Bites

May 2020

Victor Shelton, NRCS State Agronomist/Grazing Specialist

It's the first of May and it's another unusual spring. I suppose that each year is always somewhat unique, but I could really settle for just average for once.

This is starting to remind me a bit of 2018 where we had really late frosts and even some freezes. Forage took off growing in early April only to be set back fairly hard after a week of really cold temperatures and several inches of snow in the north. The cooler than normal temperatures, especially at night, and a few too many cloudy days have really slowed growth. I'm ready for some warm, sunny days and so are the forages.



Most forages will rebound from temporary stunting from cold weather.

When you have super-fast tender plant growth and then suddenly several hard freezes, the plant goes into a dormant like condition. The real damage occurs when the water in the plant cells freezes. Under severe enough conditions, the ice can puncture the cell wall and after thawing out, the plant will appear wilted and often darker in color.

When conditions are moist, it may reduce the impact of a slight frost since temperatures change more slowly in wetter soil conditions than in dryer soils. The water outside of the plant can reduce freeze injury because the water will freeze before the water inside plant cells freezes. This is one reason why spraying water on garden plants to "wash off" frost can sometimes help save plants.

Warming up slowly after freezing conditions can reduce the effects of the freeze/frost. Abrupt, rapid warming, especially under dry conditions, aggravates frost injury and the chance of plant recovery is reduced.

I've not seen any damage to forages yet, just stunting. Forages are certainly not growing like they were, especially south of I-70, but should rebound with warm weather and sunny skies.

Prior to the stunting cold spell, forage growth was at least ten days ahead of normal, except for northern areas which has stayed slightly colder and even had some late snows. A friend of mine stated that he really ought to mow his yard, but he'll have to shovel the snow off first. Everyone is eager to start grazing, especially grass-based dairies.

Depending on the extent of stunting caused by heavy frosts or freezing, grass plants will feel some stress from this and may move slightly quicker towards reproductive stages. This will be intensified if pastures are also overgrazed. If you maintain adequate residual or stop grazing heights and have good healthy soil, you probably won't see much impact.

I've seen several pastures this spring that have already been grazed way too tight. I'm not sure that I have ever mowed my yard that short! I will try to refrain from stepping up on a soapbox, at least not a tall one. Close grazing, especially early in the season before root reserves are refreshed, will reduce total production for the field for the year. You want to maintain potential production or increase it. In a lot of cases, lack of sufficient nutrients and/or management reduces yield and those fields have potential to

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

Issue 148

produce two or three times what they are presently. Isn't doubling production more feasible by management than doubling acreage?

The other troubling thought that comes from close grazing early in the season is what you are actually doing to the plant itself. For the most part, the adage of "short grass, short roots" is very accurate. Not only are you potentially reducing production, but you have also reduced the plants ability to seek out nutrients deeper in the soil profile and moisture and, most importantly, decreased its resilience.

Reduced root mass and reduced resilience equates to a lot more susceptibility to drought conditions. There may be, or seem to be, plenty of moisture at the moment, but we are never more than just a few weeks away from a drought. Resilience to droughty conditions needs to be started way before such an event. Overgrazing also can remove or reduce valuable ground cover that helps maintain soil moisture.

Going back now to the topic of slightly stunted forage due to colder weather, it is probably a wise decision to make sure that you are feeding a mineral mix with sufficient magnesium. Normal rates for mineral mixes contain about 2% magnesium. When we have cooler temperatures and lush forage in front of the cows, a high-magnesium mineral supplement should be used. High-magnesium mineral mixes usually have about 16.5% magnesium. You should probably continue with this supplement until we get past the early flush of new grass. Fields that have been supplemented with extra nitrogen and potassium tend to have more issues because more magnesium can be tied up. It's a balancing of cations. Keeping sufficient salt and other minerals that are needed available all the time is always a good place to start and lowers concerns. Check with your local veterinarian or extension agent for more information.

Food or forage for thought; adding extra nitrogen to stunted forages to help push growth will potentially increase the risk of grass tetany. Keeping some hay available to grazing livestock for a while can help reduce risk slightly, if they will eat it. It will also provide some stable fiber to help balance out new forage that is lush and often higher in water content. Generally, if they need it, they will eat it. Ruminant livestock have never failed to support that theory.

One last word of advice: beware of poison hemlock. It is becoming more and more common along roads and some pasture and hay fields. All parts of this plant are poisonous when ingested by livestock. It is a biennial, producing only a rosette the first year and then flowers and seed the second year. It is very prolific. It looks a little like a wild parsnip but will have purplish blotches on the stem. Do not handle these plants with bare hands; there is risk of adverse reactions. Do not let plants go to seed. Consult your local extension office for control methods.



Poison Hemlock is poisonous to livestock. Note the unique purple blotches on the stem.

It's not about maximizing a grazing event, it's about maximizing the grazing season. Stay well and keep on grazing!

Reminders & Opportunities

Due to COVID 19, several scheduled events are now postponed or pending. Several events are hosted or cohosted by the Indiana Forage Council. For more information about their upcoming events, go to <http://indianaforage.org> and while you are there, consider becoming a member.



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

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

Issue 148