Grazing Bites

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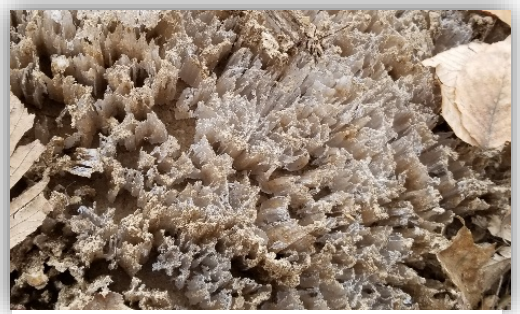

Extreme frost-heaving of the soil. (Photo: NRCS Victor Shelton)

It is 45 degrees outside today as I write this article. I normally appreciate mild winter weather, but when it rains, and temperatures remain above freezing, except for a frivolous teasing of heavy frosts, a pasture can get pretty ugly. I for one wouldn't mind a little free concrete right now, you know, frozen ground. For many of us, 2018 was an extremely wet year. Some parts of Indiana, including where I live ended up with over 60 inches of rain. That makes me think of a Clint Eastwood quote, "If you think it's going to rain, it will."

Strip grazing stockpiled forage is usually a delight. Of course, it is best accomplished under dry or frozen conditions. If the pasture of stockpile is heavy (at least 3,000 pounds of dry matter per acre), then it can often be grazed even under fairly wet conditions without too much long-term damage but, you will need to have a watchful eye.

Under wet conditions make sure you are providing sufficient allotments daily according to your set time frame. If livestock start to run low before the next move, you will often see some pacing along the temporary fence line as they patiently (not) wait for the next move. Their pacing creates a lot of soil disturbance and pugging. Pugging can quickly turn a nice pasture into what appears to be a wallow. The hooves create pockets of compacted soil that bury the remaining plant tissue quickly. These highly disturbed areas of bare soil are then prone to erosion, especially if they are on sloping land and will most likely be a weedy mess next spring. You can reduce the impact by allocating out a little more than normal and by not being tardy in rotating to the next allowance.

The livestock still need mineral and water. Most likely than not, particularly due to the time of year and less use of temporary water systems, permanent type water tanks are used. When permanent water tanks are used, the moves or allocations of stockpile usually start from that location and move out from there with no back fencing so livestock can go back to the water and mineral if it is left at the same spot. Under wet conditions, some trailing is inevitable in that path to the water. There is not a lot you can do about it under wet conditions. I probably try to extend temporary water systems way beyond a sensible time frame just to reduce this disturbance. I have found that the feeding of bale of hay unrolled on that area as the last event for that field for the season is not a bad idea.

Fields that are grazed with less forage mass present under these same wet conditions will have more damage. The lack of surface plant material along with the reduced complementing root structure is more prone to pugging, compaction, and more visual soil and thus even erosion. Okay, we have all done this at one time or another, by accident or simply neglect and the first thing to cross your mind when you see the field all mucked up is, dang, that's not very pretty and it won't look much better next spring.

I hate bare soil. Bare soil is nothing less than a missed opportunity for forage production and at the same time an invitation for unwanted plants and weeds. Come spring, something is going to be growing in that bare spot and you will want it to be plants with some grazing or biological benefits. Now is a great time to look at the situation and opportunities to improve.

By this time of year, any seeding of forages would be considered a dormant seeding. Seeds planted now will lay there until the right conditions present themselves closer to spring. Most producers with pasture or hay ground

understand the concept of "frost-seeding." Frost-seeding is taking advantage of the freeze-thaw process of the soil during winter months. When water in the soil freezes, it moves upward, pushing some soil with it. This creates little pockets for seed to fall into, especially slick smooth seeds like clover. This process provides a good environment for seed-to-soil contact and good conditions for that seed to grow later. Soils that have been disturbed and that have more soil visible are subject to more heaving due to a lack of enough vegetative buffers. Soils that are bare or that have thin cover will freeze quicker and deeper. Soils with heavy cover sometimes don't freeze much at all.

If you already have some clover planted and are just enhancing what you have, then utilize improved varieties for the best results. If not, then you should inoculate the seed with the appropriate rhizobium. The seed may germinate and thrive without it, but it will do so much better if it is present, especially if one of the goals for planting the legume is as a nitrogen source for the grass component of the stand. The clover fills in the gaps or voids in a grass stand, especially disturbed ones. Adding clover to help fix these sites makes sense. Clover adds diversity, boosts yields, provides pollinator loving plants to the pasture, and there are some benefits, especially with red clover, in reducing or diluting endophyte-infected tall fescue issues.

If there is a lot of disturbance, then the situation gets more challenging. You certainly don't want to fill in all those voids with legumes. High amounts of some legumes, especially white clover, can increase the risk for bloat. What you really want is something to fill in those voids until the perennial forages can take hold again and compete successfully with opportunist weeds in the spring. By early spring, anything growing in those spaces that can be consumed as forage and not a weed, even temporarily, is a good thing.

Planting grasses into existing grasses is almost always risky at best. Those new little seedlings can't compete with established plants; it's just too much competition. Typical tall cool-season forage seeded, such as orchardgrass and tall fescues, don't come up fast enough in the early spring and by the time they are really starting to grow, the established plants are already outgrowing and outcompeting them. One grass that potentially can fit this bill is perennial rye grass, especially in the southern part of Indiana. In normal weather conditions, it will come on early enough to get a foothold and at least provide enough cover to help reduce weeds and some quality forage too. This rescue method with perennial ryegrass does have some risk, and often does not remain long-term.

Keep on grazing!

Reminders & Opportunities

- **2019 Heart of America Grazing Conference** — January 22-23, 2019, Ferdinand Community Center, Ferdinand, Indiana. For more information: https://indianaforage.org/upcoming-events/heart-of-america-grazing-conference/ or email Jason Tower at towerj@purdue.edu
- **Northern Indiana Grazing Conference (NIGC)** – February 1-2, 2019, Michiana Event Center (new location) 4405 E Farver St., Shipshewana, IN. For more information about the NIGC or to get a registration form, please call the LaGrange County Soil & Water Conservation District office at 260-463-3471 extension 3.
- **Southern Indiana Grazing Conference (SIGC)** – March 6, 2019, Crane, IN – Speakers include Greg Judy, Darby Simpson, and Peter Allen. For more information contact the Daviess County Soil and Water Conservation office at 812-254-4780, Ext 3, email Toni Allison dc.swcd@daviess.org or visit http://www.daviesscoswcd.org/index.php/sigc or https://www.facebook.com/SouthernIndianaGrazingConference
- More pasture information and past issues of Grazing Bites are available at http://www.nrcs.usda.gov/wps/portal/nrcs/main/in/technical/landuse/pasture/

Greg Judy is back!