

Grazing Bites

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I've enjoyed several good autumn days and quirked, "it can just stay this way and then turn nice," but, winter is coming. I do enjoy the different seasons with each providing some traditional features, but my least favorite season is probably winter. Don't get me wrong, there are some beautiful winter days – pristine, clean looking landscapes monotonously all covered white, hiding the scars of prior days and sometimes poor decisions.

My wife and her sister quite often refer to and compare winters to the "winter of '78." To them, it's not only noteworthy weather wise, but also a bit of an age factor indicator. I've certainly not forgotten that winter. Literally mountains of snow that had to be dug through, not plowed, and multiple tractors gelling up, creating the need to feed silage completely by hand. No other winter since has dared to compare – that's a good thing.

Lots of things have changed since then – winter weather is one of them. I'll leave it up to you to decide if it is a trend or a direction. Either way, winter is still challenging. Winters in the past almost always blessed us with extended frozen soil conditions - that is usually not the case now. The past couple of winters it seems I could count the length of frozen soil in days, not weeks. There is a lot of benefit to having some of that free concrete. You could graze or move hay around and even place hay on fields where you might want to feed it, with no or little worries about rutting or excessive compaction.

When winters are mild and especially when they are also wet, soil conditions just are not as compatible for a lot of winter use. If you want to graze under these types of winter conditions, then you're going to have to be very careful how you do it.

One of the first things that you're going to have to pay attention to is the amount of forage that is available in that pasture. If you don't have enough cover, residual or a decent heavy stand of forage, then your potential to cause damage grazing on the site increases.

Ideally, you really need a total of about 3,000 pounds of dry matter per acre to be able to graze under wet soil conditions without causing some potentially long-lasting damage to the forage stand and the soil. That sounds like a lot, but it's only about ten inches of dense forage, sometimes slightly less. A good healthy grass/legume stand can easily produce 250 to 300 pounds of dry matter per acre inch.

When forages have been allowed to regrow and are stockpiled for later use, not only has the above ground biomass increased, but also the below ground system. It is not a failproof system, but certainly does provide some resiliency over pastures or systems that have been continuously grazed closer than ideal and thus lacking the additional underground supportive structure.

That said, there are also benefits to having that much growth on the surface. First, it is winter feed that can be utilized and allocated in such a manner to be very efficient without the need to get a tractor out or worry about relocating manure the next season – it's automated. Second, what isn't consumed is usually laid down upon the soil surface to become litter or residue to protect the soil surface, provide some nutrients for the next seasons growth, improve infiltration of winter precipitation and buffer some of the hoof action under wet conditions.

If you don't have this cover and the associated root mass created from the good cover, then the pasture will not fair nearly as well if grazed under wet conditions – expect excessive pugging, soil disturbance, forage stand reduction and potentially long-lasting compaction. None of that is good, and depending on site conditions, the winter weather and a few other factors, it's a toss up of which one will be worse.



Unrolling hay on pasture. A good option if soil conditions are good.

Quite often the one that is noticed the most is increased weed presence and pressure the following season. That is primarily due to soil disturbance, then loss of forage stand integrity, and lastly cover. You might have thought you fared well over winter until spring comes when suddenly, where did all these weeds come from?! Early successional annual weed species are expected, especially foxtails and crabgrass, but more aggravating species such as spiny pigweed and cocklebur like to bounce back from old seed banks to try and reestablish themselves with some vengeance. These seedbanks are only held hostage from persistent maintenance of cover and competition or mechanical and/or chemical treatment after the fact.

Feeding hay on pasture can absolutely reduce time in winter feeding areas and can also boost organic matter and nutrients to sites that need it. Rolling out those bales to feed them helps to more evenly distribute hay and livestock waste across a larger area. It also reduces the impact and time spent on any specific area. A large round bale fed within a ring or on a wet site can quickly turn the area around the bale to a soupy mess. Soil structure is heavily damaged. This is a good reason to try and feed either on frozen or dry soils or on a feed pad.

Feed pads can be built of rock or concrete. They should always be placed a good distance from any water body, yet convenient for access and ideally where wind protection is available for the livestock. Rows of large hay bales, a solid fence, a building, trees or topography can all provide a decent windbreak.

Occasionally, a pasture is damaged from hoof action on wet soils no matter how much we try to prevent it. An unexpected rain during the grazing allocation or, more likely, more rain than expected for any given time frame can quickly compromise the integrity of the stand. It has certainly happened to me – especially when setting up areas to be grazed for a few days while I'm away. The plan can fail. The light drizzle that was predicted can turn into two or more inches of hard rain and the perfect allocation quickly was not enough.

If this has happened, make sure you assess pastures, paddocks, or areas of either, as they might be good candidates for some winter dormant overseeding. Assess the damage. How much bare ground do you see? If you have 80 percent or more live plant cover, then I wouldn't get concerned because most of the spaces will be filled in by spring. If the live plants cover 60 percent or more of the stand, then the addition of some more legumes such as clover will quickly fill in the void areas. If there is over 40 percent bare ground, then additional seed is normally needed.

Broadcasting some seed during the dormant period on these thin areas will increase the chances of better stands and perhaps some more control of spontaneous weeds the next spring. Clovers are pretty easy – just make sure they are inoculated appropriately with the correct rhizobium for the species. Smooth, small-seeded grasses usually do best for overseeding. I don't recommend doing an entire replanting at this time, but I'd rather risk a little seed to fill in some gaps than wrestle with feisty weeds. Timothy, perennial ryegrass, Italian ryegrass, redtop and bluegrass are probably good choices for such purpose.

Things change over time. The format of Grazing Bites has also changed. It will be mailed from two different email addresses. For most, it will come from grazingbites@gmail.com which you may respond to.

May your roots grow deep, and your soils be rich – Merry Christmas!

Remember, it's not about maximizing a grazing event, but maximizing a grazing season! May the grass grow deep roots under your feet and your soil be rich. Keep on grazing!

Reminders & Opportunities

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