

# Grazing Bites

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I have seen a lot of pugged pastures the last few weeks. Pugged meaning soil trampled into consolidated mud by hooves.

There are a few parts of the state that have remained frozen long enough to retard excess damage to pastures. The rest of the state has remained wet enough that any pastures or overwintering areas that have been used have occurred damage to the sod.

I mentioned last month that I was asked about temporary or summer cover for overwintering areas. I have also had lots of questions about what to do with damaged pastures. Good questions, but not the easiest to answer because really, “it depends.” Time and weather are also factors in whether you can address it sooner or later.

Overwintering areas take a major beating but are worse under almost constant wet conditions. Winter feeding of hay and other feed creates tractor tracks along with the churning of soil from livestock hooves. The overabundance of nutrients and organic material in these feeding areas are often a mess by the end of winter and both producers and livestock can't wait to stay out of it. These overwintering areas are ideally designated areas, not entire pastures or pasture systems. Destruction of the sod is bad enough on small units but is devastating over large areas. Heavily pugged fields can have up to 75% reduction in desirable forage yield. These areas usually have less legumes, more erosion, a loss of nutrients, potentially horrible weed problems from opening up the seed bank, are extremely rough to walk or drive on, and may increase some livestock health issues.

When we talk about pastures, it is usually recommended that you change the field that you start the season with every year to help maintain forage diversity and to not accidentally stress the same fields over and over the same time periods. When it comes to overwintering areas, it's probably best to determine the best location and continue using it every year. An ideal location is away from any water bodies and close to equipment when possible. The area will need to have an all-weather watering facility and ideally some heavy use area rock pads to make life for both you and the livestock a little better. The portion that doesn't have a pad, will normally get torn up.

So, what can you do with these damaged areas? First of all, these areas will need to dry up and that may not happen until after the livestock are back out on pastures again. Once dry enough, animal waste and any remaining decomposing hay should be cleaned up and ideally spread on a field that could use the organic matter and nutrients. These overwintering areas quite often have some perennial forage remaining and trying to survive the turmoil. Unless animal units are very low, trying to maintain perennials on these sites can be difficult. A mixture of annuals and perennials is best, but just annuals can also work.

If you decide to seed something early (March-April), a mix of oats and or annual ryegrass, and red clover can be used, and you certainly could add a little tall fescue at the same time if you want to provide some longer lasting security. If you cannot get around to planting until a little later (May-early June) due to weather, row crop planting, or just procrastination, then warm season forages might be better. These species could include Japanese or Pearl millet, sorghum-sudangrass, sudangrass, cowpeas, and perhaps a forage crabgrass. If you don't plant anything in



*Pastures have taken a beating this winter. This field has been “plowed” with hooves.*

these overwintering areas, then nature will usually fill the void with species you and the livestock may not really appreciate, including those that tend to thrive or like higher nutrient and organic matter levels such as barnyard grass, prickly pigweed, jimson weed, goose grass, and ragweed.

It is important to remove excess manure from the area if possible. If you have too much organic matter on the site, especially leftover hay that hasn't broken down, then it will tie up nitrogen for the forages that you are trying to grow. Adding legumes in the mix can help provide nitrogen to help break this matter down. If the site happens to be heavy in nitrogen from feeds, then excess nitrates could also be an issue.

Once the site is cleaned up and the "product" taken and spread on a field(s) needing the nutrients, then only level the area if needed. Any other disturbance, especially with tillage tools, will alter structure of the soil to the depth of the tillage tool used. The disturbed depth will be softer and more prone to disturbance and future pugging until the natural structure of the soil is restored. No-till drilling is the preferred method of planting.

Once planting and growing, the cover can be utilized for grazing when needed or left to build bulk and provide some protection for the next winter use. If planted to a warm season forage mix, the stand could be part of your contingency plan for later in the year if it turns hot and dry. It is actually good to lightly graze it once in a while to promote tillering and root growth and to keep more vegetative for forage quality. How valuable this is to the operation is somewhat dependent on the size of the area and what the rest of your forage-to-animal balance looks like. Vegetative cover on the site is certainly valuable for reducing erosion, recycling nutrients, reducing nutrient leaching, and in some cases, feed for livestock.

Let's move on to damaged pastures. Damaged pastures can have similar problems as the overwintering areas. The more damage or disturbance (or the barer the soil is), the higher the risk of erosion (even on pasture) and the chance of not only annual weeds, but perennial weeds. Heavy disturbance in pastures promotes ironweed, cocklebur, Carolina horsenettle, thistles and whatever has been laying around in the latent seedbank. If the pasture had good desirable forage cover prior to the disturbance, then what is left is going to be competitive with anything that you plant with it due to the already established plants and their energy reserves.

Light disturbance or less than 20% of the ground disturbed may not need any help and if allowed a little extra rest, will most likely fill itself back in. Heavier disturbance could benefit from some intervention, even if it is only temporary. Redtop, annual ryegrass, timothy, and clovers all make good "fillers" and if not out competed by existing perennial forages, can certainly add diversity and hopefully help provide enough growth quick to reduce undesired plants.

No-till drilling is still ideal, but over seeding can be fairly successful as long as there isn't too much competition and it's done as early as possible. All the previously mentioned species have a small slick seed that is more capable of reaching the soil than coarser seeds except annual ryegrass. I include annual ryegrass because the success rate is still pretty high if enough disturbance or bare ground is present even if the planting method is a bit precarious.

If you have two fields that could be rotated occasionally (every 4-5 years) that are used for winter feeding, established sods, especially with tall fescue, usually hold up a little better. Spring is coming, keep the ground covered, and look forward to "keep on grazing!"

### Reminders & Opportunities

- **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](mailto:dc.swcd@daviess.org) or visit <http://www.daviesscoswcd.org/index.php/sigc> or <https://www.facebook.com/SouthernIndianaGrazingConference>
- **Grazing 102** – June 21-22, 2019, Southern Indiana Purdue Ag Center. More information coming.
- 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/>

