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Approaching Forage Crop Dormancy?

By the time you read this, Northeast Kansas will be close to the date of our average first 32-degree temperatures. The chances of it happening? Low - but maybe that's good?

For alfalfa stands, the benefit of a longer growing season depends on where you are in the harvest cycle. Alfalfa stops growing at 26 degrees. To give it time to build carbohydrate reserves to survive winter, the recommendation for the last growing season cutting has always been to do so to allow for eight to 12 inches of foliage growth (four to six weeks) prior to the first killing frost. If you harvested later than mid-September, a longer season may be a good thing.

For brome stands recovering from fall armyworm feeding (or just about any forage experiencing heavy grazing or even haying late into the season), a longer growing season could also be beneficial. The same need for root system replenishment in alfalfa is necessary for grass plants as well. Stands slow to recover could use the additional growing days, especially with ample moisture to get as much recovery time in as possible prior to dormancy setting in.

Late planted cover crops might even benefit. Whether you're planning on grazing cover crops or using them for weed control or were delayed seeding because of harvest or the fear of fall armyworm feeding, a longer growing season might provide greater opportunity for increased ground cover before temperatures drop to maximize the benefits these crops provide.

Right now, it looks like a longer growing season is what we'll get (moisture might be a little more variable...) but what happens if temperatures plunge sooner than expected and the growing season ends before recovery is complete? Things get a little more complicated for sure.

The first concern would be the effect on very young or small plants trying to either get started or in recovery mode. A lack of time to amass ample leaf area and corresponding root growth for energy storage could equal a lack of survival. It might happen outright this fall or it could happen as a 'winterkill' type of situation. This is always a concern in alfalfa when we harvest too late and plants don't have ample time to recover before the growing season ends.

If they do survive, a second concern is spring greenup. One aspect of that is how quickly plants actually green up. If the root system is compromised, delayed greenup next spring is to be expected. A second aspect relates to forage productivity. It may not be a one-to-one relationship, but the tendency is certainly there for yields to be reduced when plants are slowed, taking off in spring.

Management decisions – and even factors outside our control - through the end of the current growing season often play a larger role in next year's production than we might think. We might be able to do a few things to help (reduce grazing pressure, address fertility needs, etc...), but understanding what plants are doing over the next couple of weeks can help us look ahead to next year as well.

Ross Mosteller
District Extension Agent, Livestock & Natural Resources

Corn Stalk Rental Agreements

Recently my weekly thoughts revolved around forages available in fall for grazing livestock. Having received a call this week about this topic and serving as a good follow-up to the previous article, today seems like a good opportunity to discuss how to agree upon a rental rate for utilization of crop residues. Since the most plentiful crop residue in our part of Kansas is corn stalks, that will serve as an example for today's discussion.

Corn stalk fields have long been a fall source of feed for grazing livestock. Grazing corn stalks has benefits for livestock and crop fields alike. The most obvious is the utilization of fallen corn. Not only does this feedstuff removal provide an energy source for the animal, but it also helps prevent volunteer corn in the field the following growing season. As livestock graze, they also return nutrients to the soil by working residue and manure into the soil. Utilization of husk and leaves also serves as a good livestock feed source, one more likely to remain on the field in manure pats versus blowing into the road ditch.

After establishing the benefits of utilizing corn residue and securing fields to rent for grazing, how might one go about developing said rental agreements? Many factors need to be considered, all which have direct impact on rates and terms of the agreement. The amount of corn and residues left in the field is a major consideration. High-yielding corn will have more leaves, husks, stalks, and corn in the field, thus increasing the amount of feed available. What is the length of grazing period? What is the stocking rate? Are there fences and water available or will that all need to be provided? How far away from the home operation are the fields? Will livestock need to be hauled? All add or subtract value.

Often the resistance on the part of the crop farmer to graze crop residue with livestock is the potential for nutrient removal and soil compaction. The University of Nebraska and Iowa State University have done multi-year research to evaluate compaction concerns from grazing. The results of these studies have found minimal to no compaction issues depending on tillage systems. They also reported limited compaction on frozen, dry soil, so removing the cows before spring thaws and muddy conditions will help mitigate that concern.

Stover removal is another consideration to evaluate. High-yielding corn can leave up to 5 tons of residue per acre. That is a lot of stover to break down over the winter. By grazing the stalks, some of this residue can be removed, allowing the soil to dry and warm sooner next spring. Grazing for a limited amount of time allows the livestock to clean up dropped ears and some of the leaves and husks, while leaving a percentage that will become organic matter in the soil.

Rental rates fall into two basic categories: dollars per acre or dollars per head per day. The latter allows more flexibility to adjust depending on forage availability, weather and other factors. Choosing one method over the other comes down to owner's preference. Rates may vary widely given all the factors mentioned above. Having done the math using value of providing baled hay as an alternative, \$0.50 to \$1.50 per head per day (depending on the factors above and value established on hay) is not unreasonable. Fields with good fences and water are generally rented at a slightly higher rate. Producers should push a pencil and see what makes sense for your situation.

Regardless of the rate or method used, a good rental agreement should be written down and signed by all parties. This ensures everyone understands what the terms of the agreement are. The agreement can be as formal as using a rental agreement contract or informal as written on a blank sheet of paper. The important part is that it is written down, and both parties have a copy. The University of Nebraska - Center for Agriculture Profitability has a good tool to help determine corn stalk rental rates found at:

<https://cap.unl.edu/livestock/tools/>

Laura Phillips
District Extension Agent, Horticulture

Don't fall victim to fall tree pruning

This time of year, there is one question that I get asked a lot: is now a good time to prune my trees? In most instances, the answer is no. The best time to prune your trees is going to be late winter to early spring. Think February or March.

Why not prune your trees in the fall? This has to do with tree physiology. Trees store resources in their roots and move these resources up to their shoots when they are growing. In the fall, trees are starting to go dormant and moving resources down to their roots. If we prune in the fall, we disrupt this cycle. The tree may start to move resources towards the pruning cuts to try and compensate for the lost branches. This new growth may not have time to harden off before the winter, making the tree more susceptible to winter damage. It also uses up valuable resources the tree needs to get through the winter.

Ideally you prune your trees in late winter. This again has to do with tree physiology. When you prune a tree, it creates an open wound. When we get an open wound, we keep it clean and our bodies know to regrow the skin in that spot, slowly closing the wound. Unlike us however, trees do not heal but seal. They will form a callous tissue that slowly starts to cover the wound and reduce the risk of infection. While they can seal wounds in the dormant season, they recover from wounds faster in the growing season. By pruning right before the tree enters its growing season, we limit the amount of time the tree has an open, exposed wound.

Lastly, we generally stay away from summer pruning, as summer can be a challenging time for trees. Hot weather and droughts can stress trees and shrubs. If we prune while plants are already stressed, it may worsen their condition.

While it is clear that late winter or early spring is the best time to prune your trees, there are a few caveats. Dead or diseased branches can be removed any time of year. Not only are these branches a hazard to building and people, but a proper and controlled pruning cut will do less damage than a rough wound left behind from a branch snapping in the wind. Additionally, you should always remove branches with a heavy disease or insect infestation to prevent the issue from spreading to the rest of the tree.

Another caveat comes for flowering trees. Some flowering trees set their buds on older growth in late summer or fall. Others set their buds on new growth each spring. For flowering trees, it is important to know when they will produce buds, so that you can time your pruning around it and not cut off all your flower buds.

As a rule of thumb, prune your trees in late winter or early spring. If you have a flowering tree, it will be worthwhile to learn more about that tree's flowering cycle so you can prune at the proper time. There are a few other tree species that require different pruning times, so if you have questions on when and how to prune your trees, feel free to reach out for more guidance.

Teresa Hatfield
District Extension Agent, Family and Community Wellness

Caregivers: Prioritizing Your Well-Being This Fall and Winter

As the days become shorter and the holidays approach family caregivers need to recognize the importance of care for themselves as well as the person they are caring for. Besides the regular caregiving routine, there is the added stress of holiday activities. There's often pressure to maintain holiday traditions even though we are facing caregiving responsibilities. While your role is vital and deeply meaningful, it's equally important to care for yourself.

Find time to take care of yourself. Often, caregivers are so focused on attending to the needs of others that they forget to care for themselves. You can't care for someone else when your batteries are running low. Taking some time for yourself will help you be a better caregiver.

Embrace Self-Care

Shorter days and colder weather can affect your mood and energy levels. Try some sunshine to boost vitamin D and your mood. Fifteen minutes of direct sunlight a day should do the trick.

Try to stay active. Even if you can't go outside, try some gentle stretches and walking in place to keep active. Many in-home exercise routines can be found online. You are sure to find one that fits your fitness level.

Eat food that nourishes your body. Try to fill half your plate with non-starchy vegetables, one-quarter with lean protein such as fish or chicken, and one-quarter with a whole grain bread, rice, or starchy vegetables.

Set Boundaries

Learn to say "no" to events or traditions that are too overwhelming. Explain your caregiving situation to friends or family members who are unaware of it. Participate in those activities that are meaningful to you and the person you are caring for. It is also okay to ask for help if you need it. Take advantage when some offers. You can make a list of small things that need to be done to help you lighten the load.

Prioritize Your Mental Health

Make sure to set aside some time for yourself. Take some quiet time to read a book, listen to music, or go for a walk. Connect with others who care about you and understand your experience. Consider joining a support group for other caregivers, either in-person or online.

Caregivers often experience conflicting emotions during the holidays. Loss and sadness are common emotions. Holiday traditions may need to change, but that is okay. The work you are doing as a caregiver is priceless. However, you do have to take care of yourself as well. Set a priority to include self-care as your gift to yourself; in doing so you will be a better caregiver.

Cindy Williams
District Extension Agent, Food, Nutrition, Health and Safety

Hunting Down Food Safety

Hunting season is here, and with it comes the opportunity to eat game meat and wild birds. These are nutritious foods, and most are naturally lean because of the animals' diet and high level of physical activity. (Two exceptions are duck and goose, which have higher levels of fat than other poultry.) Before eating wild game or birds, however, keep in mind special food safety points.

Handling in the field and during processing: Do you know if care was taken regarding safe handling of the meat? Was the animal or bird "field dressed" promptly? Was the meat protected from contamination? Was it cooled quickly, and kept cool during the drive home? If you are a hunter yourself, know how to ensure food safety in handling the meat of game animals and wild birds, both in the field and during processing.

Storage: If you use it within three days, store game meat in the refrigerator. Keep raw meat and cooked meat separate to prevent cross contamination. Immediately freeze any extra meat. Prevent "freezer burn" by dividing meat into meal-size quantities and using moisture and vapor-proof containers or wrap. Press the air out of the packages before sealing and label them with name of the contents and date. For best quality, use frozen meat within one year.

Thawing: Thaw meat in a refrigerator, then cook the thawed meat within two days. Or thaw it on the "defrost" setting in a microwave oven and then fully cook the meat immediately afterwards. Keep raw meat separate from cooked foods.

Preparation: Cook wild birds to at least 165 degrees F., and game meats to at least 160 degrees F. (Use a meat thermometer to check the internal temperature of the thickest part.) This will reduce your risk of getting foodborne illness. Wild game tends to be drier and less tender than other meats and often has a very distinctive flavor. To serve wild game that is juicy and tender, use a cooking method that adds liquids, such as stewing. You can reduce the "gamey" flavor by cutting the fat off game meats before cooking them. You can also mask that flavor by using extra species or marinades. Marinating will also help tenderize the meat. Marinate all meat in the refrigerator.