

David Hallauer
District Extension Agent, Crops & Soils

Perennial Forage Season of Use

The success of cool season grasses in our Northeast Kansas forage systems has made it easy to be comfortable and satisfied with what we have and look no further. Why fix what isn't broken? In some cases, however, the system might *be* broken, or at least in need of evaluation.

There are numerous reasons cool season grass stands may not be performing optimally. Weed increases and woody encroachment may have reduced usable acreage. A good soil fertility program takes time *and* money and correcting a deficient program can be a costly challenge. Some stands simply haven't fared well after previous grazing/haying pressure, drought, armyworm damage, etc... It may make you consider other forage alternatives.

If you are looking at the perennial and annual options available as you consider retaining or renovating a current cool season stand - or starting over altogether - one thing to consider is season of use. For simplicity, a quick look at brome production (cool season) versus native grass (warm season) production tells a pretty good story.

Brome (cool season) production begins in early spring, with five percent of the season's dry matter forage production occurring in March and another 15 percent in April. As temperatures increase in May, production skyrockets. Fifty percent of a fertilized bromegrass stand's dry matter production occurs in May (30 percent in unfertilized stands), before dropping drastically (20 percent) in June. For July/August, brome earns its cool season label with almost zero production from stands that may actually go dormant during hot/dry weather. We'll likely see another flush of growth as temperatures cool in early fall when the final 10 percent of production occurs.

Contrast that to production from warm season native tallgrass species (big bluestem, Indiangrass, little bluestem, switchgrass, etc...). Only five percent of their production occurs prior to May. May accounts for 30 percent of a stand's annual dry matter production and June almost 35 percent. In July and August, when cool season species are in dormancy, warm season species continue to thrive with 20 and ten percent of the annual production occurring during those two months respectively. Because they prefer warmer temperatures, production is all but done by September.

Why consider 'mixing it up' from the forage system side? From a hay production standpoint, the differences in maturity might spread the workload needed for high quality forage production over a longer time frame (NOTE: if you are only worried about yield from the hay crop, this will be less important.). From a grazing animal standpoint, the quality of feedstuff in front of the animal can change drastically through the season – affecting animal performance along the way (for more on the animal performance side of the equation, visit with District Livestock/Natural Resources Agent Ross Mosteller).

If you're looking at changes – because you *want* to or because you *have* to – don't forget about differences in season of use and how that can affect everything from yield and quality to workload and animal performance. If you're going to be doing something different anyway, a second look at some options is in order.

Ross Mosteller
District Extension Agent, Livestock & Natural Resources

Winter Bull Management

The last few days have been a very real reminder that it is January and frigid winter weather can assault with vicious force at any time. At the calving school last night, a good deal of attention was given to hypothermia in new born calves, as well as energy requirements of the cow herd. Great discussion, but what can often be forgotten in winter cattle management discussion is the bull. Having just deep bedded the bull calves in another blowing snow storm, this seems to be a topic to discuss this week.

Harsh winter weather can impact bull fertility both short term and into the next breeding season. Now is a perfect time to be checking the bull battery for cold weather issues. Paramount importance should be given to ensuring that bulls have appropriate shelter, bedding, and feed to weather winter conditions and advance successfully into the next breeding season. An ounce of lower cost prevention now, can prevent a costly pound of cure if bulls need to be replaced later.

Bulls need appropriate housing to provide protection during severe cold weather, which can lead to fertility problems. Tissue damage due to frostbite will appear as a scab, discoloration, and/or sloughing of the lower portion of the scrotum. Scrotal frostbite will hinder the bull's ability to raise or lower the testicles for proper thermoregulation, which ultimately will affect sperm production and result in reduced fertility. Evaluating and observing for tissue damage can help a producer identify bulls that need time to heal or allows time to cull that bull and find a replacement prior to the breeding season.

Frostbite can be prevented by providing heavy bedding (i.e. straw, cornstalks, etc.), a shelter, or windbreak for bulls to get out of the weather. Bedding is important to help alleviate the cold by providing insulation from the frozen ground or snow and keeps cattle clean. We often recognize the issues associated with severe winter storms. What might be less obvious are the weather stress coming from moderately cold, wind, rain, ice or wet snow, that lead to wet hair coats. Just like wet clothing, wet hair cannot insulate effectively. Moderately cool, yet wet conditions, is often worse than extreme cold and dry weather.

Providing protection from wind and cold temperatures can help bulls maintain body condition rather than using feed to maintain body temperatures. Similar to maintaining body condition score (BCS) of the cowherd, bulls should be in an adequate BCS of 5 to 6 as we move through winter, which allows for greater BCS and potentially semen quality in the succeeding breeding season. Research has shown that bulls in a body condition 5 to 6 have better semen quality than those in a 4 or 7. Reference the [K-State Body Condition Guide MF3274](#).

Winter weather injuries most definitely impact a bull's ability to breed cows. Taking care during winter weather, along with planning to schedule a breeding soundness exam before each breeding season, are important management considerations. It is much easier to work with prevention on the frontside, versus dealing with the aftereffects. It matters not if the discussion revolves around reproductive track injuries in the cold or reduced body condition and nutritional considerations. When out checking the cows and calves in the snow and cold, don't forget the bulls!

Laura Phillips
District Extension Agent, Horticulture

K-State Garden Hour Webinar Continues in 2024

Over the past couple years, gardeners from across Kansas have tuned in each month to watch K-State horticulture agents cover highly requested lawn and garden information. These free, hour long webinars have steadily grown in popularity, and we are excited to offer the program again in 2024 with a new set of topics.

We kicked off the 2024 season on January 3rd with K-State Specialist Irina Sheshukova who gave a presentation on Floral Design. On February 7th we will reconvene to for a presentation from K-State professor Dr. Chuck Rice called Gardening in Climate Change. On March 6th extension agents Anthony Reardon and Rebecca McMahon will present on selecting and planting fruit trees in Kansas climates.

These free webinars take place on the first Wednesday of each month from 12 noon to 1 p.m. (CST), including a 45 minute presentation and 10-15 minutes for viewer questions.

The K-State Garden Hour began in the early days of the COVID-19 pandemic as a way for K-State Research and Extension horticulture experts to share research-based information to gardeners of all abilities and experience.

It has blossomed into a program that, in 2022, was watched by viewers in 40 states, eight countries and four continents. Since its beginning in 2020, the K-State Garden Hour has drawn more than 60,000 online viewers.

To see the full list of this year's topics, visit us at www.hnr.k-state.edu/extension/consumer-horticulture/garden-hour. On this site you will also find recordings of all past webinars and a link to register for upcoming webinars. One registration will give you access to all the webinars for the year. If you have any questions about the K-State Garden Hour or how to join, be sure to reach out to our office for additional guidance.

Teresa Hatfield
District Extension Agent, Family and Community Wellness

Winter Safety Strategies for Seniors

With the latest bout of snow and cold, winter has officially arrived. And while I am already longing for the time I start my spring garden, we will have to get through this winter first. For older adults, the winter can be a bit more challenging, and there are some things you should keep in mind as the cold Kansas winter stretches on.

Make sure you have an emergency kit at home and that it has adequate supplies. Recently, after losing power after a summer thunderstorm, I saw that the batteries in my portable radio had corroded. Take a lesson from me and get your kit together, or double-check to ensure it is stocked.

- Make sure you have a battery-powered radio, flashlight, and extra batteries.
- Have food available that you can prepare without electricity.
- You will need one gallon of water per person per day.
- Have a first aid kit available.
- Include a spare pair of glasses and extra hearing aid batteries.
- Have an additional power source for medical equipment.

For additional information on what to include in a home emergency kit, visit www.ready.gov

If you are going outside, make sure to check the local forecast. As we all know, the weather can change very quickly in Kansas. In the winter, wind, snow, and rain can lower your body temperature quickly. It's also a good idea to let someone else know if you will be outside, and don't stay there too long. Carry your cell phone with you. Make sure to dress in layers, as each layer insulates you from the cold. Make sure to change your clothing if it gets wet. Keep sidewalks clear of snow and ice outside of your home, and use sand or ice melt to reduce the risk of falls. Wear non-skid or rubber-soled shoes to keep you steady. Be aware of the signs of hypothermia.

Hypothermia occurs when your body's core temperature drops below 95°F. Hypothermia is a severe medical emergency that requires immediate attention. Many people may not even realize that this is happening to them. Hypothermia includes signs include:

- Cold feet and hands.
- Puffy or swollen face.
- Pale skin.
- Shivering or shaking.
- Slow or slurred speech.
- Feeling sleepy, angry, or confused.

Call 911 right away if you believe someone is suffering from hypothermia, move them to a warm place, offer a warm drink, and wrap them in dry blankets.

It is also possible for older adults to experience hypothermia inside the home as well. To prevent this from occurring, keep your thermostat set no lower than 68°F. Temperatures between 60°F and 65°F can lead to hypothermia. Wear socks and slippers and make use of throw blankets to keep warm. Put extra covers and blankets on your bed. Place a rolled-up towel under the doors to block the cold air from getting in.

If you have an older family member or neighbor, check in on them during these winter months, and hopefully, spring is just around the corner.

Resources: National Institute on Aging, Ready.gov

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

January is Radon Action Month

Because of its odorless, tasteless and colorless ways, radon can be a silent killer and unfortunately, it's fairly prevalent in Kansas soils. The radioactive gas that occurs naturally in some soils is the No. 1 cause of lung cancer in non-smokers. It claims the lives of about 21,000 Americans every year, according to the EPA. But there are ways to test for it and mitigate it. To help raise awareness and encourage people to have their homes tested, the EPA has deemed January as National Radon Action Month.

The Kansas Radon Program encourages all homeowners to test for radon. Test kits can be obtained from any of the Meadowlark Extension District in Holton-(785) 364-4125; Oskaloosa-(785) 863-2212 or Seneca-(785) 336-2184. Cost for the radon kit are \$7.00 and this includes lab analysis and return postage.

More than 112,000 radon measurements have been reported in Kansas, according to the Kansas Department of Health and Environment. The agency indicates that the statewide average indoor radon level in Kansas is 4.9 picocuries of radon per liter (pCi/L), which is above the EPA threshold of 4.0.

For homeowners who test and find elevated radon levels in their homes, the most common technique to reduce it is called Active Soil Depressurization. An ASD mitigation system is a permanently-installed pipe-and-fan system that places a direct constant vacuum on the soil beneath the home's foundation, so the amount of radon that can be penetrate into the living space is reduced.

More information about radon, testing and mitigation is available at kansasradonprogram.org/home; by calling the Kansas Radon Hotline at 1-800-693-5343 or contacting one of your local Meadowlark Extension District offices. Offices and contact information are listed above.