

David Hallauer
District Extension Agent, Crops & Soils

Cereal Rye Seeding

As cover cropping systems have evolved, cereal rye has become increasingly popular. The benefits it provides for everything from erosion control to grazing days to weed suppression make it one of the more versatile ones available.

With any luck, your cereal rye is planted. Work out of Wisconsin showing the benefits of early planting on weed suppression would suggest planting early and increasing biomass production is a good thing. If not, and you're still hoping to get some cereal rye seeded, the 'optimum' window is starting to close. Early November is typically the end of the seeding window, but you can find county specific information using the Midwest Cover Crops Council Cover Crop Selector Tool at <http://mccc.msu.edu/selector-tool/>.

At that same site, you'll also find recommendations for seeding (drilled/broadcast/aerial) rates. A 55-60 pound per acre seeding rate drilled at three quarters to an inch and a half deep is typically best for our area. As we move later into the seeding window or use other seeding methods, rates should be increased. *Note: if participating in USDA-NRCS or other cost share programs, be sure to follow recommendations to keep you eligible for program benefits.* Even if you do all of the above, stands aren't always perfectly uniform. Various issues can affect germination and emergence. Two of the largest this fall will likely be moisture – which we can't do much about – and previous herbicide programs.

While fall-seeded rye can typically establish well following most corn herbicides, there are exceptions based on chemical characteristics of the herbicide, weather, etc.... If in doubt, consult product labels and follow provided instructions. A recent article in the KSU Agronomy eUpdate (<https://eupdate.agronomy.ksu.edu/article/cover-crop-response-to-herbicides-612-3>) also provides a good summary of herbicide injury likelihood during establishment for a number of commonly used active ingredients. Recommendations are a conservative estimate based on field research and herbicide label recommendations. Results may vary. If in doubt, consider a field bioassay to determine crop response to potential herbicide residues.

Even if the cereal rye establishes well, there may be grazing restrictions based on previous herbicide use to contend with as well. For example, herbicides containing acetocholor, dimethenamid, and pyroxasulfone have little potential for cover crop injury but may contain herbicide residues if grazed. As with use of any herbicide program, always read and follow label directions keeping in mind potential cost share program restrictions as well.

Next week: What can cereal rye provide for weed suppression?

Ross Mosteller
District Extension Agent, Livestock & Natural Resources

Is Bigger Better?

My Dad liked big cows, my brother and I prefer moderate cows. This created lots of debate throughout the years in our family operation. This same “ideal cow size” debate is replicated across the industry, looking at all sides of the equation from pounds of weaned calf sold, to pounds of forage/feed consumed and everything in between. Ask most cow/calf producers how big their cows are, you might hear 1250 to 1300 pounds. Go to any livestock auction in the area and watch cull cow weights, my guess is you will see more cows over 1250 than under, so we might be underestimating cow size? This is a loaded question, but what is the “right” sized cow for the average commercial cow calf operation?

Cow carrying costs have increased over the last 50 years due to a 30% increase in cow size from around 1,050 pounds in the mid 1970's to over 1,360 pounds in the 2000's, and this larger cow trend appears to have only continued through today. A 30% larger cow requires 22% more energy per day for maintenance and will consume 20 to 30% more forage per day, decreasing cow carrying capacity and or increasing input costs associated with pasture management, supplementation, and stored forages.

By simply increasing cow mature weight and not adjusting the number of head allocated to a specific pasture, this automatically creates an increase in stocking rate. As stocking rate increases the effect is weaning weights and rebreeding rates decrease. This has been linked to reductions in forage allocation, pounds of forage available per pound animal body weight, limiting diet selectivity, diet quality, dry matter intake, and forage regrowth rate. Total weaning weight/acre has been shown to increase up to a point, even though individual animal is decreased, until animal performance is reduced to such an extent that weaning weight/acre begins to decrease. Smaller cows also have been shown to have greater weaning efficiency in terms of pounds of calf weaned per pound of cow body weight.

The increase in weight and condition loss with larger cows is a concern when stocking rates are not adjusted and this could lead to reduction in fertility and increases in rebreeding interval for large cows. Supplemental feed is always an option to offset this nutritional gap, but as cow mature weight and stocking rate increase the amount of hay and annual cow costs increases as well. Additionally, the response to drought in production systems with higher stocking rates and larger cows is more impacted by climatic stressors and thus less resilient to harsh environments.

The costs of maintaining a beef cow and the unit cost of production of weaned calves have increased tremendously over the past decade. Variable costs such as fuel, fertilizer and herbicides are real cost that bare much of the blame; however, fixed costs such as equipment, hired labor, and land cost have increased as well. When cow herd numbers rebound, like they always do, will these high calf prices remain steady enough to cover the higher costs of production? Would more smaller cows, eating less pounds per cow and weaning less pounds per calf, but more total pounds per acre make sense?

Obviously, these are all questions that each operation has to evaluate and make work in your production system. There is not one right answer on the cow size question and tradeoffs in every management decision. Efficiency is certainly a buzz word in the industry now and means different things to different people, but cows that can annually convert more pounds of live weaned calf, per pound of forage/feed consumed, at the most economical rate possible, should be everybody's goal.

Laura Phillips
District Extension Agent, Horticulture

Prepare Your Lawn Mower for Winter

As fall hits, we start to end our mowing season. But before you completely move on from lawn mowing, Kansas State University horticulture expert Ward Upham recommends a few mower maintenance steps before we let them sit idle in our sheds for the winter.

“Make sure you drain the gas tank of gasoline-powered engines or use a gasoline stabilizer,” Upham said. “Untreated gasoline can become thick and gummy.”

Spark plugs should be replaced. Before putting the new one in, place a few drops of oil inside the hole to lubricate the cylinder. Battery terminals usually corrode during the season, so they should be cleaned with a wire-bristle brush before being removed and stored for winter.

“If you remove the battery, be sure to store it in a protected location for the winter (a cool basement works best),” Upham said.

Cleaning and storing mowers properly are just one part of end-of-season-care. Upham also suggests using this time to sharpen mower blades.

“Sharpening rotary mower blades is fairly straightforward,” said Upham, who listed the steps to guide the process:

- Check for major blade damage and replace what can't be fixed.
- Remove grass and debris with a damp cloth. Dry the blade before sharpening.
- Use a grinding wheel or hand-file to remove nicks from the cutting edge. If using a grinding wheel, match the existing edge angle to the wheel. If hand-filing, file at the same angle as the existing edge.
- File edges to 1/32 inch, or about the size of a period at the end of a sentence.
- Avoid overheating of the blade, as this could damage it.
- For optimum winter storage, clean the blade with solvent or oil. Avoid using water because it will promote rust.

“Following these tips can help you better prepare your mower for winter storage and also save you some steps this coming spring,” Upham said.

Teresa Hatfield
District Extension Agent, Family and Community Wellness

Why You Need Advance Care Directives

What would happen to you in a medical emergency if you could not speak for yourself? Would your family members know what your wishes would be if you were incapacitated? The need for advance healthcare directives isn't just for older adults; anyone over age 18 needs to think about the reality of the situation should it occur.

In 1990, a 26-year-old woman from St. Petersburg, Florida, suffered cardiac arrest. Emergency workers were able to resuscitate her, but she suffered massive brain damage and was left comatose. After months with no improvement, she was diagnosed as living in a persistent vegetative state. The woman's name was Terri Schiavo, and her story made national headlines. Because Terri did not have advanced healthcare documents in place, what ensued was a family struggle between her husband and parents that lasted fifteen years.

Situations like these do not have to happen. Advanced Healthcare Directives are an often-overlooked aspect of healthcare planning. Advance directives are legal documents allowing you to voice your wishes regarding future medical care/treatment if you cannot do so.

The two most common types of Advance Directives include:

- **Power of Attorney for Healthcare:** A Durable Power of Attorney for healthcare is a legal document in which you appoint someone to speak for you. In Kansas, this person is called your "agent". You might have also heard them called a "health care agent," "proxy," or "health care proxy." The individual you have appointed can only speak for you if you were to become incapacitated due to illness or injury. If something happened to you right now and you were still able to speak for yourself verbally, your agent would have NO say over your medical care.
- **Living Will:** A living will is an instruction list for your physician, family, and friends regarding your life-sustaining or end-of-life care preferences. Kansas also offers a fill-in-the-blank version of this form, essentially a request to die naturally. If you use this form, medical professionals can only utilize comfort care measures – such as pain relief.

Completing your Advance Healthcare Directives can be seen as a gift to your family. By communicating your wishes before a crisis occurs, you take the heavy responsibility off their shoulders. If your family members are unaware of your wishes, they might have differing views about the best treatment course. The key is to have these conversations with your family members early.

Appointing your agent is easy. The state of Kansas offers a fill-in-the-blank form. You will fill in your name and contact information and get the document signed by a notary or by two witnesses. The witnesses must be 18, cannot be related to you, are entitled to your estate, and have direct financial responsibility for your health care. Please remember that the Power of Attorney for Healthcare is not the same as a General Power of Attorney; this type of document needs to be drawn up by an attorney.

Store your documents in an accessible place. Keep a copy in your house; you might want to put a copy on your refrigerator. You could also keep a copy in your car and give copies to family and friends. Be sure to provide a copy to your doctor and the person you have assigned as your healthcare agent. DO NOT store your document in a safe deposit box at your local bank. If no one can get to the form, it is useless.

If you haven't completed a Durable Power of Attorney for Healthcare, you can find the documents on the Meadowlark Extension District website at <https://www.meadowlark.k-state.edu/family-community-wellness/index.html> or the Meadowlark Extension District offices.

October 11, 2024

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

No news article this week.