

David Hallauer  
District Extension Agent, Crops & Soils

## Carbon Markets

K-State Research & Extension Specialist in Environmental Quality, Dr. Peter Tomlinson recently gave a presentation on carbon market considerations for ag producers. In it, he shared that the current supply of carbon credits is less than a tenth of the annual U.S. emissions. He also shared how agriculture might be positioned to help meet the potential need for emissions offsets. Sounds like a great opportunity, right? As with anything, make sure you read the fine print.

There are a lot of moving pieces when it comes to carbon market programs. The buyers are typically corporations, energy companies, etc... looking for an opportunity to offset their emissions. Ag producers are on the other end and while they have a 'commodity' – in this case carbon – to provide, sales (likely) won't be direct. Instead, the marketplace between the two is coordinated by intermediaries who take care of those details. Complexity increased.

Within that system there are factors that can cloud things further. What are payments based on? Will my practices be validated and how? Sampling processes for validation can be time consuming (and expensive) and complicated, not to mention variable. What if sampling shows I provided *less* carbon than initially predicted? Will payments be affected? There's also the question of whether payment will be provided for practices *already* implemented or whether new practices will have to be initiated. The questions can be many.

Maybe participation in a carbon market isn't for you, but if it's something you've considered, it's a good idea to do some research before going too far. Two University of Minnesota Extension specialists have developed a number of questions a producer should ask as they are evaluating programs. Dr. Tomlinson shared them in his presentation and they are available upon request if you are interested. Another resource is from Iowa State entitled *How to Grow and Sell Carbon Credits in US Agriculture* available online at: [https://www.researchgate.net/publication/353523269\\_How\\_to\\_Grow\\_and\\_Sell\\_Carbon\\_Credits\\_in\\_US\\_Agriculture](https://www.researchgate.net/publication/353523269_How_to_Grow_and_Sell_Carbon_Credits_in_US_Agriculture) . If you are looking at what different programs might be offered, the Illinois Sustainable Ag Partnership keeps up a pretty good list at: <https://ilsustainableag.org/programs/ecomarkets/> .

The market is constantly changing and there are lots of bugs to be worked out. Having a good background can help you make a decision when the time is right.

Ross Mosteller  
District Extension Agent, Livestock & Natural Resources

## **Deterring Dystocia**

There are many reasons fall calving is a part of my personal operation. Calving fleshy cows on native grass, generally favorable weather, better use of bull power with two calving seasons, different marketing opportunities, etc... all make their way to the top of the list. One anecdotal observation that I've noted and hear repeated by other fall calving managers, is shorter gestation periods which can translate into less dystocia. Dystocia is a major profit robber as it relates to dead or "slow" calves and has negative effects on rebreeding the female. Issues with the birthing process cannot be completely avoided, but there are preventative measures to consider.

The fourth Beef Cow/Calf study conducted by the National Animal Health Monitoring System (NAHMS) in 2017 estimated 9% of heifers and 4% of cows need some assistance during calving each year. The final days or hours leading up to calving is often too late in the process to prevent dystocia from occurring, but looking back on management decisions from the past breeding season and gestation period may provide some insight into how calving will go.

Selecting heifers that have a better chance of calving unassisted is a perfect starting point. If the heifer was big and needed assistance when she was born, is an indicator that she too could have dystocia issues. Measuring pelvic area in replacement heifers before their first breeding or calving will give producers an idea of which females may have trouble due to abnormal pelvis shape or size. Not every heifer is destined to be a momma cow and feeder heifers have good value now, don't be afraid to cull. Make replacement selections based upon genetics and performance carefully!

Expected Progeny Difference (EPD) values can help point decisions towards heifer retention and bull selection, particularly the Calving Ease Direct (CED) EPD. Utilize calving ease bulls when mating to heifers or young/small cows that may have trouble calving. CED measures percent of unassisted births and considers the size and presentation of the fetus. Be careful not to over select for CED in mature cows, as pounds of weaned calf and potential revenue can be given up unintentionally. CED is a better indicator to prevent dystocia compared to birth weight EPD or actual birthweight numbers.

Body condition score going into calving is an important factor to monitor. Pay attention to heifers and cows that are carrying excessive amounts of fat or are very thin. Over-conditioned females are more likely to have calving troubles due to accumulation of fat in the pelvis, incumbering fetal passage through the birth canal. Those females who are too thin likely will have reduced endurance during calving due to lack of energy stores. Separate cows based on condition so not to overfeed fat cows and underfeed thin ones.

Physical condition may be an overlooked factor and can be another beneficial difference with fall calving cows. Cows need to be in good physical shape at calving season and cows who've been out grazing generally get more exercise. If cows have been in a dry lot or small pasture during gestation, less energy will be used every day, due to inactivity and they can become "out of shape". Finally, avoid hauling cows close to calving, as fetal growth is occurring very rapidly and calf position can flip if cows slip or fall. Injuries to the cow can also occur through this movement and activity.

We may be at a point in year where some of things cannot be addressed for this calving season, but there is always next year to plan for. Nothing can completely prevent dystocia and careful observation needs to be given to the cowherd at calving time, but hopefully incidences of dystocia can be lowered following some of the above management practices. Good luck with fall calving!

Laura Phillips  
District Extension Agent, Horticulture

## **Water-Wise Gardening**

Right now, parts of Northeast Kansas are experiencing mild to moderate drought. If you are in a drought, you may be tempted to irrigate your lawn and garden more. However, this can rack up quite the water bill. Before you start irrigating your landscape, make sure you minimize your watering needs with these water-wise horticultural tips.

- Mulch in-between your plants. Mulching will conserve soil moisture and prevent soil from drying out as fast.
- Check soil moisture before adding water rather than watering on a set schedule. You can use a soil probe to see what the soil looks like farther down. While the very top layer of soil may be dry, you might find that soil a few inches down still has moisture. As long as the root zone of your plants has moisture in the soil, your plants do not need more water.
- Group plants with similar water requirements together to prevent overwatering species that are more drought tolerant. If you need recommendations on drought tolerant plants, you can reach out to us for a list of options.
- Control weeds to reduce competition for soil moisture. Weeds are going to use up water, which takes away water from your plants.
- Trees benefit from deep, slow watering. If you add too much water at once, most of it will run off and not end up helping your tree. If drip irrigation is not an option a 5-gallon bucket with a small hole drilled in the side near the bottom can be used. Fill the bucket and let the water drip out slowly next to the tree. Each time the bucket drains you have applied 5 gallons of water.
- Avoid planting a ring of flowers at the base of trees. This creates an imbalance by pairing plants that require regular, shallow watering with plants that need less frequent deeper watering. The result is shallow tree root growth and the potential for basal decay.

Utilizing these tips during times of drought can help save money. Even if you are not in a drought, reducing your water usage will help promote a healthier, more sustainable environment.

Teresa Hatfield  
District Extension Agent, Family and Community Wellness

### **See More Clearly: Protecting Your Sight as You Age**

I enjoy teaching a class called “Gray for a Day.” I primarily teach this class to students but have also taught it to adults. The class focuses on the sensory changes that people experience as they age. This interactive class lets participants gear up as a person experiencing these changes. Participants often report having more empathy towards people living through these changes and the need to take better care of themselves now.

Vision changes are one of the sensory changes we experience as we age. It is crucial to recognize vision changes and seek treatment. You may be experiencing blurred vision, trouble focusing, or difficulty seeing at night while driving. Sometimes, these changes can signal serious eye problems. If you experience sudden blurred vision, see flashes of light, have eye pain, experience double vision, or have redness or swelling of your eyelid, seek professional eye care immediately. Even if you are not experiencing these symptoms, the American Academy of Ophthalmology recommends that people over 65 have yearly eye exams. These regular check-ups can provide reassurance and early detection of potential issues, allowing you to take proactive steps to protect your sight.

Common age-related eye problems include:

- Presbyopia: Early signs include difficulty reading fine print, tired eyes after reading a book, difficulty seeing up close, and the need for brighter light. Reading glasses usually help.
- Cataracts refer to the opacity of the lens, which interferes with vision. People often report foggy, blurred, or fuzzy vision with color changes. When changes in eyeglasses are no longer an option, treatment options include surgery.
- Macular Degeneration: Age-related macular degeneration occurs when there is damage to the macula, which causes damage to your central or “straight ahead” vision.
- Diabetic retinopathy: Damage to the blood vessels causes this condition. It is a possible complication of diabetes, but not all people with diabetes will get it.
- Glaucoma: This eye condition results from faulty drainage of eye fluids (which, if left untreated, can put too much pressure on the optic nerve and cause permanent damage) and results in the loss of peripheral vision.

Detecting these eye conditions early is important, so seeing your eye doctor regularly is vital. The good news is that these conditions are often treatable if detected early enough. Seeing your eye doctor can also uncover other health issues, emphasizing the importance of regular check-ups.

There are some simple things you can do to help protect your eyesight.

1. Wash your hands before touching your eyes. Unwashed hands can spread diseases by touching your eyes or near your eyes.
2. Take care of your contacts. Don’t wear your lens longer than recommended, use an unexpired solution, and never touch your lens with unwashed hands.
3. Wear eye protection whenever there is a potential to get debris in your eyes.
4. Eat well-balanced meals to keep your eyes healthy.
5. If you have diabetes, manage your blood sugar, blood pressure, and cholesterol.
6. Stop smoking.
7. Get regular exams.

As we get older, problems with vision become more likely. Take steps now to protect your eyesight. If you are concerned about anything with your vision, have it checked out. Our vision impacts so many things in our lives, both physically and mentally.

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

### **August is National Sandwich Month**

The sandwich has a long history and its origins are unclear---but regardless of when, where and why they came about, there are many ways to make them healthy! Try these tips for making nutritious sandwiches without compromising on taste.

Opt. for whole grain bread. What makes a sandwich a sandwich? The bread, of course! Carbs have a bad reputation, but they are an important part of the diet. Whole grain breads, rolls, wraps, pitas and English muffins are some of the healthiest bread options for sandwich building.

Bonus tip: Whole grains provide greater nutritional benefits than their refined grain counterparts.

Pick your protein. Lean proteins such as turkey, chicken, lean roast beef, and tofu all work great on sandwiches. While cold cuts provide a quick and easy protein option, check the nutrition facts on your favorites to get an idea of their fat and sodium content. Also, processed meats may not be healthy when consumed daily.

Bonus tip: Make your dinner work double duty. Roast a slightly larger chicken, turkey, pork loin or lean cut of beef than you would normally. Slice extras to use for sandwiches. This can save you money and provide a healthier option for your sandwich.

Choose your cheese. Cheese isn't always a sandwich necessity, but it can add good flavor, another source of protein, plus calcium and Vitamin D. Opt. for low-fat cheeses and make sure you don't add too much.

Bonus tip: Cheese can serve as your protein if you like to go meatless.

Don't forget the veggies. Veggies are a great addition to any sandwich. Add sliced tomato, lettuce leaves, sliced peppers, sliced mushrooms...whatever suits your fancy. Veggies are high in nutrients but low in calories and fat, so don't hold back when adding them to your sandwich.

Conclude with condiments. Mayo also has a bad reputation when it comes to nutrition. However, if you look at the nutrition label, you'll find most brands are high in monounsaturated and polyunsaturated fats. That being said, it still should be consumed in moderation. If you're looking for new ways to add flavor to your sandwich, try toppings like whole grain mustard, banana peppers, hummus, smashed avocado, light salad dressing, and wasabi. Hold the salt, especially if you are using processed or deli meats.