MANAGING CATTLE THROUGH HEAT

On a hot summer day, people often dress in light clothing, drink more water than normal and seek shade to minimize the impacts on the body from heat and humidity. Cattle need many of those same strategies for maximum performance over the summer. Heat stress is a challenge to many producers, and it costs the U.S. cattle industry up to $370 million in losses each year. Managing heat conditions is important for cattle comfort and efficiency.

First it is important to recognize the signs of stress. Cattle that are experiencing heat stress will have decreased production, so it is important to know the signs, which often mimic respiratory disease. Many times, cattle that are breathing rapidly might be experiencing heat stress. However, it is sometimes difficult to detect because if you see one animal breathing hard in the heat often there is another set of calves that are also experiencing heat stress but not showing the signs to the same degree as the one you noticed. Often times it is the young calves that are most impacted by the heat. Very young calves seem to be more sensitive to the heat when compared to their older herd mates.

Along with noting the daytime high temperatures, producers need to monitor the nighttime low temperatures as well. If it doesn’t cool down overnight, the cattle can’t dissipate the heat like they would otherwise, so those are the days that you need to be extra vigilant in watching for signs of heat stress. Another way cattle produce heat is by digesting food, typically four to six hours after eating. If we think about it, feeding cattle within the wrong time period can actually increase their heat load because the heat of digestion and the heat from the environment are building on top of each other.

Feed 70 percent of the animals’ ration as late in the evening as possible, which puts the peak heat of digestion overnight when temperatures are likely cooler. Decrease feeding during the day.

Check the watering systems often because on the really hot days they may not be able to keep up with the demands for water that the cattle are placing on them. One rule to follow is that cattle need to consume about five times the amount of water as the dry matter they are consuming. Cool, clean, and readily available water is critical during heat stress events. This might mean increasing the water tank capacity within a pen to meet these needs or providing additional water sources that have easy access. Producers should start thinking ahead as to how they will provide this additional water cattle will need during heat stress events.

Regarding shade, whether it is a tree in the pasture or an artificial shade it is important to confirm it is big enough to allow good airflow moving underneath the shade. Having a group of cattle huddled together will not help dissipate heat from one another. The dreaded summer months of hot weather are upon us and managing heat stress on cattle can help with performance and efficiency. If you have any questions please reach out to livestock agent Kaitlyn Hildebrand in the Washington office 785-325-2121 or by email khildebrand@ksu.edu.
One of the most important things to consider is how we got to this point. This price drop is not necessarily attributable to any new bearish outlooks, but a natural cooling off of the markets in response to international crop scare coverage we observed in previous weeks. Russia, one of the world’s largest wheat producers and exporters, was the subject of concern, because it appeared at the time that their wheat crop was going to be negatively impacted by drought conditions and anomalously late spring freezes. Russia’s crop was also in a critical stage of yield determination, so a combination of adverse conditions had true potential to knock back their expected production.

Something to keep in mind, however is that a crop scare event such as this one is not purely brought about by the possibility of larger or smaller crop supplies, but it is compounded by uncertainty. Uncertainty breeds speculation, and speculation breeds a crop scare rally, even in the event that a smaller crop is realized after the fact, even just knowing what we have supply-wise tends to drop prices back into a pre-scare trading range. This is a key difference between supply and demand shocks in agricultural commodities: in demand shocks, the shock takes effect throughout the whole international commodity purchasing window, while a supply shock typically has a greater intensity around a single event – in this case harvest prospects.

Supply and demand shocks are a natural part of the commodity marketing experience, so we need to stay aware of opportunities to use marketing alternatives to optimize price and mitigate risk. So, we have to ask ourselves: where were we on Memorial Day, when wheat prices surged to $7.46 per bushel? Did we have bushels priced? Did we have bushels hedged? Did we have some sort of arrangement in place to take advantage of higher price points in the market, or at least reduce our downside risk? Because if we were just waiting around until harvest to price our wheat, we might be more disappointed at the price we receive. Even if harvest lows stick around the $6.35 per bushel mark (which is still better than what we were seeing several months ago when bids had fives in front of them), we’d be wondering what kind of upside we could have taken advantage of. Plus, there’s no guarantee that this selloff is over, either. For many people in the hard red winter wheat producing areas of the state, harvest is still a few weeks away, and the bottoms we may see will likely be reached then.

If you have any questions about planning and carrying out a commodity marketing program, please contact Luke Byers, River Valley District Agriculture & Natural Resources Extension Agent, at 785-632-5335, or by email at lsbyers@ksu.edu.
STAYING COOL THIS SUMMER

We are in the middle of summer and some hot temperatures. It is important during these hotter summer months, specifically for older adults, to know how to keep cool and hydrated. There are a few different ways to make sure you stay cool this summer. Stay in air-conditioned homes or buildings as much as you can. When it is very hot, do not rely only on fans to keep you cool. Try to avoid using your oven and stove as often to cook, as this will warm up your house. If you need a way to cool down, try taking a cool shower or bath. Other ways to stay cool are associated with your activity level and clothing. Try to get plenty of rest and avoid rigorous activities. During these hot months try to wear lighter colors or clothes which are looser fitting and light weight. Staying hydrated is extremely important during the summer months. In order to stay hydrated you should drink water more regularly. Do not wait to drink water until you feel thirsty. It can also be helpful to check on your friends and neighbors and have them check on you. As always stay updated on temperatures and weather in your area. For more information on this topic check out the following link https://www.cdc.gov/diseases/ extremeheat/older-adults-heat.html. Source: CDC.gov

DIGITAL AMBASSADOR PROGRAM

The River Valley Extension District is part of the new Digital Ambassador Program. This is a train-the-trainer, volunteered effort to address the broadband knowledge and affordability gap in Kansas. Broadband infrastructure is a vital tool in bridging the education gap and increasing economic mobility. In the River Valley Extension District, we are looking for local adult volunteers, who would be interested in providing education to their local community about different digital technologies and internet-based applications. The digital ambassador program is designed to increase home internet adoption and the use of internet-based applications, so Kansans are better able to navigate the digital economy and improve their lives through access to online education, economic opportunities, and telehealth.

A core group of K-State Research and Extension specialists and agents will become digital ambassador train-the-trainers. This core group will provide digital ambassador training for local adults and youth. Extension agents will provide access to local communities, recruit adult and youth digital ambassador volunteers and provide links to community vitality specialists and K-State resources.

Informational meetings will be held for those interested in becoming an adult volunteer and then trained by local River Valley Extension District Agents. Be on the lookout for these meetings in the newsletter, on Facebook, or our website (rivervalley.k-state.edu). If you are interested in becoming a digital ambassador or have questions please contact Jordan Schuette, Adult Development and Aging Agent in the Washington Office at 785-325-2121 or Wade Reh, District Director in the Clay Center Office at 785-632-5335.

SUNFLOWER FAIR

“Be Better! Be Brighter!” is the theme of the 2024 Sunflower Fair. The Sunflower Fair is being held on Tuesday, September 24, 2024, from 8:00 a.m.- 4:00 p.m. in Salina at Tony’s Pizza Event Center (Formerly called the Bicentennial Center), 800 The Midway, Salina. Registration for the event costs $25. Registration for the event includes lunch, expert speakers, exhibits, auctions, health screenings, and more. You can register by sending your name, address, phone number, and check payable to NC-FHAAA and mail it to the North Central-Flint Hills area Agency on Aging, 401 Houston St., Manhattan, KS 66502. You can also call 800-432-2703 or go to www.ncfhaaa.com. Visit with old friends and meet new ones! You will learn while having fun!

SUMMER PROGRAMMING FOR YOUTH

River Valley Extension District is so lucky to be hosting four summer interns for the third and final year of the Kansas 4-H Summer Engagement: Helping Youth Discover their Spark to Increase Learning Grant! This grant was created in partnership with the Kansas Department of Education to help bridge the learning loss gap that youth suffered as a result of a decrease in intentional instruction time. There are four summer interns throughout our counties who are partnering with our local schools and summer programs to bring educational programs to the youth of the district in different learning areas such as STEM (Science, Technology, Engineering, and Mathematics), the arts, communications, and so much more! These interns have also taken on the task of providing 4-H Project-Related Workshops available to the youth of the district, ages 7-18, whether they are enrolled in 4-H or not! The upcoming workshops in July include: Woodworking, Charcuterie Boards, the Innovation Lab Tour at Kansas State University, Sewing, Bringing Home the Bacon: a class in Financial Literacy, and Floral Arrangements. These classes are filling up fast, so, make sure to sign up today! To register, or to find more information, please visit our website at https://www.rivervalley.k-state.edu/4-h/Summer_Activities.html

We are so thankful for our interns and the hard work they have already put forth this summer; and for the innovative, engaging, educational programs they have yet to come!
“Connecting makes a difference.” That may be the case at many levels, and today we will meet a rural-preneur who has found that statement to be true as she builds her business in rural Kansas.

Autumn Breault is the founder and owner of Autumn Fever Designs. Autumn grew up in Cloud County at the north central Kansas town of Clyde, population 694 people. Now, that’s rural – but there’s more.

Breault enjoyed art and creating beautiful things with her hands. She earned an associate’s degree in art from Cloud County Community College. “I had a friend in California and I was thinking of renovating a camper and going out to the west coast when I met Trask,” she said. Trask Breault is a local guy who works for the city of Concordia.

Autumn and Trask married and are now living at the nearby town of Jamestown. Autumn is working as a certified nurse’s assistant at the hospital in Concordia. She continues her interest in art.

“In one of my (college) classes, one assignment was to make up a business of our own,” Breault said. Her first art experience had been in abstract acrylics. She transitioned to making handmade jewelry and home décor creations.

For the class assignment, she developed a description of a business that would market her handmade products. Using her first name, she called it Autumn Fever Designs. The name stuck.

Breault dabbled in artwork, but a friend in California encouraged her to pursue it as a business. “She motivated me to do more,” said Breault, who established a website in 2018.

Today, Autumn Fever Designs is selling a variety of jewelry, macramé and personal items online and at craft shows and festivals. There are no “Made in China” products in her selection. One hundred percent of the items she sells are creations that she made herself. Breault specializes in handmade jewelry and home décor, particularly macramé.

“One of the things I like to say is that everyone should enjoy their own journey,” Breault said. “Why not own a pair of handmade earrings or macramé home decor to take along with you?”

“I like making my house cute. I enjoy helping other people do that too.”

Autumn Fever Designs offers jewelry such as necklaces and bracelets; macramé plant hangers, hat hangers, dog leashes and coasters; keychains, hair barrettes; and more. One line of products features Dalmatian Jasper, which is a speckled stone. Another line includes an extensive offering of lightweight clay polymer earrings. Many of her products incorporate pearls, morganite or other gems.

Breault enjoys customizing products. “I absolutely love taking custom orders,” she said.

She can create unique items for weddings and other special occasions, or such things as gift boxes for a bridal party. The bridal collection features elegant clay earrings in an array of styles, colors, and textures.

“Each pair is carefully designed to be comfortable and light weight,” Breault said. “I also offer 10 to18 carat gold plated jewelry paired with freshwater pearls.” These luxury pieces, she said, are available in rings, bracelets, necklaces and earrings.

Autumn Fever Designs website is www.autumnfeverdesigns.com. The company’s online business has expanded significantly. “We have sold products coast to coast and as far away as Hawaii, Canada and Australia,” Breault said.

It’s an impressive record for a business based in the rural community of Jamestown, population 237 people. Now, that’s rural.

Breault has observed an interesting dynamic as she and Trask take her products to craft shows and festivals.

“The jewelry sells well online but the macramé does better in person,” Breault said. “I like interacting with people. Meeting people makes a connection that helps them see how they can use and enjoy these things.”

Connecting makes a difference. Autumn Breault has found that connecting with her customers helps find, design and create the right product for them.

We commend Autumn Breault of Autumn Fever Designs for making a difference with her entrepreneurship and craftsmanship. Whether online or in person, she has found a way to make creative connections.
CANNING SEASON IS UPON US

If you plan to pressure can veggies, meats, and other low-acid foods this canning season, bring in your pressure canner dial gauge for FREE testing. We test Presto, National, Maid of Honor and Magic Seal dial gauges. We do NOT test All American dial gauges. You are welcome to bring in the gauge by itself or leave the gauge attached to the lid and bring in the entire lid. You can drop off your gauge and/or lid at any of the River Valley Extension District offices (Clay Center, Concordia, Belleville, Washington). We recommend you test your dial gauges before the start of every canning season or anytime you might have accidentally dropped the gauge.

I also encourage those interested in canning and other forms of home food preservation to check out Karen Blakeslee’s e-newsletter titled You Asked It! Karen is K-State Extension’s Food Preservation Specialist and also works closely with the North Central Food Safety Extension Network, another home food preservation resource worth checking out.

The following article on canning previously frozen food is from the July 2024 edition of the You Asked It! e-newsletter.

Canning Previously Frozen Food

Sometimes, freezing is the quickest way to preserve fresh food from the garden or farmers market. But can that frozen food be used in canning? In many cases, it depends on the food itself. Freezing will change the texture and soften the food upon thawing. This will cause the food to pack into jars differently compared to fresh food.

For example, frozen tomatoes could pack into jars differently than freshly prepared tomatoes and cause overfilling of jars. Overfilling can result in under-processing (and therefore possible spoilage on the shelf) and possibly under-acidification with more tomatoes in the jar than expected.

Process times are dependent on food being prepared as described in the preparation steps.

Continuing with our tomato example, the best recommendation is to use these tomatoes in something that is well cooked like stewed or crushed tomatoes or make tomato juice or sauce. For example, freeze the tomatoes for a very short time of just a few weeks at most, without any other added liquid or ingredients. Then when you have enough, thaw them completely and use all the tomatoes and their juices to make crushed tomatoes with the hot pack method.

Unsweetened frozen and thawed fruit can be used in place of fresh fruit in jams and jellies. For best results, measure frozen fruit before thawing.

Learn more tips about safe changes to tested canning recipes here:
https://www.ndsu.edu/agriculture/sites/default/files/2024-03/fn2102.pdf

You are welcome to swing by your local Extension Office for a hard copy of this food preservation publication!

Questions can be directed to Kaitlin Moore, Nutrition, Food Safety & Health Agent at 785-243-8185

BILL CALENDAR

Do you find yourself dealing with fees due to a late or missed payment? In addition to likely having to pay an extra fee, late or missing payments could also have a negative effect on your credit history. A bill calendar may be helpful.

A bill calendar is a tool that can provide a monthly visual reminder of when bills are due, how much you owe, and to whom. Taking it one step further, you can add your sources of income to the calendar to compare when amounts are due and when you receive income to cover those expenses. This is a similar process to a cash flow budget.

If you have more bills than income in a given week, consider asking to change the due dates of those bills to better align with your income.

Below are resources from the Consumer Financial Protection Bureau for both a Bill Calendar and Cash Flow Budget. You can create a bill calendar multiple ways, including electronically or even with a pocket calendar that can easily be carried with you.


If you have any questions on financial management, please contact Monica Thayer, Family Resource Management Extension Agent, at 785-527-5084 or mthayer@ksu.edu.

POWERPAY (DEBT REDUCTION TOOL)

Discover how quickly you can become debt free, and how much you can save in interest costs by following a debt reduction plan. PowerPay is an online platform that will give you the tools to develop a personalized, self-directed debt elimination plan. Utah State University Extension is pleased to provide this debt management tool without any cost to consumers worldwide.

Create your personalized debt reduction plan online at https://extension.usu.edu/powerpay/. With any questions, please reach out to Monica Thayer, Family Resource Management Extension Agent, at 785-527-5084 or mthayer@ksu.edu.
TOMATO LEAF-SPOT DISEASES

This time of year, two common leaf-spot diseases appear on tomato plants. Septoria leaf spot and early blight. Brown spots on the leaves characterize both diseases, so it is important to figure out which disease you have so you can treat it accordingly.

Septoria leaf spot usually appears earlier in the season than early blight and produces small dark spots. Spots made by early blight are much larger and often have a distorted “target” pattern of concentric circles. With both diseases, heavily infected leaves eventually turn yellow and drop off. Older leaves are more susceptible than younger ones, so these diseases often start at the bottom of the plant and work up.

Mulching, caging, or staking keeps plants off the ground, making them less vulnerable to both these diseases. Better air circulation allows foliage to dry quicker having less of a chance to develop these diseases. Mulching also helps prevent water from splashing up onto the leaves and carrying disease spores to the plant.

In situations where these diseases have been a problem in the past, rotation is a good strategy. It is too late for that now, but keep in mind for next year. Actually, rotation is a good idea even if you have not had problems in the past. Unfortunately, for many gardeners their space is too small to make rotation practical. If you have room, rotate the location of the tomatoes each year to an area that had not had tomatoes or related crops (peppers, potatoes, eggplant) for several years.

If rotation is not feasible, fungicides are often helpful. Be sure to cover both upper and lower leaf surfaces, and reapply fungicide if rainfall removes it. Plants usually become susceptible when the tomato fruit is about the size of a walnut. Chlorothalonil is a good choice for fruiting plants because it has a 0-day waiting period, meaning that fruit can be harvested once the spray is dry. Chlorothalonil can be found in...
HEAT STOPS TOMATOES FROM SETTTING FRUIT

We haven’t been terribly hot yet this year, but we all know it’s coming! When temperatures remain above 75°F at night and are around 95°F during the day, and with dry, hot winds, these conditions will cause poor fruit set on tomatoes. High temperatures interfere with pollen viability and/or cause excessive style growth leading to a lack of pollination. It usually takes about 3 weeks for tomato flowers to develop into fruit large enough to notice and an additional week before tomatoes are full size and ready to start ripening. There are “heat-set” tomatoes such as, Florida 91, Sun Leaper, and Sun Master that will set fruit at higher temperatures; the difference is normally only 2 to 3 degrees. Cooler temperatures will allow flowers to resume fruit set. If you have any questions feel free to stop by or contact me in the Washington office, 785-325-2121 or khatsohl@ksu.edu.

PRUNING STORM DAMAGED TREES

Most of us have gotten lucky with the storms we have had so far this year. As we continue into thunderstorm season, there are a couple things to be aware of when dealing with tree damage. Most of the time you have to decide whether a tree can be saved or if it needs to be taken down. Here is a simple checklist you can follow to help take care of your storm-damaged landscape.

First, you need to be safe when first checking on your landscape after the storm. Check for downed power lines or hanging branches. Don’t venture under the tree until you know it is safe. If large limbs are hanging from the tree, be sure to take extra precautions. If the limb is too large for you to handle safely or is in a spot that can cause damage to a surrounding building, you can call an arborist that has the tools, training, and knowledge to remove the limb safely. Next thing you need to do is clean up and remove any debris so you don’t trip over any of it.

Second, decide whether it is feasible to save the tree. If the bark has been split, exposing the cambium, or the main trunk of the tree is split then the tree probably will not survive and should be removed. If there are too many broken limbs on the tree, destroying the form of the tree, the best option is to take down the tree and replace it. When pruning the tree, the topping method which is done by removing all the main branches and only leaving stubs on the tree, is not a recommended pruning procedure. New branches will normally arise from the stubs, but they will not be as firmly attached as the original branches and are more likely to break in subsequent storms. Also, the tree will put a lot of energy into developing new branches, leaving less energy to fight off diseases and insect attacks. Often the topped tree’s life is shortened, causing you to remove the tree later anyway. Below you will find a couple ways of pruning your tree, if you decided the tree can be saved.

Third, prune off the broken branches to the next larger branch or to the trunk, depending on which limb is broken. If you are removing the limb back to the trunk, do not cut flush with the trunk but rather at the collar area, which is between the branch and the trunk of the tree. Cutting flush with the trunk leaves a much larger wound than cutting at the collar and takes longer for the tree to heal the cut. Middle-aged or younger vigorous trees can handle having up to one-third of the crown removed and still make a surprisingly swift comeback. Older trees can take longer to recover from a vigorous pruning.

Remove the larger limbs in stages. If you try to take off a large limb in one cut, it will often break off before you are finished cutting and will strip the bark off the trunk. Instead, make a cut about 15 inches from the trunk on the limb you are removing. Start from the bottom and cut one-third of the way up through the limb. Make the second cut from the top down but start 2 inches further away from the trunk than the first top cut. The branch will break away as you make the second cut. The third and final cut, made at the collar area, will remove the stub that is left from the tree.

Those are just a few ways to help with summer storm cleanup of trees. If you happen to have damage from any storms and want help deciding what needs to be done with your trees, please feel free to stop by or contact me in the Washington office, 785-325-2121 or khatsohl@ksu.edu.
# RIVER VALLEY DISTRICT

## “2024 UP-COMING MEETINGS & EVENTS”

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<tr>
<th>DATE</th>
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<th>PROGRAM</th>
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<tbody>
<tr>
<td>July 1</td>
<td>2pm</td>
<td>Youth Woodworking Workshop</td>
<td>Concordia-Cloud County Fairgrounds</td>
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<tr>
<td>July 1</td>
<td>6pm</td>
<td>Red, White &amp; Blooms</td>
<td>Washington-KSDS, 124 West 7th St.</td>
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<tr>
<td>July 2</td>
<td>2pm</td>
<td>Youth Charcuterie Board</td>
<td>Washington-FNB Basement</td>
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<tr>
<td>July 4</td>
<td>6pm</td>
<td>Independence Day</td>
<td>All River Valley Extension District Offices Closed</td>
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<td>July 8</td>
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<td>Youth Innovation Lab Tour</td>
<td>Manhattan-KSU Campus</td>
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<td>July 9</td>
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<td>July 24</td>
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<td>Youth Floral Arranging</td>
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<td>July 29-Aug. 3</td>
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<td>Youth Floral Arranging</td>
<td>Republic County Fair</td>
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<td>Aug. 3</td>
<td>10am-1pm</td>
<td>Free Health and Cancer Screening</td>
<td>NCK Fairgrounds-West side of Commercial Building</td>
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<tr>
<td>Sept. 24</td>
<td>8am-4pm</td>
<td>Sunflower Fair</td>
<td>Salina–Tony’s Pizza Event Center, 800 The Midway</td>
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