

History steaming through



Crowds gathered along the tracks of the Union Pacific Railroad as a piece of history steamed through Kansas - literally. The Big Boy steam engine 4014, one of twenty-five built exclusively for the Union Pacific Railroad, had been retired since 1961 after logging 1,031,205 miles during its twenty years in service. Union Pacific reacquired the engine in 2013 and began the two-year restoration process to have it ready to roll again to celebrate the 150th anniversary of the completion of the Transcontinental Railroad. The engine is 132 feet long and weighs 1.2 million pounds. Its length requires the frame to be articulated, or hinged, for rounding curves. Engine 4014 is one of seven Big Boys on display around the country in St. Louis, Dallas, Omaha, Denver, Scranton, Green Bay and Cheyenne. This leg of Big Boy's journey began September 27 heading west from Cheyenne to go through Utah, Nevada and California before turning east towards Arizona, New Mexico, Texas and Arkansas, then traveling back to Cheyenne through Missouri, Oklahoma, Kansas and Colorado.

Photo by Kevin Macy

U.S. leads the way in responsible and sustainable beef production

A new white paper detailing the minimal environmental footprint of beef production in the U.S. was recently published by the National Cattlemen's Beef Association, a contractor to the Beef Checkoff. The white paper, authored by Sara Place, Ph.D., senior director of sustainable beef production research at the National Cattlemen's Beef Association, highlights why and how the U.S. is the leader in sustainable beef production.

Beef greenhouse gas emissions in the U.S.

U.S. beef production, particularly when it comes to greenhouse gas (GHG) emissions, is often misrepresented with global statistics that fuel inaccurate reports and misconceptions. This new white paper addresses this issue by sharing the most recent data, indicating that only 3.7 percent of U.S. GHG emissions come directly from beef cattle. By comparison, globally, beef cattle account for 6 percent of GHG emissions.

To put U.S. beef production further into perspective, all of agriculture, including beef cattle and other animal and crop agriculture, accounts for 8.4 percent of U.S. GHG emissions. Comparatively, transportation accounts for 28 percent of GHG emissions in the U.S. On global scale, all livestock agriculture accounts for 14.5 percent of GHG emissions, which is often used inaccurately to represent U.S. beef emissions.

These variations can largely be attributed to different regional production practices. As the white paper notes, cattle production in the U.S., due to scientific advancements in beef cattle genetics, nutrition, husbandry practices, and biotechnologies, has one of the lowest beef GHG emissions intensities* in the world. In fact, GHG emissions intensity in the U.S. is ten to 50 times lower than other parts of the world.

Improved Efficiencies

The white paper also

details the results of improved efficiencies in beef cattle production in the U.S. during the past several decades. For example, compared to the mid-1970's, today the U.S. produces the same amount of beef with one-third fewer cattle. Furthermore, the U.S. produces around 18 percent of the world's beef with only 8 percent of the world's cattle herd. These efficiencies are possible due to improved productivity practices, refined genetics, nutrition and scientific advancements.

In addition to more efficient cattle production, beef farmers and ranchers have dedicated themselves to being stewards of the land by focusing on preservation and enhancement of grassland ecosystems through responsible land management practices. As ruminants, cattle can convert plants with little to no nutritional value often found on these lands into a high-quality protein.

Continuous Improvement

Although the U.S. beef industry is the most sustainable in the world, there is still room for improvement. In addition to research and extension and adoption of new knowledge, beef farmers and ranchers have invested in a first-of-its kind lifecycle assessment to better evaluate sustainability achievements and opportunities across the entire beef

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Robots, such as that shown above, could help farmers with some of the work, while providing volumes of information to help plant, manage and harvest better crops.

Robots, drones becoming workhorses for agriculture

By Pat Melgares

The small, rolling vehicle looks a bit like something out of a science fiction film as it moves slowly across a barren patch of land on Kansas State University's North Agronomy Farm.

It rolls on treads similar to an Army tank, but the complicated array of attachments suggests something else.

The machine, which measures two feet tall and three feet wide, was built for farm work by K-State agricultural engineer Dan Flippo and his students, who are testing its ability to cut a narrow trench and plant seeds in unison.

Their work on this day is a glimpse at agriculture of the not-too-distant future, when small machines guided by computer programs will do some of the work and give farmers large volumes of information that they can use to plant, manage and harvest better crops.

"We are not trying to take over tractors or get rid of tractors; we are trying to make more food," Flippo said. "By 2050, we are going to have close to 10 billion people, and right now we are not close to meeting the amount of food production that will be needed."

Much of agriculture already is being touched by some form of technology, whether it be sensors on tractors that precisely measure planting and fertilizing rates, or thermal infrared cameras attached to drones that fly above farm fields and detect water or insect stress in crops. There are even robotic arms that can milk a cow.

"I think farmers are ready for everything that is easy to adopt and which gives them a reliable and confident source of information," said Ajay Sharda, associate professor of biological and agricultural engineering. "That's their bottom line. They cannot spend hours and hours to set it up or hours to run them."

Therein lies an opportunity for universities like Kansas State, which, in recent years, has built considerable momentum toward incorporating technology

on America's farms.

Rovers in the Field

Flippo's fleet includes several vehicles that spent their first life as motorized wheelchairs. The students - which include undergraduates and graduates - are using the motor and casing to custom-build machines that serve a specific purpose on the farm.

"There are different categories that we are building," Flippo says. "The first is the rover category. This would be like a microwave-size robot. Their purpose is to go out and scout a field, which is important because humans can scout really well, but nobody wants to walk around a field all day."

When an entomologist goes out to look for pests in a field, they may look at two or three spots and make a judgment about the whole field. Rovers can cover the entire field, perhaps working through the night, and provide data on pest pressure in the entire field.

"There are some issues there, such as if it breaks, you're going to have to go find that in the field," Flippo said, noting that engineers also need to account for how long that vehicle can hold a charge, how it handles ruts in the field, and whether it can follow the correct path between rows.

"But," he adds, "these small rovers can go through the field consistently and keep track of the field much better than humans ever could."

K-State also is building machines that are slightly bigger than the rovers, called ag drones. Flippo said these robots are "the workhorses," such as the unit they were testing recently to plant seed. Ag drones potentially could be used to carry tanks of chemical to an area of a field or plant seed in areas where a larger tractor can't safely go, such as sloped hills.

Larger robots, some the size of lawnmowers and others the size of a bed frame, are capable of more conventional farming work, such as pulling disc drills for wheat, scouting fields and planting fields. But as the robots get bigger, Flippo notes that companies and farmers become more

concerned about safety. At this point, K-State is not working on larger robots.

Detect and Defeat

In January, 2019, Flippo, Sharda and K-State entomologist Brian McCornack were awarded a grant for \$882,920 from the U.S. Department of Agriculture through its National Robotics Initiative to study the use of robots to detect and defeat insects in crop fields.

According to the USDA, farmers spray nearly \$15 billion worth of chemicals annually yet still lose 37% of their crop yield to pest damage.

Sharda says K-State's group is working on a rover that has a sensor on the front of the vehicle to detect insects, such as aphids in a sorghum field. The sensor will have the ability to detect whether the concentration of aphids - which measure no more than one-eighth of an inch - exceeds a critical limit.

When the concentration of insects exceeds the critical limit, the robot will send a signal to a sprayer that is mounted to the back of the vehicle. The sprayer takes that cue and knows immediately that it should treat the area.

"We are going to synchronize the system so that based on the moment that the vehicle sees the insects, it will start spraying backward, and it builds a buffer zone around the area," Sharda said. "In other words, it will spray beyond the point where the insect was sensed so that we have established a full zone of control."

Sharda notes that spraying from below the crop canopy will help to contain more of the chemical where it's needed, and reduce spray drift. Ultimately, that means less chemicals being used and less money paid by the farmer.

Eye in the Sky

Sharda also is leading a project to use unmanned aerial vehicles, best known as drones, to scout crop fields for water stress. The four-year project is helping farmers schedule irrigation more efficiently because they better understand areas of a field that are more stressed than others.

The researchers have

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Thankful for Agriculture

By Glenn Brunkow, Pottawatomie County farmer and rancher

Happy Thanksgiving! The day we sit down to a feast that often includes turkey, mashed potatoes, stuffing, gravy, pumpkin pie and all the other trimmings. I would argue a good prime rib or pork loin is just as festive and makes me every bit as thankful, but turkey is fine.

The eating aspect of Thanksgiving is important, believe me. I value eating, but we also need to be sure we fully appreciate the giving thanks part of the day. We need to take time to recognize all we have been given and all we have. We live in a country where we often take our blessings for

granted.

I also would say this is the holiday when we celebrate our ag heritage in the United States, whether we know it or not. Thanksgiving is when we pause and express our gratitude for all we have, and the bedrock of our thankfulness is the abundant food supply we often fail to appreciate. Think about it; it's a holiday where the main celebration is a feast. If that is not a celebration of agriculture, I don't know what is.

This very holiday is the one where the Pilgrims were said to have come together to have a feast to celebrate the bounty they had grown and harvested. Agriculture and food have always been the bedrock and

foundation of our great nation, and Thanksgiving is where the American farmer and rancher should step forward and take a bow.

Most nations in this world only dream of agriculture production like ours. We not only grow enough food for our own country, but we feed a large portion of a hungry world too. We live in a nation where we have an abundance of safe, wholesome, affordable food at our fingertips. We can go to about any grocery store and not only find any food we desire but often have choices between types and brands of the same food.

I am quite sure that as a society we have forgotten what a tremendous blessing our agriculture is. Food security and an ample supply of nutrition is the first building block in any great society, and without it nothing else can be accomplished. My fellow farmers and ranchers, we are the ones who make that happen. Thanksgiving is a celebration of what we do.

The holiday is nearly here, and I hope we will take a minute to feel pride of all that we have accomplished in agriculture in the United States. We are the most progressive, productive and efficient in the world and because of it our country will be able to celebrate with a great feast. I know I will sit down to eat on Thanksgiving but before I dig in, I will take a minute to take it all in with a sense of pride. My fellow farmers and ranchers, without you, none of this would be possible.

"Insight" is a weekly column published by Kansas Farm Bureau, the state's largest farm organization whose mission is to strengthen agriculture and the lives of Kansans through advocacy, education and service.



It's Thanksgiving, what do you have to be thankful for? I know it has been a tough year for a lot of us. The weather and markets have gotten the best of us and it may be one of the hardest years for you ever, but you know what? There is an awful lot to be thankful for, even in a year like this.

Each of us who live in this great nation should be thankful for that and that should be enough. We have so many advantages, rights and freedoms that often we take them for granted. We live in a society and a nation with a lifestyle that most of the world can only dream of. We have the ability and the freedom to do whatever makes us happy and that is luxury most of the rest of mankind never know.

I know this has been a lean, tough year and maybe the near future doesn't look so good either. I get it, I am right there with you, but I can tell you this. We have the opportunity to bounce back, to see success and to make things better; that is an opportunity many never have. Even when we are at the lowest of our lows, we are still better off than most and that is something we should be thankful for.

Let's start off at the most basic level. Do you have a roof over your head? Do you have food in your refrigerator? Do you have water, electricity and heat? If the answer was yes, and I suspect it was, you should be thankful for what you have. I don't mean to be condescending because I am talking to myself as much as anyone else.

Thanksgiving is a day when I hope you will take the time to reflect on all that you have been blessed with. I know it is easy to let bad things pile up and get you down but each of us have been so blessed and given so much that we should take the time to give thanks more often than once a year, but it is a start and I hope you will take that time to pause and think of all you have.

Those of us who make our living in agriculture have an extra measure of blessing. I know that is easy to forget when the snow is blowing, or the rain will not let up. When the markets go

down when they should have gone up it is hard to think of how good we have it. Yesterday was one of those days for me; I won't lie, it was a tough day. It was one of those days when things started off bad and kept piling up through the day. Just when I thought the day couldn't get worse, bang, another thing happened.

However, at the end of the day, I was leaning on the hood of the truck talking to Isaac about the farm and the future. Suddenly things didn't seem so bad. Sure, it was a rough day, but we will find a way through it and all because I have been blessed to live where I do and be born into the life I have. That is the thanks we should all be giving.

Each day we have the chance to go out and grow food. We get to work in the fresh air, plant seeds, work with animals and most of all be free. I am not sure life can get any better than that. We have challenges but I am sure those challenges are there to make us appreciate the good times. Even in tough times we have so much to be thankful for.

I hope you will have a Thanksgiving surrounded by friends and family. I hope you will be able to sit down to a magnificent dinner with all the trimmings but most of all I hope each of you will be able to find just a moment of peace this Thanksgiving. A moment when you can take in all you have been given and just be at peace.

It might be in the morning when you are alone doing chores. You might be drinking that first cup of coffee before everyone else starts to stir. It might even be sitting in the middle of that family gathering with chaos and noise all around, but I hope the moment will find you and you will be able to relax and smile just a bit when it hits you.

I know it is a moment I need. What does the next year hold? Odds are it will be better, and I hope it is. Just know that we all have so much to be thankful for and our blessings are many. I hope this holiday finds you with harvest done and your livestock cared for and you can see all of those things you have to be thankful for.



Several months ago my youngest daughter called me and asked, "Isn't Boston on your bucket list?"

"The city or the rock group?" I replied. I've always wanted to visit the city, and don't even get me started on the band. When they come on the car radio, my speed instantly increases by 10-15 mph. If I'm ever stopped, I have every intention of using the "Boston Defense" and hoping the police officer is a fellow classic rocker.

"The city," she responded, and I could feel her rolling her eyes in exasperation right through the phone. Over the years she'd had many a car-ride nap interrupted by the sudden and extreme increase in radio volume when *More Than a Feeling* came over the airwaves.

It seems she had found cheap airline tickets to Boston and was of the opinion we should go.

"Sure," I said. "Book them."

So she did and on November 15, we took to

the skies headed east. It was after midnight when our plane touched down and nearly 2 a.m. when we got checked into our hotel. After a short night, we were up and on the move early the next morning.

My daughter had done a really good job of researching all the "must sees" of the city and from the start we knew right where we were headed and when. Our first priority was to walk the Freedom Trail, a path marked by red bricks that would take us through 16 sites that were pivotal in our nation's formation. The two-and-a-half-mile path went from Boston Common to the Bunker Hill Monument in Charlestown. We perused the graves in the Granary Burying Ground, where Paul Revere, Samuel Adams, John Hancock and many others are interred. A large monument in the center marks the final resting place of the parents of Benjamin Franklin. Visitors walked among the graves, talking in hushed, rever-

ent tones, keenly aware that our very existence as freedom-loving Americans is owed to these brave souls. Throughout the first day we made it to 14 of the sites, seeing, hearing and reading the details of the founding of our nation. It was humbling, sobering and thought-provoking.

The next day we were to go on a whale-watching tour, and also planned to see the last two stops on the Freedom Trail. Weather forced the cancellation of the whale watching, which turned out to be a good thing, because four hours on the water would have really rushed us at the Bunker Hill Memorial and the USS Constitution. They were both so interesting it would have been a shame to hurry through them.

It all left me with an even greater appreciation for our history and the sacrifices that were made to create this nation - never perfect, constantly learning and growing, but hopefully always striving to be the best we can be.

Temple Grandin to receive Dole Leadership Prize

(AP) - The Dole Institute of Politics says Temple Grandin will receive the 2019 Dole Leadership Prize.

Grandin is an animal science professor at Colorado State University and an advocate for people with autism. She will accept the award Dec. 11 at the institute.

She is best known for her work to lessen the stigma around autism. She gives lectures about how autism makes her feel threatened by her surroundings and how dealing with that gave her a new perspective on improving the treatment of domestic animals.

The Dole Leadership Prize is awarded annually to a person or group whose public service inspires others. Previous winners include Nelson Mandela, former Polish president Lech Walesa, and former presidents George H.W. Bush and Bill Clinton.

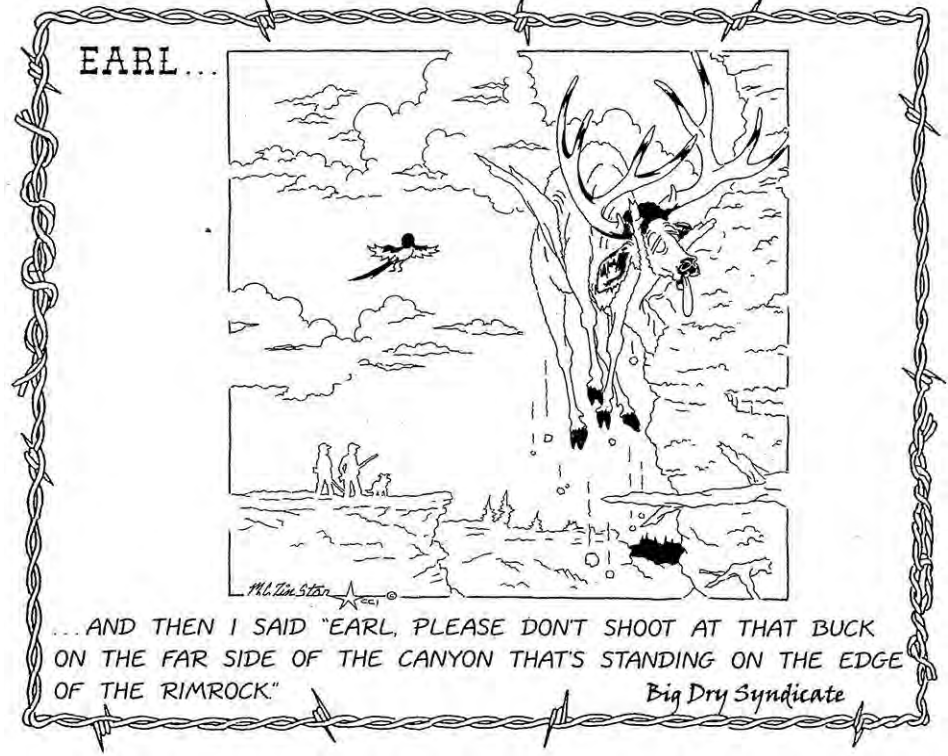
Blockchain Kansas beef arrives in Japan

Blockchain-verified traced beef from a U.S. farm arrived via air freight to Japan, according to an announcement from United Parcel Service (UPS). The beef was delivered to a contemporary steakhouse where guests were provided menu items along with a scannable QR code that provided a detailed journey of the beef they were to consume.

UPS collaborated with agri-tech firm HerdX Inc. to develop tracking and traceability technology that provides quality assurance for beef products being shipped internationally. According to UPS, a customized, integrated visibility tool that plugs into HerdX's blockchain technology provides live updates and data points as the product moves through the supply chain.

"HerdX technology securely authenticates transactions along the entire livestock production cycle, enabling greater understanding and trust," the companies said.

The shipment of beef left Kansas the week of Nov. 4 wrapped in UPS Temperature True packaging, a cold-chain thermal management solution that features temperature-sensitive air freight containers. The packaging contained sensors that monitored and recorded the shipment's temperature from origin to destination.



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Kansas Prairie Quilters to host annual Quilt Show December 7

The Kansas Prairie Quilters of Oskaloosa are set to host their fifth annual Quilt Show on Saturday, December 7 from 9 a.m. to 2 p.m. at the Oskaloosa School Library.

The group of ten to fifteen women started meeting in 1997 and formed the group with the goal of making a difference in Jefferson County. The quilters meet monthly at the Presbyterian Church in Oskaloosa. The group plans community service events and creates homemade items like potholders, quilts, pillows and more that are donated to a variety of organizations.

Irene Malone says the group has fun working together. "When we can do something for others, it just makes us all feel good," she said.

The annual quilt show is a showcase event for the group, bringing locals together to raffie off a handmade quilt from the group. This year, two quilts will be raffied off: Garden Jewels and Friendship Starts. Garden Jewels was started by Jacqueline Culley, an exceptional artist, having made the stained glass blocks and completed by artistic ladies of the Kansa Prairie Quilt Club. Friendship Stars was a project completed in the quilt club sewing meeting.

All proceeds from the raffie ticket sales will be used to support the numerous non-profit organizations in Jefferson County. Raffie tickets are \$5 for six tickets or \$2 for one ticket and can be purchased from one of the group members or at the show.

Other boutique and homemade items will also be available for purchase from local vendors. Admission is free. For more information email malonej_00@yahoo.com.

Perdue defends, celebrates USDA agency moves to Kansas City

(AP) – U.S. Secretary of Agriculture Sonny Perdue said recently that he has "absolutely zero regrets" about moving the headquarters of two research agencies from Washington, D.C., to Kansas City, despite continuing criticism that the move would harm agricultural research and make it less available to federal lawmakers.

Perdue joined political leaders from Missouri and Kansas in touring the new headquarters for the Economic Research Service and National Institute of Food in Kansas City, Missouri, and to celebrate a move that he said would improve researchers work by placing them closer to farmers, colleges with agriculture experts and hundreds of private agribusinesses.

He said he was surprised by the opposition that erupted in Washington when the plan to move about 550 employees to Kansas City was announced in June, but he still believes it was the right decision.

"I thought we were doing the right thing and I am convinced today even more so having been here and seeing where we will be on the ground that we did the right thing," Perdue said. "I applaud this decision, I celebrate this decision and I have absolutely zero regrets of beginning this process and finishing this process right here in Kansas City."

Perdue praised the congressional delegations, governors and other leaders in Kansas and Missouri for working together to win a competition for the headquarters that originally drew 136 expressions of interest from around the country. He and others said the agencies will benefit from being closer to people with agricultural knowledge.

"There's a certain culture here, and that influences your

on-the-ground ability there, rather than sitting somewhere that doesn't have any agriculture," he said. "You're going to find more people in this region that know about agriculture, have the challenges and stress of the year-in and year-out agriculture and be able to make decisions and policies that help inform better research and policy from the USDA."

USDA economist Laura Dodson, acting vice president of the union that represents ERS employees, called the idea that moving to Kansas City would help the agencies' agricultural research "patently ridiculous."

"We do a national level of research," she said. "Suggesting we could be better researchers seeing a single cornfield in one state is wrong. We are in service of national agriculture, we service all, not just one region or a specific few."

The Economic Research Service examines issues including the rural economy, international trade, food safety and programs that provide food assistance to poor Americans. The National Institute of Food and Agriculture provides grants for agricultural

Robots, drones becoming workhorses for agriculture

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mounted thermal infrared cameras to the drones, which they fly at several hundred feet above the field. The cameras measure canopy temperature throughout the field, sending volumes of information to a computer on the ground that meshes the data into a model that gives the farmer guidance on irrigating that field.

Eventually, Sharda said this system could be combined with information from the ground robots to give farmers an even clearer picture of their crop's water needs.

K-State is also advancing drone technology to detect insect pressure in crop fields.

"In regards to UAVs, I

think farmers are getting more confident in terms of what they are seeing," Sharda said. "There is a lot of research being done by universities and lots of companies that are spending a lot of resources on many acres across the United States to make those models more robust. The artificial intelligence capabilities are definitely improving."

Who Will Do The Work?

Farmers may be hesitant to adopt some of the newer technology because, frankly, farming can be very personal. Farmers enjoy driving the tractor, checking on their crops and livestock and even doing some of the hard work.

But statistics on farm labor indicate that the in-

dustry may need help. A 2013 report by the National Agricultural and Rural Development Policy Center – an agency funded by the U.S. Department of Agriculture – indicates that agriculture is vulnerable to "labor supply shocks, which could increase costs and threaten the ability of some farmers to harvest labor-intensive crops."

The reality for U.S. agriculture is that it may be faced with a shrinking work force willing to do physically demanding and

less-compensated farm jobs.

"You know, agriculture has been around forever," Flippo said. "We are really good at getting seed in the ground fast, but maybe this is the time to re-think it: What does it really take to get those seeds in the ground?"

"Just think if we could have a bunch of small robots going out to do that work. They can cover the entire field and get the work done. And they can work all night."

U.S. leads the way in responsible and sustainable beef production

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lifecycle. The outcome of this rigorous assessment, conducted in partnership with USDA and set to be released in the first half of 2020, will be economic, environmental and social benchmarks the beef industry can use to set new goals and measure continued improvement.

"It is clear the U.S. is leading the way when it comes to sustainable beef production," said Place. "Not only are we producing more beef with less resources, but we are able to raise a high-quality protein while still caring for the environment. The beef industry takes pride in raising cattle sustainably, which is evident in its dedication to continued improvement."

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Fire-damaged Kansas Tyson plant to resume operations in December

(AP) – A fire-damaged Tyson meat processing plant in Kansas is expected to resume operations in December.

Tyson announced in a news release that reconstruction of the Holcomb plant is nearing completion. The company says it will begin processing beef again in the first week of December and be fully operational by the first week of January.

The fire started in August in an area of the plant near where animals are killed, causing part of the roof to collapse. Reconstruction included replacing support beams and the roof, as well as installing more than 50,000 feet of new wiring.

The plant employees about 1,200 people. The company says it continued to pay full-time workers during the shutdown.

Holcomb is located less than ten miles west of Garden City.



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First Holiday Contest Winner Is Janis Mickelson, Lyndon

Winner Janis Mickelson, Lyndon: “Delicious cooked apples with just the right amount of sweet and tart. A favorite recipe that is very easy to make and goes well with any meat.”

MICROWAVE SCALLOPED APPLES

8 to 10 apples, peeled & sliced (about 10 cups)
1/3 cup sugar (or Splenda)
3/4 teaspoon cinnamon
2 tablespoons corn starch
1/8 teaspoon nutmeg
2 tablespoons butter
1/4 cup water

Place apples in a microwavable-safe bowl. Combine sugar, corn starch and spices; sprinkle over apples and toss to coat. Add water and dot with butter. Cover and microwave for 15 minutes or more on high power. Stir every 5 minutes.

Charlotte Van Wey, Harveyville: “This pie is very good.”

AMAZING COCONUT PIE

2 cups milk
3/4 cup sugar
1/2 cup biscuit mix
4 eggs
1/4 cup butter
1 1/2 teaspoons vanilla
1 cup Bakers’ Angel Flake coconut

Combine milk, sugar, biscuit mix, eggs, butter and vanilla in electric blender container. Cover and blend at low speed for 3 minutes. Pour into greased 9-inch pie pan. Let stand for about 5 minutes, then sprinkle with coconut. Bake at 350 degrees for 40 minutes. Serve warm or cool. Store any leftover pie in refrigerator.

Millie Conger, Tecumseh:

PINEAPPLE ORANGE CRANBERRY SAUCE

3 large oranges
1/4 teaspoon cinnamon
12-ounce package fresh cranberries
1 cup finely chopped fresh pineapple
1/2 cup honey
Remove 2 teaspoons zest & squeeze 1 cup juice from oranges

Bring 1 teaspoon zest, the juice and cinnamon to a boil in a large pot. Add cranberries and return to heat and simmer 10 minutes. Add 2/3 cup pineapple and the honey. Stir to combine. Remove from heat and let cool before transferring to a serving dish. Top with remaining 1 teaspoon zest and 1/3 cup pineapple.

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G&G Announces Its Annual Holiday Recipe Contest

Nov. 26 through Dec. 17

In observance of the holiday season, Grass & Grain will award the weekly winners \$40 in addition to the prize gift. Recipes received NOW through DECEMBER 11 will be entered in the holiday contest. Enter as often as you like during this period.

BONUS DRAWING

Second chance to win! The names of all contestants will be entered in a drawing from which four names will be chosen. Each of these four contestants will receive \$40. Winners will be announced Dec. 17.

SET OF 3 GIVING PLATES

Start a Tradition of Generosity with these Giving Plates!

The idea is to fill a plate with homemade treats and give it to a family member or friend. That person fills it with their homemade goodies and passes it on, and so on. A poem is printed on the plate describing the tradition. Using your own permanent marker, you could write your name and date on the back of each to track the plate’s travels.



- Made from Melamine. • Hand wash recommended.
- Measures 12 inches diameter x 7/8-inch high
- “This plate shall have no owner for its journey never ends. It travels in a circle of our family and friends. It carries love from home to home for everyone to share. The food that’s placed upon it was made with love and care. So please enjoy what’s on the plate, then fill it up again. Then pass along the love it holds to your family and friends.”

The winner each week is selected from the recipes printed. Send us your favorite recipe. It may be a main dish, leftover, salad, side dish, dessert, or what-have-you. 1. Check your recipe carefully to make certain all ingredients are accurate and instructions are clear. 2. Be sure your name, address and phone number are on the entry. Please include a street address with your recipe entries. A post office box number is not sufficient for prize delivery. Allow 3-4 weeks for delivery. 3. Send it to: Woman’s Page Editor, Grass & Grain, Box 1009, Manhattan, KS 66505.

OR e-mail: auctions@agpress.com

2019 Grass & Grain Holiday Recipe Contest

Susan Schrick, Hiawatha:

TATER TOT CASSEROLE

1 pound hamburger
1 pound sausage
1 can cream of mushroom soup
1 can cream of chicken soup
24-ounce jar liquid cheese (like Ragu)
1 packet onion soup mix
1 can sliced carrots
1 can sweet peas
1 can green beans
1 can sweet corn
1 bag tater tots

Heat oven to 350 degrees. Cook hamburger and sausage; set aside. Mix cream of mushroom soup, cream of chicken soup, onion mix, vegetables and cheese. Add cooked hamburger and sausage. Put into a 9-by-13-inch pan and top with layer of tater tots. Bake for 1 hour.

Lucille Wohler, Clay Center:

GRAHAM CRACKER TREATS

1 stick oleo
1 stick real butter
1/2 cup sugar
Graham crackers
1 cup chopped nuts

Preheat oven to 350 degrees. Combine oleo, butter and sugar and bring to a rolling boil for 2 minutes. Place a single layer of graham crackers on foil-lined cookie sheet. Pour sugar mixture onto graham crackers. Sprinkle nuts on top. Bake 8 minutes Cool and break into pieces.

Kimberly Edwards, Stillwater, Oklahoma:

CRANBERRY CHEESECAKE

1/2 cup flour
2 tablespoons brown sugar
3 tablespoons cold butter cubed
1/4 cup pecan halves, chopped
3 cups fresh cranberries
1/2 cup sugar
1/4 cup water
24.3-ounce tub Philadelphia No Bake Cheesecake Filling

1 ready-to-use graham cracker crust

Combine flour and brown sugar in medium microwavable bowl. Cut in butter with pastry blender or 2 knives until mixture resembles coarse crumbs. Microwave on high 3 minutes stirring after each minute. Microwave addi-

tional 1 to 2 minutes or until crumb mixture is crisp and golden brown stirring every 30 seconds. Add nuts and mix well. Spread into large plate and cool. Microwave cranberries, sugar and water in large microwavable bowl 3 minutes then stir. Microwave an additional 2 minutes or until sugar is completely dissolved stirring after each minute. Continue to microwave 3 minutes or until thickened; stir. Spoon cheesecake filling into crust. Serve with warm cranberry sauce and crumb mixture.

Linda Kepka, Dorrance:

PEANUT BUTTER BALLS

1/4 cup butter
1 cup marshmallow creme
1 cup peanut butter
1 cup powdered sugar
2 cups Rice Krispies cereal
3/4 pound white almond bark

12 ounces chocolate chips
Mix butter, marshmallow creme, peanut butter and powdered sugar; then add Rice Krispies cereal. Form into balls and chill until firm. Melt white almond bark and chocolate chips in microwave. Dip balls into mixture and lay onto waxed paper-lined cookie sheets. Chill in refrigerator.

Mary Hedberg, Clifton:

COFFEE CAKE

1 box yellow cake mix
3 large eggs
3/4 cup vegetable oil
8-ounce container sour cream
1 1/4 cups firmly packed brown sugar
1 tablespoon ground cinnamon
Icing:
2 cups confectioner’s sugar
3 tablespoons milk
1 teaspoon vanilla extract
1 teaspoon butter flavoring

Preheat oven to 350 degrees. Lightly grease a 9-by-13-inch baking pan. In a large bowl beat cake mix, eggs, oil and sour cream at medium speed with electric mixer until smooth. Spread half of cake mixture in the bottom of the pan. In a small bowl combine the brown sugar and cinnamon. Sprinkle evenly over cake mixture in pan. Gently spread remaining cake mixture over brown sugar mixture. Bake 35 to 45 min-

utes or until a toothpick inserted in center comes out clean. Let cool in pan for 5 minutes. NOTE: Also can add nuts to brown sugar and cinnamon.

After the cake cools whisk together icing ingredients. Using a fork pierce the cake at 1-inch intervals. Drizzle icing evenly over the cake. Let icing harden for 20 minutes. Cut into squares to serve.

Bernadetta McCollum, Clay Center:

YULETIDE LAYER BARS

1/2 cup butter
1 can sweetened condensed milk
1 1/2 cups graham cracker crumbs
1 1/2 cups flaked coconut
1 cup chopped pecans
1 2/3 cups (10-ounce package) holiday morsels (these are red, green & chocolate mixed)

Preheat oven to 350 degrees. Melt butter in a 9-by-13-inch pan in the oven. Remove from oven. Sprinkle graham cracker crumbs over butter. Stir well; carefully press onto bottom of pan. Sprinkle with coconut and nuts. Pour sweetened condensed milk evenly over top. Sprinkle with morsels; press down lightly. Bake for 25 to 30 minutes or until golden brown. Cool completely in pan on wire rack. Cut into bars.

Rose Edwards, Stillwater, Oklahoma:

PUMPKIN CHEESECAKE

(3) 8-ounce packages cream cheese
1/2 cup canned pumpkin
3/4 cup sugar, divided
1 teaspoon pumpkin pie spice
1 1/2 teaspoons vanilla, divided
2 eggs
1 ready-made graham cracker crust
8 ounces Cool Whip (about 3 cups)

Heat oven to 350 degrees. Beat 2 packages cream cheese with pumpkin, 1/2 cup sugar, pie spice and 1/2 teaspoon vanilla in a large bowl with mixer until blended. Add eggs one at a time mixing on low speed after each just until blended. Pour into crust. Bake 40 minutes or until center is almost set. Cool completely. Refrigerate 3 hours. Beat remaining cream cheese, sugar and vanilla in a large bowl with mixer until blended.

Fold in Cool Whip. Spread over pie.

NOTE: Something a little extra: Can sprinkle lightly with a little more pumpkin pie spice before serving.

JoAnne Breault, Wamego: “A simple recipe for your holidays. Makes a great gift idea in a Mason jar. Easy to double recipe!”

SPICED NUTS

1/3 cup sugar
4 teaspoons cinnamon
1/2 teaspoon nutmeg
3 tablespoons light corn syrup
2 cups whole almonds

Mix all ingredients together. Spread onto a greased cookie sheet. Bake in preheated 250-degree oven approximately 20 minutes, stirring every 5 minutes until browned and bubbly. Cool then store in air-tight container.

Kellee George, Shawnee:

CINNAMON POPCORN

Nonstick cooking spray
(2) 9-ounce packages cinnamon red hots
1/2 cup butter
2 tablespoons light color corn syrup
2 drops cinnamon oil
14 cups popped popcorn

Coat a 2-quart slow-cooker with spray. Add the red hots, butter, corn syrup and cinnamon oil to the slow-cooker. Cover and cook on low 4 1/2 to 5 hours. Stir until smooth. Place popcorn in a large greased roasting pan. Pour syrup over the popcorn. Stir quickly to coat. Spread on waxed paper or foil to cool.

TIP: Have a helper stir the popcorn while you pour the candy mixture. Or do it yourself with half of the candy mixture while you keep the rest warm in the slow-cooker.

Jackie Doud, Topeka:


CELERY FILLING

1 cup finely chopped cooked chicken
3 tablespoons sour cream
2 tablespoons buffalo wing sauce
1/4 cup Ranch dressing
16 celery stalks (2 1/2 inches long)

Mix chicken, sour cream and wing sauce until blended. Spoon into hollow centers of celery stalks. Drizzle evenly with ranch dressing.

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2019

Grass & Grain

Holiday Recipe

Contest

Darlene Thomas, Del-phos:

PHILLY CHEESESTEAK CASSEROLE

4 hoagie rolls, cut into 1-inch cubes

4 tablespoons butter, melted

1 teaspoon garlic powder

2 tablespoons extra-virgin olive oil, divided

1 onion, sliced

2 green bell peppers, sliced

2 garlic cloves, minced

1 1/2 pounds sirloin steak, sliced into strips

Kosher salt

Freshly ground black pep-per

2 tablespoons Worcester-shire sauce

1 cup low-sodium beef broth

12 slices provolone

Chopped fresh parsley, for garnish

Preheat oven to 350 de-grees. On a large baking sheet toss hoagie rolls with melted butter and garlic powder. Bake until light-ly golden, 10 minutes. In a large skillet over medium heat, heat 1 tablespoon oil. Add onion and pepper and season with salt and pepper. Cook stirring occasionally until soft, 5 minutes. Stir in garlic and cook until fra-grant, 1 minute more; then transfer mixture into a large bowl. Increase heat to medium-high and heat re-maining tablespoon of oil. Add the steak in a single layer, working in batches if necessary. Season gener-ously with salt and pepper and let sear until bottom is golden, 3 minutes. Flip then sear other side. Re-turn vegetables to skillet and stir in Worcestershire. Remove from heat. Grease a 9-by-13-inch baking dish with cooking spray. Spread half of the hoagie rolls on the bottom of the dish, then add in half the meat and vegetable mixture. Top with 6 slices provolone and re-peat with remaining half of hoagie rolls and meat and vegetable mixture. Pour broth over then top with re-maining 6 slices of cheese. Bake until cheese is melted and bubbly, 15 minutes.

By Sonia Cooper, Extension Agent: Nutrition, Food Safety and Health, River Valley Extension District

The holidays are com-ing, and at this time of year I think of gathering with friends and family, and of course enjoying food when we are together. Holiday eating may have you con-cerned about foods high in fat and calories, or over-eating in general. I want to share some tips to help you enjoy the holidays without increasing your waistline.

Making recipes healthier may be easier than you think. Make simple ingredient sub-stitutions or adjustments to create healthier recipes without sacrificing flavor and enjoyment. Many of the traditional foods served during the holidays start out healthy. It's what is added to the traditional foods and how they are prepared that add extra calories and fat. Here are a few healthier hol-iday eating tips:

Reduce sugar; In baked goods, such as quick breads, cookies, pie fillings, custard, pudding, and fruit crisps, re-duce the sugar by one-fourth to one-third. When you use less sugar in recipes, add spices such as cinnamon, cloves, allspice, and nutmeg, or flavorings such as vanilla extract or almond flavoring to enhance the sweetness of the food. Do not reduce sugar in yeast breads, be-cause sugar provides food for the yeast and promotes rising.

Be sodium savvy; Choose fresh or low-sodium versions of products, such as low-so-dium soups, broths, soy sauce, canned vegetables, and tomato products. Frozen vegetables are an alterna-tive to canned vegetables. In many recipes salt can be reduced or deleted altogeth-er. When the recipe calls for seasoning salt, such as gar-lic salt, celery salt, or onion salt, try using herb-only sea-soning, such as garlic pow-der, celery seed, or onion flakes. You could also use finely chopped herbs, garlic, celery, or onions. Do not cut salt out of yeast breads, be-cause salt helps control the rising action of yeast.


Increase fiber; Try using whole-wheat flour, whole-wheat bread, bulgur, whole-wheat pasta, brown rice,

oatmeal, whole cornmeal, or barley in recipes and dishes. Substitute whole-wheat flour for half of the all-purpose flour in a recipe. Vegetables are another great way to in-crease the fiber of dishes, add a variety of vitamins and minerals, and make meals stretch further. Add vegetables to chili, meatloaf, hamburgers, and spaghetti sauce. Add extra vegetables to quiche fillings, casseroles, and salads. Beans such as kidney, pinto, or navy beans are great for soups or stews. Fruits can be added to muf-fins, pancakes, desserts, and salads.

Use healthier cooking techniques; Try using non-stick pans or spraying pans with nonstick cooking spray to reduce the amount of fat and calories added to baked foods. Choose health-ier cooking methods that use less fat, such as baking, broiling, grilling, poaching, steaming, or microwaving.

Lower the fat; Skim excess fat from the top of soups, gravies, and stews. Use skim or low-fat milk in-stead of whole milk. Choose lean meat, and drain excess fat after cooking. If a recipe calls for regular sour cream or mayonnaise, replace them with reduced-fat versions. For dip recipes, try using plain, low-fat or non-fat yo-gurt in place of mayonnaise.

Start a tradition. Make your holiday recipes health-ier through simple substitu-tions and adjustments. Enjoy the holidays. If you have a question, contact Sonia Cooper by emailing srooper@ksu.edu or calling 785-632-5335. Adjusting Recipes to meet Dietary Guidelines. Healthy Holiday Eating Tips – K-State Research and Ex-tension.



Home and Away

Giving Thanks

By Lou Ann Thomas

Happy Thanksgiving! This is one of my favorite holidays. There is no pres-sure to buy and wrap gifts and no expectations of over-the-top jolliness. Re-ally the only thing that is expected of us on Thank-s-giving is to eat a lot.

At least that's how the holiday unfolded in my family. Thanksgiving al-ways consisted of a large gathering of extended fam-ily. My mother and her sis-ters, along with my grand-mother when she was still alive, spent days prepar-ing the food that would cover the dining table ex-tended for the occasion to the entire length of our living room. There were all the standards – turkey, dressing, mashed potatoes and that green bean casse-role with the dried fried onions sprinkled on top. There was also a family favorite of corn pudding and, in addition to pump-kin, a couple other choices of pies.

When it was finally time to sit around the table a quiet would descend on

much as we kids. We would always dine at the Kids Table, a card table set up in the kitchen where it was assumed we wouldn't bother the adults gath-ered in the dining room. I don't recall that goal was ever achieved since one or more of our parents were constantly yelling at us to be quiet or ask-ing what in the world we found so funny. There was no way to explain to the adults that everything was funny at the Kids Table, like the time my cousin Paula laughed so hard she snorted, which made us all break into gales of uncon-trollable giggles, which made me shoot water out my nose, which made is all laugh so hard we couldn't breathe. Laugh-ter like that never hap-pened at the adult table and that's why I felt a little disappointed when I was deemed old enough to sit with the adults.

So this year, I'm going to enjoy the holiday feast at my own Kid's Table. And if I laugh so hard water comes out my nose, it will be one of the best Thanksgivings ever!

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KSU Meat Judging Team named Reserve National Champions

The 2019 KSU Meat Judging Team completed its year, placing 2nd at the International Intercollegiate Meat Judging contest, earning the title of Reserve National Champions in Dakota City, Neb. Kansas State finished behind Texas Tech University (1st). KSU was followed by Texas A&M (3rd), Oklahoma State (4th), and Colorado State (5th). In total, 89 students representing 12 institutions competed in the contest. Also, Kansas State had three students – Lane Egger (1st Team), Michaela Musselman (1st Team), and Hannah Williams (2nd Team) – named to the All-American teams, representing the first time in history K-State had three students named as All-Americans in the same year. This contest marks the end of a very successful year for the Meat Judging Team, with the team having 1st place finishes at the Eastern National and Iowa State Contest, 2nd place finishes at the International, Amer-



ican Royal, Southwestern, Houston Livestock Show and Rodeo Contest, and Barrow Show, a 4th place finish at the National Western, and a 5th place finish at the High Plains Contest. The team is coached by Dr. Travis O'Quinn.

Team Results:
2nd High Team Overall
2nd High Team in Reasons
2nd High Team in Beef Grading
2nd High Team in Total Beef

2nd High Team in Specifications

3rd High Team in Beef Judging

4th High Team in Lamb Judging

4th High Team in Pork Judging

5th High Team in placings

Individual Results:

Michaela Musselman – 4th High Individual Overall, 2nd in Beef Judging, 3rd in Lamb Judging, 3rd in Specifications, 5th in Reasons; Lane Egger – 5th High Individual Overall, 1st in Reasons, 3rd

in Beef Grading, 4th in Total Beef, 2nd in Pork Judging; Hannah Seymore – 3rd in Pork Judging. Team members include: Greyson Collins of Saint John; Kimmi Doran of Whiteford, Md.; Lane Egger of Columbus, Neb.; Katie Lybarger of Garnett; Jake McCall of Greenville, Va.; Michaela Musselman of Clay Center; Luke Prill of Wichita; Hannah Seymore of Visalia, Cal.; Adelyn Smith of Corinth, Texas; Cheyenne Swoope of Kilgore, Texas; and Hannah Williams of Kearney, Neb.

Sheep and Goat Workshop rescheduled for December 12

There will be a Sheep and Goat Workshop on December 12, 2019.

Participants will learn about vaccination protocols and parasite prevention and control for both sheep and goats.

The workshop will be led by Dr. Alison Crane, KSU Specialist of Sheep and Goats. It is sponsored by K-State Research and Extension Meadowlark Extension District and will be held at the Northeast Kansas Heritage Complex south of Holton beginning at 7:00 p.m..

For additional information or questions about the event contact Jody Holthaus in the Holton office at 785-364-4125 or jholthau@ksu.edu.

Winter Water Technology Expo to be held in Garden City

Farmers and ranchers in southwest and southcentral Kansas who want to learn more about improving their bottom line through water management tools, soil moisture monitoring, crop selection and other technologies are encouraged to save the date and attend the Winter Water Technology Expo on January 9 in Garden City.

The Expo will be at the Finney County Fairgrounds-Exhibition Building at 409 Lak Ave in Garden City from 4 to 8 p.m., and will feature a wide variety of companies and organizations focused on helping producers with overall profitability as well as water technology issues and opportunities. Attendees will be eligible for many great door prizes and heavy hors d'oeuvres and beverages will be provided throughout the evening. They will also hear from other farmers who are using the tools with details of how it's improved their operations. The Winter Water Technology Expo is free and open to the public, but participants are encouraged to RSVP at www.kwo.ks.gov.

The Winter Water Technology Expo is hosted by the Kansas Water Office with help from local volunteers with a strong interest in the area's water resources. For more information, go to www.kwo.ks.gov or email: Alexandra.Geisler@kwo.ks.gov.

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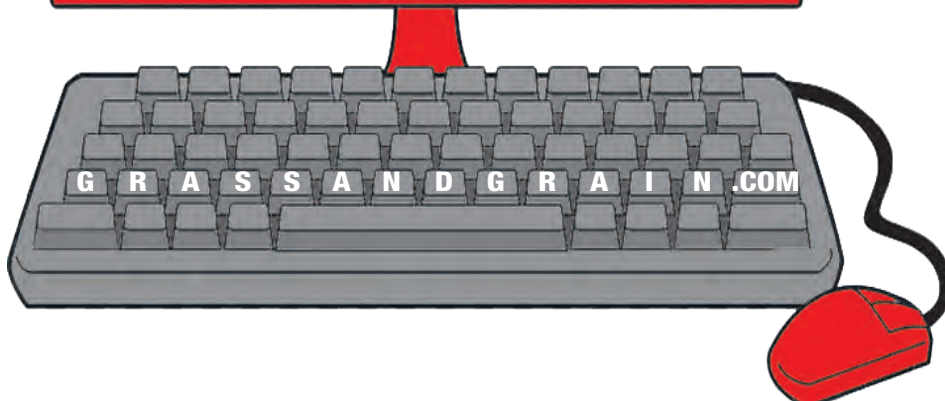
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Kansas students participate in Taiwan Agricultural Youth Exchange

Two Kansas students traveled to Taiwan Oct. 26-Nov. 3, 2019 to represent the state as part of a longstanding student exchange program to learn about Taiwan's agricultural industry and how Kansas agriculture exports benefit both Kansas and Taiwan. The students were selected for the Taiwan Agricultural Youth Exchange Program by the Kansas Department of Agriculture based on their exceptional leadership and communication skills, appreciation for international travel, and passion for Kansas agriculture.

"This exchange offers students an opportunity of a lifetime to experience another country's agriculture, technology and culture," said Suzanne Ryan-Numrich, international trade director at KDA. "The students who went on this exchange came home with a broader understanding of the global economy we live in."

The two students who participated were Jeffrey Garcia

from Cassoday, a freshman at Butler Community College majoring in agribusiness; and Katherine Sleichter from Clay Center, a freshman at Kansas State University majoring in agribusiness (international option), Global Food Systems Leadership, and minoring in Spanish.

The students traveled with students from Missouri. Their visit included tours of the National Chung Hsing University, interaction with Taiwanese students, meetings with the Taiwan Ministry of Foreign Affairs, and visits to local farms and research institutes across Taiwan.

"It was interesting to me to see the difference between Kansas agriculture and Taiwanese agriculture," said Sleichter. "While in Taiwan we had the opportunity to tour a variety of different farming operations, specifically fruit farms. We toured a passion fruit farm, a dragon fruit farm, an organic tea farm, a guava farm, a tomato farm, and a cocoa farm. The farm tours

opened my eyes to the diversity of agriculture, and that there is more than just the type of farms that are common in the United States."

Garcia agreed that it was a great experience. "I really enjoyed trying all the new food and seeing how they grow all the fruit and vegetables they grow in Taiwan."

The trip is coordinated by KDA and the Taipei Economic and Cultural Office in Denver, Colorado, and is sponsored by TECO.

Opportunities such as the Taiwan Agricultural Youth Exchange Program provide tremendous knowledge and networking to the delegates. In 2018, Kansas exported over \$167 million in agriculture commodities to Taiwan and it was the fifth-ranked export destination for Kansas products. International relationships with countries such as Taiwan help open opportunities for more exports in the future.

Each fall, KDA coordinates the Taiwan Agricultural

Vesecky awarded American FFA Degree

Each year, the National FFA Organization honors FFA members who show the utmost dedication to the organization through their desire to develop their potential for premier leadership, personal growth and career success through agricultural education.

The American FFA Degree is bestowed upon a select group of students in recognition of their years of academic and professional excellence. This year 4,353 American Degrees were awarded.

Lacey Vesecky, a member of the Eudora FFA chapter, was awarded the American FFA Degree at the 92nd National FFA Convention & Expo Oct. 30-Nov. 2, in Indianapolis. She is the daughter of William and Joanna Vesecky, Baldwin City.

Sponsored by Case IH, Elanco Animal Health and Syngenta, the award recognizes demonstrated ability and outstanding achievements in



agricultural business, production, processing or service programs.

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State milk production up three percent

Milk production in Kansas during October 2019 totaled 316 million pounds, up 3 percent from October 2018, according to the USDA's National Agricultural Statistics Service. The average number of milk cows was 163,000 head, 3,000 head more than October 2018. Milk production per cow averaged 1,940 pounds.

al Youth Exchange Program application process which is open to high school seniors or

college freshmen. For more information, please contact Robin Blume, education and

events coordinator at KDA, at 785-564-6756 or robin.blume@ks.gov.



Jeffrey Garcia, Cassoday, and Katherine Sleichter, Clay Center, recently participated in an agricultural youth exchange program to Taiwan.

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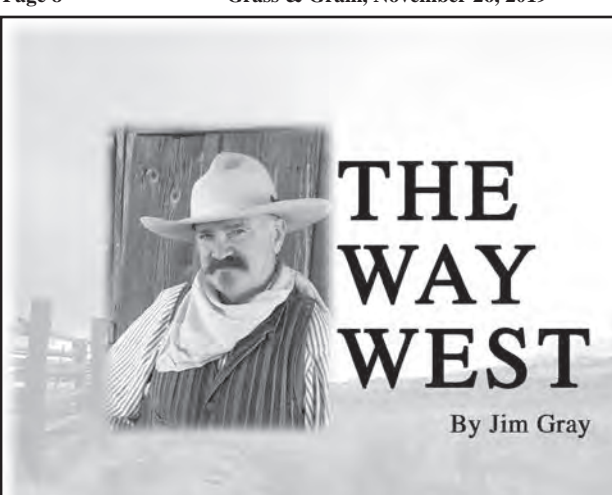


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A Lively Frontier Town

The rush was on with the opening of Kansas Territory in 1854. The Kansas River was a natural thoroughfare leading to the west. Its wide valley and deep, fertile soil attracted a good deal of the first settle-

ment in the territory.

Indianola, K. T. (Kansas Territory) was founded by pro-slavery men in 1854. The three hundred twenty-acre townsite was along the banks of Soldier Creek north of the

Kansas River (the original Topeka townsite was south of the Kansas River). At that time Indianola was in Calhoun County, named for either John C. Calhoun, vice president of the United States, or John Calhoun, the Surveyor General of Kansas and Nebraska. The individual for which it was named was not recorded.

The first two permanent residents of Indianola were Lewis Harris and Louis Vieux. Vieux had actually lived there as early as 1846 with his Potawatomie relatives before moving to the Oregon Trail crossing of the Vermillion River thirty miles northwest. He also operated an important toll bridge at the crossing.

Even though the Indianola founders were pro-slavery, abolitionists were equally attracted to the location. Indianola was located on the Pappan Ferry branch of the Oregon Trail and the recently constructed military road connecting Fort Leavenworth to the new frontier post of Fort Riley. Construction of the military road was authorized by Congress one year before on March 2, 1853.

Town lots were offered for sale on June 27, 1855. Trustees for the town, John. F. Baker, H. D. McMeekin, and George H. Perrin ran an advertisement

in the *Kansas Weekly Herald* at Leavenworth for several weeks prior to the sale. Indianola was situated at the military crossing of Soldier Creek fifty miles from Fort Leavenworth and seventy miles from Fort Riley. "Papin's Ferry... one of the best crossings on Kansas river," was within two miles of the town. The ad boasted, "The country in the vicinity has been pronounced by experienced and competent judges, as good, if not better than any portion of the Territory for farming purposes." A vein of "superior Stone Coal" had been found nearby, as well as an abundance of the finest quality timber.

Across the Kansas River the townsite of Topeka was scouted in late November, 1854, and officially founded December 5, 1854. Topeka was founded by men with strong civic convictions, giving the town the advantage of strong organized settlement. However, in those early days Indianola appeared lively and dynamic by comparison.

Major A. E. Ogden directed construction for the expansion Fort Riley, slated to become a cavalry post. Windows and doors were made in Cincinnati, Ohio, shipped by boat to Fort Leavenworth, and by mule team over the military

road to Fort Riley. In July of 1855, fifty-six mule teams passed through Indianola with wagon-loads of building materials bound for Fort Riley. The road was not limited to military traffic. "Every day prairie schooners loaded with homesteaders and freighters on their way to Colorado, Santa Fe and Oregon" passed through Indianola.

During those interesting early days the Indianola pro-slavery men only challenged the abolitionists once. Several of them confiscated guns from the Fiedlerling brothers. Samuel Reeder recalled that thirteen men gathered to get the weapons back. Among them was W. E. Bowker, who later became one of the first trustees for Washburn College in Topeka. Before engaging the "enemy" they all went home to have breakfast, "for we thought we could not fight on an empty stomach." Having abated their hunger J. M. Cole, Captain of the militia, strapped on his sword and mounted his horse to lead his men of war into town. They approached Indianola from the east and as they reached a log cabin on the bank of Soldier Creek they stopped to load their guns. One gun was missing a ramrod, requiring a "loan" from a compatriot to prepare for the

coming battle.

Captain Cole met the opposing leader halfway between forces, then rode over to the other side to "talk it over." Apparently, they only wanted to arouse the Free State men and really didn't want to fight. They promised to give the guns back to the Fiedling boys and "The Battle of Indianola" was over.

In 1865 the town of Eugene was established on the river bottom between Indianola and Topeka. The Union Pacific Eastern Division Railway built to Eugene. On New Year's Day, 1866, a Union Pacific, Eastern Division engine steamed into Eugene. Its whistle was the death knell for Indianola. Eugene was annexed by Topeka and renamed North Topeka in April 1867. In time only an old hotel, too large to move, was all that remained of Indianola. Business houses and townspeople moved away, some to North Topeka, the newest lively location on The Way West.

"The Cowboy," Jim Gray is author of the book *Desperate Seed: Ellsworth Kansas on the Violent Frontier*, Ellsworth, KS Contact Kansas Cowboy, 220 21st RD Geneseo, KS. Phone 785-531-2058 or kansascowboy@kans.com.

Honing skills: K-State to host 'Farm Financial Skills for Women in Ag' workshop series

On farms large and small across the United States, the number of women making the decisions is growing. Against that backdrop and especially in view of the current struggling farm economy, Kansas State University will host a four-part series of workshops focused on helping women sharpen their farm financial management skills.

More than 25,500 women are decision-makers on Kansas farms. They farm more than 14 million acres, according to the U.S. Department of Agriculture's Census of Agriculture.

Overall, in 2017, 36% of all agricultural producers across the country were women, up from 31.5% in 2012. Fifty-six percent of farms had at least one female decision-maker.

"Women in agriculture will be specifically targeted for these workshops," said Robin Reid, a farm economist with K-State Research and Extension. "They tend to be an underserved demographic, but many times are doing the books or record-keeping for the operation. By teaching them skills necessary to turn farm records into financial statements, and then using those statements to make assessments and management decisions, farm women can increase the profitability and sustainability of their operations."

The K-State Research and Extension program will run as

a series, so each evening session builds on material from the previous sessions. Participants register at a cost of \$40 for the entire four-session series. The fee covers all meals and program materials. The sessions, all on Wednesdays, are Jan. 15, Jan. 22, Jan. 29 and Feb. 5, 5:30 to 8:30 p.m. and offered in 31 locations around the state through a combination of broadcasted keynote and local speakers. In Belleville, this event will take place at the fairgrounds in the 4-H Building.

Local K-State Research and Extension agents will serve as hosts for the program and also facilitate the hands-on activities and discussions. Dinner will be served at each location to start each of the four sessions.

For more information, including a list and contact in-

formation for all participating sites, visit www.AgManager.info under the Events page. Registration is available online or by contacting the local host site location. For questions, contact Robin Reid at 785-532-0964 or LaVell Winsor at 785-220-5451.

"The downturn in the farm economy in recent years has highlighted a need for more education in farm financial management, specifically focusing on debt/asset relationships, cash flow management, financial analysis and benchmarking," said Winsor, a farm analyst for K-State Research and Extension and farm wife.

There are many Women in Agriculture programs across the state, she said, but none that combine a state-level program with the convenience of 31 locations where networking and small group learning can occur. As many as 500 are expected to participate.

The workshop series was inspired by a similar program at Washington State University's Women in Agriculture Conference where Reid and Winsor delivered the keynote address in 2018 to nearly 500 women across five states.

"The model of having webinar components mixed with local activities to reach a wider range of farm women was a wonderful idea for farm financial risk management education here in Kansas," Reid said.

The program is supported by the USDA's National Institute of Food and Agriculture through North-Central Extension Risk Management Education.

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Folks used to decorate for Christmas or other holidays with things at hand, whatever the land had to offer. Depending on where you were, you might have greenery or

you might have grapevines. You might have a symmetrical spruce or you might have a tree-shaped arrangement of antlers (like lots of frontier soldiers created back in the

day). Scraps of ribbon, threaded popcorn, cinnamon sticks and dried apples, paper chains – decorations were homemade and simple.

When I was a child in Virginia's Blue Ridge Mountains, we piled into Granny's kitchen for the traditional southern Thanksgiving dinner – turkey, cornbread dressing, sweet potato pie. Sometimes the men went hunting and the women and children went on a hunting spree of a different sort – hunting for the materials from which we would make Christmas.

Granny was the most creative person I ever met. Daddy

said she could paint a room with an empty paint bucket. She took the simplest of elements and made something beautiful. We headed for the damp woods and gathered pine cones, running cedar, laurel leaves, Galax leaves, oak and sycamore balls – just whatever struck our fancy and Granny showed us how to turn these finds into something special.

When I struck out on my own and made Christmas, I carried some of her creativity with me. One year I took bare tree limbs (actually limbs from a mountain laurel bush), spray-painted them white, and

added red satin balls and clear white lights. It was revolutionary, and so, so simple. I loved the lines of the limbs, those graceful branches.

The point is, we made Christmas, and found Christmas in the making of it. The walks through the woods, the piling things on the kitchen table, the conversations, the time spent together – these times held the spirit of Christmas.

Think about making Christmas this year. Take the family away from the television and computer and get outdoors. Collect pine cones and acorns and antler shed and

whatever bounty your farm or neighborhood offers. Visit the local Christmas tree farms and walk around a bit. Don't get sidetracked by making something perfect. Instead, make it beautiful, and real, and make it from what lies just beyond your door.

Deb Goodrich is the host of the Around Kansas TV show and the Garvey Texas Foundation Historian in Residence at the Fort Wallace Museum. She chairs the Santa Fe Trail 200, the bicentennial of the Santa Fe Trail in 2021. Contact her at author.debgoodrich@gmail.com.

Building food systems through relationships

By Sarah Green

Of all the components of local and regional food systems, the production of relationships might be one of the most important.

Relationships are critical for producers who choose to market their product themselves, either directly to a consumer at a farmers' market or directly to a wholesale business, said presenters at the 2018 "Harvesting Opportunity in Kansas" symposium in Lawrence.

In fact, said Debra Tropp, a former deputy director with the U.S. Department of Agriculture's Agricultural Marketing Service who spoke at the symposium, it may be more important to know a producer than to be concerned with the number of miles the product traveled to a purchaser.

"Local food is about transparency and relationships," Tropp said, "not so much about geography."

Relationships are a key part of any successful business, "whether it's agriculture or watchmaking – it doesn't matter," said Cherie Schenker, owner of the McCune Farm to Market grocery store and Schenker Family Farms in southeast Kansas.

"You form a relationship with customers, producers, and vendors, and those are relationships that you build on," she said. "And custom-

ers want to put a face on the product they are buying."

Schenker has built relationships with other local producers for years.

"We know who's growing what for the most part in our area," she said. "We interact with them at Extension meetings, at farmers' markets, and meetings (like Harvesting Opportunity in Kansas) and more. We're not just forming relationships, we're forming a community, and that gives you potential resources to draw on."

They already knew, for instance, a local producer who could teach a recent sauerkraut class at their grocery store. And that producer didn't just have the skills to make sauerkraut, but also grew the cabbage used in the dish.

"When you can teach someone how to utilize food in that way, it creates another connection," Schenker said. "I think education is a huge, huge, huge part of connecting agriculture to consumers. The easiest way to educate someone is through their stomach."

Rebecca McMahon, a horticulture agent for K-State Research and Extension-Sedgwick County, helps producers build the relationships they need to grow their businesses. In Sedgwick County, that also means helping facilitate con-

versations between the urban world of the state's largest city – Wichita – and also the rural world of Sedgwick County, populated in large part by diverse agriculture operations.

The conversations help build not just individual businesses, but also build communities, she said.

"It is very clear, from 'Harvesting Opportunity' and other meetings and resources that the rural communities that are thriving have found ways to capitalize on the urban resources closest to them," McMahon said. "The rural communities that are declining are the ones that don't have those urban relationships."

Because of her role with Extension, McMahon is often the first call from individuals, non-profits and businesses looking to start markets or find markets in which to sell their product.

One concept that could elevate those connections and build deeper, more sustainable relationships is that of the "value chain coordinator," an individual who is tasked with working in all aspects of the food system to make connections, to provide education, and to leverage resources.

Investing in such a person, McMahon said, could elevate all of the existing work in

her local and regional food system.

"Building that capacity is so important," she said. "For a municipality, or any organization, even a county Extension office, if they want to be involved in local food system work, it's important to have someone who understand that building those relationships is their job."

These stories, including a compilation of all the stories in a PDF file, and a story map from the symposium organizers are available on KRC's website at <https://kansasruralcenter.org/harvesting-opportunities/>.

The Harvesting Opportunities Symposium was partially funded by The American Farmland Trust, USDA – Agricultural Marketing Service, the Douglas County Food Policy Council, K-State Research and Extension, the Kansas Rural Center, Douglas County E-Community, the Sunflower Foundation, Douglas County Community Foundation, Douglas County Farm Bureau, Kansas Farmers Union, Kansas Alliance for Wellness, Growing Growers Kansas City and the Community Mercantile.

For more information, contact Mary Fund at the Kansas Rural Center at mfund@kansasruralcenter.org or 866-579-5469.

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Promoting growth and grade – Pritchard talks implant do's and don'ts

By Miranda Reiman

When it comes to growth implants in cattle, animal scientist Robbi Pritchard only worries about three things: getting enough premium if you're not use them, using them wrong and using them with too little insight.

"Using them without sound

technical advice, you can ruin a bunch of carcasses, no doubt about it. Using them wrong and running out of gas can cost you a lot of money in cost of gain," said the longtime South Dakota State University ruminant nutritionist. But if used correctly, "You can have all of the performance and all

of the final product value you want."

But what exactly is "used right?"

During the 2019 Feeding Quality Forum in Amarillo, Pritchard said the answer depends on everything from the type of cattle to the quality of working facilities.

It's not one-size-fits-all, but it can work for most cattle.

When someone says they have better genetics that don't need an implant, they're wrong, Pritchard said.

"For sure, if you're going to go implant-free, you want superior genetics; that's a slam dunk. But to say that we can come up with genetics that remove the need for them, not so much," he said. "The person who told you that may not realize how implants really work, because the better the genetic growth potential, the bigger the absolute daily response to the implant."

A moderate potency implant boosts daily gains by about 15%. That's 0.3 pound on calves gaining 2 lb. per day, but 0.6 lb., "if you have superior genetics that are gaining 4 lb. a day," he said.

With that kind of growth potential comes the need to match nutrition that will keep up with an implant.

Maybe that's the reference. Maybe, he suggested, some producers are saying, "My cattle can eat enough and grow fast enough that if you give them an implant, the management plan doesn't keep up."

When it comes down to the bottom line, implants usually win. Pritchard shared dollar figures during a follow-up presentation at the 2019 Angus Convention in Reno.

With a wide Choice-Select spread and cheap feed, the base carcass grid price for non-implanted finished cattle would need to bring \$11/hundredweight (cwt.) above the base for conventional cattle to make up for the weight their

implanted contemporaries gained. That gets even steeper as quality premiums diminish or feed gets more expensive.

Two decades of experience and dozens of research trials suggest an implant at branding or "turnout" has no impact on grade, but the weight added at weaning shows up on the rail. That extra 25 lb. of weaning weight adds 8 to 10 lb. of carcass weight.

Estrogenic-based implants don't increase frame size.

"That's one of the problems we had a long time ago with implants in cattle not grading," Pritchard said. "We kept backgrounding them like they were smaller-frame cattle, but when we put the implant in their ears, we just turned smaller-frame cattle into a bigger-frame animal but didn't feed him accordingly—and that's where we would lose the grade."

Implant strategy on the ranch all depends on the marketing strategy: when you're selling, who you're selling to and how you're weaning and growing the animals until delivery.

Pritchard offered several if/then scenarios:

"You don't want to sell a calf that has an implant that isn't mostly depleted," he said.

If the buyer gives another implant and basically doubles up, that's where carcass quality will suffer, and discounts will ensue.

"If you're going to carry those calves over to grass, don't implant them," Pritchard said. "You didn't want them to grow; why give them a growth promotant?"

"If you've got a creep feeder out there, please implant the cattle. Otherwise, you're just selling me more fat," he said.

"Don't implant calves on weaning day." For a few days after weaning, they struggle to take in enough calories to gain weight, much less support an implant.

"If you're going to implant cattle, deworm them," he said, noting internal parasites decrease feed intake. "Depress-

ing intake and stimulating growth are counterproductive when it comes to carcass quality."

"If you're downsizing your cows' mature size, think very seriously about implanting."

"Get your day count right, because if you run out of implant everything's going to go backward. If you're too short or you overlap them, you'll create problems," he said.

"There's no upside to overdosing. There's this American thing: if something's good, more is better. However, there are limits."

Other options include use of a long-acting versus a traditional implant, he said, calling them as different as a Crescent wrench or a box-end wrench.

"Which one's better?"

We Care University helps form bridges

Call it cross-training for Pork Checkoff staff. The Pork Checkoff's new We Care University showcases pig farming in terms of the six We Care principles to help team members speak with more confidence and knowledge when they promote pork to grocery retailers, convenience-store chains, restaurants and other partners.

"We want to ensure that new employees are equipped to answer questions from retailers and others in the supply chain about pig farming and the We Care principles," said Brett Kaysen, assistant vice president of sustainability for the Checkoff.

He noted that all staff also complete the Pork Quality Assurance® Plus training.

"We focus on key topics that generate questions, such as sow housing, African swine fever, antibiotic use and the environment," said Angie Krieger, assistant vice president of channel outreach for the Checkoff.

Earning a Place at the Table

Retailers are genuinely interested in how farmers focus on continuous improvement, but activists put tremendous pressure on them," Krieger

Whose toolbox doesn't contain both?" he asked. "Everybody has both of them because there's a place for both of them."

Consumer acceptance of the technology is a consideration, but Pritchard says it fits the sustainability narrative.

"They do reduce the amount of labor per serving of beef. They also reduce the carbon footprint per serving of beef," he said. Moreover, implants let cattlemen keep cows matched to their environments and still produce calves matched to the market.

After all the consideration it comes down to a couple of linked points, Pritchard said: "Weight without quality is problematic, but quality without weight is unprofitable."

said. "We want to help retailers protect their brand by basing decisions on facts. But to have those conversations, we need to have a seat at the table."

She added, "Building relationships does that by transforming us from salespeople to trusted consultants. Companies that once weren't interested in meeting with us now call for information. We Care University helps Checkoff staff provide the answers they need."

Elaine Otte, national channel marketing and innovation manager for the Pork Checkoff, says the We Care University training was worthwhile.

"I can better explain the science that goes into pig farming, from nutrient management to animal well-being, while emphasizing farmers' commitment to their communities and families," Otte said. "I also ask if they've ever been on a farm or want to visit one. We want retailers to feel comfortable about the food decisions they make and the products they promote," said Otte, who can work with her colleagues to line up farm tours or coordinate virtual farm tours through South Dakota State University's swine farm. "It's essential people understand the value of the product we're offering."

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SATURDAY, DECEMBER 7, 2019 — 10:00 AM
As we are Retiring we will sell the following Farm Equipment, Livestock Equipment, Hay & Miscellaneous at Public Auction, Located at the Farm: 1478 100th Road, EUREKA, KS; From Eureka East to Jct. 99 Hwy & 54 Hwy, South on 99 Hwy. 4.5 mi. to 100 Rd. then West 1 mi. on 100 Rd., or From Jct. 99 Hwy & 400 Hwy North of Severy, go North on 99 Hwy 8 mi. to 100th Rd. then 1 mi. West on 100th Rd.
FARM MACHINERY, sells at approx. Noon: 1996 Belarus #530 D Tractor, open station, hyd. front loader w/bucket, 3 pt. PTO, 1 rear remote, 1407 hrs. approx. 55 HP; 2019 MC3700 Vermeer hydro swing mower/cond, disc mower w/fail shredder, only 1000 acres; Bushog, 13' rotary mower, pull type, twin drive, nearly new blades; pasture sprayer, 2 wheel, 300 gal. w/5.5hp B&S engine; JD #68 auger wagon, shedded; JD 15' tandem wheel disc, HD; JD Model H Series 47 manure spreader, good cond.; Glenco - 15' field cultivator w/mulcher; 3 pt. box blade w/ripper teeth; 3pt. boom, 3 pt. post hole digger; 3 pt. hyd. big bale roller; 3 pt. 2 bottom plow - new; 3 pt. NH #80 bale mover.
LAWN & GARDEN: Wheel Horse lawn tractor, 36" deck; Kohler engine lawn tractor, no deck; "Ag Fab" tilt yard wagon; hand tools, weed eaters; mini tiller, Poulan Pro PR25 pole saw; hand garden planter; Troybilt Pony rear tine tiller; Huskee 6.5 HP shredder.
TRAILERS: 1980 WW 20' GN Flatbed, wood floor; 2008 Travalong "Advantage" 6'x24' GN Stock Trailer, 16 ply New Tires, Very Nice!; Hickory 5'x16' Bumper Stock Trailer, Nearly New Floor, full top, Good Tires; 4 wheel hay trailer; 2 wheel trailer w/till.
TRUCK: 1995 Dodge Ram 3500, Cummins Diesel Engine, Auto, Duals, 4x4, w/Steel Spike Bale Bed, 205,546 mi., Runs Good, "Laramie" w/Siren.
BUILDINGS: 10'x16' Wood Frame, 10' Door & Walk in Door on Steel Skids; 8'x16' Wood Frame w/(2) 8' doors, steel skids; 8'x16' Wood Frame w/Metal Sid-
TERMS: Cash or Approved Check. Must have positive ID to Bid. Nothing Removed until settled for, all items sell as is where is with no warranties or guarantees from seller or sellers agent. Not Responsible for accidents or theft.
OWNERS: ROCKY & BARBARA STRICKLER
For Pictures go to Websites: www.lmarshallauctionandrealty.com, www.kansasauctions.net or email: marshallauction@twinmounds.com
Find us on Facebook @ Larry Marshall Auction and Realty
LIKE US ON FACEBOOK TO RECEIVE ALL OUR AUCTION SALE BILLS!
Newton Family Concessions & Rest Room Available.

AUCTIONEERS:
Larry Marshall, 620-485-6136 * Mark Garretson, 620-433-2561
CLERKS & CASHIER: Gayle Garretson, Lorrie Marshall, Rita Voth, & Clancy Milligan

BUSINESS LIQUIDATION AUCTION

MONDAY, DECEMBER 2 & TUESDAY, DECEMBER 3, 2019

MONDAY START TIME 9:00 AM (East Building)

TUESDAY START TIME 10:00 AM (West Building) * Vehicles & Trailers* Sell @ Noon

* ALL ITEMS WILL BE SOLD AT TOPEKA BUT SOME VEHICLES & TRAILERS WILL REMAIN IN MANHATTAN AND BE SOLD VIA VIDEO. CONTACT BILL FOR VIEWING INFORMATION ON ANY OF THE ROLLING STOCK. INFORMATION SALE DAY WILL TAKE PRECEDENCE OVER WRITTEN MATERIALS. INFORMATION IS STILL BEING COLLECTED ON SOME VEHICLES.

AUCTION LOCATION: 200 SW Jackson — TOPEKA, KANSAS



BOTH DAY ITEMS
(Some on each day)

Moving dollies; appliance dollies; "J" bars, pallet jacks; yard tools; moving ramps (various kinds); pallet racking (various sizes); moving carts (various kinds); pallets; moving boxes; moving blankets; ladders; moving supplies and pallet racking (large quantities).

MONDAY, DEC. 2 ONLY

SHOP & TOOL ITEMS

Steel workbenches; pickup tool boxes; Tommy lift gate; flammables cabinet; Delta bandsaw; sm & lg rolling ladders; mig welding cart; transmission jacks; portable oil drain; drill press; portable oil drain; drill press; 20 ton shop press; 10 ton floor jack; Powermate table saw; ratchet straps; Jobbox; forklift chargers; propane heaters; 4 ton floor jack; waste oil tanks; Delta lathe; portable fuel tanks; Rockwell lathe; engine stands; stripe painter; tire machines; Transtool; tire balancer; bench grinder; vise; chains; creepers; extension cords; Lincoln Welder; oil pump; oil; router; chain hoist w/frame; Eaton electric hoist; gas cans; Exide charger; clamps; propane bottles & storage cage; tires; Rigid generator; rolling tool box w/tools; hitch; Mac tool box; Craftsman toolbox; parts bins; Delta saw; rim clamp machine; Craftsman sander; Rockwell joiner; tire chains; parts cleaner; Kohler engine; Carolina Steel bandsaw; CO2 tank; semi fenders; 1/4 fenders; shop fans; battery charger; air compressors; lots of misc. tools.

YARD & GARDEN

Wheel barrow; push lawnmowers; snowblower; edger; Ariens riding mower; shovels & hand tools; weed eaters; fertilizer spreader; snow scoop.

HEAVY EQUIPMENT & MOTORCYCLE

Snorkel scissor lift; Yale forklift (2); Hyster Forklift (2); Toyota forklift; Nissan forklift; Clark forklift; Tennant self-propelled floor cleaner; misc. forklift attachments, extensions & forks; Yamaha motorcycle.



COLLECTIBLES
Antique trunks; antique safes; antique dentist chair.

ELECTRICAL, HVAC & BUILDING SUPPLIES

Dri-Aire system; electric hydraulic pump; misc. residential & industrial used AC units (lots); misc. residential new AC units; fluorescent bulbs (LOTS); furnace filters (LOTS); carpet squares (NEW); rubber coated benches; misc. garage doors; electrical panels; misc. doors; refrigeration service unit; steel plate; load dock bumpers; Edge-O dock systems (4); Grand Aire AC Unit (NEW) Siemens electrical unit; Heil AC unit (NEW 410A); electrical transformer; Carrier AC units (lots); cement siding board (pallet); Electro steamer; all sorts of misc. items.

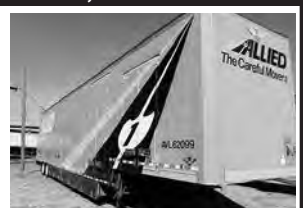
MISC.

Modern safes; floor buffers; wheelchairs; shopping carts; electric scooter; razor wire; shop/office lighting fixtures (lots); display racks; desks; popcorn machines; platform for scale; misc. lumber; commercial clothes dryer; shop vacs; copy machines; rubber floor mats(NEW); floor runners (NEW); parking blocks; ceiling tiles; bowling pins & balls; Coors Light lamp; office calculators (NEW); Royal commercial vacuums (NEW); multiple vending machines; ice machines; tables; barbwire; pianos (5); 300 gal plastic water tank; antenna displays (new); traffic cones; grocery style shelving (lots); scrap metal; set of bleachers **and TOO MUCH TOO LIST!!!**

TUESDAY, DEC. 3 ONLY

VEHICLES & TRAILERS

Kentucky moving trailers (15 different trailers of various years-45'-53'); 1990 Kenworth K100 semi; 20' flatbed trailer; Dorsey 48' moving trailer; 1995 Ford E350 Box Truck; 1997 Dodge D250 Van; 2000 Peterbilt semi; 1988 Kenworth semi; 1994 International Semi; 1992 GMC



Top Kick box truck; 1993 International 4700 Box Truck; 1995 Ford E350 box truck (2) 1988 International semi

HEAVY EQUIPMENT

Selco box baler; box baler (brand?); scissor lift; Toyota forklift; Hyster forklift; Cat AC13 auger attachment; EZGO golf cart; forklift propane tanks; misc. appliances; organ; mattress sets; misc. furniture.

FURNITURE, HOUSEHOLD & APPLIANCES

Bedroom set; antique table; antique wood cabinet; buffet w/ mirror; couches; dresser; drop leaf table; fold table w/chairs; Kenmore deep freezer; Kenmore dryer; stackable dryer; misc. appliances; organ; mattress sets; misc. furniture.

SHOP & TOOLS

500 gal fuel tank; air bubble; air hose reel; battery charger; bolt bins; bulk oil tank; Craftsman air compressor; drill presses; E-Z trailer rail; floor jack; gas cans; generac generator; construction cones; Industrial air compressors (4); jack stands; Napa cabinet; oil tote w/pump; old shop heaters; panel saw; parts cleaner; industrial flammables cabinets (3); receiver hitch; saw horses; steel work benches; Hunter tire balancer; tool boxes; Speedways roller conveyors.

ELECTRICAL, HVAC & BUILDING MATERIALS

15 ton commercial ac unit (Trane-NEW), building fire valve; electrical boxes & components; all sorts of exercise equipment; aluminum business awnings (several); insulated overhead doors (2-2x12); misc. steel & pipe; supplementary heater.

MISC.

8 bay portable storage unit; T-posts; yard benches; Camaro (?) car hood; yard furniture; yard trailer; Lockers; fishing poles; several safes; office cubicle components; office furniture; hospital beds; punching bag; Service master floor cleaners; antique baby stroller; house goods & misc.

Check us out on Facebook & Online for more info www.kscrossroads.com www.facebook.com/KScrossroadsauctions



ANDREW SYLVESTER, Auctioneer, 785-456-4352
BILL DISBERGER, Auction Coordinator/Associate Broker 620-921-5642
TERRI HOLLENBECK, Broker/Owner, 785-223-2947

FARM EQUIPMENT AUCTION

SATURDAY, NOVEMBER 30 — 11:00 AM

AUCTION LOCATION: 2040 Quail Road — ENTERPRISE, KS
4 mi. East of Enterprise on 2100 Ave. to Quail Rd. then South 3/4 mi.
PLEASE BE ON TIME, THERE ARE NO SMALL ITEMS. SALE OVER BY 2!

TRACTOR, SKID LOADER, COMBINE & HEADERS
2018 CUB CADET, ATV, 4x4 (volunteer 741 EF1) less than 12 hrs, w/cab, doors & manual dump bed, like new.

TRUCKS, FARM EQUIPMENT & MISCELLANEOUS ITEMS

See last week's Grass & Grain for listings & for pictures & listings go to KansasAuctions.net/reynolds

LYLE DIEHL ESTATE

For additional information on equipment contact

Dan Diehl, 316-641-2126. BE ON TIME!

Lunch will be served.

REYNOLDS AUCTION SERVICE

ABILENE & CLAY CENTER

RANDY REYNOLDS: 785.263.5627

landmanrj@gmail.com

GUEST AUCTIONEER: Greg Kretz, 785-630-0701

2-DAY AUCTION

SATURDAY, DECEMBER 7 & SUNDAY, DECEMBER 8, 2019

10:00 AM BOTH DAYS

Auction will be held in Kenwood Hall at the Saline Co. Expo 900 Greeley in SALINA, KS

SATURDAY, DECEMBER 7:

INDIAN COLLECTION,

HALLOWEEN & CHRISTMAS

Indian jewelry inc: rare 1927

Santo Domingo necklace & earrings, large assortment

silver & turquoise many

signed some Tasco; pictures, blankets; Indian girl

beer advertising picture;

1976 Winchester "The Comanche Indian Chef; ATSF

Indian prints; large collection

of jewelry inc: Bakelite,

quality costume; Bakelite

buckles; collection buttons;

large collection of Halloween,

Christmas & Easter

many unusual items. Many

German die cut Halloween

pieces; This is a very large

collection, it will be a long

day, check our pictures at

www.thummelauction.com.

SUNDAY, DECEMBER 8:

FURNITURE, DOLLS, TOYS,

COLLECTIBLES

6' pine harvest table buttermilk

pains; pine mustard jelly cupboard; pine corner cupboard;

Pennsylvania walnut slant front desk; oak roll front file cabinet; tall pie cupboard w/tin

sides; red tall pie cupboard w/

tin sides; pine 2 door cabinet;

pine kitchen cabinet; oak 48"

S roll top desk; oak 1 door

wardrobe; 12"x24" curved

glass table showcase; 3'x4'

floor showcase; horn table;

sow belly cabinet; painted

curved glass china cabinet;

Hoosier helper; Apex green

& white gas cook stove; walnut

parlor table w/marble top;

handmade Mexican secretary;

walnut railroad desk; folding

stroller high chair; oak high

chairs w/flip trays; 10 drawer

work bench w/vise; small Farm

Master incubator; Globe Werner

nicke card file; pine base cabinet;

Harry Roseland original

pictures; signed Calvary picture;

assortment of other good

pictures; 5 Samplers; advertising

pictures; Fred Harvey post

cards; several wooden dough

bowls; Santa Fe items inc:

pictures, oil cans, box, other;

UP calendar; railroad broom;

Lionel cardboard ad; quilts

inc: name; Pendulum blanket;

table cloths; linens; Victorian

ladies clothes; cowboy boots;

Bakelite purses, radios, pianos;

blue granite pieces; bird

platter sister rare; Ton & Jerry

egg nog set; Jadite cake ped-

estal; Pyrex bowl sets; assortment

of other kitchen items;

Dolls & Toys: 1850's Pre

Greinner wood doll; WPA dolls

rare; 1934 Shirley Temple 27"

doll w/flirty eyes original dress;

German laughing doll; Sacony

Clothes doll; Jumeau dolls;

china dolls; German dolls; 30"

composition doll; other composition

dolls; tin dolls; Raggedy

Ann & Andy dolls 1

Grass & Grain Area Auctions and Sales

Online only auction (bidding opens Dec. 4; soft closes Dec. 11) — Selling approx. 250 lots from closed Gt. Bend Store including shelving, plumbing supplies, humidifier, tools, electric appliances, cooking equipment, garden supplies, mini blinds, electric grills & smokers, porch swing, large selection of Anchor Hocking, light fixtures & more held at <https://hollingerauction.hibid.com/auctions/current> for Ag Pride Resources. Auctioneers: Hollinger Auction, Jim & Mary Hollinger.

November 26 — Farm retirement auction including tractors, combine, farm equipment & much more held at Belleville for James & Carol Levendofsky. Auctioneers: Sullivan Auctioneers, LLC.

November 30 — Absolute auction of 170.02 acres m/l of Nemaha County land including good producing bottomland & upland held at Seneca for Raymond Rilinger Trust. Auctioneers: Seneca Realty, Mike Kuckelman, Dale Wilhelm.

November 30 — Wood framed pedal grindstone, tools, planes, wrenches, collectibles, license tags, yardsticks, advertising rain gauges, pocket knives, glass & wood quilt case, Featherweight sewing table held at Rossville for Leo & Rowena Gannon Estate. Auctioneers: Gannon Real Estate & Auctions, Bob Thummel & Zach Sumpter.

November 30 — Farm machinery, livestock equipment, unique antiques, furniture & collectibles held South of Manhattan for Leroy Fechner Estate. Auctioneers: Cline Realty & Auction, LLC.

November 30 — Tractors, trucks, skid loaders, balers, construction equipment, good line of farm equipment held at Enterprise for Lyle Diehl Estate. Auctioneers: Reynolds Auction Service.

November 30 — Gold Buckle Female Classic - Cow Sale & Commercial Females held at El Dorado Livestock Auction.

December 1 — Estate gun auction selling approx. 150 guns held at Salina. Auctioneers: Wilson Realty & Auction Service.

December 2 — Farm machinery & livestock equipment held in NW Dickinson County near Longford for Verl Wolf Estate. Auctioneers: Kretz Auction Service.

December 2 & 3 — Selling both days: moving & appliance dollies, yard tools, moving ramps, pallets, ladders & more; selling Dec. 2: Shop & tools, yard & garden, heavy

equipment & motorcycle, collectibles, electrical, HVAC & building supplies & misc.; selling Dec. 3: Vehicles, trailers, heavy equipment, furniture, household, appliances, shop & tools, electrical, HVAC & building materials & misc. held at Topeka. Auctioneers: Crossroads Real Estate & Auction, LLC.

December 3 — Farm equipment & other farm items, trucks & pickup, livestock items, antique farm items, shop items, antiques & collectibles held south of Leoti for Raymond & Charlene Dirks. Auctioneers: Berning Auction, Inc.

December 3 — 389.10 +/- acres Pratt County cropland & pasture to sell in 3 tracts held at Pratt. Auctioneers: Farmers National Company.

December 5 — 2 bedroom, 1 bath home along with just under 4 acres held at St. George. Auctioneers: Crossroads Real Estate & Auction, LLC.

December 5 — 3 bedroom, 2 bath home, full basement, fireplace & more held at Wamego. Auctioneers: Crossroads Real Estate & Auction, LLC.

December 5 — Bred Cow Special sale including bred heifers, cow/calf families, bred cows held at Beatrice Livestock Sales in Beatrice, Nebraska.

December 7 — Retirement farm equipment auction including tractors, trucks, farm equipment & other farm items, livestock items, tools & shop, antiques held near Dighton for Nelson Schwartz. Auctioneers: Berning Auction, Inc.

December 7 — Real Estate (10 acres Washington County land with 1977 manufactured home, barn, shop & other small buildings); ATV, trailers, shop & yard tools, guns & more held at Hanover for Kenneth & Marcella Craig. Auctioneers: Raymond Bott Realty & Auction.

December 7 — Farm machinery, lawn & garden, trailers, truck, buildings, hay, cattle equipment, antiques, guns, feed bin, misc. & more held at Eureka for Rocky & Barbara Strickler. Auctioneers: Larry Marshall Auction, Larry Marshall & Mark Garretson.

December 7 — Selling house & lots, 8N Ford & equipment, vehicles, trailers, antique farm implements, lots of antiques & collectibles, tools, welders, shop equipment, wood stoves, propane tank & lots more at Aliceville. Auctioneers: Kurtz Auction & Realty Service.

December 7 — Over 1,000

toys held at Clay Center for Delmer Kahrs Estate. Auctioneers: Kretz Auction Service.

December 7 — Real Estate & personal property including 6 BR, 5 BA home; and a 30x80 business building on 1 acre m/l and personal property held at Manhattan for All About Quilts closing auction. Auctioneers: Crossroads Real Estate & Auction, LLC.

December 7 — Consignment sale held at Salina. Auctioneers: Wilson Realty & Auction Service.

December 7 & 8 — selling 12-7: Indian item collection including jewelry, pictures, blankets, prints & collectibles and Halloween & Christmas items; selling 12-8: Furniture, dolls, toys & collectibles held at Salina. Auctioneers: Thummel Real Estate & Auction, LLC.

December 8 — Guns & coins held at Clay Center for Delmer Kahrs Estate. Auctioneers: Kretz Auction Service.

December 9 — 160 acres m/l of Lyon County prime Native Tall Grass Pasture with 2 ponds held at Osage City for Estate of Adelia Pearson. Auctioneers: Mill & Midyett Real Estate, Wayne Wischropp.

December 9 — 160 acres m/l of Lane County cultivation land held at Dighton. Auctioneers: Farmland Auction & Realty Co., Inc.

December 10 — 80 acres m/l of McPherson County land held at Canton for Randy C. Hamilton. Auctioneers: Van Schmidt Auction, Farmers National Company.

December 10 — Farm Machinery & equipment auction at Cheyenne Wells, CO. Auctioneers: Farm & Ranch Realty, Inc.

December 12 — 4 irrigated quarters NW of Dodge City in 4 tracts. Auctioneers: Farm & Ranch Realty, Inc., Don Hazlett, broker.

December 13 — 183 acres m/l Russell County cultivation & grass held at Russell. Auctioneers: Farmland Auction & Realty Co., Inc.

December 14 — 155 acres m/l of Ottawa County pas-

ture land held at Minneapolis for Carol Tilton. Auctioneers: Midwest Land & Home, Mark Uhlik, Jeff Dankenbring.

December 14 — Liquidation of the entire auto mechanics class of Abilene High School including car lifts, automotive tools, diagnostic equipment, engine hoists, valve grinders, brake equipment, complete line of automotive & shop equipment held at Abilene for USD 435. Auctioneers: Reynolds Auction Service.

December 14 — 156.06 acres m/l of Nemaha County farmland held at Centralia for Alfred Roeder Trust. Auctioneers: Cline Realty & Auction, LLC.

December 15 — Approximately 150 guns for an estate auction held at Salina. Auctioneers: Wilson Realty & Auction Service.

December 17 — 195 acres m/l of Dickinson County land consisting of premier deer & duck hunting, pasture, timber, farmland, trophy whitetail bow hunting farm held at Woodbine. Auctioneers: United Country Real Estate Crossroads Auction & Realty.

December 17 — Absolute auction of 2,898 acres m/l in Haskell County, KS offered in 15 tracts held at Garden City for the Withers Farm. Auctioneers: Peoples Company Innovative Real Estate Solutions.

December 20 — 677 acres m/l of Wabaunsee County land including pasture, recreational ground, timber, dryland & expired CRP offered in 3 tracts held at Belvue. Auctioneers: Farmers National Company, Fred Olson, Van Schmidt.

January 25, 2020 — 240 acres m/l of Washington County cropland held at Linn for Dianne Brooks. Auctioneers: Midwest Land & Home, Mark Uhlik, Jeff Dankenbring.

February 8, 2020 — Production sale at Leavenworth for J&N Ranch.

March 7, 2020 — Judd Ranch 42nd Gelbvieh, Balancer, & Red Angus Bull sale held at Pomona for Judd Ranch.

March 14, 2020 — Equipment, trucks & salvage held at New Cambria for Don Janssen Estate. Auctioneers: Reynolds Auction Service.

April 11, 2020 — Fink Beef Genetics Spring Angus and Charolais Bull Sale held at Randolph.

2018 irrigation and water management data now available

There were 231,474 farms with 55.9 million irrigated acres, which included 83.4 million acre-feet of water applied in the United States, according to the 2018 Irrigation and Water Management Survey results, published recently by the U.S. Department of Agriculture's National Agricultural Statistics Service (NASS). In 2013, the irrigation survey results showed that there were 229,237 farms with 55.3 million irrigated acres, which included 88.5 million acrefeet of water. The results show that though the number of farms irrigating and the amount of land irrigated increased slightly between 2013 and 2018, the total amount of water used for irrigation declined.

“The 2018 Irrigation and Water Management Survey, formerly titled the Farm and Ranch Irrigation Survey, expands on the data collected in the 2017 Census of Agriculture,” said NASS administrator Hubert Hamer. “This report offers detailed, comprehensive, up-to-date information specific to the agriculture industry’s use and management of water supplies.”

Data highlights from the 2018 Irrigation and Water Management Survey include:

- The total amount of water used in 2018 was 83.4 million acre feet, down 5.8 percent from 2013.
- The average acre feet applied was 1.5, which compares with 1.6 in the 2013 irrigation survey. (An acre foot is the amount of water required to cover one acre to a depth of one foot.)
- The largest portion of irrigated farmland acres in the United States was dedicated to cropland – including grain and oilseed crops, vegetables, nursery and greenhouse, and hay crops.
- Farmers irrigated 51.5 million acres of harvested cropland in the open in 2018.
- Ground water from on-farm wells accounted for 50 percent of irrigation water applied to acres in the open; the average well depth in 2018 was 235 feet.
- The irrigation results show more irrigated acres with sprinkler systems than gravity irrigation.
- Five states accounted for around one-half of the irrigated acres and water applied – California, Nebraska, Arkansas, Texas, and Idaho.

• Equipment, in general, is one of the leading irrigation expenditures with farmers and ranchers spending more than \$2 billion on irrigation equipment, facilities, land improvements and computer technology in 2018; energy costs for pumping well and surface water amounted to \$2.4 billion.

• Irrigated area of horticulture under protection was 1.53 billion square feet in 2018. This compares with 1.41 billion square feet in 2013.

• Irrigated horticulture grown in the open was 581,936 acres in 2018. This compares with 524,227 acres in 2013. The 2018 Irrigation and Water Management Survey followed up with approximately 35,000 producers who indicated in the 2017 Census of Agriculture that they irrigate. Producers provided information on water sources and amount of water used; acres irrigated by type of system; irrigation and yield by crop; and system investments and energy costs.

“The 2018 Irrigation and Water Management Survey results provide valuable information that farmers, ranchers, policymakers, and others can use to make agriculture water use more efficient,” said Hamer. “In making decisions about their operations and their communities, producers and policymakers can learn about the use of improved technology, efficient ways to irrigate, and ways to reduce irrigation related expenses.”

To access the results of the 2018 Irrigation and Water Management Survey, visit www.nass.usda.gov/AgCensus.

2-DAY AUCTION

Due to death we will sell the following items at public auction at the Clay Center National Guard Armory located at 12th & Bridge Street, CLAY CENTER, KANSAS

DAY 1: LARGE TOY AUCTION
SATURDAY, DECEMBER 7 — 9:00 AM

Doors open at 7:30 a.m. for viewing.

We will be selling over 700 toys. All toys all day. Most are farm toys; Many tractors of various makes and styles. There are also many cars, race cars, tractor trailer rigs, cast iron toys, airplanes, large sailing ships and more. Many are NIB. Please go to kretzauctions.com or kansasauctions.net for pictures of nearly every toy to be sold.

DAY 2: GUN & COIN AUCTION
SUNDAY, DECEMBER 8 — 11:00 AM

Doors open at 9:00 a.m. for viewing.

GUNS: Selling will be 142 rifles, pistols and shotguns as well as accessory items. There are approximately 100 .22 caliber rifles. Many are the old round and hexagon barreled pioneer rifles by Winchester, Stevens, Remington and other makers. There is also a variety of 12 ga. and 410 shotguns as well as several 30-30 rifles. There are a variety of pistols of various calibers and by a variety of makers. Some of these guns have rust issues but most are nice and some are in excellent or exceptional condition. We will be selling by lot number. A full printable catalogued listing is available on line, as well as a full compliment of pictures. Please go to kretzauctions.com or kansasauctions.net.

COINS: Also selling will be a collection of 85 lots of coins including over 100 silver dollars and other collectible and commemorative coins. The coins will be sold intermittently during breaks from selling guns.

TERMS: Cash or good check day of sale. Not responsible for accidents.

CLERK: Shirley Riek, 526 Frederick, Clay Center, Ks. 67432

DELMER KAHR'S ESTATE, SELLER

Auction conducted by: **Kretz Auction Service**
Greg Kretz, Salesman & Auctioneer: (785) 630-0701
Guest Auctioneers: Randy Reynolds & Morgan Riat

FARM EQUIPMENT & HOUSEHOLD AUCTION

TUESDAY, DECEMBER 3, 2019 — 10:00 AM
LOCATION: From LEOTI, KS, 18 mi. south on Highway 25, at mile marker 100.

FARM EQUIPMENT

FK 9x5 sweep plow w/pickers; FK 7x5 sweep plow w/pickers; FK rod weeder w/harrows 48"; Hoeme 30' chisel plow; (2) JD LZB disc drills, 12x12; JD 30' oneway; Melroe 7-section tine harrow w/transport; CRP 24' sickle mower, 3 pt.; JD 5' mower, 3 pt.; Case 5-bottom plow; Krause 3x7 sweep plow.

OTHER FARM ITEMS

Grain elevator 22' w/gas motor; Mayrath 8'x60' auger, pto; 6'x30' auger; Small two-wheel sprayer; (3) Weigle mowers; Extra picker wheels & shafts; JD front dozer blade, 40's & 50's Series; Noble flex harrows; 4010 XL cab; Scrap iron; Lots of good usable air & pipe; (2) Mayrath 12-volt drill fill augers; Walker front deck riding mower, new motor, 42" deck.

TRUCKS & PICKUP

1974 Chevy C-60 truck, 366 motor, 5x2 spd. trans., 49,000 miles, 14' bed & hoist; 1974 Chevy C-60 truck, 366 motor, 5x2 spd. trans., 45,000 miles, 14' bed & hoist; 1991 Ford Ranger pickup, non-running.

TRAILERS

4' semi van trailer; 2-wheel horse trailer, wooden sides; Pickup bed trailer; 230 gal. fuel trailer w/12-volt pump; Coleman 8' pop up camper trailer; 2-wheel trailer w/Wilson welder & 6-cyl. motor, cutting torch.

LIVESTOCK ITEMS

Square bale feeder; metal feed bunks; wooden fence posts; rolls of barb wire; stock tanks; fence chargers; Bear Cat roller mill; tack.

ANTIQUE FARM ITEMS

Airport luggage cart tractor; Case DC tractor, non-running; Case VAC tractor, new tires, runs; 1949 Chevy Winch truck w/gin poles, needs starter; JD sickle mower; Old metal rear tractor wheels; Branding irons & heater; Model A parts & Model A motor; Case L parts.

SHOP ITEMS

Large industrial band saw; Large industrial drill press; (2) large bench grinders; Continental 20-ton press; Olson band saw; Shovels, rakes, hoes, etc.; Some hand tools; Lots of parts & repairs; Gear pullers; Hydraulic cylinders; Anvil; Welding table w/vise; Lincoln 225-amp welder; Husqvarna chain saw; Several B&S motors; Transfer pumps; Pipe fittings; Bolt bins; Porta power; Cutting torches; Motorola business band radios; Used truck, car & implement tires; Coats tire machine; Pump jack; Ultra 595 paint sprayer, like new; Lots of other items.

ANTIQUE & COLLECTIBLE ITEMS

Old farm equipment manuals; Old lanterns; Brass blow torches; Flat top trunk; Kerosene stoves; Fenton glass; Lots of old glassware; 8-place setting of Wm. Rogers flatware, International Silver, in chest; 8-place setting of Wm. Rogers flatware, Silver plate, in chest; Oak straight chairs; Rocker; Kitchen cabinet; (2) Square oak dining tables; Avon collectibles.

RAYMOND & CHARLENE DIRKS, OWNERS

TERMS: Must have valid ID to register. Cash or approved check day of sale. No credit cards! Not responsible for theft or accident. Everything sold as is. No warranties expressed or implied. Announcements day of sale take precedence. **Lunch served.**

BERNING AUCTION, INC., 812 West M St., Leoti, KS 67861
620-375-4130

Check us out on Facebook & at www.berningauction.com

RETIREMENT FARM EQUIPMENT AUCTION

SATURDAY, DECEMBER 7, 2019 — 10:00 AM
LOCATION: From DIGHTON, KS, 8 mi. east to Quantum Rd., south 8 miles to Rd. 70, 1/2-mile west.

TRACTORS

2004 JD 9220 tractor, 4-wheel drive, 520-85R-42 duals, JD auto steer, w/Degelman dozer blade, Ser. #20366, 6036 hrs. (1); 2000 JD 9200 tractor, 4-wheel drive, 520-85R-42 duals, Degelman dozer blade, Ser. #030767, 9831 hrs. (3); 1998 JD 9200 tractor, 4-wheel drive, 520-85R-42 duals, Degelman dozer blade, Ser. #010565, 10418 hrs. (4).

HARVESTING

2010 Case IH 6088 combine, 1253 separator hrs., clean combine; JD 1253A row-head, made for Case flagship combines; Brent 1084 grain cart, walking tandems, roll over tarp.

TRUCKS

1976 IHC Paystar 5000 tandem truck, Detroit motor, 13 spd. trans., twin screw, 22' bed w/hyd. end gate; 1975 GMC 6000 truck, V-8 motor, 4x2 spd. trans, 16' bed & hoist, roll over tarp.

FARM EQUIPMENT

JD 1910 commodity cart, w/JD 1830 hoe drill, 60", 12" (nice); Miller Series VI disk 30"; Sunflower 27" disk; 2015 Minimizer 9x6 sweep plow w/new style pickers (nice); Richardson 9x5 sweep plow w/new style pickers (nice); (8) Versatile 2700 hoe drills, 7", transports, 12"; (4) JD LZB 10x12 hoe drills w/transport; JD MaxEmerge 2 planter, 8-row, w/markers; Krause 24' chisel plow; Hoeme 16' chisel; Great Plains solid stand, 30' folding drills, 9" w/liquid fertilizer.

OTHER FARM ITEMS

Burchland CSX130 portable drive over pit w/electric auger (nice);

NELSON SCHWARTZ, OWNER • (620) 397-2370

TERMS: Must show valid ID to register. No exceptions! Cash or approved check day of sale. Not responsible for theft or accident. No warranties expressed or implied. Everything sold as is. Announcements day of sale take precedence. **Lunch served.**

BERNING AUCTION, INC., 812 West M St., Leoti, KS 67861
620-375-4130

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GRASS & GRAIN
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...ONLINE SINCE 2007.



BAXTER BLACK

ON THE EDGE OF COMMON SENSE

A Sheep Thanksgiving

For some reason this Thanksgiving, I'm thinking of sheep. The sheep industry is havin' a fair year. One factor is lamb being included and advertised in specialty dog food. The sheepman's equivalent

market to fast food burgers.

How to strengthen the market, you ask? Breed more dogs, you say? Or get humans in Canada and the U.S. to eat more sheep and wear more wool? So how do you get



HAY FEEDERS AND BUNKS

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5-S Livestock	Selden	785-386-8075
Tyler Kasl	Belleville	785-527-0753
Dan Brooks	Wamego	785-458-9504
Farmers & Ranchers Livestock	Salina	785-825-0211
Flint Hills Welding	Alta Vista	785-499-6469
Greg Vering	Marysville	785-562-7164
Midwest Farm & Dairy	Hutchinson	877-221-7221
Tim Deters	Baileyville	785-294-0523

Farmers & Ranchers

AUCTIONS EVERY MONDAY & THURSDAY

Selling Cattle every Monday

Hog Sales on the 2nd & 4th Monday of the month only!

RECEIPTS FOR THE WEEK TOTALED 6,188 CATTLE.

STEERS			HEIFERS		
300-400		\$185.00 - \$195.00			
400-500		\$172.00 - \$181.00			
500-600		\$163.00 - \$174.00			
600-700		\$148.00 - \$166.00			
700-800		\$147.00 - \$156.00			
800-900		\$143.00 - \$153.00			
900-1,000		\$138.00 - \$146.50			
HEIFERS			HEIFERS		
300-400		\$160.00 - \$168.00			
400-500		\$148.00 - \$160.00			
500-600		\$142.00 - \$150.00			
600-700		\$133.00 - \$145.00			
700-800		\$130.00 - \$145.00			
800-900		\$131.00 - \$148.00			
THURSDAY, NOVEMBER 21					
STEERS			HEIFERS		
2 blk	Spring Hill	320@195.00	3 blk	McPherson	348@168.00
3 blk	Kanopolis	387@183.00	11 mix	Wynnewood, OK	408@160.00
17 mix	Wynneward, OK	386@181.50	18 blk	Longford	399@160.00
16 blk	Spring Hill	486@181.00	2 blk	Abilene	468@156.00
2 blk	Lorraine	450@180.00	2 mix	Barnard	458@155.00
2 blk	Walton	418@174.00	5 blk	Culver	507@150.00
14 blk	Salina	538@174.00	45 blk	Abilene	813@148.00
9 mix	Hope	482@171.00	12 blk	Clyde	563@146.50
16 mix	Wynneward, OK	573@168.50	31 blk	Spring Hill	523@146.50
6 blk	Lorraine	529@168.00	10 mix	Salina	590@145.00
4 blk	Colwich	573@167.00	2 blk	Andale	533@145.00
12 mix	Colwich	631@166.00	10 red	Salina	665@145.00
28 blk	Longford	489@165.50	31 blk	Beloit	688@145.00
5 rwf	Salina	531@162.50	31 mix	Beloit	809@145.00
30 blk	Spring Hill	598@162.00	66 mix	Hope	770@145.00
21 mix	Burdick	595@162.00	64 mix	Hillsboro	797@145.00
3 blk	Gypsum	673@161.00	12 mix	Salina	685@145.00
9 blk	Assaria	624@160.00	9 blk	Manchester	791@144.50
21 mix	Salina	609@158.00	9 mix	Salina	667@144.00
8 blk	Gypsum	772@156.00	29 blk	Longford	495@142.50
37 mix	Carlton	739@155.50	6 mix	Benton	612@142.00
8 mix	Newton	706@154.00	3 blk	Lincoln	812@142.00
10 blk	Salina	803@153.00	9 blk	Gypsum	827@141.50
20 mix	Carlton	808@152.75	26 mix	Wynnewood, OK	539@141.00
46 mix	ASSARIA	729@151.50	21 mix	Brookville	762@141.00
11 blk	Salina	735@151.00	15 mix	Salina	610@140.50
27 mix	Abilene	852@150.75	2 blk	Andale	648@139.00
32 mix	Claffin	849@150.75	18 blk	Assaria	704@134.00
60 mix	Hope	853@150.75	2 blk	Ellsworth	965@131.00
61 mix	Assaria	846@149.75	BRED HEIFERS		
14 blk	Peabody	848@149.50	33 blk	Claffin	@1660.00
5 blk	Gypsum	944@146.50	5 blk	Claffin	@1650.00
58 mix	Abilene	902@146.25	51 blk	Claffin	@1635.00
8 blk	Gypsum	983@142.50	15 blk	Claffin	@1635.00
17 mix	Claffin	1015@138.00	34 blk	Claffin	@1625.00
10 blk	Salina	1063@135.00	47 blk	Minneapolis	@1500.00
			10 red	Sedgwick	@1225.00
PAIRS			PAIRS		
			25 blk	Halstead	3-4 yr@1800.00
			12 blk	Wilsey	3-5 yr@1775.00
			5 red	Beloit	5 yr@1760.00
			12 blk	Assaria	3-5 yr@1735.00
			10 blk	Salina	broken@1010.00
PAIRS			PAIRS		
			3-5 yr	@1875.00	
			2 yr	@1850.00	
			2 yr	@1850.00	
			3-5 yr	@1810.00	
			4 yr	@1785.00	
			2 yr	@1785.00	
			3-5 yr	@1785.00	
			3-5 yr	@1785.00	

UPCOMING SALES:

All Tuesday Sales starting at 11:00 AM

SPECIAL COW SALES: Tuesday, Dec. 17 • Tuesday, Jan. 21
 Tuesday, Feb. 18 • Tuesday, March 17 • Tuesday, April 21
 Tuesday, May 5th

WEANED/VACC. SALE: Tuesday, December 3
 Tuesday, January 7 • Tuesday, February 4

BUFFALO SALE starts at 11 AM: Saturday, December 7

CHRIS HOFFMAN ESTATE COW SALE starts at 11 AM: Tuesday, Dec. 10

IN STOCK TODAY:

- Heavy Duty Round Bale Feeders
- 6'8" x 24' GOOSENECK STOCK TRAILER METAL TOP
- 6'8" x 24' GOOSENECK STOCK TRAILER
- 42' ROUND BALE DUMP TRAILERS
- HEAVY DUTY FEED BUNKS (Silage & Grain)
- HEAVY DUTY 5000# GRAIN TOTE

For Information or estimates, contact:

Mike Samples, Sale Mgr., Cell Phone 785-826-7884
Kyle Elwood, Asst. Sale Mgr., Cell Phone 785-493-2901

Jim Crowther 785-254-7385 Roxbury, KS	Lisa Long 620-553-2351 Ellsworth, KS	Cody Schafer 620-381-1050 Durham, KS	Kenny Briscoe 785-658-7386 Lincoln, KS	Kevin Henke H: 785-729-3473, C: 785-565-3525 Agenda, KS	Austin Rathbun 785-531-0042 Ellsworth, KS
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Cattle Sale Broadcast Live on www.cattleusa.com 1150 KSAL, Salina 6:45 AM -MON-FRI * 880 KRVN 8:40 AM - WED.-THURS. *550AM KFRM - 8:00 am, Wed.-Thurs.

wool and a bag the size of overalls on a dirigible. With only two teats it would halve the expense of costly udder inflation replacements. This would lead to the use of hippopotamus gene splicing so the calves mouths would be big enough. Which would result in better consumption because the shippocow could eat more in less time.

And finally we would be able to attack the biggest problem the sheep industry has... no one likes to eat it. We could literally pick the flavor we wanted and splice it in. We could make the meat taste like catfish, chocolate, beef, butter, pumpkin pie, cranberry sauce, dressing, and yes, even turkey! Which gets me back to Thanksgiving.

Someday we might be able to offer a leg o' lamb that tastes like everything on the Thanksgiving table! Call it shurkey. The possibilities are endless. Easter sham, backyard sheep burgers, shicken cordon blue, shoysters on the halfshell, a wildgame feed with shelk, sheer and shantelope, a shuffalo robe, a shink coat, shackaroni and sheeze, shangaroo tail, a singing sharakeet, and sheep...uh, grits.

I better schtop now...!

www.baxterblack.com

2019 overall U.S. pork exports now in positive territory

U.S. pork exports demonstrated strong performance year-to-date through August increasing 22% from a year ago to 221,586 metric tons. Additionally, the value of U.S. pork exports climbed 19% to \$588.8 million. These results push January-August export volume 4% ahead of last year's pace at 1.7 million metric tons (MT), while value increased 1% to \$4.35 billion. Here are a few specific highlights:

Despite China's retaliatory duties, China/Hong Kong was the largest destination for U.S. pork in August at 63,656 MT, more than tripling the August 2018 volume. Additionally, export value climbed 160% to \$137.6 million. For January through August, exports to China/Hong Kong were up 38% in volume (356,322 MT) and 17% in value (\$717.9 million).

Since Mexico removed its 20% retaliatory duty on U.S. pork in late May, exports have rebounded significantly but still trail the record-large numbers posted in 2017. August exports to Mexico were down 1% year-over-year in volume (61,365 MT), but value increased 18% to \$121.1 million. A slow start to the year still weighs on January-August exports to Mexico, which were down 11% from a year ago in both volume (473,309 MT) and value (\$821.8 million).

Pork export value averaged \$54.18 per head slaughtered in August, up 22% from a year ago. January-August exports accounted for 26.4% of total pork production and 23% for muscle cuts, both up slightly year-over-year.

Tell them you saw it in Grass & Grain!

Livestock Commission Co., Inc. Salina, KANSAS

SALE BARN PHONE: 785-825-0211

MONDAY — CATTLE • HOG SALE 2nd & 4th MONDAY
 Hogs sell at 10:30 a.m. *on the 2nd & 4th Monday of the month.*
 Cattle at 12:00 Noon. Selling calves and yearlings first, followed by Packer cows and bulls.

THURSDAY — CATTLE ONLY
 Selling starts at 10:00 a.m. Consign your cattle as early as possible so we can get them highly advertised.

AUCTIONEERS: KYLE ELWOOD, BRANDON HAMEL & GARREN WALROD

For a complete list of cattle for all sales check out our website www.fandrlive.com



FARMERS & RANCHERS HAS SWITCHED BACK to Cattle USA.com for our online auctions.

NO SALE THURSDAY, NOVEMBER 28th for Thanksgiving!

2 blk Hillsboro	2 yr@1775.00	15 red Gypsum	3-5 yr@1425.00
5 blk Hill City	4 yr@1760.00	24 blk Gypsum	3-5 yr@1425.00
10 blk Alma	3-5 yr@1750.00	47 blk Gypsum	3-5 yr@1425.00
6 blk New Cambria	3-5 yr@1725.00	7 red Longford	3-5 yr@1410.00
1 bwf Longford	4 yr@1725.00	5 bwf Longford	3-5 yr@1410.00
		9 blk Canton	3-5 yr@1410.00
		6 blk Longford	3-5 yr@1400.00
		6 red New Cambria	3-5 yr@1350.00
		5 blk Beloit	6-8 yr@1200.00
		15 blk Beloit	broken@885.00
		21 blk Beloit	broken@725.00
		22 blk Pawhuska	broken@725.00

EARLY CONSIGNMENTS FOR TUESDAY, DECEMBER 3 WEANED/VACC SALE

50 blk/red s&h 500-700 home raised 60 days weaned 2 rnd fall vacc, 20 charX s&h 600 home raised, 50 s&h 600-650 home raised, 8 str 600-700, 25 charX s&h 550-700, 7 s&h 550, 20 blk s&h 550-700, 100 s&h 500-650, 20 blkj s&h 450-550, 18 str 650-700, 35 red angus/simmX s&h 650, 10 s&h 600, 35 blk s&h 600-700 home raised, 33 blk s&h 450-600, 55 blk s&h 600-700, 90 str 600-700, 90 blk/red s&h 550-800, 130 blk/red str 600-750, 135 blk s&h 550-700 off brome, 75 blk/bwf s&h 575-675 home raised, 59 blk s&h 500-700, 28 blk s&h 450-550 home raised, 25 blk s&h 550-700, 33 red s&h 650-750, 100 blk str 600-700, 33 blk s&h 450-600, 135 blk str 650-750 sim/angus sired running out, 45 blk s&h 600-650, 40 s&h 500-600, 133 blk str 550-750, 108 blk str 550-750, 20 blk str 700, 14 s&h mostly blk 550 2 rnd vacc, 25 s&h 675-750 100 days weaned, 50 str 750 home raised, 20 blk s&h 400-650, 16 s&h 500-700 **PLUS MORE BY SALE TIME.**

EARLY CONSIGNMENTS FOR THURSDAY, DECEMBER 5:

50 blk s&h 450-650, 70 blk s&h 500-700 fall vacc, 80 blk/bwf s&h 600-800 fall vacc, 11 s&h 650-900 weaned 45 days 2 rnd fall vacc, 50 s&h 450-650 vacc, 65 blk str 875 long weaned home raised vacc no sort, 130b lkj str 825 long weaned home raised vacc no sort, 25 s&h 600-700 long weaned vacc, 75 s&h 550-700 home raised, 65 s&h 500-750 2 rnd fall vacc, 200 s&h 500-650 home raised 45 days weaned fall vacc, 56 blk str 700-800 home raised 45 days weaned 2 rnd fall vacc, 25 blk s&h 600 weaned vacc, 40 blk s&h 600-800 long weaned vacc, 90 blk s&h 550-600 **PLUS MORE BY SALE TIME.**

EARLY CONSIGNMENTS FOR TUESDAY, DECEMBER 10 SPECIAL COW SALE:

Chris Hoffman Estate Dispersal: This has been a closed herd for 30 years all Gardiner genetics heifers to start Feb 10th cows to start Feb 20th OUTSTANDING SET OF FEMALES

20-25 Gardiner Angus Bulls 18-36 months all semen & trich tested
 125 1st calf heifers; 185 coming with 2nd calf; 150 coming with 3rd calf
 100 coming with 4th calf; 90 coming with 5th cal; 100 coming with 6th calf
 240 7th calf to older

Lucky 7 Angus all purebred angus cows home raised great genetics: heifers to start calving Feb 25th for 45 days cows to start March 1st for 70 days
 50 1st calf heifers; 59 3 yr olds; 48 4 yr olds; 65 5 yr olds; 41 6 yr olds; 131 7yrs to older

Brian Livingston: Dispersal of spring herd Ohlde genetics on the cows
 200 blk cows 2nd calf to 8 yrs old (heavy on 5&6 yr olds) home raised, bred to Hanel Simm/Angus or Moser Simm/Angus start March 1st for 75 days

Check our listings each week on our website at www.fandrlive.com

