



Former biology teacher establishes Worm Hippy Worm Farm

By Donna Sullivan,
Editor

What does a retired biology teacher, who may or may not understand the definition of 'retirement,' do to keep busy? For former Riley County High School teacher and boys basketball coach Kelly Hammel, worm farming fits the bill. The journey to the Worm Hippy Worm Farm was via an injury by a wild steer while working part time in 2015. Following surgery, Hammel developed neuropathy and was laid up for a couple of months. Google searches for home businesses kept showing results for worm farming, among the others for growing micro greens or raising small animals. In the end, the idea of making use of organic waste and table scraps to raise worms interested him the most. "So I ordered a thousand worms and put a bin in the basement," he said. "Unfortunately, that didn't take up much time, because after I got my worm bin done and stuck my worms in there, I was bored again, so I ordered more worms." His first batch was Red Wigglers, followed by European Night Crawlers. "Then everybody online said I should try African Night Crawlers, and these guys ended up being my favorite worms," he continued. "They're really quick and red, and they can get really big."

It didn't take long for his worm operation to outgrow their basement digs. Plus, the African Night Crawlers are temperature-sensitive. So he built a heated room in his shop for them, which turned out to be a bit of an

exercise in trial and error. The first time the room was too cool and they all died. So Hammel installed heat mats, which proved too hot for the worms. For the third batch, a heavy rain penetrated the room and all the worms came out of their buckets and onto the floor. "When there are that many worms, you have no idea which kind is which, so I just put them back in the buckets," Hammel said. "So I'm sure there's a little mix of everything in the room." He does have three or four buckets that he believes are pure African Night Crawlers. He washes his hands and changes gloves to work with those buckets separately because the baby worms, called wisps, stick on his hands and jump off to contaminate the bins. "You learn all sorts of crazy things," he laughed.

Marketing his business proved to be another learning curve for the former educator. "I got a couple of customers right away for worms, which was the wrong thing to do because the customers took all the worms and I ran out, so I had to buy more and replenish," he recalled. "So then I quit selling worms for a while to get my populations up and the castings started to accumulate, so I started selling castings." The castings are basically earthworm manure – a mixture of soil, sand and the organic material the worms have digested – that is used as fertilizer in lawns, gardens and houseplants.

The first year Hammel sold about 100,000 worms and figures he's sold about that many already this year.



Worm farming was a natural fit for Kelly Hammel, a former biology teacher at Riley County High School northwest of Manhattan.

His worm room contains 65 five-gallon buckets with at least 1,000 worms in each one. He also has several old cattle protein tubs that hold 3,000-5,000 worms each. By keeping them warm all winter, the worms continued to feed, grow, populate and create castings. "I've probably doubled my population from last year to this year just by keeping them warm and keeping them fed and active over the winter," he said.

Worms are hermaphrodites, meaning they have both male and female reproductive organs. Once mating occurs, each worm will produce from one to three capsules per week, each containing one to five baby worms. In the right conditions they will hatch in two to four weeks, and it takes from six to eight weeks for them to reach maturity. In captivity some worms will live up to nine

years, while in nature their life span is three to five years.

When Hammel starts a new bucket of worms, he fills it about one-third full of wet, ripped-up cardboard, then adds manure, which gives the base more fungal activity, something that is good for the soil. He adds decaying leaf matter that also provides fungus and beneficial micro-organisms for the soil. Table scraps, coffee grounds and rotting produce from neighbors' gardens round out the diet of the worms. He feeds them about every 30-45 days. "I lift the top off the bucket and if it's all worm castings and real fine on top, it's done. I sift the worm castings out, put what wasn't decomposed back in and then I add more cardboard to it and we start all over again." He has learned that the worms don't seem to care for anything that is

not composted, except for watermelons, cantaloupes or strawberries. They don't like citrus, onions, peppers or anything with a little spice to it. They prefer sweet things, and also have a penchant for corn cobs.

Hammel constructed a shaker using a metal screen and a reciprocating saw to separate the worms from the castings. He sells the castings by the pound, with his biggest order having been for 2,000 pounds of the organic fertilizer. Common recommendations are to use two pounds of the castings per ten square feet in the garden or two to five pounds per 100 square feet for a well-established yard. On his own lawn, Hammel has seen that it really helps to germinate new grass seed. When he had some work done in his yard that resulted in tire tracks, he decided it was a good way to test the worm castings. He put down the grass seed, then the castings and watered them in. "The two

tracks are a lot greener than the grass around them," he attested. "I know it does help." And in his garden, he says his plants are bigger and healthier since using the castings.

Ever the educator, Hammel has given presentations on worm farming to homeschoolers, civic groups, grade-schoolers and gardening classes. "It's been very interesting for me, pretty wild," he said.

As for whether or not he intends to expand his venture, that's a bit up in the air. "I'll probably expand a little bit, especially if I get the African Night Crawlers going," he said. "If I get such bigger I'm going to have to get more room and bigger equipment. I enjoy it and have a lot of fun with it, but as far as getting bigger, that's yet to be determined."

More information about Hammel's venture can be found on his Facebook page, www.facebook.com/wormhippie/



The logo for the Worm Hippy Worm Farm was designed by Hammel's son Kyle.

K-State researchers find new clues for improving wheat

A team of Kansas State University wheat scientists is tapping into 10,000 years of evolution in the plant's genetic code as part of their continued efforts to understand how historic processes that shaped modern wheat can help to improve the varieties grown by today's farmers.

The exhaustive study, which is published in Nature Genetics, involved sequencing the genomes of nearly 1,000 wheat lines collected from different parts of the world with different environments. The work was led by research-

ers from K-State and Agriculture Victoria of Australia, in collaboration with the University of Saskatchewan (Canada) and the University of Minnesota.

"We compared the genomes (in the 1,000 wheat lines) against each other, and looked for nucleotide base changes, or mutations, that distinguish one wheat accession from another," said Eduard Akhunov, a K-State wheat geneticist.

He noted that the researchers found more than 7 million differences in the genetic code of the 1,000 lines.

"These differences can affect the function of genes that control various traits in wheat that helped it adapt to new growth conditions, such as withstanding drought and heat stresses; fighting off diseases; and yielding nutritious grain," Akhunov said.

The changes that occurred in the genetic code can tell researchers a history of each wheat accession.

"When humans started spreading wheat from the site of its origin to other places, they brought it into contact with wild wheat, and wild ancestors accidentally began to interbreed with bread wheat," Akhunov said. "What happened then was that bread wheat



Shown is Eduard Akhunov, Kansas State University professor of wheat genetics and pathology.

inherited the genetic diversity that was present in the wild emmer wheat."

That process of one species sharing genes with another species is called gene flow, and it is key for explaining the genetic diversity of today's wheat varieties, according to K-State wheat breeder Allan Fritz.

"Understanding gene flow between wild emmer and common wheat is more than just academically interesting," Fritz said. "The importance of historical introgression suggests that a more strategic use of wild emmer should have value for future wheat improvement."

Fritz noted that K-State scientists have been using wild emmer in developing germplasm for new wheat varieties in projects funded by the Kansas Wheat Association and the university's

Wheat Genetics Resource Center.

The work by Akhunov and his research team allows breeders to "evaluate the diversity in wild emmer and be intentional and strategic" in how they employ desired traits in new wheat varieties, according to Fritz.

"As we move forward, we can apply what has been learned here to also focus future efforts on traits related to health and nutrition that wouldn't have been direct targets of historical selection," he said.

Akhunov adds: "For the first time, we have described how wild emmer's genetic diversity contributed to the development of bread wheat. And what it's done since humans domesticated wheat is it's helped to develop a better crop."

K-State's study was funded by the Agriculture

and Food Research Initiative's competitive grants program, administered through the U.S. Department of Agriculture's National Institute of Food and Agriculture and part of the International Wheat Yield Partnership, which Akhunov said aims at increasing the genetic yield potential of wheat using innovative approaches.

Akhunov also said that Corteva Agriscience and the agriculture division of

Dow/DuPont provided financial support through its collaboration with Agriculture Victoria Service. Their support, he said, allowed the researchers access to needed technologies and to develop the set of data indicating the genetic differences in wheat varieties, also called an SNP dataset.

K-State received additional funding from the Kansas Wheat Commission and the Bill and Melinda Gates Foundation.

USDA extends deadline to May 17 for producers to certify 2018 crop production for Market Facilitation Program payments

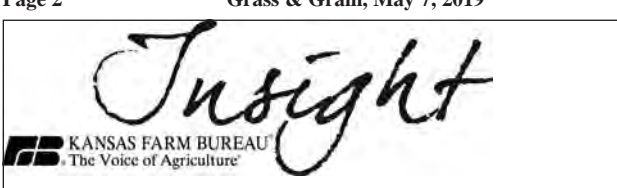
USDA extended the deadline to May 17 from May 1 for agricultural producers to certify 2018 crop production for payments through the Market Facilitation Program (MFP), which helps producers who have been significantly affected by foreign tariffs, resulting in the loss of traditional exports. USDA's Farm Service Agency (FSA) extended the deadline because heavy rainfall and snowfall have delayed harvests in many parts of the country, preventing producers from certifying acres.

Payments will be issued only if eligible producers certify before the updated May 17 deadline.

The MFP provides payments to producers of corn, cotton, sorghum, soybeans, wheat, dairy, hogs, fresh sweet cherries and shelled almonds. FSA will issue payments based on the producer's certified total production of the MFP commodity multiplied by the MFP rate for that specific commodity.

"Trade issues, coupled with low commodity prices and recovery from natural disasters, have definitely

Cont. on page 3



Fire in the Sky

By Greg Doering,
Kansas Farm Bureau

While driving through the Flint Hills one evening recently I saw the most brilliant sunset. The day had been mostly overcast, with a gentle breeze from the northwest. It was a perfect day for prescribed burning in the nation's largest patch of tallgrass prairie.

I watched as flames licked at last year's growth, stretching skyward as the sun dropped toward the horizon. The clouds broke, but the smoke-filled air dispersed purple, red and orange hues. It looked as if the burning prairie had ignited the entire sky.

It was a beautiful sight, and just a small part of the 2.5 million acres farmers and ranchers have ignited in the Flint Hills this spring. There are still a few days left in the season, which typically runs

into early May.

Stretching from just south of the Nebraska border down into northern Oklahoma, the Flint Hills are home to the remains of an ecosystem that once covered much of the Great Plains. The rocky terrain saved nearly 10,000 square miles of tallgrass from being plowed under.

While I know the benefits of prescribed burning, it's one agricultural practice that's often misunderstood.

Fire is a vital tool to preserve this patch of grass. Without it, cedar trees and weeds take over robbing the grass of the nutrients and water it needs.

"We try to burn every year, so we have new fresh grass," Lyon County rancher Jacquelyne Leffler said. "We do it for weed control, but we also want that fresh grass that gives us

optimal gain for our cattle as well. We're in the market to be profitable, too."

Leffler and her family run a stocker operation that places 600-pound cattle on grass around mid-April.

"Hopefully when we pull them off in August, we'll have around 2.2 to 3 pounds of gain per day," Leffler said.

While fire is friendly to ranchers' bottom line, it's also good for the environment. Controlled burns kill weeds, nourish the soil, destroy parasites living in dead grass and help preserve the prairie ecosystem. Fire is vital to wildlife like prairie chickens and other grassland birds. Most of that can be achieved through other means, but Leffler said, those aren't nearly as efficient as fire.

"It's cheaper to be able to light a match and just have some water to control it," Leffler said. "It makes it so our land is sustainable for the future generations that will be here."

Safety is a key component of prescribed burns, Leffler said. And that starts with

knowing where you're burning.

"Our ground isn't necessarily flat and smooth, so we try to make sure everybody knows where the bigger ditches are, Leffler said, noting that helpers also carry tools to cut fence if they need a quick escape route.

"We leave at least a 50-foot back burn anywhere we want the fire to stop," she said. "Once we do that, we make sure everyone's accounted for, and then we go into the process of lighting the head fire."

Pushed by the prevailing wind, the head fire clears the land of cedars and other woody plants.

"That means more grass is going to be able to come up, so that means more feed for our cattle, which is going to contribute to those better gains," Leffler said.

"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.

USDA reaffirms science-based decision making at G20 Agricultural Chief Scientists meeting

Two of the U.S. Department of Agriculture's top scientists reaffirmed the United States' commitment to science-based decision-making at the G20 Agricultural Chief Scientists (MACS) meeting held recently in Tokyo.

Dr. Chavonda Jacobs-Young, USDA's acting chief scientist and administrator of the Agricultural Research Service and Dr. Scott Hutchins, USDA's Deputy Under Secretary for Re-

search, Education, and Economics (REE), led the U.S. delegation. The United States has participated in MACS meetings since 2012.

"The G20 MACS brings together agricultural chief scientists from around the world to deliberate on global agricultural research priorities," Jacobs-Young said. "The meetings have proven to be essential in advancing the science and technology dialogue on critical issues facing

the agricultural sector."

"I was pleased to see an affirmation of the role for science-based decision making for advancing global food production in the MACS communique," Hutchins said. "Globally, we are seeing an increase in the use of scientific information in policymaking and it is important that we remain vigilant in our risk assessment processes to ensure that we continue to accelerate innovation in agriculture."



Last Saturday was the best day of the year. We unloaded the last load of cows on their summer pasture. Seeing that last cow step off the trailer is a gratifying sight most years but this year it was an emotional experience. It meant we had survived what was one of the hardest winters I had ever seen.

I know there have been worse winters and I know many of you experienced worse losses than I did, so please don't take this as whining. I think we can all agree that if you had livestock this winter it really took a toll on man and beast and we can all celebrate getting them out to grass for the summer. In fact, I am certain that my cows were even happier than I was to step foot into the green grass of their summer pasture.

We started working cows and putting them on grass as soon as we could this spring. I have some brome pasture and my heifers were on it by the middle of April. It was earlier than I wanted but with my hay supply dwindling I decided that desperate times required desperate measures. Again, I am almost certain that the heifers did not mind.

Honestly, I think the cows cooperated this year. I really did not have any problems with them even though we had some tough days to work with. The last day we vaccinated cows the wind was blowing at gale force and by the end of the day we were all wearing more dirt than was on the ground. Through all that the cows remained calm and cycled through the chute in relative peace. I truly think they knew where they were going.

I guess my favorite day of the year is the morning after we get the cows to pasture. We still have seven cows to calve, the butcher steers and three old cows that will go on a pasture in the lots but those chores paled in comparison to the daily grind of checking and feeding the whole herd each morning. I drove the roads and checked the cows finding them either grazing or bedded down in the green grass. There was something soothing and satisfying in that sight.

This winter was one for the history books and one that I hope we don't repeat anytime soon. I hope it is one of those years that I tell my grandkids

(many years from now) about the winter of '19. For now, this winter is a not-so-distant and very painful memory. Like the ruts around the pastures the green grass is covering the wounds up, but they have not filled in and healed yet.

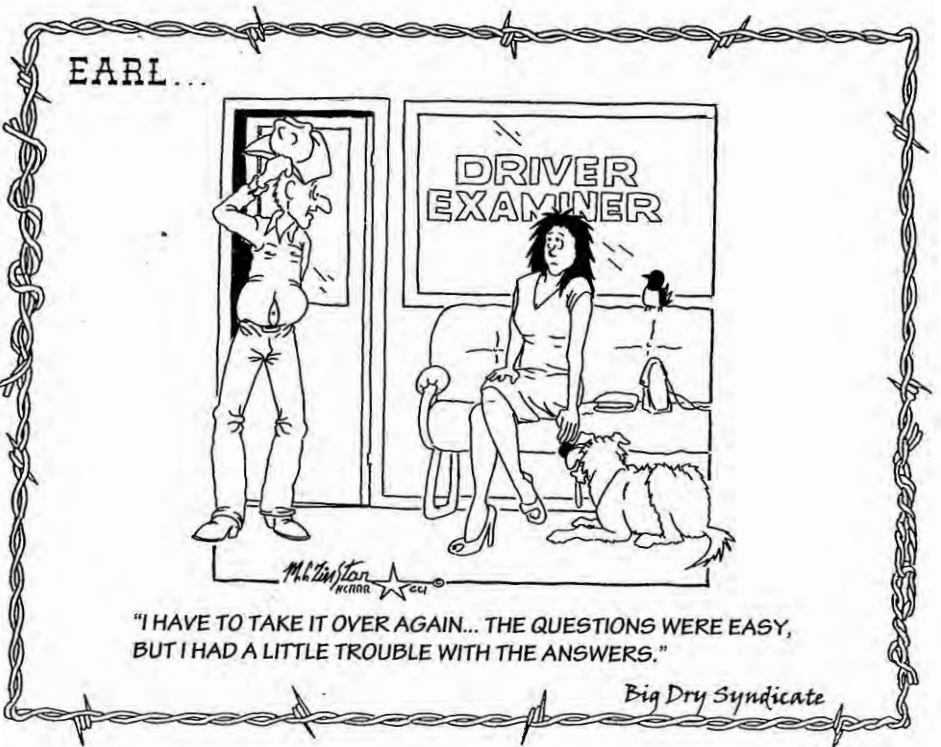
The pain in my back, hips and knees is gradually getting better and my feet are becoming more accustomed to my leather boots rather than the mud boots they spent most of the day in from December to April. I must admit, the cows came through the whole ordeal in rough shape too, I can only hope that the abundant moisture of the winter leads to some pretty good grass. Lord know they deserve it.

We knew spring would eventually come and winter would pass on, although there were stretches when it seemed as though winter might stick around into the spring and maybe summer. Now as we watch the green grass shoot up and the leaves cover the trees our focus can turn to getting the spring crops planted and eventually to baling hay.

Hopefully there is a lot of hay to bale too, I know I was in a similar situation, but I ended the year up with exactly one big round bale of prairie hay. That is too close for comfort. I know I am not alone in praying for a good year with enough hay for next winter and a little to replenish the reserve. Maybe that will be one of the positives of last winter, enough moisture to grow a good hay crop.

Safe to say, it is a relief to know that we survived this winter although it was nip and tuck there for a while. I asked Jennifer to put me out of my misery more than once and her reply was something along the line of suck it up and get back out there. Tough love and Advil PM were all that got me through this calving season.

They say what doesn't kill you makes you tougher and if you are reading this, winter didn't kill you. I hope you will take time to celebrate surviving this winter, I know I will. I am planning to celebrate with a bonfire on which I will offer up a burnt sacrifice of my winter chore clothes and Muck Boots. You are all welcome to join in, just watch for the big orange glow on the horizon.



Since 1954

GRASS & GRAIN

Published by AG PRESS

785-539-7558
Fax 785-539-2679

Managing Editor — Donna Sullivan
gandgeditor@agpress.com

— Advertising Staff —
Steve Reichert, Kurtis Geisler, Shelby Mall
steve@agpress.com, kurtis@agpress.com,
Shelby@agpress.com

GRASS & GRAIN (USPS 937-880)

The newsweekly for Kansas and southern Nebraska, published each Tuesday at 1531 Yuma (Box 1009), Manhattan, KS by Ag Press, Inc. Periodicals postage paid at Manhattan, Kansas and additional offices. Postmaster send address changes to: Ag Press, Box 1009, Manhattan, KS 66505.

Subscription — \$76 for 2 years. \$41 for 1 year, plus applicable sales tax. Outside Kansas, \$51 for 1 year, \$95 for 2 years.

MEMBER OF Associated Press

www.grassandgrain.com



A few weeks ago I was looking out the window at my bird feeders and noticed an interesting phenomenon. There was a cardinal sitting on a branch near a feeder, but every time he went to land on it to eat, a little finch would chase him away. The cardinal was easily twice the size of the finch, yet it kept letting it chase him away. After about the fourth time it happened, it was like something clicked inside the cardinal's head and he realized there was no reason for him to keep being bullied by the finch. He then landed on the feeder and when the little finch tried to snipe at him, he answered with a bigger, stronger snipe, and the little finch flew away. The cardinal then proceeded to feed in peace.

My purpose in telling you this is not to cement my image in your mind as the crazy bird lady my children are all convinced I have become. No, it's to illustrate a train of thought I've been having for a while now.

A few weeks ago I was at a cattlemen's conference and listened to Dr. Dan Thomson speak. I greatly admire Dr. Thomson and think he brings very valuable insight and information to every meeting he is a part of. He talked about the steps the livestock industry has taken over the years to ensure animals

are handled humanely right up to the very last moment of their lives. He said as an industry, we must always continue to raise the bar, and that is true. But as I sat there that day, another thought came to mind. Yes, we must always continue to raise the bar, and that is a good thing. The problem lies in the fact that while we are raising the bar, the animal rights activists are moving the goal posts. You see, it's all about the end game. The stated purpose of the more extreme groups is to put an end to animal agriculture. Nothing less will satisfy them.

Recently, PETA has placed billboards along busy highways in Kansas City, Mo., Fargo, N.D. and Sioux Falls, S.D., all areas affected by the devastating floods. "Stop Eating Meat! They die for your cruel and dirty habit" the billboards proclaim, as a calf is depicted swimming in deep water.

Are you kidding me?

These producers haven't suffered enough with the loss of their herds, their crops, their homes, their very livelihood? Someone feels the need to capitalize on such tragedy, adding the proverbial insult to injury? Where is their so-called compassion when it comes to their fellow members of the human race, many who are teetering on an emotional ledge, just trying to survive another day?

So my question is, how long as an industry do we continue to allow them to set the narrative, make the rules, and in all reality, bully us? How long will we be the cardinal being chased off the feeder by a finch?

Yes, we must be transparent with our consumers, employ the very best in animal husbandry, set high standards for every link in the supply chain. But just like that cardinal on the feeder, just like every kid who has ever been bullied on the playground, at some point we're going to have to say enough is enough and stand our ground. We are an important industry with a noble calling. Our product helps to sustain humanity.

And that, my friends, is worth defending.

Eastern red cedar—know your enemy

By Dwayne Rice, former Rangeland Management Specialist, Lincoln, Kansas
“If you know your enemy and know yourself, you will not be imperiled in a hundred battles. If you do not know your enemy nor yourself, you will be imperiled in every single battle.” Sun Tzu, The Art of War.

The eastern red cedar (*Juniperus virginiana* L.) is the most widely distributed conifer in the eastern United States and native to Kansas. Red cedar is not a true cedar, but rather a member of the Juniper genus having a cone or fruit that is fleshy and berry-like rather than woody. *Juniperus* is the classical Latin name; *virginiana* refers to the state of Virginia.

Before European settlement in America, eastern red cedar trees were relatively rare. Historically, red cedar only survived on rock outcroppings or in canyons, bluffs, and other areas where fire did not reach. Fire was intentionally set by Native Americans, especially during the late spring, summer, and early fall, to promote a diversity of habitats for hunting, fireproofing areas, pest management, improve production, warfare, insect collection, crop management, and economic extortion. With the increase of European land management practices, forests expanded and the red cedar escaped from sites where it had been historically contained. It has since invaded virtually all of Kansas’ plant communities. In the absence of fire, eastern red cedar thrives and may eventually dominate the prairie vegetation.

The wide natural distribution clearly indicates it has the ability to grow under varying moisture and temperature extremes. Eastern red cedar has an inherent ability to sustain stomatal opening at low moisture levels, which help the species adapt to dry environments and drought conditions. Red cedar is an evergreen which allows it to grow year-round, whenever temperatures are above 40° F. It is somewhat shade tolerant and can con-

duct photosynthesis during the winter when over story hardwoods are leafless, making it a strong competitor in forests and woodlands.

Like most plants, red cedar grows best in well-drained soils that are at least 24 inches deep but can establish on a wide variety of soil types (fertile to dry rocky outcrops) and moisture conditions (very dry to wet but well-drained). It prefers calcareous soils and is even moderately tolerant of salinity. Red cedars display great diversity in phenotypic characteristics such as tree form, foliage color, and crown shape. Annual growth rates are generally between 0.5 to 1.5 feet dependent upon climate and soil quality. Heights of 30-35 feet are not uncommon under good soil and moisture conditions. The reigning Kansas state champion, located near Neodesha in Wilson County, measures 63’ tall, has a 12’3” trunk circumference at the 54 inch height, and a 37’ crown spread. Although eastern red cedar is listed as moderately long-lived, a tree 795 years in age was reported in Missouri and, based on tree-ring chronology records from West Virginia, a red cedar has the potential to live over 850 years. Eastern red cedar has a thin bark and flammable foliage that easily ignites making it highly susceptible to fire. It contains cedrol, a volatile terpene, and other oils that ignite and burn easily. The conical growth form brings the flammable foliage close to the ground. In forests and

woodlands cedars can act as a ladder fuel to allow fire to climb into the crowns of taller trees. When it burns, red cedar can shower thousands of embers (firebrands) downwind increasing the chance of spot fires and the overall rate of fire spread.

Research has shown that red cedar is a dominant factor in displacing grassland birds and songbirds from the native prairie and as few as three red cedar per acre will displace some birds (prairie chickens) from their habitat. Red cedars can provide some value to wildlife but the value is generally not unique and can often be fulfilled by other vegetation. As cedars invade, vegetation that supplies food and nesting cover for quail and mast (acorns) for turkey and deer are squeezed out. Turkeys routinely abandon roost sites that have grown up into red cedars. Areas infested with cedars often attract raccoons, opossums, skunks, and snakes which displace bobwhite quail coveys and turkeys mainly through nest predation. However, fire promotes plants that wildlife prefer for food. Thus, a burned plot of any size, especially one devoid of all cedars, is a food plot.

Eastern red cedar has spread aggressively in poorly managed rangeland due to the lack of prescribed fire management, as well as a lack of appreciation for prairie and shrubland ecosystems and indigenous wildlife. During the Dust Bowl drought of the 1930s, the Prairie States For-

est Project encouraged farmers to plant eastern red cedars in shelterbelts (windbreaks) throughout the Great Plains. Cities and towns are directly affected by the increased wildfire hazards associated at the Wildland Urban Interface. The increase in red cedar on the landscape near municipalities and homes changes the fire regime from frequent, low-intensity fires to infrequent but extremely high-intensity fires.

Eastern red cedars are likely to continue their expansion throughout their range as a result of urban development, landscape fragmentation, but mostly due to the exclusion of prescribed burning. The cost of doing nothing increases every year. Taking action is the only way to reverse the trend. For more information on controlling eastern red cedar and other brush species in your pastures, contact your local NRCS office. To find a service center near you, check your telephone book under “United States Government” or on the Internet at offices.usda.gov.

Program deadline extended

Cont. from page 1
impacted the bottom line for many agricultural producers,” said FSA administrator Richard Fordyce. “The MFP payments provide short-term relief from retaliatory tariffs to supplement the traditional farm safety net, helping agricultural producers through these difficult times. Weather conditions this fall, winter and early spring have blocked many producers from completing harvest of their crops, and we want to make sure producers who want to finalize their MFP application have an opportunity.”
Producers can certify production by contacting their local FSA office or through farmers.gov.

PRECISION AERIAL APPLICATION: Pasture \ Crop \ Government






(877) 79-VERSA
(316) 882-1540
VersaAir.com


WRE

WERTZBERGER RANCH EQUIPMENT LLC

28998 BURR OAK RD ALMA, KS 66401 785-765-3588



STOCKING DEALER











LIFETIME WARRANTY ON BALE LOADING ARMS

5 YEAR STRUCTURAL 2 YEAR SYSTEM WARRANTY

wertzbergerrancheequipmentllc.com

OUR OTHER BRANDS





AMERICA'S HEMP ACADEMY

Industrial hemp is now federally legal and can be a very profitable crop to grow!

America's Hemp Academy will help you excel as you discover all of the economic possibilities and potential, and will teach you everything you need to know to get started in the industry.

For more info on how to enroll, please visit us on Facebook, Instagram, & americashempacademy.com

Or call (913) 583-8447

By Advertising in **Grass & Grain**,

“We have been able to reach people, both near and far, who need us most; hard-working ag people who can’t call in sick and need an alternative to invasive surgery - so they can get back to work, fast.”



Kansas Regenerative MEDICINE CENTER

Extend your reach!

Join the dozens of other satisfied customers who advertise with

Since 1954

GRASS & GRAIN®

Call Toll Free Today:
1-877-537-3816

Or stop by to talk to one of our advertising representatives:

1531 Yuma St. • Manhattan, KS 66502

Never miss an issue of

GRASS & GRAIN

Subscribe or renew today!

New Subscription _____ Renewal _____

Name: _____

Address: _____

City: _____ **State:** _____ **Zip:** _____

Phone: _____

Email: _____

Activate Online Edition? _____

****Online Edition is FREE with purchase of Print Subscription; Email is required.****

In-State Print Edition Rates:

1 Year; \$41 + sales tax _____

2 Years; \$76 + sales tax _____

3 Years; \$105 + sales tax _____

****Call if unsure about total sales tax; varies by location. TAX MUST BE INCLUDED IN PAYMENT.****

Out-Of-State Print Edition Rates:

1 Year; \$51 _____ 2 Years; \$95 _____ 3 Years; \$132 _____

****Call for info about our 1st Class or Online Only rates****

Check/Cash Enclosed: _____

or

Credit/Debit Card:
Visa, Master Card, Discover, American Express

_____ - _____ - _____ - _____

Expiration Date: ____/____/____

V-Code (3 digits on back of card): ____

Signature: _____

Mail to: P.O. Box 1009, Manhattan, KS 66505
OR Stop by the office: 1531 Yuma St., Manhattan, KS 66502
1-877-537-3816



Our Daily Bread

***** By G&G Area Cooks *****

Virginia Lilley, Longford, Wins G&G Recipe Contest And Prize

Winner Virginia Lilley, Longford: "Enjoy! These little cookies are even better the next day."

SOFT FROSTED BANANA BREAD COOKIES

Cookies:
3/4 cup butter-flavored shortening
3/4 cup sugar
1 egg
1 teaspoon vanilla
1 cup mashed bananas
1/4 teaspoon salt
1 teaspoon soda
2 cups flour
Frosting:
1/2 cup butter
6 tablespoons brown sugar
4 tablespoons milk
3 1/4 cups powdered sugar
1/4 teaspoon vanilla
Dash of salt

Preheat oven to 350 degrees. Cream 3/4 cup butter-flavored shortening and 3/4 cup sugar together in your stand mixer or large mixing bowl. Add 1 egg, 1 teaspoon vanilla and beat it for an additional 2 minutes. Grab a couple of bananas. You'll want to use bananas that have brown spots all over them. Brown spotted bananas are super ripe and very sweet. Peel the bananas and mash them. You'll need 1 cup total. Add them to the mixing bowl and beat to combine. Into a small mixing bowl combine 1/4 teaspoon salt, 1 teaspoon baking soda and 2 cups flour. Add the dry ingredients to the mixing bowl and mix until combined. The dough will be sticky and slightly thick. Spray the inside of a kitchen scoop with cooking spray. Spray a large cookie sheet with cooking spray as well and scoop the dough out onto it. Bake for 8 to 9 minutes or until the cookies are golden brown along the bottoms. Remove them to a cooling rack and allow them to cool completely.

Make the frosting while the cookies are baking. Place 1/2 cup butter, 6 tablespoons brown sugar and 4 tablespoons milk into a medium-sized saucepan. Melt them together on the stove top. Pour 3 1/4 cups powdered sugar, 1/4 teaspoon vanilla and a dash of salt into the melted ingredients and whisk it well to combine. Let the frosting sit for about 10 minutes. It will continue to thicken as it cools down. Frost each cookie. Makes 36 cookies.

Need Senior Insurance?

- ★ Medicare Supplement
- ★ Long Term Care
- ★ Final Expense



800-373-9559
PHILLIPS INSURANCE
Jim- The Answer Man!





OPTIONS:

- Post Hole Digger
- Tool Boxes
- Hydra Feeder
- 3rd Spool Valve
- LED Work Lights

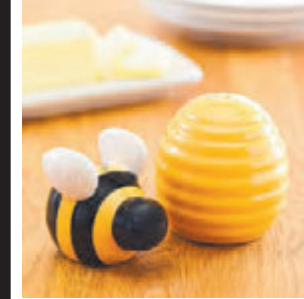


BEDS IN STOCK
INSTALLATION AVAILABLE

BOOT HILL SALES
CLAY CENTER, KS • 785-388-2245 | 785-632-7420
www.boothillsales.com

Prize for MAY 2019! "Our Daily Bread" Recipe Contest Prize

Honey Bee Salt & Pepper Set




This Honey Bee Salt & Pepper set is a sweet addition to your table that will have guests buzzing!

Dispense holes are located at the tops, while the fill holes are on the bottoms.

Made of Ceramic.

Hand Wash.

Send Your Recipes Today!

 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 at: auctions@agpress.com



Jackie Doud, Topeka:
BEST GREEN BEANS
5 cans green beans, drained

1 pound bacon, cut into 1-inch pieces
2/3 cup brown sugar
1/4 cup melted butter
1/4 cup soy sauce
1 1/2 teaspoons garlic powder

Place green beans in 9-by-13-inch ungreased pan; set aside. Fry bacon until done but not too crisp. Reserve some for topping. Scatter bacon over beans. Combine remaining ingredients in a small bowl. Spoon over green beans and mix. Bake uncovered at 350 degrees for 40 minutes or until heated through. Top with reserved bacon.

Rose Edwards, Stillwater, Oklahoma:
BAKED PARMESAN ASPARAGUS

1 pound asparagus spears, trimmed
1/4 cup Kraft Peppercorn Ranch dressing
2 tablespoons Parmesan cheese
12 Ritz Crackers, coarsely crushed
Heat oven 350 degrees. Cook asparagus in simmering water in large skillet 2-3 minutes or until lightly green but crisp; drain. Place in shallow baking dish then add dressing and toss to coat. Top with cheese and crumbs. Bake 10-15 minutes until topping is slightly browned and asparagus heated through.

The following two recipes are from Lydia Miller, Westphalia:
CRANBERRY-PECAN CORN MUFFINS

1 3/4 cups yellow cornmeal
3/4 cup all-purpose flour
1 1/4 teaspoons baking soda
1/2 teaspoon salt
1 1/2 cups (12 ounces) fat-free plain yogurt
1 egg
1/4 cup canola oil
1/4 cup honey

1/2 cup dried cranberries

1/4 cup chopped pecans
In a large bowl mix cornmeal, flour, soda and salt. In another bowl mix yogurt, egg, oil and honey. Stir into dry ingredients just until moistened. Fold in cranberries and pecans. Coat muffin pans with cooking spray; fill three-fourths with batter. Bake at 375 degrees for 18 to 20 minutes or until toothpick inserted near center comes out clean. Yield: 1 dozen.

1 muffin = 185 calories.

CURRIED CRAN-ORANGE SNACK MIX
2 cups Wheat Chex
1 1/2 cups Corn Chex
1 cup chow mein noodles
1/3 cup shelled pistachios
2 tablespoons butter, melted
2 tablespoons orange juice
2 teaspoons curry powder
1 teaspoon salt
1 teaspoon garlic powder
1 teaspoon dried basil
1 teaspoon grated orange peel
1/4 teaspoon pepper
3/4 cup dried cranberries

In a large bowl mix cereals, noodles and pistachios; set aside. In a small bowl mix butter, orange juice, curry powder, salt, garlic powder, basil, orange peel and pepper. Drizzle over cereal mixture; toss to coat. Transfer to a 15-by-10-by-1-inch baking pan coated with cooking spray. Bake at 275 degrees for 40 minutes or until golden brown, stirring every 10 minutes. Stir in cranberries. Store in air-tight container. Yield: 5 1/2 cups.

1/2 cup = 125 calories.
Diabetic Exchange: 1 starch, 1 fat.

AUCTION

SATURDAY, MAY 11, 2019 — 10:00 AM
From BERRYTON, KS, 1 mi. North on S. Berryton Rd., then 1/2 mi. East on SE 61st, then 1/4 mi. South on Driveway.

Ford 1210D tractor w/loader; some smaller 3 pt. implements; Miller Bobcat 225G Plus welder/gen.; Onan Marquis Gold 5500 generator, new; Miller Syncro-Wave 180 wire welder; Miller 200 wire welder; Miller plasma cutter; 2 acetylene torch sets; Atlas metal lathe, 30"; Craftsman & I.R. air compressors; 2 Tennsmiths T-52 shear & U48 brake; 4 engine stands; Milwaukee HD elec.

NOTE: Too much to list, huge selections of tools, shop items, parts & pieces from Refrigeration & Repair Business.
INSPECTION: Friday, May 10, 1 to 5 PM.

MRS. JOE B. "DARLENE" McCARTER, SELLER



Info & Pics at:
www.wischroppauctions.com
785-828-4212

Need an extra copy of GRASS & GRAIN?

Pick one up at any of our Box locations:

Dara's Fast Lane:

- 5321 Tuttle Creek Blvd, **Manhattan. KS -**
- 8811 US-24, **Manhattan. KS -**
- 1132 Pillsbury Dr., **Manhattan. KS -**

Sharp's:

- 118 W. Randolph St., **Randolph. KS -**

The Store:

- 104 E Barton Rd., **Leonardville. KS -**

Copies are also available at these businesses:

- Bluestem Farm & Ranch:** - 2611 W. Hwy 50, **Emporia. KS -**
- Pioneer Farm & Ranch:** - 427 NE 14th **Abilene. KS -**

Or Stop by the Grass & Grain Office:

- 1531 Yuma St., **Manhattan. KS -**

Office Hours: Monday-Friday, 8am-5pm



Picnic-Perfect Plates For Outdoor Dining

(Family Features) — Picnics, patio dining and al fresco foods all come to mind when warmer weather allows families and friends to enjoy the flavors of homemade meals in the great outdoors. As you seek out recipes for outdoor entertaining and more, try keeping the options light and simple with dishes that can be created at a moment's notice.

Ruby Beet Chicken Salad Skewers, uniquely flavored with Aunt Nellie's Baby Whole Pickled Beets, can be ready in less than an hour for those last-minute get-togethers. Try this Middle Eastern-Inspired Bean Salad with a touch of za'atar seasoning and READ Bean Salad for a flavorful accompaniment to the main course.

Find more outdoor dining ideas and recipes at auntnellies.com and READsalads.com.



RUBY BEET CHICKEN SALAD SKEWERS
Servings: 8
1 jar (16 ounces) Aunt Nellie's Baby Whole Pickled Beets
2 large boneless, skinless chicken breast halves (about 1 pound)
1/2 teaspoon salt, plus additional, to taste, divided
1/2 teaspoon pepper, plus additional, to taste, divided
4 1/2 tablespoons stone ground mustard, divided
1 1/2 tablespoons, plus 1/3 cup, orange marmalade, divided
2 tablespoons minced fresh chives
1 large lemon, zest & juice (1/3 cup juice)
1/4 cup olive oil
1 bag (9 ounces) leafy romaine lettuce pieces
1/3 cup chopped almonds, toasted
1/3 cup crumbled blue, feta or goat cheese
Heat oven to 375 degrees. Drain beets; set aside. Season both sides of chicken with salt and pepper, to taste. In small bowl, combine 1 1/2 tablespoons mustard and 1 1/2 tablespoons marmalade. Brush mixture over chicken until completely coated. Bake chicken on rimmed baking

sheet lined with aluminum foil about 20-25 minutes, or until juices run clear; set aside.

To make vinaigrette: In medium bowl, combine remaining mustard, remaining marmalade, chives, lemon zest and juice, 1/2 teaspoon salt and 1/2 teaspoon pepper. Slowly pour in oil while whisking vigorously until completely combined.

Slice cooled chicken into 1-inch pieces. Onto each skewer, thread one beet, one piece of chicken and 4-5 pieces of lettuce; repeat two times for each skewer, adding one beet at ends. Repeat to make eight skewers. Place skewers on large serving platter.

Stir vinaigrette; drizzle lightly over skewers. Sprinkle with almonds and cheese. Serve with remaining vinaigrette.



MIDDLE EASTERN-INSPIRED BEAN SALAD
Servings: 6
1 can (15 ounces) READ 3 or 4 Bean Salad
1/2 cup cherry or grape tomatoes, halved
1 small cucumber (4-5 inches long) cut in half lengthwise then thinly sliced crosswise
2 green onions, thinly sliced
1/2 cup chopped fresh parsley
2 tablespoons chopped fresh mint
1 small clove garlic, minced
1/4 teaspoon crushed red pepper flakes
Dressing:
2 tablespoons prepared hummus
1 tablespoon fresh lemon juice
1/4-1/2 teaspoon za'atar seasoning blend
Drain bean salad. Discard liquid. Place bean salad in large bowl. Add tomatoes, cucumber, onions, parsley, mint, garlic and red pepper flakes to bean salad. Toss to combine.
To make dressing: In bowl, combine hummus, lemon juice and za'atar seasoning.
Add dressing to salad just before serving; toss to combine well. Serve immediately or chilled.

Think about Elsie Grace's when shopping for Mother's Day & Graduates!!



Need a gift basket?
Call Elsie Grace's!
We Ship Fudge DAILY!



Elsie Grace's
123 N. Kansas Ave.
Frankfort, KS
785-292-4438

Hours:
Mon.-Fri.: 9 a.m. - 5 p.m.
Saturday: 1-3 p.m.
Follow us on Facebook!

Fresh, Homemade pie by the slice, every day!


Always Free Samples of our FAMOUS FUDGE!

BARN BUILDERS DT CONSTRUCTION

918-527-0117

Free Estimates! All Workers Insured Est. 1977

One Year Warranty



30x50x10 enclosed Galvalume \$9,100
12' slider, 1 walk door...Colored metal \$10,100
40x60x14 enclosed
2 12' sliding doors..... Galvalume \$16,100
1 walk doorColored metal \$17,500
40x100x16 enclosed
20' split sliding door..... Galvalume \$24,600
1 walk doorColored metal \$26,600

Price includes labor and material.

www.DTCBarns.com

Kansas POWERTRAIN & EQUIPMENT LLC

785-861-7034
1534 NW TYLER
TOPEKA, KANSAS

Complete Drivetrain Specialists • Drive Shafts
Rear Ends and Heavy Duty Parts

Eating Healthy Eating Habits In Kids

(Family Features) — As a parent, instilling healthy eating habits in your children at an early age can aid in proper growth and development. Eating well goes a long way toward maintaining a healthy weight, increasing energy levels and improving moods while also reducing risk of obesity and other chronic issues such as heart disease and diabetes later in life.

Set your children on a path to making lifelong nutritious choices with these tips:

Foster independence. Allowing your children to help with shopping and meal prep can aid in them taking ownership of what they're eating. Start by divvying up easier tasks such as setting the table then work toward creating snacks and meals on their own. These Rainbow Fruit Parfaits are simple for kids to assemble – just set the ingredients out and let them layer – and can serve as a healthful on-the-go breakfast or after-school snack.

Offer balanced options. Children require balanced diets made up of all three major food groups, including fruits and vegetables, for proper development. Looking for the Produce for Kids logo next to nutritional, family-friendly items at the grocery store is an easy way to identify healthy food choices while also supporting local organizations that help children and families in need.

Be a role model. Typically, your children will follow your behaviors, which includes the types of foods they select at mealtimes. Eating a rainbow of fruits and vegetables can help ensure your family is getting a complete range of nutrients. For example, a recipe like this Rainbow Buddha Bowl provides a combination of fresh and roasted vegetables that can be customized to meet your family's tastes. Thinking about how many colors you eat in a day may inspire your kids to do the same, which can foster a lifetime of healthy eating habits.

To find more healthy meal inspiration, including more than 500 registered dietitian- and family-tested recipes, visit produceforkids.com.



Rainbow Fruit Parfaits

Recipe courtesy of
Produce for Kids

Prep time: 10 minutes

Servings: 3

1/2 cup sliced strawberries
2 mandarins, peeled & segmented
1/2 cup chopped pineapple
2 kiwis, peeled & chopped
1/2 cup blueberries
1/2 cup red seedless grapes

1 cup vanilla Greek yogurt

In parfait glasses, layer strawberries, mandarins, pineapple, kiwis, blueberries and grapes. Top each fruit parfait with yogurt.



Rainbow Buddha Bowl

Recipe courtesy of Jodi of Create Kids Club on behalf of Produce for Kids

Prep time: 30 minutes

Servings: 4

1 medium sweet potato, peeled & diced
1 cup broccoli florets
1/2 small purple cabbage, sliced
1 tablespoon olive oil
Salt, to taste
Pepper, to taste
2 cups quinoa, cooked according to package directions
1 cup red cherry tomatoes, quartered
1/2 cup yellow cherry tomatoes, quartered
1 avocado, sliced
4 tablespoons yogurt ranch dressing

Heat oven to 425 degrees F. Place sweet potatoes, broccoli and cabbage on baking sheet lined with parchment paper. Toss with oil and season with salt and pepper, to taste. Bake 15-20 minutes, or until potatoes are soft.

Divide cooked quinoa into four bowls. Top with roasted sweet potatoes, broccoli, cabbage, red tomatoes, yellow tomatoes and avocado.

Drizzle with dressing.



By Ashleigh Krispense

Here's a recipe from the March 1931 edition of the *Farmer's Wife Magazine*. This magazine was published in Minnesota and ran from 1893 to 1939. Although the magazine is no longer going, the recipes are still all around and being used! There's now a great series of cookbooks that are packed full with those exact recipes from the magazine. These biscuits are from "The Farmer's Wife Harvest Cookbook". They come out of the oven warm and flaky, and you just can't wait to dig into them! Not only are they super quick to pull together, but they're also quite simple (only 5 ingredients!).

2 cups flour
4 teaspoons baking powder
1 teaspoon salt
4 tablespoons butter
3/4 cup milk



Start by measuring out your dry ingredients and then giving them a quick sifting!

Cut your butter into chunks and add to the dry ingredients. Use either your fingers or a couple of knives to work the butter into the dry ingredients.

Once you get the butter all worked in, pour in the milk and stir rapidly for a few seconds.

One tip that I've found for when rolling out the dough is to put it on a floured cookie sheet. This way, your cookie sheet is the only surface dirty and not your entire kitchen table! So, get your dough set out onto the cookie sheet and knead it vig-



orously for about 30 seconds. Then roll it out to about 1/2 inch thick.

Using either your biscuit cutter or a glass drinking cup, cut out your biscuits and then place on a baking sheet and bake at 400 degrees for 12 minutes.

Pull out and serve warm with some butter and jam!

Enjoy!



Ashleigh is a freelance writer and blogger for her website, *Prairie Gal Cookin'* (www.prairiegal-cookin.com). She shares everything from step-by-step recipes and easy DIY projects, to local history, stories, and photography from out on the farm in Kansas. Follow PGC online or like it on Facebook for more recipes and ramblings!

ESTATE AUCTION

SATURDAY, MAY 11, 2019 — 9:30 AM

Auction at the residence, 811 Huntress, CLAY CENTER, KS
FURNITURE & APPLIANCES (sell at 11:00), HOUSEHOLD GOODS & COLLECTIBLES; 20+ beautiful crocheted tableclothes & bedspreads, many from Belgium
Hope to complete auction by 2:00pm.

See last week's *Grass & Grain* for listings & Go to kretzauctions.com or kansasauctions.net for pictures, and additional information!

CLERK: Shirley Riek, 1745 21st Rd., Clay Center, Ks. 67432

KATIE MALL ESTATE, SELLER

Auction conducted by: **Kretz Auction Service**
Call Greg Kretz: (785) 630-0701

E&D Custom Silage

Conveniently located in central Kansas

- Claas 900 machine with K.P. and inoculant.
- 8 row head and pickup head.
- Support trucks and equipment.
- Dependable crew and equipment.

Jobs of Any Size!

| | | |
|--------------|--------------|--------------|
| Dustin | T.R. | Cort |
| 620-635-0238 | 620-786-4646 | 620-786-5172 |

REAL ESTATE AUCTION

MONDAY, MAY 20, 2019 — 7:00 PM

Auction will be held at the Community Center Fire Station in WESTFALL, KANSAS
Legal Description: W ½ SW ¼ 6-13-6 Lincoln Co., Kansas

The farm is located 1 ½ miles West of Westfall to 250th Road then 1 mile North to Fox Drive on the Northeast corner of 250th Road & Fox Drive. The farm is 76.3 acres with 61.1 CRP acres with the balance native grass & trees. The CRP payment is \$46.16 per acre. The contract expires on September 30, 2020. The purchaser will receive the 2019 and 2020 payments. The purchaser will maintain the CRP contract.

Seller will pay 2018 and all prior year's taxes. Purchaser will pay 2019 taxes. 2018 taxes were \$2,080.00.

Possession: Possession will be upon closing on or before June 30, 2019.

Terms: 10% of purchase price as down payment day of auction, the balance will be due upon closing on or before June 30, 2019. Down payment will be escrowed with Land Home Title. Escrow fees will be split 50/50 between seller & purchaser. Title insurance will be used, the cost will be split 50/50 between seller & purchaser.

Thummel Real Estate & Auction LLC is acting as seller agent. All statements made day of auction take precedence over printed material.

WILLIAM PATTON

Auction Conducted By: **THUMMEL REAL ESTATE & AUCTION LLC**
785-738-0067

"Alexa, turn on KFRM"

"The Voice of the Plains"
KFRM
550 AM

Streaming 24-7
Download the
KFRM App and
Listen Anytime,
Anywhere!



AG LIME GYPSUM

Standard or Variable Rate Application

GEARY GRAIN, INC.

Junction City, Kansas

785-238-4177

gearygrain.com

CENTRAL KANSAS AG AVIATION

Call for all your
Spring spraying
needs!



STEVE DONOVAN

Cellular: 785-366-0513 • Office: 785-258-3649

Ag Risk SOLUTIONS

Experience. Knowledge. Integrity.
YOUR Crop Insurance Solution

www.ag-risk-solutions.com

913-367-4711

Ag Risk Solutions is an Equal Opportunity Provider



Mike Chartier - Hiawatha, KS 913-370-0999

Tony Elizondo - Wamego, KS 785-410-7563

Jennifer Forant - Nortonville, KS 785-217-3815

Mike Scherer - Atchison, KS 913-426-2640

Kurt Schwarz - LaCygne, KS 660-424-3422

WORLD'S LARGEST SELECTION OF SQUEEZE CHUTES



ON SALE

ALL THE FEATURES YOU NEED, AND MORE



GoBobKansas.com
(866)-287-7585

TIFFANY CATTLE CO., INC.

A Complete Cattle Feeding & Marketing Service



- Risk management handled by Tiffany Cattle Company
- Locked commodity prices
- Complete profit/loss statement for each pen
- All marketing decisions discussed with and approved by cattle owner
- Rewarded for your efforts in producing a quality product by selling your cattle on an industry competitive grid

Tiffany Cattle Company
1333 S. 2500 Road
Herington, KS 67449
(785) 258-3721

Tiffany Cattle West
758 Pioneer Road
Marquette, KS 67464
www.tiffanycattle.com

Shawn Tiffany
(785) 229-2902
shawn@tiffanycattle.com

Shane Tiffany
(785) 466-6529
shane@tiffanycattle.com

Family Owned & Operated

Tiffany Cattle Company is excited to announce the acquisition of a new location in McPherson county! Now with a total capacity of 32,000 head we are looking forward to providing multiple feeding and marketing options to our existing and new customers in both locations. With pen sizes of 50 to 200 head, we are equipped to service customers of any size.

Production Services

Objective is simply: Least Cost Per Pound of Gain! Ration formulation and cost analysis, health program designed and maintained by veterinarian, special pens and attention to sick animals, feed financing and cattle purchasing available.

Marketing Services

Marketing finished cattle is top priority at Tiffany Cattle Company. You have the option of selling on the cash market, forward contracting or grid pricing through multiple Kansas packers.

4-H exchange program helps share cultures, spawns lifetime friendships; program is looking for Kansas families to host youth this summer

It may have seemed like an unlikely pairing.

In 1977, 17-year-old farm girl Rose Scott begged her parents to sign up for a 4-H program that paired Kansas families with foreign exchange students from Japan.

They relented, and for part of that next summer, 13-year-old Hiroe Yoshioka took up residence at the Scotts' home in rural Clay County.

"We had been writing back and forth to the family (in Japan) to introduce ourselves and kind of learn what to expect," Rose Scott remembers. "We met Hiroe at the Extension office; she got off the bus

and they said, 'Here's Hiroe and here's the Scott family. Now go have some fun.'"

That was 42 years ago, marking not only the start of a lifetime friendship for two girls who lived a half world apart, but also the first year that Kansas 4-H had participated in an exchange program with the island country.

"There were about 170 (Japanese students) who came to Kansas that first year," Scott said. "They were transported to their host county via a Greyhound bus."

This summer, the Kansas 4-H program's exchange program with Japan will continue

with about 25 Japanese youth expected to be in Kansas for about four weeks beginning in mid-July. Like the Scott family 42 years ago, many of the families will be hosting a Japanese student for the first time.

"A lot of people are afraid, particularly with the Japanese, that they won't know enough English," said Mary Kay Munson, who helps to coordinate several 4-H exchange programs in Kansas.

"But other families have learned that the students don't need to know English well. They find out really quickly that if they will just relax and let the kids play, do what kids do – such as go to the pool – they get along without language pretty well. They find out that the (Japanese) kid speaks a lot more than they thought."

Munson notes that the program with Japan has had the longest continued success in Kansas, but the state's 4-H office also coordinates programs

Big Blue River Compact meeting to be held May 15

The 46th annual meeting of the Kansas-Nebraska Big Blue River Compact Administration will be held in room 124 at the Kansas Department of Agriculture, 1320 Research Park Drive in Manhattan, on Wednesday, May 15, 2019, at

with Finland, Norway, Costa Rica, Korea, Taiwan, Greece, Uzbekistan, Tajikistan, Russia, Belarus and several countries in Africa.

All told, she expects that approximately 60 Kansas families will have an opportunity to host a foreign exchange student for about a month this summer. Two Kansas kids will visit one of the foreign countries this summer as part of the outbound program.

"We're always looking for more families, and especially families that will host older teens," Munson said.

The state's 4-H office has a web page for families who want more information, or those wanting to learn more can call Munson at 785-238-3631.

Rose Scott is now the coordinator for the 4-H Japanese Summer Inbound Exchange program in Kansas. She said she hopes to help others enjoy the excitement she felt as a soon-to-be high school senior

and welcoming Hiroe into her home.

"When Hiroe was in Kansas, the thing that intrigued me so much was how excited she got about stuff that I took for granted, like wide open spaces, stars in the sky, and hearing a thunderstorm," Scott said. "Hearing the thunder and seeing the lightning go across the sky... she would just squeal."

The following summer, Scott traveled to Japan through the 4-H exchange program and stayed with Hiroe's family.

"Again, how mom and dad agreed to it, I don't know," Scott said. "I was just graduating from high school. The Yoshioka family hosted me and I got to see what Hiroe's day-to-day was like."

Scott remembers the shock of going from a state with wide open spaces and 2 million people to a crowded country with 10 million people in Tokyo alone.

the orderly development thereof, and to encourage an active pollution abatement program in each state.

The Compact Administration is composed of a federally appointed Compact Chairman, currently W. Don Nelson of Lincoln, Nebraska; two state appointed representatives: David Barfield of the Kansas Department of Agriculture-Division of Water Resources and Gordon "Jeff" Fassett of

"When we went out sight-seeing, we made a point to look at what color shirts we were wearing so I could spot somebody in a crowd," Scott said.

Munson notes that experiencing differing cultures helps to shape youth's futures.

"People may think the value is in the kids that go abroad, but the bigger impact I think is the ones who host here, because they reach a whole family, and a lot of the families have children in preschool up to high school," she said. "Those kids have a broader view of the world, and they have an enhanced interest in what is going on around the world."

Deryl Waldren, the northwest area 4-H Youth Development specialist in Colby, said that participants reported higher scores in their ability to be independent, speak English and make friends after completing the program.

BENNINGTON GUN STORE
Schur Firearm Sales, LLC
Family Owned Repair & Special Orders Class 3 Dealer


CUSTOM RIFLE WORK
 Action Blueprinting & Truing
 Barrel Threading
 Custom Cerakote Bake-on Finish
 Barrel Chambering
 Rifle Accuracy Troubleshooting & Repairs
 Plus many more repairs of all types of firearms
• PERMANENT STORE HOURS •
 Tues., 10-6pm; Wed., 4-7:30pm
 Thurs., 10-6pm; Fri., 10-6pm; Sat., 10-3pm
785-201-5090 • 104 NORTH NELSON, • BENNINGTON, KS



"Big Enough to Deliver. Small Enough to Care."




Tallgrass Commodities
420 Lincoln St.
Warrego, KS 66547

785-494-8484
Call Today For All Your Feed Needs!


Solar Water Pump

Water 60 head a day from 80' deep
The Cottonwood 1260GPD Portable solar water pump station provides access to water. This portable, **solar direct power supply** has pump, pipe, wire & carrying stand.




\$3,485 + T&S.

785-499-5311
dsam51@centurylink.net



OAK GROVE
FABRICATION


GRASS & GRAIN

HEARTLAND

SOIL SERVICES

"UNLESS YOU TEST, IT'S JUST A GUESS"




Insect Detection




Yield Data




Data Collection




Soil Sampling




VRT Fertilizer



DataFarm



Tissue Sampling



VRT Seeding


Imagery

Irrigation Mgmt.

Data Analysis


ROI

Reduce your farm's electric bill




Lower electric bills
 +
 30% federal tax credit
 +
 USDA rural development grant
 +
 equipment depreciation
 =
 sytem payback in 3-5 yrs

10 year workmanship warranty
 10 year manufacturer's warranty on inverters
 25 year manufacturer's warranty on solar panels



King Solar

316-265-8568
www.KingSolar.net
 Serving central Kansas since 1982



620-298-2780
www.HeartlandSoilServices.com

KRC to host Pollinators, Pesticides and Drift workshop in Wichita May 20

The Kansas Rural Center (KRC) will host a “Pesticides, Pollinators and Drift: What You Need to Know” workshop in Wichita. The workshop will focus on the impacts of pesticides and herbicides on pollinators, beekeepers, farmers and local foods’ initiatives. Farmers, gardeners, beekeepers, conservationists, pollinator proponents and local foods’ advocates will gain a broad view of the role of pesticides in our farm and food system. The workshop will be held in the Sunflower Room at the Sedgwick County Extension Education Center, 7001 W 21st Street N., Wichita, on Monday, May 20, from 9 a.m.-4 p.m. Lunch will be served by a local catering company. Registration is \$10 and is required by Thursday, May 16, in order to ensure an accurate count for lunch.

To register, please visit: <http://events.constantcontact.com/register/event?llr=haxabybab&oeidk=a07egaoseryc1e2c9e2>.

In the morning, the workshop will cover how pesticides impact pollinators and the role that agriculture plays in pollinator decline, but also how a number of farming strategies that are gaining traction in Kansas reduce or eliminate pesticide use and can help the farmers’ bottom line. Claire LeCanne, M.S., University of Minnesota Extension, will



talk about a study she did with entomologist Dr. Jonathan Lundgren looking at the benefits of using non-treated seeds in corn, and how cover crops attract and sustain beneficial insects including pollinators.

Andy Burr, Kansas Department of Wildlife, Parks, and Tourism, will cover conservation programs that include cost-share for pollinator habitat, and KRC staff will give an update on current legislative initiatives in Kansas that deal with pesticides.

Angela Anderson, Twin Lakes Watershed coordinator, will cover work she did with the Kansas Wildlife Federation to work to ban pollinator-harming pesticides.

In the afternoon, the impacts of herbicide drift on pollinators and specialty crop farmers will be explored. Brad Dilts, Serenity Farms specialty crop farmer, will discuss his experience with drift which resulted in tens of thousands

of dollars in crop loss. Steps for reporting drift will be covered, along with an update on Kansas’ current noxious weed

law and potential pesticide laws that could help curb drift and protect farmers.

Pesticide use in agriculture is a primary cause of pollinator decline, and while agriculture has played significant role in pollinator decline, it can also play a huge role in reversing the trend. Farmers in Kansas, and across the U.S., are turning to farming methods that use fewer or no pesticides and provide habitat for pollinators and other beneficial insects.

Herbicide drift threatens not only pollinators but also

specialty crop growers, organic farmers and, most recently, soybean farmers. Drift was cited in a 2014 report published by the Kansas Rural Center as a significant barrier to scaling up specialty crop production in Kansas. One incident of drift can cause an organic farmer to lose certification for three years, minimum, and researchers are finding that some herbicides, while not targeting pollinators or insects, are causing harm to them through loss of the flowering plants they rely on

to survive.

Come learn more about the impacts of pesticides and herbicides on pollinators and people, and what can be done, and is being done, to help remedy the problem. Registration is \$10 to cover lunch and materials, and is required by Thursday, May 16, in order to ensure enough food for lunch. To register, please visit <http://events.constantcontact.com/register/event?llr=haxabybab&oeidk=a07egaoseryc1e2c9e2>, or email info@kansasruralcenter.org.



KBS Agri Systems, LLC

**A FULL LINE
GRAIN HANDLING
COMPANY**

1-800-544-6530

WWW.KBSAGRISYSTEMS.COM

A member of the Custom Agri Systems family

HEARTLAND IMPLEMENT SOLUTIONS LLC

- AIR SEEDER REBUILDS • CUSTOM SOLUTIONS -

REMOTE LUBRICATION SYSTEMS

www.HeartlandImplementSolutions.com

FREE ON-SITE ESTIMATES CALL 785 534 3433

Butchering & Processing Plant
Call Now And Reserve A Spot!
Retail Cuts Available!!!
Store Hours: Monday-Friday, 7a.m.-4p.m.
785.499.6829

We take credit cards, checks, & cash! **303 LOWE, ALTA VISTA, KANSAS**

Butchering & processing by appointment.
No Deliveries

THE WORKING MAN'S BALER.

The Signature name says it all. The 504R Signature baler advances the Vermeer legacy by giving the working man a baler that is built upon the three signature pillars of Vermeer — convenience, ease of use and durability. Combine that with a camless wide pickup, rotor and durable steel windguard roller for quiet and smooth operation — all while making bales at a quick pace. Backed by a 3-year pickup warranty*, it's clear the 504R Signature baler is truly one of a kind.

Vermeer Corporation reserves the right to make changes in engineering, design and specifications, add improvements, or discontinue manufacturing or distribution at any time without notice or obligation. Equipment shown is for illustrative purposes only and may display optional accessories or components specific to their global region. Please contact your local Vermeer dealer for more information on machine specifications. Vermeer and the Vermeer logo are trademarks of Vermeer Manufacturing Company in the U.S. and/or other countries. © 2018 Vermeer Corporation. All Rights Reserved.

| | | | |
|--|--|---|---|
| BERG REPAIR Westmoreland, KS 785-457-3534 | SUPERIOR IMPLEMENT, INC. Superior, NE • 402-879-4723 www.superiorimplement.com | VERMEER BALER SALES & LEASING Forrest Johnson, Leonardville, KS 785-457-3534 | WERTZBERGER RANCH EQUIPMENT LLC Alma, KS • 785-765-3588 • 785-313-1108 • 785-556-1918 wertzbergerranchequipmentllc.com |
|--|--|---|---|

90 YEARS OF QUALITY
DIESEL ENGINE OIL & TRACTOR HYDRAULIC FLUID
WORTH TALKING ABOUT

CUSTOMERS THAT PUT OUR OIL TO THE TEST
GET USED OIL ANALYSIS AT NO EXTRA COST

| | | |
|------------------|----------------------|----------------|
| Topeka, KS | Tom Badger | (785) 565-8831 |
| Esbon, KS | Leon Boden | (785) 546-6302 |
| Sylvan Grove, KS | Tom Carney | (785) 694-3379 |
| Washington, KS | Larry Ditmars | (402) 446-6828 |
| Seneca, KS | Robert Engelken | (785) 294-0615 |
| Fairbury, NE | Don Fox | (402) 300-1025 |
| Ramona, KS | Ronnie Hanschu | (785) 386-0811 |
| Halstead, KS | Kenneth Holdeman | (316) 250-6082 |
| Clay Center, KS | Eric Langvardt | (785) 632-7089 |
| Linn, KS | Ohlde Tractor Repair | (785) 348-5766 |
| Smith Center, KS | Wyatt Rhoades | (402) 440-1063 |
| Holton, KS | Justin Rinkes | (785) 231-4305 |
| Bennington, KS | Stoney Runnion | (785) 488-6704 |
| Blaine, KS | Dennis Schwant | (785) 458-9103 |
| Phillipsburg, KS | Garry Stapel | (785) 543-8624 |
| Tipton, KS | Benedict Streit | (785) 545-8404 |
| Manhattan, KS | Andrew Walter | (785) 341-8070 |

ARCHEROIL.COM

WE BLEND IT WE BACK IT

Archer Lubricants are blended and backed in Council Bluffs, IA. **We take pride in consistently producing high-quality products that we proudly stand behind.**

KANSAS AG PARTNERS

Let's build your dreams together.

Our ag bankers don't just know banking — they understand the needs, challenges, and hard work involved in running a successful agribusiness.

Our real estate lending provides loans for the acquisition and expansion of agricultural real estate — *fixed and variable rates available for 1-20 year terms.*

Your dream farm, our ag experts.
Let's get started.

EMPRISE BANK

855.747.4344
emprisebank.com/agribusiness

Blue Valley FFA members awarded local, state and national SAE grants

Being awarded SAE grants is something high school students can use towards their operations at home. This year Blue Valley FFA won two national SAE grants, six state SAE grants, and two local SAE grants from the Alumni chapter. The national grants are \$1000, state grants are \$500, and local grants are also \$500. The National and state recipients will get recognized at the state FFA convention held at the end of May.

Brock Burgman, son of David and Jane Burgman from Leonardville, is only in middle school and received a national grant his first year applying. Brock plans on using this to help build pens at home which would have all the necessities including water tanks, feed bunks, and mineral feeders. His grant was sponsored by Caterpillar.

Rylee Olson, daughter of Todd and Sally Olson from Olsburg, is a junior in high school. Rylee has received three national grants and a local grant since her eighth grade year. Rylee has improved her family's facilities and her own cattle herd with the grants she has won over the years. Rylee's grant was sponsored by Caterpillar.

Bryce Hoeltzel, son of Hans and Jenny Hoeltzel from Olsburg, is an eighth grader this year. This is his first year applying. He plans on using this grant to help buy his next show heifer which would then be added to his herd to further expand his operation. His grant is sponsored by Kansas Soybean Commission.

Brook Staten, daughter of Tony and Justine Staten from Olsburg, is a junior in high school. She plans on using

this grant to help improve her facilities. This year her family had a lot of buildings ruined by a flood. She is wanting to help by buying more fence to rebuild what was ruined. Her grant is sponsored by Harris Crop Insurance.

Logan Schanks, son of Doug and Susan Schanks of Randolph, is in eighth grade this year. Logan is interested in engineering, so he is planning on buying a 3D printer with this grant. He would use it at home to help him further his interest in engineering. His grant is sponsored by Kansas Soybean Commission.

Will Johnson, son of Jeremy and Joni Johnson of Olsburg, is a junior in high school. Will had previously won another state grant his freshman year which he used to help buy sheep. With this grant he plans on improving fencing for



Blue Valley grant winners are, back row, from left: Abigail McIntyre, Brooklynn Zoeller, Logan Schanks. Middle row: Brook Staten, Lola Speicher, Brock Burgman. Front row: Taylor McNett, Will Johnson, Bryce Hoeltzel. Not pictured: Rylee Olson

his cattle operation. His grant is sponsored by Harris Crop Insurance.

Lola Speicher, daughter of Gabe Speicher and Rachel Foster is in eighth grade. Bees has been an interest to her this year. She plans on buying bees and all the necessities to take care of them at home. She will then make honey and other items she can sell. Her grant is sponsored by Kansas Corn.



Pictured, from left are: Miss Cobb, Aaron Jilka, Tucker Gibbs, Colby Sims, Jacob Tiers, Charlie Killingsworth and Mr. Holliday.

Rock Creek High School participates in Kansas Envirothon

The Rock Creek High School Envirothon Team competed at the 28th Annual Kansas Envirothon on April 25, 2019 at the YMCA Camp Wood near Elmdale. The Kansas Envirothon is a hands-on

outdoor, environmental high school educational competition that is organized and coordinated by Conservation Districts.

Students train and test in such components of Soils/Land Use, Forestry, Wildlife, Aquatic Ecology and a Current Environmental Issue. The current issue for the present year is "Agriculture and the Environment: Knowledge and Technology to Feed the World."

Students rotated to one presentation in each area and then as a team during the written testing portion of the contest. Each group also gave an oral presentation over the current issue topic. There were 13 teams from all over Kansas competing at the event. The unit of five students scored a total of 336 points, received third place in the forestry di-

Taylor McNett, daughter of Robert and Jennifer Merrow from Randolph, is a sophomore. This is her first grant and she has used it to help buy her two horses. She has been training them to be able to ride so far. She plans on using them for show in the future. Her grant is sponsored by the Blue Valley FFA Alumni.

Abby McIntyre, daughter of Richard and Tracy McIntyre from Manhattan, is a junior. Abby is planning on using this grant to help with horticulture projects at school. Her main project is hosting a floral design workshop that will be held this spring with middle school students. Her grant is sponsored by Blue Valley FFA Alumni.

Blue Valley Ag Ed strives to help these students prepare for the future. These grants give students the opportunity to help grow their operations or start new enterprises. The grant recipients have a wide variety of projects this year. It is exciting to see how many young people are involved in agriculture and how many of them want to become more involved. Some of these grants will be done at the school with supervision from their advisors, Anthony Meals and Megan Larson.

KANSAS EXPERTS.

REGIONAL REACH.

Nationally recognized marketing.

McCurdy
AUCTION, INC.
REAL ESTATE SPECIALISTS

Control the way you sell your farm and ranch.

McCurdyAuction.com | 316.683.0612

Brandy Criss Engler
Associate Broker

COOP OWNER MEMBER

**Land, Farm, Home
and Commercial Sales**

785 383 3169
bbmcriss@yahoo.com
www.superiorlandgroup.us

EK REAL ESTATE
LAND GROUP
115 W. 17th St
P.O. Box 511
Lyndon, Kansas 66451

K Krogmann
BaleHandler

For the serious cattlemen

USER FRIENDLY CONTROLS & FEATURES

THE LEADER IN BALEBED ENGINEERING WITH PATENTED ARM & SPINNER DESIGN

I believe the Krogmann BaleBed is the most outstanding bed on the market. I like the features this bed has over the competition."
- Roger Miller, Booker, TX

Engine driven or all electric models available

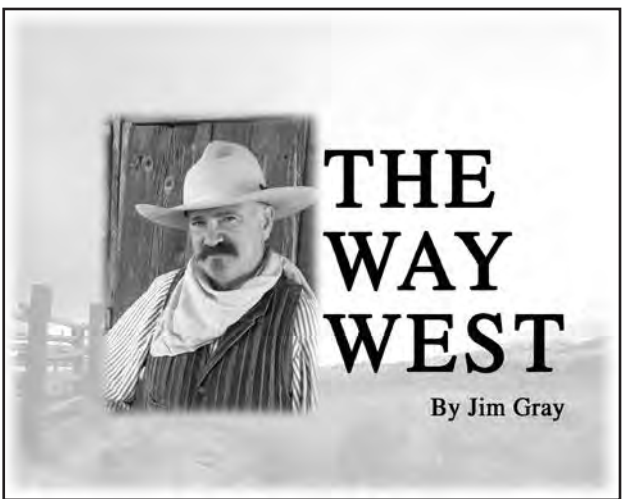
Custom built shorter or longer beds. Standard Equip: arm extensions, gn & receiver hitches, side rails, lights, trailer plug & pioneer quick connects.

Across the bed toolbox 70"Lx10"H x 20"W - complete with stainless steel hinges, tray and gas shock.

Side toolboxes 30" Lx17" H x 12" D standard size of 12 ga. steel with stainless steel hinges and latch.

Lift, Haul and dump with the Krogmann Carry-All

1-877-745-3783 • WWW.KROGMANNMFG.COM



To Fight Another Day

U.S. forces out of Texas charged all the way into Kansas tracking a Comanche war party in 1859. Two years earlier peace seemed to be at hand. Comanches had ceased their devastating raids upon frontier settlers. Pressured by the continuous patrol of the 2nd U.S. Cavalry the Comanches sought refuge outside Texas borders. In response the War Department transferred the 2nd Cavalry to Utah.

In the vacuum the Comanches moved back into Texas, resuming their raids with a vengeance. Early in 1858 John S. Ford was placed in charge of the Texas Rangers for the defense of the frontier. Ford was a legendary character who had gained the title of ‘Old Rip’ from his days as

adjutant for the Texas Rangers in the Mexican War. He was responsible for recording Ranger deaths, noting “Rest In Peace”, which was later shortened to R.I.P. at the end of each casualty list.

The 2nd Cavalry had forced the Comanches out of Texas in 1857, but they neglected to follow them to their villages beyond Texas borders. Rip Ford was given free reign and was encouraged to follow the Comanches and punish them wherever the trail led.

With one hundred two Rangers and another one hundred Tonkawas and other native enemies to the Comanches, Ford crossed Red River on April 22, 1858. In the Antelope Hills on the western border with Texas a Comanche

camp was attacked and sacked in the early morning hours of May 12, 1858. The expedition returned home with eighteen prisoners, three hundred horses, and seventy-six scalps.

The action convinced the War Department to bring the 2nd Cavalry back to keep Texas Rangers from taking action beyond Texas borders. In September Captain Earl Van Dorn led troops across the Red River, traveling north along a route that would later become the famous Chisholm Trail. Comanches had just been convinced by a U. S. Indian Commission to travel to Fort Arbuckle, near present-day Davis, Oklahoma, for a peace conference. Unfortunately, while the Comanches were camped at a Wichita village on Rush Creek, near present-day Rush Springs, Oklahoma, Van Dorn’s troops attacked and killed fifty-six Comanches. The friendly Wichita village lost most of their robes, blankets, and food stores in the attack. Van Dorn was shot through the arm, lung, and stomach. Carried back to Texas he was hailed as a surviving hero. Texas was protected but Indian Territory was in turmoil.

Troops from Fort Arbuckle were attacked within twenty miles of the post. Additional troops under the command of Captain Eugene Carr were

sent from Fort Leavenworth to protect the post. Two separate patrols were attacked near Fort Arbuckle in February 1859.

In Kansas, Comanches and their Kiowa allies threatened traffic on the Santa Fe Trail and were ranging as far north as the Smoky Hill Trail. Comanches were suspected of trying to persuade the Cheyenne and Arapaho tribes to go to war with them against the United States and especially Texas. Fortunately, the Cheyennes and Arapahos were not convinced.

Captain Van Dorn returned to his command fully recovered by spring, 1859. By early May he was back in Indian Territory with Captain Edmund Kirby Smith, second in command. Others in the command were Lt. George B. Cosby and Lt. Fitzhugh Lee. All would become generals for the Confederate States of America.

From a captured Coman-

che boy Van Dorn learned that the raiders were far north along the Cimarron River in Kansas. Van Dorn’s march to Kansas took him to the mouth of Bluff Creek at the Cimarron River. Abandoned camps comprising approximately two thousand people were found all along the creek. Following Bluff Creek Van Dorn’s troops crossed over the divide to Crooked Creek. About eighteen miles southwest of present-day Dodge City, with a rain storm moving in, the command halted for a rest. Three Comanche warriors tried to stampede the horses but were discovered by Lt. William B. Royall and several guards. In the pursuit about one hundred warriors took up a defensive position in a well-fortified ravine.

Van Dorn’s troops arrived, dismounted, and began a long skirmish that involved creeping through rain-soaked brush. In the midst of the rain Cap-

tain Kirby’s glasses fogged, allowing a warrior to shoot him in the thigh from close quarters. Lieutenant Lee was hit by an arrow as he shot his opponent “squarely between the eyes” with his revolver. The arrow penetrated his lung and through his back. Blood drained from his mouth, while not a drop bled from the wound that was thought to be fatal.

The trapped Comanches fought valiantly, but their fate was sealed. Forty-nine warriors lost their lives, two soldiers were killed, but with tender care Lt. Lee survived to fight another day 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.*

Study: Adding sulfur may boost wheat yields, quality

In the past decade, scientists have been reporting that America’s move from burning coal to natural gas and low-sulfur coal has led to a large decrease in the amount of atmospheric sulfur, compared to 40 years ago.

And while that’s good news for the environment, it also has led to a new challenge for the country’s farmers.

“In recent years, sulfur deficiency has become a big challenge for wheat production in the southern Great Plains,” said Romulo Lollato, a wheat production specialist with K-State Research and Extension.

Lollato said sulfur balances in many agricultural fields are now negative, suggesting that farmers may need to apply sulfur fertilizer at some point, especially in fields with sandier soils and low soil organic matter. He said it’s not uncommon early in the spring to be driving by a wheat field that looks bright green, a sign that the crop might be sulfur-deficient.

“The reason for the deficiency is that over time there has been a lesser amount of sulfur in the rainfall,” Lollato said. “We have less pollution going out in the air, and therefore we have less sulfur coming back to the crop.”

A sulfur deficiency not only leads to yield losses, but also ultimately affects the quality of the wheat produced, he said.

Lollato and his colleagues have been studying ways in which growers can add safe amounts of sulfur in conjunction with other nutrients, such as nitrogen.

A recent project funded by the Kansas Wheat Commission and Grain Craft is exploring the role of nitrogen and sulfur with numerous wheat varieties, many of those common to Kansas wheat fields.

Lollato said the scientists are trying to understand how wheat varieties respond to differing rates of nitrogen and sulfur.

Their early data indicates that when sulfur is extremely deficient in a field, the crop showed no response to nitrogen, which inevitably affects its yield and quality. But when sulfur was present in sufficient amounts, “yield increased, and the crop became responsive to the applied nitrogen,” Lollato said.

He adds: “We are able to use nitrogen more efficiently when sulfur is available or is added to the plant.”

Lollato said the work continues in hopes of bringing specific recommendations to wheat growers. For more information, interested persons can contact their local Extension agent, or Lollato is available at 785-532-0397, or lollato@ksu.edu.

“This is an example of the

type of research that K-State, together with the Kansas Wheat Commission and Grain Craft is bringing to the Kansas wheat producer,” Lollato said.

More information about Kansas wheat is available from the Kansas Wheat Commission and the Kansas Wheat Alliance.

10, 12 & 14 Bale Hay Trailers



- Cradles can be lifted w/one hand • Cradles are removable
- Safety locks for cradles in both the up & down positions, located at the front of trailer
- 1-Year Mfg. Warranty on axles & tires • 2-Year Warranty on trailer
- Heavy duty tubular construction
- 10-bale trailer has 7,000 lb. tandem axle with brakes & 10 ply tires
- 12-bale trailer has 10,000 lb. tandem dual axle w/brake & 10 ply tires
- 14-bale trailer has 12,000 lb. tandem dual axle w/brake & 14 ply tires
- Comes with a spare tire
- Now have options of hydraulic dump & 14 ply tires

DENNING
MACHINE SHOP, INC.
Toll-Free: 866-293-5450
THE WORKHORSE OF WESTERN KANSAS



UNCONDITIONAL PERFORMANCE FOR THE TOUGHEST CONDITIONS.

For over 25 years, Case IH Magnum™ series tractors have powered through the toughest conditions. With efficient power that uses less fuel and delivers the maximum amount of work in the fewest number of hours. Our Selective Catalytic Reduction (SCR) technology and our Diesel Saver Automatic Productivity Management (APM) system ensure that you won't sacrifice power for fuel efficiency. Our proven engines and simple emissions control system help you decrease your operating costs and increase the length between service intervals. Add our intuitive controls, AFS Pro 700 display, suspended cab and you will realize how easy it is to increase both your productivity and efficiency with a Case IH Magnum tractor. For more information, visit your Case IH dealer or caseih.com.



Wamego, KS
18035 E Hwy 24
785 • 456 • 2041

Ottawa, KS
3313 Nebraska Terr..
785-242-1463

Your Partner and Full Service Dealership

All rights reserved. Case IH is a trademark registered in the United States and many other countries, owned by or licensed to CNH Industrial N.V., its subsidiaries or affiliates. www.caseih.com

KanEquip offers a **FULL PARTS DEPARTMENT** and **CERTIFIED TECHNICIANS**. **SERVICE AFTER THE SALE IS IMPORTANT TO CASE IH & KANEQUIP.**

DON'T BE FOOLED BY THE IMITATORS.



CONSISTENT, TIGHTLY WRAPPED BALES

RW ROUND AND SW SQUARE BALE WRAPPERS

- Low-profile design for maximum stability and gentle unloading
- Consistently wrapped to maintain forage quality throughout storage
- Patented pre-stretcher with aluminum rollers for easy cleaning
- Easy to operate

3-point mounted and trailed models • satellite or turntable

INVEST IN QUALITY™
KuhnNorthAmerica.com

| | | | |
|---|---|--|---|
| Farm Implement & Supply Colby Plainville | KanEquip Ellsworth Herington Marysville Ottawa | R & F Farm Supply Erie | O'Malley Equipment Independence Iola |
| Visit your local Kansas KUHN Dealer today! | R & R Equipment Fort Scott | O'Malley Implement Pittsburg | |



As I write, Dr. Jake is off doing vet work, which this time of year is a lot of bull testing. Me, I test bull all the time, as in, "How far can I get with this bull?"

Hmmm, maybe I didn't phrase that quite right.

I am always amazed, shocked, and awed when people approach me to say they read my column in *Grass and Grain*. Of course, my personal favorites are my good

friend, Jim Gray, and how can you not love Baxter Black? I love scanning the photos of farmers, ranchers, and their families, and with fair season coming, seeing the excited faces of those kids who have been raising livestock to show. But when folks say they get the paper to read my column, then find there is so much other great information, well, I am gratified and humbled. So hello to the two people

who subscribed just to read me – my longtime friends D. K. Clark and Michael Hughes, historians extraordinaire!

I am hoping that as you read this, we are headed to Denver for the Order of the Indian Wars annual symposium. It is a chance to reconnect with old friends, gain new insights, and participate in fascinating conversations.

This year, one of the speakers is Towana Spivey, an amazing human being. When he was inducted into the Chickasaw Hall of Fame a few years ago, this is the biography they shared. I want to share it with you in full, because it touches on his story. As I have said so many times, the connections between Kansas and Oklahoma are profound and intimate. The history is so intertwined it cannot be completely separated. At the

core of that connection is the story of Indian Removal, and its impact on the people who would become Kansans and Oklahomans.

Towana Spivey is the descendant of several generations of Chickasaws who came to Indian Territory in 1837 from northern Mississippi. He was born in Madill, Oklahoma, and still owns the original 140-acre Chickasaw allotment of his grandparents, Henry "Buck" Russell and Gladys Rogers.

Mr. Spivey graduated from Southeastern Oklahoma State University in 1968 with a bachelor's degree in history and natural science. He earned his master's degree from the University of Oklahoma in anthropology/archeology and museum studies.

While conducting archaeological investigations at 19th century military posts and pre-historic and historic sites, Mr. Spivey worked simultaneously as curator for the Chickasaw

White House, conducting research to restore the home to its original form. Mr. Spivey was also a consultant on the preservation of the original 1855 Chickasaw Nation Council House.

Since 1982, Mr. Spivey has held the position of director/curator at the Fort Sill National Historic Landmark and Museum in Lawton, Oklahoma. He was curator for the U.S. Army Museum System and was involved in the planning of the new Field Artillery Museum at Fort Sill. He was instrumental in development of the National Historic Landmark and Museum. He is now retired and resides in Duncan, Oklahoma.

Mr. Spivey has served on numerous boards and advisory committees for such organizations as the Oklahoma Archaeological Survey, Governor's Review Committee for the Oklahoma State Preservation, Oklahoma Museum's Association and Southwest Oklahoma

Historical Society.

Mr. Spivey has authored several books and articles pertaining to frontier history and has served as a primary consultant or been featured in at least 35 television documentaries. He has also worked as a historical consultant to movie productions, playing an intricate role in the development of characters and historical accuracy in the making of the movies *Windtalkers* and *Dances With Wolves*.

Throughout his life and career, Mr. Spivey has been regularly involved in preserving the history, language and material culture of many Oklahoma tribes including the Chickasaw, Choctaw, Comanche, Kiowa, Chiricahua, Apache and the Warm Springs Apache.

Wow. I can hardly wait to listen to his presentation and to sit around and visit. The other speakers are Paul Hedren, Eli Paul, Ray Sumner, and Bob Snelson, each one a distinguished historian. This fall, the annual tour sponsored by the Order of the Indian Wars will be focused on Sand Creek. Visit IndianWars.net for more information on this incredible organization.

There are so many opportunities to join historical societies and organizations that enrich your life and those of your families. Check those out in your neighborhood and beyond. Visit the places where history happened. Shake hands with the people preserving it and keeping those stories alive.

Deb Goodrich is the host of the *Around Kansas* TV show and the *Garvey Historian* in Residence at the Fort Wallace Museum. She is the chair of the Santa Fe Trail 200, the bicentennial of the opening of the Santa Fe Trail to be celebrated in 2021. Contact her at author.debgoodrich@gmail.com.

REAL ESTATE AUCTION

THURSDAY, MAY 16, 2019 — 7:00 PM

Auction will be held at the Trinity United Methodist Church Basement 8th & Lincoln in CONCORDIA, KANSAS

Legal Description: NW ¼ 9-5-3 Cloud Co. Kansas The farm is located 1 ½ miles North of John Deere on Highway 81 North of Concordia, Ks. (81 Highway & Wagon Road).

The farm is 148.6 acres with 109.9 cropland and 38.7 trees. The bases are Wheat 25.12 acres 46 bu yield, Corn 27.48 acres 110 bu yield, Grain Sorghum 42.39 acres 108 bu yield, Soybeans 14.91 acres 34 bu yield for a total base of 109.9 acres. The farm is enrolled in ARC/PLC. Conservation system is being applied. The farm is located on the West side of Highway 81 with a gravel road along the North and West sides.

Seller will pay 2018 and all prior year's taxes. Purchaser will pay 2019 taxes. 2018 taxes were \$2,080.00.

Possession: The farm has a lease that runs out on August 1, 2020. Purchaser will receive the cash rent on the farm for 2019 & 2020. The rent is \$125.00 per acre on 107 acres. The rent is paid 1 st half on August 1 the 2nd half on Feb. 1.

Terms: 10% of purchase price as down payment day of auction, the balance will be due upon closing on or before June 16, 2019. Down payment will be escrowed with Scott Condray Attorney.. Escrow fees will be split 50/50 between seller & purchaser. Title insurance will be used, the cost will be split 50/50 between seller & purchaser.

Thummel Real Estate & Auction LLC is acting as seller agent. All statements made day of auction take precedence over printed material.

TRINITY UNITED METHODIST CHURCH

Auction Conducted By: THUMMEL REAL ESTATE & AUCTION LLC
785-738-0067

ADVERTISING AUCTION

SATURDAY, MAY 18, 2019 — 10:00 AM

Auction will be held at 240 E.4th in JUNCTION CITY, KANSAS

PICKUPS, CARS & MOTORCYCLE

1972 Chevrolet Cheyenne 10 pickup, 350 engine, automatic, air, 67899 miles very good; 1961 Corvair 95 pickup 4 speed, 6 cylinder, 4,111 miles; 1962 Corvair Monza 2 door car 4 speed, 38,632 miles engine locked up; 1956 Buick Century 4 door hard top, automatic, V8 14,380 miles (car purchased from John K. Fisher showroom in El Dorado, Ks); 1972 Yamaha Enduro 250 motorcycle 180 miles.

ADVERTISING

Auto signs inc: (Hudson Terraplane; Hudson; Star; Overland; Kaiser Frazer; Wil-

lys Knight; Chrysler Plymouth; Dodge Plymouth; Studebaker Erskine; Whippet; Cadillac; Oldsmobile; Chevrolet; Ford; Nash; Rambler; Studebaker; Buick; GMC; Pontiac; IHC truck; Mack; others); **Oil signs inc:** (Marathon; Conoco; White Star; Magnolia Petroleum; Wolfs Head; Kendall; Quaker State; Skelly; Veedol; Gulf; Pyramid; Deep Rock; Shell; Texaco; MFA Oil Co; Castrol; Iso Vis D; DX; Tydol; Wolfs Head; Sinclair; Opaline; Penn Drake; Mobiloil; Valvoline; Standard; Phillips 66; Independent; Toliene; others); Oliver; 4 leg John Deere; Martin Ditcher Terracer & Road

Grader; Bendix Brakes; Battery signs; many other signs; **Tire signs inc:** (Dominion Balloons; Fisk; Wyeth; US Royal; Cooper Gates; Good Year; General; OK; Gillette; Dunlop; Star; Brunswick; Seiberling; Mansfield; Hercules; other); Thermometers inc: (Prestone; Delco; others); 1960's Coca Cola pop machine; 3-10 gal. visible gas pumps w/globes; square Mobil gas pump; gas globes inc: (Sinclair; DX; Red Crown; Texaco wiper cabinet; Alemite cabinet; oil jars; large collection of oil cans; many pieces paper advertising; Cast iron seats; large assortment of other advertising.

NOTE: Pat has collected for over 40 years. This a very large quality collection. There will be no buyers fee or sales tax. Check our website for pictures www.thummelauction.com

PAT POWERS ESTATE

Auction Conducted By: THUMMEL REAL ESTATE & AUCTION LLC
785-738-0067

489 ACRES OTTAWA COUNTY FARMLAND

OFFERED IN 4 TRACTS

GENERAL INFORMATION: These farms were recently acquired by an area bank and offer the opportunity to purchase good productive cropland in areas where land seldom changes hands. Visit www.arrowsprintco.com/ottawacountyland.html or www.kretzauctions.com for soil maps, FSA photos and other information.

TRACT #1: N/2 S/2 of 27-9-3W, less tract containing a church at the east end and a tract containing a home and out buildings on the west end. 73.49 acres tillable (all open), 57.49 acres fenced grass with small pond and 18.78 acres timber. Soil consists of Geary Silt Loam Class III and Hord Silt Loam Class I. 2018 taxes were \$1,712.00 based on 150.1 taxable acres.

TRACT #2: NW/4 of 9-11-3W, lying west of highway. 64.1 acres tillable (all open), 3.5 acres waterways, balance timber and waste. Soil consists of Crete Class II and III; Geary Class III; and Hobbs Class II. Good irrigated farm with 700 gallon well. Sells with 2017 Valley Irrigation Pivot with pump (no motor). 2018 taxes were \$2,289.00 based on 73.8 taxable acres.

TRACT #3: N/2 of 9-11-3W, lying east of highway. 145.5 acres tillable (all open), 6.0 acres waterways, 33.0 acres meadow, balance waste. Soil consists of Crete Class II and III; Hobbs Class II; and grass is Edalgo Hedville Class VI. 2018 taxes were \$2,736.00 based on 185.5 taxable acres.

TRACT #4: N/2SW/4 of 14-11-3W, 71.8 acres tillable (all open), 9.5 acres waterways, balance waste and roadways. Soil is Crete Class II; Geary Class III; Hobbs Class II; and Lancaster Class IV. 2018 taxes were \$1,340.88 based on 81.23 taxable acres.

RECREATIONAL POSSIBILITIES:

Tract #1 features creek and good thick timber. Are you tired of asking landowner's permission to hunt turkey and deer...give Tract #1 a look. It has enough firewood to last for generations.

TERMS AND CONDITIONS: 10% due day of sale, with balance due June 27, 2019. If for some reason title conveyance cannot be completed by June 27, 2019, buyer to pay 10% per annum interest on unpaid balance from June 27, 2019 until date sale is closed.

2018 real estate taxes and prior years paid by Seller. Title Insurance will be used with cost split equally between Buyer and Seller. Clay County Abstract & Title Company will serve as Closing Agent. All mineral rights owned sell with property. Property selling "as is" with no guarantees or warranties made by seller.

Announcements made at the auction take precedence. All information given is from sources deemed reliable, but not guaranteed. Property selling subject to easements, restrictions and reservations if now existing. Auction Company is representing the seller in this transaction.

FSA INFORMATION:

| | Farmland Acres | Cropland Acres | Wheat Base/Yield | Corn Base/Yield | Sorghum Base/Yield | Soybean Base/Yield |
|----------|----------------|----------------|------------------|-----------------|--------------------|--------------------|
| Tract #1 | 156.68 | 73.49 | 30.11/34 | 18.05/58 | 6.11/47 | 6.14/23 |
| Tract #2 | 73.00 | 67.67 | 55.10/31 | 0/0 | .59/42 | 2.30/16 |
| Tract #3 | 185.09 | 152.13 | 126.10/31 | 0/0 | .30/42 | 5.00/16 |
| Tract #4 | 80.63 | 80.55 | 31.40/25 | 0/0 | 0/0 | 4.50/16 |

The above are FSA estimates only and are not guaranteed.

SELLER: **Solomon State Bank**
ARLINGTON • SALINA • SOLOMON



POSSESSION: Immediate
Open Ground: Immediate
Grass & Timber: Immediate

FINANCING: 85% of purchase price financing available to qualified buyers. If interested, contact Dennis or Kirk at the Solomon State Bank, 785-655-2941.

SALE CONDUCTED BY:
CLAY COUNTY REAL ESTATE
Greg Kretz, Salesman & Auctioneer
Cell Phone: (785) 630-0701

AUCTION

SATURDAY, MAY 11, 2019 — 1:00 PM

Auction will be held at the farm located 10 miles North of LUCAS, KS to 250th Drive in Osborne Co. then 1 ½ miles West; OR from TIPTON, KS 3 miles West to 20th Ave then 9 miles South to 250th Drive then 1 ½ miles West.

TRACTORS, TRUCKS & MACHINERY

John Deere 8650 4 wheel drive tractor, 3 pt. PTO, quad range, needs work; Case 970 Agra King tractor, power shift, 3 pt. dual hyd; GB loader for Case no bucket; Bob Cat 643 skid steer 4' bucket hyd pump is out; 1985 Chevrolet S10 pickup 4 speed, does not run; 1985 GMC 3500 High Sierra 4 door

4 wheel drive flatbed pickup 6.2 diesel 5 speed; 1992 Ford pickup 302 engine, automatic; 1996 Ford Explorer XLT 4 wheel drive auto, 6 cy engine weak, 321993 miles; 1940's Willys jeep; Krause 2400 tandem disc 27"; DRA John Deere 16-10 drill; Miller 14' offset disc; Cat 12AT motor grader for parts no motor.

ANTIQUE FURNITURE & GUNS

Guns inc: Ruger Red Hawk 44 mag pistol; Remington Sportsman 12 ga; Mauser 30-06 w/ scope; Oak curved glass secretary; oak flat glass secretary; fainting couch; curio cabinet; round oak table & 4 chairs; oak sow belly kitchen cabinet; 3 oak dressers; cream separator; assortment other furniture.

NOTE: The auction will not be very long, be on time, we will start with antique furniture, then equipment, there are no small items. Everything is sold as is. Everything needs to be removed in 2 days.

WENDELL ROBINSON LIVING ESTATE

Auction Conducted By: THUMMEL REAL ESTATE & AUCTION LLC
785-738-0067 • www.thummelauction.com

AUCTION

SATURDAY, MAY 18, 2019 — 10:00 AM

5240 Terra Heights Drive — MANHATTAN, KANSAS (West side of Tuttle Creek Lake)

Beautiful Oak Murphy bed; leather couch, loveseat & rocker recliner; glider rocker; 5-legged square Oak dining table; Walnut gateleg table; small antique loveseat; Walnut dining table & 4 chairs; wood framed couch & matching loveseat; Southwest pattern couch; 2 wingback chairs; glider rocker; 4-drawer Oak cabinet; 2 humpback trunks; parlor table; 2 wooden 2-door cabinets; antique Oak rocker; kneehole desk; blanket chest; several bookshelves; 2 gateleg tables; oval coffee table; Maytag eco conserver washer; wood burning heating stove; Kenmore refrigerator; 3 bar stools; trunk coffee table; child's rocker; 5-drawer stand; desk; Oak desk chair; narrow wood shelf; Bentwood chair; small oval table; wicker magazine rack ice cream chair; dinette table; gun safe; TV stand; music stand; end table; magazine stand; single mattress; record stand; McCall's cabinet; baby bed; 2, 4 & 5-drawer file cabinets; 11-drawer file cabinet; 2 metal patio chairs & 4 stand tables; wrought iron patio table. 3 Oak mantel clocks; castor set; 8-drawer antique spice rack; large hand crafted wooden anvil (very nice); old radio; kerosene lamps; table show-case; bridge lamp; picture frame dressing screen; albums; printer's tray with fossils; stoneware bowls; jugs; crocks; granite ware; glassware; Carnival berry set; Leon, Ks souvenir mug; 3pc Czechoslovakian set; cast iron kettle; fruit jars; cow yoke; wire basket;

food grinder; bottle capper; tin adding machine; paper items; Beer can collection; stamps; child's Honda Kick N Go scooter; oil paintings (Southwest); Haviland china; Washington DC convex picture; books-Western-Historical-reference & school; baskets; pictures; copper tea kettle; Bud Dry light; 2 wash boards; brass teacher's bell; ammunition; Coke bottles & wood case; chicken waterer; bottles; cast iron hames; egg crates; corn sheller; wood steering wheel; many collectibles; Deco mirror; Wildcat wood cut; Cuba, Ks plate; Oriental tea set; woven rugs; Western hats; KSU sports items; child's cowboy boots; HO scale train; Tinker Toys; cap guns; chalk horse; case of Coors baseball bat bottles; graniteware; Ostich egg; shoe last; piano & well pump; light fixture; piano rolls; Buffalo skull; glass domes; blue rock thrower; ice cream freezer; carved dog statue; wood carvings; towels; plates; teapot; canisters; CD's; malt mixer; walker; yardsticks; hay knives; hedge axe. 3-way Bissel; fan on stand; wooden stool; card table & chairs; plant stand; lamps; 3 hand carved cedar pumpkins; seashells; bedding/comforters; Christmas trees; Corning-ware; small kitchen appliances; bowls; waffle iron; punch bowl; picture frames; Oak stool; lawn chairs; trolling motor; luggage; lots Holiday decorations; paper cutter; planters; rugs; throws; juicer; hats; salt & peppers; cups; flower pots.

Craftsman 30" gas snow blower (near new); log splitter; Craftsman 36" lathe; Rockwell table saw; Craftsman 10-drawer tool chest; older electric welder; Delta floor model drill press; 10-drawer tool chest; Sears one HP air compressor; mitre saw; roll around bench; Makita mitre saw; Kennedy 7-drawer roll around tool chest; bench with vises; several roll around benches; chain saw; buffers; drills; sanders; soldering guns; Stanley #48, #40 & #110 planes; 49-drawer organizer; jig saw; lathe tools; pipe wrenches; sockets; open/box end wrenches; micrometers; calipers; drafting tools; folding rules; screwdrivers; bars; hammers; staplers; putty knives; all type clamps; drills; router bits; brace & bits; pliers; tinsnips; vise grips; welding rod & supplies; knock-out set; jacks; sledge; tree trimmer; shovels; rakes; stone hammers; chain saw; ½" drill; creeper; chain saw chains; chisels; punches; saws; hammers; hatchets; many rasps & files; nuts; bolts; nails; screws; fittings; drill bits; antique wrenches; oar; tackle box; rods & reels; sprinklers; castors; Allen wrenches; gun case; wood doll case; hardware; brass blow torch; 20-drawer bolt bin; aluminum extension ladder; wood ladder; electric motor; wheelbarrow; tires; lawn spreader; toolboxes; tractor & machinery manuals; rock collection; garden supplies; smoker; bullet molds; rifle & shotgun shells; assortment of gun parts & repairs; **LOTS MORE!**

GLEN & BARBARA LOJKA

GANNON REAL ESTATE & AUCTIONS

VERN GANNON, AUCTIONEER

785-770-0066 • MANHATTAN, KANSAS • 785-539-2316

www.gannonauctions.com

Grass & Grain Area Auctions and Sales

May 7 — Dining fixtures, bar & kitchen equipment, equipment, outside seating, catering equipment & sports memorabilia at Junction City for Coach's Grill & Bar. Auctioneers: Kull Auction & Real Estate Co., Inc.

May 7 — 157.9 acres m/l of Marion County land (investment, recreation, Flint Hills high grass, North Middle Creek, tillable land) held at Cottonwood Falls for property of Brad Matz & Sharon Matz. Auctioneers: Griffin Real Estate & Auction Service, LC.

May 7 — Household & collectibles including a Lyon piano Forte (circa 1700-1860), antique furniture, costume jewelry, magazines, glassware, perfume holders & more at Jewell for Susie McCarty. Auctioneers: Thummel Real Estate & Auction, LLC.

May 8 — 288 acres m/l of farmland & pasture in southern Ottawa County held at Salina for Tiffany Slothower, Christopher Hawk & the Revocable Trust of Farril G. Hawk. Auctioneers: United Country Real Estate-Crossroads Auction & Realty.

May 10 — Tractors, pickup (1999 Ford F150 XLT), farm machinery, New Circle D trailer, cattle equipment, 1993 Play Craft 24' pontoon boat, lots of nice tools, antiques, collectibles, hunting & fishing items & misc. farm supplies at Portis for Roger Miller Estate. Auctioneers: Wolters Auction & Realty.

May 11 (CHANGE OF LOCATION) — Truck, lawn equipment, collectibles, household & misc., quilting supplies, jewelry & more now to be held at 2110 Harper, Livestock Pavilion, Douglas Fairgrounds, LAWRENCE (NOT at Baldwin City) for Paul L. Boedeker. Auctioneers: Elston Auctions, Mark Elston & Jason Flory.

May 11 — Snap On promotional items, Match Box items, model trains, model cars & parts, NASCAR, scale models, sports collectibles, knives, bayonets, jewelry, books, coins & more at Strong City. Auctioneers: Hancock Auction & Real Estate,

May 11 — Ford 1210D tractor, Miller Bobcat, generator, welder, hand & shop tools, parts shelves, tool boxes, 1974 Fastlane BP trailer, van trailers, lots of salvage & more held near Berryton for Mrs. Joe B. "Darlene" McCarter. Auctioneers: Wischropp Auctions.

May 11 — Antique & collectible very old Snooker table, antique furniture, collectibles & more at Alma for Carl & Margie Geisler Estate. Auctioneers: Murray Auction & Realty.

May 11 — Furniture, appliances, household goods & collectibles, beautiful crocheted table clothes & bedspreads, many from Belgium & more at Clay Center for Katie Mall Estate. Auctioneers: Kretz Auction Service, Greg Kretz.

May 11 — Vehicle (2013 Ford F150 Platinum Eco Boost pickup), boat, mowers, trailer, ATV, shop & wood-working tools, fishing, outdoor & appliances, chainsaw wood carvings & more at El Dorado for Lonnie & LaDonna Snook. Auctioneers: Sundgren Auction.

May 11 — Tractors, vehicles, equipment & salvage, tools & shop items, hunting & camping, antiques & collectibles, household & more held at Americus for property of Dema Luginsland & the late Loris Luginsland. Auctioneers: Griffin Real Estate & Auction Service, LC.

May 11 — Beautiful 54-drawer oak cabinet, Victrola, furniture, military collectibles, antiques, 2 Jazzy power chairs, cash register, pedal tractor, collectibles, bee equipment, seashells, boat motor, fishing equipment held at Manhattan for Myron Schwinn Estate, Jody Schwinn. Auctioneers: Gannon Real Estate & Auctions.

May 11 — Furniture, appliances, glassware, collectibles & misc. at Junction City for Wilhite Moving & Storage auction. Auctioneers: Brown Real Estate & Auction Service, LLC.

May 11 — 151 acres m/l of Pawnee County, Nebraska clean native pasture land held at Bern, KS for John D. Hunzeker. Auctioneers: Seneca Realty, Mike Kuckelman, broker.

May 11 — Tractors, trucks & machinery, antique furniture & guns held North of Lucas for Wendell Robinson Living Estate. Auctioneers: Thummel Real Estate & Auction, LLC.

May 11 — Real Estate (4.7 acres m/l, 3BR, 2BA modular home; Morton building & more) and personal property held near Manhattan for Gary & Terri Ritter. Auctioneers: Cline Realty & Auction, LLC.

May 11 — Autos including 2010 Dodge Dakota Lone Star, 2005 Suzuki Aerio SX, 1991 Mazda Miata convertible, tandem axle car trailer, tools, tons of building supplies, furniture, household, collectibles, Schumann 1880s baby grand piano & more held at Salina for Mike & Phyllis Flory, et. al. Auctioneers: Baxa Auctions, LLC, Mark Baxa.

May 14 — 160 acres m/l of Geary County land including pasture, brome, hay meadow, wildlife habitat and pond held

at Junction City. Auctioneers: Gene Francis & Associates Real Estate Brokers & Auctioneers.

May 16 — 146.8 acres Cloud County cropland & trees held at Concordia for Trinity United Methodist Church. Auctioneers: Thummel Real Estate & Auction, LLC.

May 16 — 489 acres m/l Ottawa County farmland offered in 4 tracts held at Minneapolis for Solomon State Bank. Auctioneers: Clay County Real Estate, Greg Kretz, salesman & auctioneer.

May 18 — Oak & walnut furniture, appliances, antiques, collectibles, tools & more at Manhattan for Glen & Barbara Lojka. Auctioneers: Gannon Real Estate & Auctions.

May 18 — Farm machinery & antique farm machinery, 4-wheeler, gooseneck trailer, windmill parts, Honda 50 mini bike, small engines, household, furniture & more at Turon for the Schlatter collection. Auctioneers: Nixon Auction & Realty, LLC.

May 18 — Tractors, equipment, shop items & tools held at Americus for property of Ron & Susan Grother. Auctioneers: Griffin Real Estate & Auction Service, LC.

May 18 — Trucks, trailers, tractors, ATVs, machinery, haying & livestock equipment held near Maple Hill for Mill Brae Ranch. Auctioneers: Rezac Auction Service.

May 18 — Pickups including a 1961 Corvair 95 pickup, cars including a 1962 Corvair Monza, advertising including auto signs, oil signs, tire signs & more held at Junction City for Pat Powers Estate. Auctioneers: Thummel Real Estate & Auction, LLC.

May 19 — Real Estate (3BR, 2BA home), antique furniture, old pedal fire truck, collectibles, doll collection at Rossville for Lois Troxel. Auctioneers: Gannon Real Estate & Auctions.

May 19 — Over 150 guns at Salina for consignment auction. Auctioneers: Wilson Realty & Auction Service.

May 20 — 76.3 acres m/l of Lincoln County farmland held at Westfall for William Patton. Auctioneers: Thummel Real Estate & Auction, LLC.

May 21 — 188 acres m/l of Riley County pastureland with pond & spring held at Keats for Carl & Lorene Sinn. Auctioneers: Gannon Real Estate & Auctions.

May 21 — Pottawatomie

County land with potential building opportunities held at Wamego for Rawson Family. Auctioneers: Crossroads Real Estate & Auction, LLC.

Online Auction Opens May 22, 10 a.m. (begins to close May 29, 10 a.m.) — Selling tractors, trucks, equipment & more held online at www.dlwebb.com for Vern & Karen Knoche. Auctioneers: Dave Webb, Webb & Associates, Auctions & Appraisals.

May 25 — Farm machinery including tractors, farm equipment & collectibles held at Home City for Keith & Donna Fincham. Auctioneers: Olmsteds & Sandstrom.

May 25 — Cocks including 99 Red Wing, mini advertising jugs, churns, Mercury jugs, salt glaze, Union ovals & more and advertising & collectibles at Salina for Charles Tinchier. Auctioneers: Thummel Real Estate & Auction, LLC.

May 26 — Advertising auction including signs, clocks, thermometers, bottles, Coke trays, menu boards, buttons, KU items, coffee tins, Original 1896 Wheeling Pottery Coca Cola syrup dispenser at Salina for Bill Tackett Collection. Auctioneers: Thummel Real Estate & Auction, LLC.

May 27 — Furniture, signs, collectibles & toys at Salina. Auctioneers: Thummel Real Estate & Auction, LLC.

May 28 — 146.95 m/l farmland acres held at Salina. Auctioneers: Horizon Farm & Ranch Realty, LLC.

June 1 — International 300 tractor w/loader, 1976 Dodge D100 1/2T 4WD pickup, 1950 Ford 1T truck w/hoist, vehicles, aermotor windmill, collectibles, household at Randolph for Richard & Marlys Gardner. Auctioneers: Gannon Real Estate & Auctions.

June 1 — Real Estate (2 BR, 1 BA home) & personal property held at Wamego. Auctioneers: Crossroads Real Estate & Auction, LLC.

June 1 — Cars including 1929 Plymouth, 1936 Buick, 1939 Packard, 1948 Oldsmobile, buggys, car collectibles & other collectibles held at Junction City for Lacer Family Collection. Auctioneers: Thummel Real Estate & Auction, LLC.

June 1 — IH Farmall collector tractors, trucks, tractors, equipment, toys, household & much more at rural Lawrence for Ron & Dolores O'Neil. Auctioneers: Elston Auctions.

June 4 — Real Estate: 4 rental properties held at St. George. Auctioneers: Crossroads Real Estate & Auction, LLC.

June 8 — Auction at Lawrence for Roger & Sue Pine. Auctioneers: Elston Auctions.

June 15 — Large auction with guns, great tools, mowers, trailers, camper trailer, household at Burlingame for Dick & Dorothy Kohout. Auctioneers: Wischropp Auctions.

June 15 — Collector cars including 1968 Chrysler Imperial Crown, 1966 Chevy Corvair Monza, 1955 Chrysler New Yorker, 1961 Volkswagen Beetle, 1936 Ford, 1924 Ford Model T & more, trucks, tractors including 1938 McCormick Deering, engines & collectibles, motorcycles, lawn equipment & tools held at Russell for Russell T. Townsley Estate. Auctioneers: Thummel Real Estate & Auction, LLC.

June 15 — Collector truck, vehicles, tractor, nursery items, tools, hunting, fishing, household & much more at

Basehor for Eva Bates Trust. Auctioneers: Elston Auctions.

June 22 — Auction to be held at rural Baldwin for Chris Ogle. Auctioneers: Elston Auctions.

June 27 & 29 — Selling 6-27: tools. Selling 6-29: Antiques, collectibles, household & more both days held at Salina for Glen & Elaine Headley. Auctioneers: Thummel Real Estate & Auction.

August 10 — Farm machinery, livestock equipment & misc. held Southwest of Abilene for Mark & Patricia Berns. Auctioneers: Kretz Auction Service.

August 26 — Farm machinery & misc. held South of Abilene for Gene & Cindy Hoffman. Auctioneers: Kretz Auction Service.

NCGA to EPA: finalize E15 parity by June 1

The National Corn Growers Association (NCGA) have submitted comments on the Environmental Protection Agency's (EPA) proposed rule to allow year-round sales of 15 percent ethanol blends, or E15, by eliminating the outdated barrier that currently requires retailers in many areas of the country to stop selling E15 during the summer months.

"By allowing E15 to receive the same summer volatility adjustment EPA permits for E10, retailers will be able to offer drivers E15 year-round, providing choice to their customers without an interruption in sales between June and September," NCGA president Lynn Chrisp wrote in the submitted comments.

"Corn growers have advocated for this change for several years, and we agree with EPA's assessment that the conditions that led EPA to provide the original volatility adjustment for E10, at a time when 10 percent was the highest ethanol blend available, are 'equally applicable to E15 today,'" Chrisp added.

In addition to being beneficial for farmers, higher blends of renewable fuels such as E15 also lower fuel prices for drivers and reduce emissions, improving air quality and providing greater greenhouse gas reductions.

While NCGA supports EPA's proposal to provide parity for E15 with standard 10 percent ethanol blends, NCGA cautioned EPA against finalizing proposed Renewable Identification Number (RIN) market rule changes that would be counterproductive to greater biofuels blending supported by the E15 rule. NCGA urged the EPA to take steps to ensure the complex RIN market proposal does not weigh down the final E15 rule, which is needed by June 1 to avoid an interruption in E15 sales.

Get Your Copy of Grass & Grain Every Week . . . Subscribe Today!

Since 1954

GRASS & GRAIN

Published by AG PRESS

CALL (785) 539-7558
or go online at
www.grassandgrain.com

AUCTION

HAYING & LIVESTOCK EQUIPMENT

SATURDAY, MAY 18, 2019 — 11:00 AM
15670 Cattleman Road — MAPLE HILL, KANSAS
Directions: 2 1/2 mi. south of 1-70 Maple Hill exit 341 & 1/4 mi west!

TRUCKS & TRAILERS

- **2015 F350 Ford Lariat** dually pickup, 4x4, diesel, crew cab w/ leather, 64K miles
- **2007 Chevy 3500 dually** pickup 4x4 w/Hydra-Bed, Dura Max diesel w/Allison auto trans., 127K miles
- **2004 F350 Ford** dually pickup, crew cab w/leather, diesel 4x4, 186K miles
- **1997 350 Ford** dually pickup, 4x4 w/Hydra-Bed, diesel
- **2014 Titan** flatbed trailer tandem dually, 24' w/6' dove tail
- **1987 Featherlite** aluminum stock trailer 7'x 20'

TRACTORS & ATVs

- **2017 Case IH 145 Puma tractor**, CVT trans, MFD, 4 hyd. remotes, low hours, Unverferth snap on duals, 42" rear tires, SN EBPO3665, 1388 hrs.
- **2015 NH T7.210 tractor**, power shift, MFD, 4 hyd. remotes, Unverferth snap on duals, 38" rear tires, low 1191 hrs, SN ZFENO2080

The above tractors sold with KMW1760 loaders w/buckets attached & joy stick loader controls. Hay prong and pallet fork for loaders sell separately.

- **2013 Case IH SV300 skid steer** loader, cab, 1842 hrs.
- Skid steer attachments sold separately, 67" grapple, 8" snow bucket, NH post hole digger w/12" auger, 8" auger, rock bit, puffer bit
- **2015 John Deere Gator XUV 825i** w/cab, 4x4, 16600 mi
- **2018 Yamaha Kodiak 700 EPS** ATV, 4x4, 3100 mi

MACHINERY

- **2008 NH H8040 swather**, self prop. 14' hd, 1660 hrs.

Auctioneer's Note: Don't Miss This Well-Maintained Line of Equipment! NO SMALL ITEMS ... BE ON TIME! Lunch by Maple Hill Hustlers 4-H

MILL BRAE RANCH, SELLER
Mark Nikkel, managing partner
Cell phone 785-256-3072 • Home 785-256-4327

Pictures can be viewed on www.millbraeranch.com and www.rezaclivestock.com Rezac auction page

Dennis Rezac, Auctioneer Clerked by Rezac Auction Service
Cell: 785-456-4187 • Home: 785-437-6349

Bidding by number with ID. Cash or personal check to be paid day of sale before removing items from premises. No Credit or Debit Cards. Not responsible for accidents or theft of purchased items. Announcements day of sale take precedence over printed materials.

AUCTION

SATURDAY, MAY 11, 2019 — 9:30 AM

NEW LOCATION!!!! Due to wet weather & parking concerns, this auction will now be held at 2110 Harper, Livestock Pavilion, DOUGLAS FAIRGROUNDS LAWRENCE, KANSAS

TRUCK, LAWN EQUIPMENT, COLLECTIBLES, HOUSEHOLD & MISC., QUILTING SUPPLIES & JEWELRY
See last week's Grass & Grain for listings & Please visit us online: www.KansasAuctions.net/elston for pictures!

Concessions: Worden Church Ladies SELLER: PAUL L. BOEDEKER

Auctioneers: ELSTON AUCTIONS, Mark Elston & Jason Flory (785-594-0505) (785-218-7851)
"Serving Your Auction Needs Since 1994"

LAND AUCTION

160 acres +/- Geary County, Kansas

Tuesday, May 14th, 2019 at 7:00 pm
Auction will be held on site
4768 K-157 Hwy, Junction City, KS

LEGAL DESCRIPTION: SE ¼ of Section 27, Township 13 South, Range 5 East, Geary County, KS.

LOCATION: From Junction City, travel south approx 7.5 miles. Property is located on northwest corner at intersection of Hwy 77 & Hwy 157.

DESCRIPTION: 160 acres +/- with 100 acres +/- of pasture and remaining balance in brome, hay meadow, wildlife habitat and pond. Opportunity to build! Property is accessible by paved roadways on two sides and borders Geary State Fishing Lake with walk-in hunting permission. Property includes a 40 x 60 insulated metal building and many additional features.

GENE FRANCIS & ASSOCIATES
REAL ESTATE BROKERS & AUCTIONEERS

Lori Rogge • Broker & Auctioneer
785.556.7162 • lori@genefrancis.com

see www.genefrancis.com for full auction flyer

WILHITE MOVING & STORAGE AUCTION

SATURDAY, MAY 11, 2019 — 10:00 AM
AT 225 SOUTH FRANKLIN STREET — JUNCTION CITY, KS

FURNITURE & APPLIANCES: Queen BR set; kitchen table w/4 chairs; 2 china hutches; desk & chair; sev. occ. chairs; wicker patio set; 3 bar stools; 4 metal patio chairs & bench; 2 wood decorative benches; patio table w/umbrella; king bed w/Tempurpedic mattress; twin bunk beds; floor lamps; coffee & end tables; shrunk; sev. marble top tables; buffet & china hutch; BIG GREEN EGG BBQ GRILL; 2 sofas; love seat; Roper washer & dryer; Grandfather clock; elec. stove; upright freezer; Racecar bed; Samsung 50" TV; Emerson TV; lots of kitchenwares & small appliances. **GLASSWARE & COLLECTIBLES:** Autographed football & basketball; candle holders; crystal stemware; variety of crystal glasses; decorative plates; Ostritch eggs; Longaberger baskets; collector tins; pictures & frames; mirrors; brass flatware. **MISC.:** Christmas decor; bird bath; dog ladder; artificial flowers; toys; bicycles; topper for 1/2 ton pickup; Camo netting; motorcycle ramps; area rugs; pillows; linens. **THIS IS A PARTIAL LIST. MANY MORE CONTAINERS TO BE OPENED!**

WILHITE MOVING & STORAGE AUCTION
Terms: Cash or GOOD Check ONLY. NO BUYER'S PREMIUM!!
Lunch by White City Christian Church

JAY E. BROWN, Auctioneer,
785-762-2266 • C: 785-223-7555
GREG HALLGREN, Auctioneer
785-499-5376

KansasAuctions.net • E-mail: jbrown@ksbroadband.net

BROWN
2323 North Jackson
Real Estate & Auction Service LLC
Junction City, KS

