

Work under way on Milan grain facility and rail loading system

By Amy G. Hadachek A massive \$40 million grain facility and rail loading system currently under construction in the tiny town of Milan, in the extreme south central part of the state, is expected to be completed in time for the 2017 wheat harvest. Producer Ag, a 50/50 joint venture between the companies CHS and MKC is building the Sumner County Terminal at 1063 West 10th in Milan, located an hour southwest of Wichita. The facility will have nearly seven-million bushels of storage with a combination of three million bushels of cement slip form storage and four million bushels of flat shed storage.

"The facility was designed to receive grain; up to 100.000 bushels per hour utilizing four separate dump pits, and load up to 80,000 bushels per hour or more onto the rail," said Erik Lange, vice president of southern operations at MKC based in Moundridge. "Served by the BNSF railroad on a main railroad line already in place, the facility will also include a loop track with enough linear feet of rail for 120 cars, as well as mainline locomotives, which would be enough to handle the so-called 'shuttle of grain.' It will include room for future track development, if needed." He also would expect that we'd offer

expansion into agronomy operations, petroleum operations, feed operations, and the possibility of other industrial access to rail.

According to the 2010 census, Milan has a population of 82 people. The nearby town of Argonia's population is about 500. Microscale directions place the location of the future rail system six miles east of Argonia at the intersection of US 160 and Ryan Road.

Argonia mayor Alan Brundage said the new loading facility is expected to have a large economic impact.

"It is exciting that it's coming to the area, although we don't know the full impact yet. We have had conversations with the local coop elevators who are concerned," said Mayor Brundage, noting those concerns are about whether the elevators can be as competitive as the forthcoming rail loading facility for the amount they pay farmers for their grain.

When asked about that possible impact Lange said,

"We would hope to be extremely competitive with other local facilities, and we want to offer a competitive price not only to farmers but other grain elevators in the region; as compared with other terminals. We hope to work with them both. We said the site plan allows for a premium price. Our goal



The \$40 million grain facility and rail loading system under construction in Milan should be completed in time for the 2017 wheat harvest. Courtesy photo

is to be competitive at all times, although I can't tell you that we would, or wouldn't always pay a better cash price, than a grain ele-"We vator," said Lange. hope it's an economic boon for the whole region."

To accommodate the anticipated influx of workers, Genuine Builders Inc., of Arlington, South Dakota purchased an older motel in Wellington, 22 miles east of Argonia for dormitories, and they're considering residential options at a motel in

Harper, 15 miles west of Ar- Development Commission. gonia.

"All those people aren't here yet, but if they're all driving from Harper to the site, they'll pass right through here and right by our convenience store/ restaurant/gas station, A Mart LLC," said Brundage. The area also has a popular river RV park with 31 hookups, where some of the workers will be staying.

The mayor met July 5th with Stacy Davis, director of Sumner County Economic Davis said there's a possibility the original number of 280 construction workers at the Milan site could eventually grow dramatically as they proceed with the construction of the elevator, and include agronomy products and services.

"The economic impact on Sumner County is going to be very significant. For two years, more than 200 workers will be eating at restaurants, shopping locally and attending Wellington sports

games," Davis said.

"Competition is healthy. I think there's a positive way that we can all work together for the success of all the grain elevators in Sumner County," she said, adding, "I can appreciate their fears. I don't want anyone to go out of business. I can't say we wouldn't take steps to attract economic development; our goal is to work with businesses from manufacturing to retail to restaurants so that everyone is successful."

Continued on page 3

KSU researcher receives national award for early career plant breeding work

A Kansas State University researcher has received the National Association of Plant Breeders' 2016 Early Career Scientist Award.

Jesse Poland, assistant

that two of my students made the nomination, which was the biggest honor," Poland said. "I think there is a real need for well-trained students going into plant breeding around the world to work on developing new high-yielding varieties and meet the challenge of food security in the coming decades.' Award nominees must exhibit the ability to establish strong research foundations, such as experimental techniques and publications; interact with multidisciplinary teams; and participate in professional societies relevant to their discipline. Poland has contributed to the study of plant breeding through publications, teaching and communicating his research at meetings, conferences, workshops and field days. Among Poland's accomplishments in less than six years as a research geneticist at Kansas State University: • Advising ten doctoral students and seven postdoctoral students and serving as a committee member for several other students in plant breeding and genetics. • Welcoming and training



visiting students and scien- of hexaploid wheat under intists from India, Italy, Mexico and Uruguay.

• Serving as the adviser to the university's Plant Breeding and Genetics Club since Trevor Rife, Torrington,

ternational sequencing consortiums.

Poland's nomination package, submitted by

professor of plant pathology, is the winner of the annual award, which recognizes a young scientist who is active in the field of plant breeding. "This is a very nice recognition, and even better

Jesse Poland, Chapman, was recently honored with the National Association of Plant Breeders' 2016 Early Career Scientist Award. Courtesy photo

its founding.

• Securing more than \$12 million in competitive grants.

• Authoring more than 50 publications with 4,000 total citations.

Two of Poland's most significant achievements are the development and refinement of genotyping-by-sequencing, a novel method for genetic characterization of wheat and other species, and the development of portable high throughput phenotyping platforms. Genotypingby-sequencing has become an innate component of breeding programs around the world that allows lowcost whole-genome marker profiling. High throughput phenotyping platforms are helping breeders and researchers to maximize the amount of data available to them to make more accurate lives." selections.

Poland also contributed to the development of the first physical sequence of barley, as well as the draft sequence

Wyoming, and Narinder Singh, Ludhiana, India, both doctoral students in genetics, chronicles his career progress and significant achievements. Since joining Poland's research team as his first doctoral student in 2011, Rife has seen Poland assemble a research team of students and scientists from a variety of academic backgrounds.

"Jesse's desire to teach, share knowledge and stimulate our critical thinking are the best characteristics an adviser can have, and he also encompasses all the qualities that comprise an exceptional scientist," Rife said. "He is working to not only further our understanding of the natural world but also to ensure that knowledge is rapidly translated to farmers so that it positively influences their

Poland is from Chapman, where he and his parents grow wheat, corn, soybean and alfalfa.



Cover up

By John Schlageck, Kansas Farm Bureau

I recently read a public service ad circulating by the American Academy of Dermatology that lists five ways to die on a golf course. The five ways include being hit by a golf ball, run over by a golf cart, whacked by a golf club, struck by lightning and forgot your hat.

While none of these possibilities is pleasant to contemplate, the threat of skin cancer is real and should be

considered carefully. This is especially true of farmers, ranchers and construction workers who are in the sun much of the time.

Every year one million new cases of skin cancer are detected, according to the American Academy of Dermatology. One out of five people in this country develops skin cancer during his/her lifetime.

All across America, folks are gearing up for vacations with their families - many

Many others work for long hours in the sun during the summer months - farmers. construction ranchers, workers, amusement park attendants, etc. If you spend several hours in the sun, protect

vourself. Avoid the midday sun if at all possible. Cover up. Always wear a hat. Work in the shade whenever possible. And don't forget to wear sunscreen.

of these trips include stops

at the beach, national

parks, state lakes or out-

door amusement parks.

Melanoma is the deadliest form of skin cancer. One person dies every hour from this disease in the United States, according to the American Academy of Dermatology.

Fortunately, melanoma



The other night I was returning home late from a meeting and I was driving down the main street of my home town and I noticed a young person (probably late teens, maybe early twenties) walking down the street with his phone held up in front of his face. It seemed like kind of an odd thing to be doing so I quizzed the teenagers in my household about it.

It seems as though there is this game called Pokemon Go where you wander around places watching through the camera on your phone waiting for different characters to pop up. I really do not understand this game, nor do I want to understand it. I guess I have reached "old geezer" status. But it did leave me with a couple of thoughts. First, I guess at least they have to be outside and exercise a little bit. Second, how sad is it that the only way to get some kids (and adults) off of the couch is with some game on their phone?

I also think it is another disturbing sign of how our society has become more and more dependent on our cell phones. I have heard the addiction to your cell phone is some-

ful place.

Often I like to just sit in the bleachers or on a bench at the county fair and just watch what is going on around me. You will see neighbors and old friends engaging in conversations and catching up on what has happened since the last county fair. It is a place where kids play and meet new friends, many times the old friends catching up nearby started out as those kids playing at that very same county fair.

It is a place that will renew your faith in the next generation. You can see the hard work and skills they have acquired over the past year on display through the projects that line the barns and exhibit buildings. If you want to know more about what they have learned or how passionate they are about their projects, just ask them and you will be amazed at the answers you get in return. This is where our future community leaders are being trained.

I love the sights, smells and sounds of a county fair. Oh sure, the advances in technology have come to the county fair too. I know our fair and many others tout free wi-fi for those of us sufficiently addicted to our phones. At first I lamented the addition of an on-ramp to the internet, but maybe it isn't all that bad. Remember, my earlier lament about all of the negative video on the internet. All of that footage of all of the bad things that happen in our world, coming to us in real time. Maybe we could try to reverse this trend of negativity by sharing some of the good things and wholesomeness of our local, small town county fairs. Show the kids playing, old friends talking and the youth displaying what they have learned. Let's bombard the internet with good things. No, on second thought, let's just enjoy the moment without worrying about our phone or recording every second and truly start living. Make it a point to spend time at your county fair, take it all in and remember just how good life can be, I promise it will soothe your soul. And if you need a game to get you there it is okay, I suppose. Just remember to look away from the screen every once in a while and watch where you step.

can be cured if it's caught early enough. Dermatologists advise us to examine our skin regularly.

If you find a blemish larger than a pencil eraser, multi-colored, asymmetrical or irregular at the edges, you may have melanoma and should see a dermatologist.

While we should protect ourselves from potential skin cancer, we must be every bit as aware of this danger for our children. Overexposure to sunlight during childhood will affect children for the rest of their lives

Studies show that damage from the sun to a child's skin can actually increase the odds that he/she will develop skin cancer as an adult.

American Academy of Dermatology estimates indicate 80 percent of a person's total lifetime sun exposure occurs in the first 18 vears.

Protect your children. Cover them up. Teach them to wear long-sleeved cotton shirts that breathe. Make sure they wear head protection at all times. Make wearing sunscreen part of the ritual for gearing up for the sun.

While skin cancer can kill you, it's much more likely to disfigure you. Each year, thousands of Americans lose chunks of their skin to this disease, according to the American Academy of Dermatology. Some people lose their nose; others may lose their ears, while others may escape

with only the loss of an eyebrow

Examine your skin regularly, at least once a week. Look for warning signs. If you find anything bleeding, crusting or not healing, see your dermatologist immediately.

Remember, you can enjoy the sun and spend time outside, and don't forget these common-sense suggestions: have fun, and like everything else in life enjoy the sun in moderation

John Schlageck is a leading commentator on agriculture and rural Kansas. Born and raised on a diversified farm in northwestern Kansas. his writing reflects a lifetime of experience, knowledge and passion.

Soy Growers honor Kansas' Mike Pompeo as Soy Champion

The American Soybean Association try's most significant issues, and we are (ASA) presented Congressman Mike Pompeo (R-Kan.) with the organization's Sov Champion Award, recognizing the lawmaker's outstanding public advocacy for sovbean farmers. In a recent presentation before its board of directors in Washington, ASA presented Rep. Pompeo with the biennial award, citing specifically his work in authoring legislation establishing a national framework for the labeling of foods containing biotechnology as a member of the House Energy and Commerce Committee.

"Through his exemplary representation of a very unique urban, suburban and rural district, Congressman Pompeo has been a great advocate for farmers in Kansas and across the country," said Charles Atkinson, a soybean producer and ASA director from Great Bend. "His work on the Safe and Accurate Food Labeling Act has laid solid groundwork for success on one of our indusproud to honor him as a Soy Champion today.

ASA presented Rep. Pompeo with the award during the association's annual July board meeting and Legislative Forum, in which the ASA directors and representatives from 30 soybean-growing states gather in Washington to meet with lawmakers and raise the profile of public policy issues impacting soybean farmers.

"I am truly honored to receive the Soy Champion Award. The American Soybean Association has been a vital partner in efforts to ensure our farmers have the biotechnology tools required to feed a growing world," said Pompeo. "Thanks to the support and hard work of this organization and its many members, the American people will continue to have access to safe and affordable food."



Last week my husband and I celebrated our 35th anniversary. There were a lot of folks betting against us all those years ago when, just two months out of high school, I walked down the aisle to become his wife. And I'll admit there have been times when it looked like those doubters may have been onto something. But somehow, by the grace of God and a whole lot of perseverance, here we are. On our first anniversary, we journeyed to the Lake of the Ozarks to visit family he had spent many summers with while growing up. He dedicated one whole day to trying valiantly to teach me how to water-ski. Over the years, he'd taught many people of all ages and abilities to ski, and was absolutely certain I would not be the one to ruin his record. But he

was wrong. Eight hours and several gallons of boat gas later, he conceded defeat, at least for the time being. The next morning I could barely walk and every part of my body was in agony. He spent the rest of the weekend skiing while I spent it lamenting the pain caused by the mere act of blinking.

but my husband donned the skis once again and I marveled at how gracefully he sliced through the water. He looked like he was in his twenties again.

"Please God, don't let him ask me to try it one last time," I prayed. And he didn't. You learn a few things over the years and at some point he's accept-The following summer, ed the fact that I have all when I became pregnant the coordination of a three-legged buffalo on roller skates and there's just some things I'll never be good at. But I'm a darned good cheerleader. so I whooped and hollered when he made it up on the skis, took photos and video, and only laughed a little when he wiped out iumping the wake - proving once again that we're a pretty good team when we want to be.

where close to addiction to drugs and I would believe it. I am Example A for this. Often I find the urge to check my phone overpowering and often I allow it to divert too much of my attention.

Recently, we have seen news stories and incidents where cell phone video has sparked protests and created controversy. We are too quick to judge people and their actions based only on a few seconds of video versus waiting for the entire story to be told. All of this rush to judgment (on either side) has serious repercussions. It adds to our stress and allows us to become bogged down with worry.

I don't know about you but I really crave a break from the current news cycle and I want a reminder of all that is right in this world because I still believe there is a lot that is good and right. Thank goodness it is county fair time. If you want a snapshot of how the world should be go to your local county fair and look around. Often it reminds me of a time before we had all of this technology at our finger tips and maybe the world was a simpler, less stresswith our first child, the one and only thing the doctor told me NOT to do was water ski. It was all I could do to keep from kissing the poor unsuspecting fellow right smack on the lips.

This year, in honor of three and a half decades of being married, we headed back to that lake, where his sister and brother-inlaw now have a beautiful home.

> And a really big boat. It took a little coaxing.

So, here's to another 35 water-skiing free years.

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785-539-7558 Fax 785-539-2679

Editor - Donna Sullivan gandgeditor@agpress.com

Advertising Staff -Steve Reichert agpress2@agpress.com **GRASS & GRAIN (USPS 937-880)**

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Work under way on Milan grain facility and rail loading system

Continued from page 1

Here's how tiny Milan, Kansas was chosen for this multi-million dollar rail site: "The location in Sumner

County stands out as an excellent area when considering the number of acres in crop production, type of crops planted, shipping destinations and access to end users for crops produced on the BNSF line, as well as the future potential for production in the region," Lange said. "MKC and CHS conducted several studies and examined grain producing areas in Kansas, and identified this area as currently underserved by a cooperatively owned high speed receiving and shipping grain facility," he added.

MKC officials also believe that multiple technologies will be coming on the market in the next five to ten years, increasing the ability for farmers to produce higher yields of hard red winter wheat.

"Wheat is the most abundantly grown grain worldwide, and recently has received more attention in genetic seed research in the U.S. and abroad. In this region, a simple increase of five bushels per acre could produce an extra five million bushels of grain annually, beyond what is already produced, so not only do we need all the existing storage facilities in the region for their capacity, the market will need additional storage to hold larger crops," he added.

MKC officials are examining additional markets to deliver the larger crops.

"The Milan facility aligned with a CHS. partnership, has access to those developing markets and will deliver value; derived through the global supply chain back to local farmers," said Lange. The Milan site was also considered attractive with its quick access to highways, being an area of intense production, and having the ability to move grain by truck and rail.

SMA, based in Monticello, Minnesota is the major contractor for the facility, however several Kansasbased companies have also been contracted to provide work on the multi-million dollar rail system.

Producer Ag selected SMA for their concrete flat work, concrete slip form construction, and millwright

work. Locally, Kan-sas Electric of Newton will perform all the electrical installation, and Unruh Excavation out of Moundridge will complete all the dirt work. KASA Controls in Salina will provide the automation and operational software. BCI, Inc, out of Wichita is responsible for producing many of the major grain handling components. The BCI equipment will be made just eight miles north in Conway Springs.

"We look forward to serving producers in the region, other cooperatives, and all grain customers who will

see value in shipping grain by rail through a cooperatively owned grain terminal," Lange said. "The Sumner County Terminal will dump all types of customer trucks from smaller tandem and single-axle end dump trucks to the largest tandem and semi-truck end dumps."

The new rail facility is expected to be ready to receive grain by June of 2017; in time for the 2017 wheat harvest in Sumner County. Rail loading capacity is expected to be completed by mid-August 2017.

Scientists say herbicide resistance predates genetically engineered crops by 40 years

You may think weeds resistant to herbicides are a new phenomenon linked to the overuse of glyphosate in engineered genetically crops, but nothing could be further from the truth. Next vear will mark the 60th anniversary of the first reports herbicide-resistant of weeds, while this year marks only the 20th anniversary of glyphosate-resistant crops.

The first known report of herbicide-resistance came in 1957 when a spreading dayflower (Commelina diffusa) growing in a Hawaiian sugarcane field was found to be resistant to a synthetic auxin herbicide. One biotype of spreading dayflower was able to withstand five times the normal treatment dosage. That same year wild carrot (Daucus carota) growing on roadsides in Ontario, Canada was found to be resistant to some of the same synthetic auxin herbicides.

Since then, 250 species of weeds have evolved resist-

ance to 160 different herbicides that span 23 of the 26 known herbicide mechanisms of action. They are found in 86 crops in 66 countries, making herbicide resistance a truly global problem.

"Given all the media attention paid to glyphosate, vou would think it would have the greatest number of resistant weed species," savs David Shaw, Ph.D., a Mississippi State University weed scientist. "Though there are currently 35 weed species resistant to the amino acid synthesis inhibitor glyphosate, there are four times as many weed species resistant to ALS inhibitors and three times as many resistant to PS II inhibitors."

Scientists say what is unique about glyphosate resistance is the severity of selection pressure for resistance development. More than 90 percent of soybean, corn, cotton and sugar beet acres in the U.S. are glyphosate tolerant and receive glyphosate treatments – often multiple times per year.

"The sheer size of the crop acreage impacted by glyphosate-resistant weeds has made glyphosate the public face for the pervasive problem of resistance," says Shaw. "But resistance issues are far broader than a single herbicide and were around long before glyphosate-resistant, genetically engineered crops were even introduced."

Research shows that resistant weeds can evolve whenever a single approach to weed management is used repeatedly to the exclusion of other chemical and cultural controls – making a diverse, integrated approach to weed management the first line of defense. Many growers have had great success fighting resistance by adopting a broader range of controls.

One example is found in the experiences of U.S. cotton growers in the southern U.S. After years of relying on glyphosate for weed control, resistant Palmer amaranth (Amaranthus palmeri) began to overrun crops and caused yields to plummet. Today integrated weed management programs that use a diverse range of controls have become commonplace in cotton, despite the higher cost. Growers are using cover crops, hand-weeding, tillage, weed seed removal and herbicides with different mechanisms of action in order to keep Palmer amaranth at bay. There have been tradeoffs. Additional herbicides, labor and fuel have tripled the cost of weed control in cotton. In addition, increased tillage has raised concerns about soil erosion from water and wind. But for now, the crop has been preserved.

"Although diversification is critical to crop sustainability, it can be difficult to make a decision to spend more on integrated weed control strategies," says Stanley Culpepper, Ph.D., a weed scientist at the University of Georgia. "As a result, many of the most successful diversification efforts can be found in crops like cotton where change became an imperative."

Culpepper says that in addition to costs, another barrier to adoption of integrated weed management is the belief by some that new types of herbicides will be invented to take the place of those no longer effective on resistant weeds. But the HPPD-inhibitors discovered in the late 1980s for use in corn crops are the last new mechanism of action to make its way out of the lab and into the market.

"It would be naïve to think we are going to spray our way out of resistance problems," Culpepper says. "Although herbicides are a critical component for large-scale weed management, it is paramount that we surround these herbicides with diverse weed control methods in order to preserve their usefulness – not sit back and wait for something better to come along."





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Meri Rhodes, Tampa, Shares Zucchini Recipe To Win Grass & Grain Contest

Winner Meri Rhodes, Tampa: "I like to make these when zucchini is in abundance! They are yummy." SWEET ZUCCHINI

2 cups sugar

1 cup oil

2 eggs

- 2 1/2 cups flour

1 teaspoon soda

- 1 teaspoon salt
- 1 teaspoon baking powder

1 teaspoon cinnamon

3 cups grated zucchini

1/2 cup nuts, optional

1 cup chocolate chips

Whisk together sugar, oil and eggs. Add flour, soda, salt, baking powder, cinnamon, zucchini and nuts. Pour into a greased 15-by-10-inch pan. Sprinkle chocolate chips on top. Bake for approximately 20 minutes at 350 degrees. Cool.

- **Frosting:**
- 4 tablespoons oleo
- 4 ounces cream cheese
- 1 teaspoon vanilla
- 1 1/2 cups powdered sugar
- Combine and mix well.

Millie Conger, Tecumseh, shares the following: TATER TOT BREAKFAST CASSEROLE 1 pound sausage 30- to 32-ounce bag frozen

tater tots 1 teaspoon salt 1/2 teaspoon pepper 1/4 teaspoon garlic powder 1/4 teaspoon onion powder 1 1/2 cups shredded Cheddar cheese



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1/2 cup mozzarella cheese 8 eggs 2 cups milk

Preheat oven to 350 degrees. In a large skillet cook sausage until no longer pink. Drain fat. In a large bowl, toss tater tots, cooked sausage and cheeses. Pour into lightly greased 9-by-13-inch pan. Whisk eggs, salt, pepper, garlic powder, onion powder and milk. Pour over tater tot mixture. Bake for 35-40 minutes.

Rose Edwards, Stillwater. Okla.: **DUMP & BAKE** MEATBALL CASSEROLE

16-ounce package uncooked rotini pasta 25-ounce jar marinara sauce

3 cups water

14-ounce package fully cooked miniature meatballs, thawed

2 cups shredded mozzarella cheese

Optional: Parmesan cheese & fresh chopped herbs such as basil or oregano

Preheat oven to 425 degrees. In a large baking dish stir together uncooked pasta, marinara

sauce, water and meatballs. Cover tightly and bake for 30 minutes. Uncover and stir. Sprinkle mozzarella over the top and bake uncovered 10 minutes or until cheese is melted (or can use Parmesan cheese and herbs at this point).

HYDRA BED

Lydia J. Miller, Westphalia. shares the following two recipes: HAM & CHEESE

DANDY 8 slices bread 2 cups milk 1 stick butter 1/2 pound grated sharp cheese 4 eggs, beaten **Dash red pepper** Dash paprika 1/2 teaspoon salt 1/2 teaspoon dry mustard 1 cup ground cooked ham or sliced Canadian bacon or several slices of cooked bacon **Remove crusts from**

bread. Arrange in a greased 9-by-13-inch baking dish. Scald milk. Add butter and cheese. Blend in remaining ingredients. Pour over bread. Refrigerate overnight. Bake at 350 degrees for 1 hour. Serves 8.

***** EASY FROZEN FRUIT SALAD

21-ounce can cherry pie filling

20-ounce can crushed pineapple, undrained 1 can Eagle Brand sweet-

ened condensed milk 13 1/2-ounce carton Cool Whip

Chopped pecans, optional Stir all ingredients together well. Pour into a 9by-13-inch pan or cupcake pan for individual servings. Freeze. Take out 10 to 15 minutes before serving. Serves 8 to 10.

TRIPLE C

Soft Drinks & Orthodontics: A Recipe For Disaster

(NAPS) — Many people don't know that soft drinks — even diet soft drinks, sports and energy drinks, and fruit drinks — contain acids, which can be especially troublesome for people in orthodontic treatment. The American Association of Orthodontists (AAO) strongly advises patients to avoid drinks with low pH levels because the lower the pH level, the more acidic the beverage.

"It's tempting to reach for soft drinks. People around us drink them regularly, they are easily purchased in vending machines and at convenience stores, and many are heavily advertised," says Morris N. Poole, DDS, president of the AAO. "Sugar is known to be bad for the teeth but sugar-free soft drinks present dangers, as well.

"Consumption of soft drinks during orthodontic treatment puts teeth at risk of decay due to the acid attack on enamel," says Dr. Poole. "The acid in soft drinks pulls calcium out of tooth enamel. Repeatedly bathing teeth with acidic soft drinks dissolves enamel and is a sure path to a cavity. If soft drinks contain sugar, the risk increases. Sugar interacts with plaque and forms another acid to further dissolve enamel. When enamel is gone, the loss is permanent."

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To help, there's a new AAO educational flier. "Soft Drinks + Orthodontic Treatment = A Recipe for Disaster" (www.my lifemysmile. org/whyyou-should-get-orthodon tic-treatment), that lists pH levels of more than 30 soft drinks and explains problems and solutions, including:

• Plaque — a sticky, colorless film made up of bacteria, food debris and saliva that feeds on sugar and starches. Frequent brushing and daily flossing remove most plaque. Hard-toreach plaque requires professional attention, however.

• Damage You Can See — "I tell patients that a single sip of a soft drink is the catalyst for an attack on tooth enamel, and the attack is renewed with each new sip," says Dr. Poole. These "attacks" can leave white spots or lines on teeth. The portion of a tooth covered by a bracket is protected, but damage around the perimeter can leave a permanent outline of the bracket.

• Recommendations – Overall, orthodontic patients should:

1. Never consume soft drinks while wearing clear aligners or clear retainers.

2. Drink fluoridated water and use a fluoride toothpaste.

3. Always follow their orthodontist's instructions on oral hygiene.

If you do have a soft drink:

1. Use a straw.

2. Drink it with a meal.

3. Drink it quickly. 4. Brush right away. Learn More

For facts on orthodontists and to find one nearby, visit mylifemysmile.org.



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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 whathave-you.

1. Check your recipe carefully to make certain all ingredients are accurate and instructions are 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



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Grass & Grain, July 19, 2016 Page 5 **Christmas in July: Start saving now so holidays** don't take a bite out of your budget

WICHITA — It's summer the season for cookouts, gardening, going to the pool and a time to begin setting aside money for the holidays, said Kansas State University's Elizabeth Brunscheen-Cartagena.

As with many things in life, preparing and planning before you begin makes things easier - it is no different with financially preparing for the holidays. The holidays are a time to gather with family and friends and many oftentimes find ourselves getting caught up in the excitement and spending more than anticipated. Planning ahead of time can save vou financial and emotional strain.

Budgeting for parties and gift giving in advance is vital, Brunscheen-Cartagena, a K-State Research and Extension Sedgwick County family life and resource management agent, said. "We want to help Kansans control their money rather than the money or the season controlling them. Summer time is the best time to start planning.'

Gift giving

"We all expect a little present, especially our children," she said of holiday expectations. "Begin creating a budget specifically for gifts by making a list of all of the people who you want to give a present. Assign a sum of money and slowly start saving by putting money in an envelope that says the name of that person."

Observe what your children and others like. Or ask them now, "if someone gave you \$30, what would you buy with it?" By asking months ahead of time, the surprise effect could still work since the holidays are so far away, said Brucheen-Cartagena. Shop throughout the year and take advantage of sales in stores or online.

"Remember that not all gifts have to be purchased," Bruncheen-Cartagena said. One of the benefits of starting now is that you can create some of your gifts. Some gift suggestions she shares are

• For a child who likes to cook, gradually buy a cook book with simple recipes and the dry ingredients for one recipe, put them in a mixing bowl and wrap it with cellophane;

• For budding artists, gradually buy brushes,

paint, and a canvas, and put them into a decorative bag;

• A good gift for grandparents or a neighbor is for children to create coupons of volunteer time: shoveling snow twice, wash the car three times, yard cleanup twice or a plate of something you can cook twice are some examples;

• If you or your kids like photography, grandparents often appreciate receiving framed photos; or

• Use a clear jar and put the mixture of dry ingredients of a soup recipe in a decorative way. Don't forget to include the recipe and any other necessary instructions.

Another idea to save money on gifts is to only purchase gifts for your children or partner and have a gift

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exchange with other family and friends. This way, price limits can be set for gifts and removes the stress of having to find the perfect gift for multiple people. When suggesting this to your family and friends now, explain that you're proposing exchanging names in July so everyone has time to shop or make gifts ahead of the holiday rush.

Holiday food shopping

The holidays are also characterized by a lot of spending on food. Brunscheen-Cartagena suggests starting to plan in July to ask family members to bring different items to holiday dinners rather than any one person assuming all the work and cost.

"If there are five siblings, perhaps for Christmas two siblings will be responsible for the meat, one is responsible for sodas, another is responsible for dessert and another is responsible for the salad," she said. "The load is distributed and a more relaxed atmosphere is created."

"In short, do not buy at the last minute," she said. "Avoid impulse purchases. Start shopping early enough to avoid feeling pressured to buy whatever shows first. This allows you to compare similar items and take advantage of sales."

Planning for the festivities will save you time, money and energy, while at the same time, bring peace of mind, good relations and happiness to you and those around you.

785 539 857

By Martha Murphy Wildcat District **Extension Agent** Pittsburg **EFNEP** office

Food spoils faster in the summer. Why? Bacteria grow fastest in the heat and humidity. Also, more people cook outside at picnics, barbecues and on camping trips, where refrigeration and washing facilities can be hard to find.

Fortunately, you can take steps to make sure your food is safe to eat, even during the summer heat

Plate it safe!

• Keep beverages in a separate cooler, since it will be opened more frequently.

• Pack perishable foods (such as luncheon meats, cooked meats and chicken, and potato or pasta salads) in an insulated cooler in sealed plastic bags under several inches of ice, ice packs or containers of

frozen water. If packing raw meats, do not allow raw meat juices to touch ready-to-eat food. Do not partially cook food ahead of time.

• Pack just the amount of perishable food that you can use.

• If a cold insulated cooler is not available, do not take perishable foods. Instead, pack foods such as hard cheeses, canned meats, chicken and tuna; nuts, peanut butter, dry cereals, bread, crackers, fruits and vegetables.

• Keep the cooler in the coolest part of the car. Place it in the shade or shelter it from the sun at the picnic site. Preserve the cold temperature of the cooler by replenishing the ice as needed.

• When planning a picnic, barbeque or camping trip, find out if there will be a source of safe drinking water. If not, take water for

preparation and cleaning

Pack disposable washcloths and/or hand sanitizer. Use them to clean your hands.

• Pack a food thermometer. Check meats with a food thermometer to be sure they reach an internal temperature of 145 degrees for steaks and chops, 160 degrees for ground meats, and 165 degrees for poultry.

• Wash all plates, utensils and cutting boards that held raw meat or poultry with hot soapy water before using them again for cooked food

• Perishable food that is not kept cold for more than 2 hours is not considered safe to eat. When summer heat gets above 90 degrees, foods left out of the cold cooler for more than 1 hour should be thrown away.

For additional information, contact the Wild-



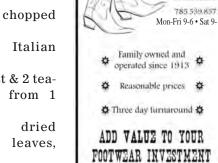
Top Summer Food Safety Tips: Keep Your Diners Safe From Bacteria 1/2 cup yellow (or red) cherry tomatoes, halved

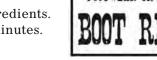
1/4 cup finely chopped red onions 1/4 cup zesty Italian

dressing 1/2 teaspoon zest & 2 teaspoons juice from 1

lemon 1/4 teaspoon oregano crushed

Combine ingredients. Refrigerate 30 minutes. ***







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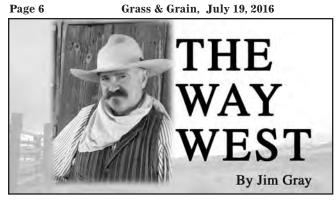
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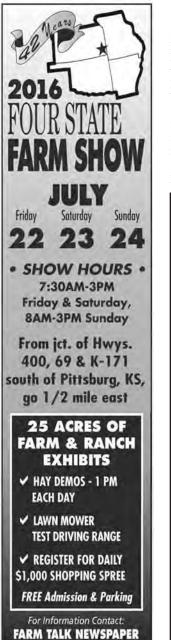
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Life and Death in Hays City

In 1871 Hays City was a tough place just looking for the next outbreak of racial violence. Tensions were still smoldering from an 1869 clash that resulted in the murder of two black barbers. March 2, 1871, marked the beginning of events that would lead to another vio-



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lent round of turmoil on the very edge of the frontier.

Four men broke into a black woman's home and violently abused her. Justice John B. Cunningham performed a preliminary examination and on testimony of black residents, bound the four over for trial. That evening the town erupted as a crowd of men filled Tenth Street, firing pistols and seething against the black population. Sheriff Peter R. Lanahan, better known on the frontier as "Rattlesnake Pete," was overwhelmed. When Justice Cunningham appealed to the post commander at Fort Hays, troops from the Seventh U.S. Caval-



while the soldiers anxiously looked on.

Paddy Ryan ran one of

the popular drinking resorts

in town with a convenient

corral that allowed troops to

be posted close to potential

trouble. They weren't long

in finding it. Lt. Frank Bald-

win's report documented

street, Lt. Baldwin proceed-

ed with five of his men onto

Tenth Street. Within a very

short time a rough crowd

surrounded Baldwin and

his soldiers "...most of them

with revolvers drawn and

leveled on my party." One of

the men specifically threat-

ened Lt. Baldwin which

brought a swift reprisal

from one of his soldiers. The

"tough" was knocked to the

ground by the soldier, be-

fore he was also knocked

down by another ruffian in

time to prevent heightened

trouble. In the face of addi-

tional soldiers pouring into

the street the mob backed

away, allowing the soldiers

to retreat to the platform of

the railroad depot. The

troops had been ordered not

More troops arrived in

Hearing shots down the

the events.

the crowd.

Shots were heard near the courthouse around 2 a.m. on the morning of March 4th. Justice Cunningham requested an escort to the scene. There they found former Hays City militiaman R. S. McCready lying on the ground, shot through the body; a Springfield rifle and ammunition at his side.

As the darkness of early morning wore on chaos subsided. Lt. Baldwin and his men returned to Fort Hays at 6 a.m. Black residents of Hays City fled to the safety of the fort. The town continued to simmer as the four men languished in jail, awaiting trial for the outrage that had plunged the town into a frenzy.

Many in town harbored a simmering suspicion that "Rattlesnake Pete" Lanahan was responsible for the death of the militiaman, R.S. McCready, found dead near the courthouse during the rioting. In the days to come Lanahan battled a growing tide of discontent in the town he was charged to protect.

Meanwhile, the Seventh Cavalry pulled out of Fort Havs to support General Hancock in his spring campaign against the Cheyenne. The Seventh was replaced by the Sixth Cavalry. Just after midnight, July 17, 1871, some troopers entered Henry Kelly's saloon "calling for drinks." Soon they were arguing, fighting and shooting. The shooting spilled out into the street, drawing the attention of Sheriff Lanahan who had been enjoying the pleasures of Emma Bowen's brothel just next to Kelly's saloon. As Lanahan stepped in to quell the disturbance a bartender by the name of Charles Harrison fired and hit Lanahan in the stomach. Emma charged from her brothel, tossing two guns to Lanahan. Quick as thought, the guns were blazing. Harrison was hit in the eye from Rattlesnake Pete's blazing guns. Although mortally wounded the sheriff entered Kelly's saloon searching for his assassins.

Another Kelly, known as "Hound" Kelly was part of the anti-Lanahan faction. The sheriff fired on "Hound" as he hid under a table, but weak and losing blood Lanahan sank to the floor. He was carried to Emma Bowen's bed to await his death. But that wouldn't do for "Hound" Kelly. Outside the building Kelly opened fire with a rifle.

William May was hit in the leg. When Kelly tired of his "turkey shoot" Sheriff Lanahan was taken to the court house for protection but Rattlesnake Pete's days were done. There would be more rioting in Hays City and "Hound" Kelly would never be held accountable for his actions. It's hard to imagine today, but that was the life and those were the days in a place called Hays City on The Way West.

"The Cowboy," Jim Gray is author of the book Desperate Seed: Ellsworth Kansas on the Violent Frontier, Executive Director of the National Drovers Hall of Fame, and Trail Boss of THE Texas Longhorn Cattle Drive/Chisholm Trail '17. Contact Kansas Cowboy, P.O. Box62. Ellsworth, KS 67439. Phone 785-531-2058 or kansascowboy@kans.com

Dryland corn plot/on-farm research tour planned near Gypsum and Solomon July 28

K-State Research & Extension and Central Kansas Extension District will host tours of two dryland corn seeding rate plots and one stop featuring site specific precision ag technology using satellite imagery in Saline County on Thursday, July 28th.

Focus of the tour will be a discussion of the on-farm research plots at each farm; evaluating twin row versus 30" row corn, the use of satellite imagery in site specific precision farming and dryland corn seeding rates.

The first stop will begin at 8:30 a.m. at the Dwight



south of Gypsum on Gypsum Valley Rd. and then 1/4 mile east on Assaria Rd. An onfarm research plot sponsored by Great Plains Manufacturing, comparing twin row corn vs. 30" row corn at three different seeding rates will be discussed.

The second stop will begin at 9:30 a.m. at Shadelawn Farm operated by Justin Knopf located 1 mile north of Gypsum, just north of the Gypsum Valley Rd. and McReynolds Rd. intersection. An on-farm research plot featuring the use of site-specific precision agriculture tools and satellite imagery will be discussed, as will the use of a triticale cover crop following corn last year, and where no-till soybeans were planted in 2016. The last stop will begin at 11:00 a.m. at the Mark Pettijohn farm located southwest of Solomon. From Solomon go 1 ¹/₂ mile west on Old Hwy 40 then 3/4 mile south on Donmver Rd to Campbell Rd. then east 1 mile to the T intersection and then south 1 mile to the plot. Or coming from the south. from the Donmyer Rd./Country Club Rd. intersection go 4 miles north to Campbell Rd. then east 1 mile to the T intersection and then south 1 mile to the plot. An on-farm research plot featuring dryland corn seeding rates of 14. 18. 22. 26 and 30K seeds per acre will be discussed.

Speakers include K-State Extension specialists



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For more information about the tours, contact Tom Maxwell at the CKD3 - Salina office at 785-309-5850. All interested persons are invited to attend any or all of these tour stops, no RSVP is needed.



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



Grass & Grain, July 19, 2016 **Off-target herbicide movement: what you see is not what you get**

Off-target herbicides may be invisible, but that doesn't mean they don't exist

Off-target herbicides damage crops, ornamentals and other vegetation in nearby fields when droplets move off of the soil or intended plants and onto nontarget plants, says University of Missouri Plant Sciences research specialist Mandy Bish.

applicators Pesticide have control over many factors that contribute to the off-target movement of herbicides, such as spray tank contamination and making applications when it is too windy. "However, volatility, or the ability of the herbi-



cide to evaporate, is a property of the chemical itself. This makes it tricky to understand and hard to detect, yet impactful when it happens," Bish says.

Bish and other researchers at MU showed their findings at the annual MU Pest Management Field Day on July 7.

To demonstrate volatility of an herbicide, researchers sprayed bare ground plots with the herbicide dicamba. Thirty minutes after application, they placed potted tomato and pepper plants on plastic film on the sprayed test plot and on an unsprayed plot 40 feet away and downwind of the treated plot. After six hours, they removed the plants and grew them in the greenhouse for nearly two weeks, monitoring the plants for dicamba injury. Within one week, the tomato plant in

the untreated plot that was downwind of the dicamba application began showing dicamba injury. By two weeks after application, both the pepper and tomato plants had cupped leaves. Plants in the treated plots had much less injury.

"Herbicide droplets may initially land on target plants and/or soil," Bish says. "Conditions that favor evaporation instead of absorption can allow herbicide to move back into the air."

Moisture, temperature, ground cover and wind speed influence movement.

Herbicide formulations matter as well. Low-volatile herbicide formulations are essential in minimizing injury of nontarget plants due to volatility.

Temperature inversions can also affect off-target herbicide movement. Inversions occur when the air temperature near the ground is cooler than at higher altitudes. This causes a stable air mass with little wind. When this occurs, spray particles remain suspended instead of reaching the target surface.

Page 7

Most inversions occur around sunset to sunrise. Bish says the following conditions may indicate temperature inversions:

• Wind speeds less than 2-3 miles per hour.

• Dew or frost. After reaching their target, spray particles may evaporate before being absorbed.

• Horizontal smoke patterns, which indicate horizontal wind movement.

• Ground fog in low-lying areas

• Clear evening skies, which indicate a lack of clouds to trap warm air in the atmosphere.

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Lawrence-area consumers recently enjoyed a farm to fork meal and discussion about food production. Courtesy photo

Consumers and farmers share dinner along with conversations about food

the Lawrence area came to the farm for dinner on a re-



happened next was an evening of conversations and a delicious farm-grown dinner.

"We just wanted to invite people to the farm for dinner and talk to them one-onone about food and farming. We wanted to learn about their questions and concerns. Farmers have a great story to tell, and we were happy to open the doors of the farm and share that story," said Lowell Neitzel, who along with his wife, Krystale, thought up the event.

The Neitzels are part of a multi-generational family farm that includes both Bismarck Gardens, that grows and sells sweet corn and other produce, and Nunemaker-Ross Farms that grows corn, soybeans and cattle. The corn grown at Bismarck Gardens is sweet corn, a vegetable crop that is harvested in the summer. The corn grown on the farm is dent corn, a grain harvested in the fall, used primarily for livestock feed and ethanol production.

"Part of my discussions with people was helping them understand that the corn we grow on the farm is different than the sweet corn we grow at the market. When we are feeding cattle or making ethanol, we're



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not using up their corn on the cob or canned corn," Neitzel said. "We also had a lot of conversations how we use biotechnology to grow healthier, more sustainable crops on our farms."

From the brisket to the beer, much of the menu had a connection to their farm. Pat Ross, who is part of the farm and serves on the Kansas Corn Commission, explained the synergy between the farm and the companies that helped supply the meat and beverages for the dinner.

"We buy distiller's grains from Boulevard Brewing in Kansas City to feed our cattle along with the grain we raise here on the farm. A lot of cattle we raise here go to Bichelmeyer Meats in Kansas City. We are enjoying products from both of these companies tonight." Ross said.

Participants shared a meal and conversation with family members from the Nunemaker-Ross Farm and Bismarck Gardens and

Continued on page 9

Grass & Grain, July 19, 2016

Consumers and farmers share dinner and conversations

Continued from page 8 other area farmers, including volunteers from CommonGround Kansas, volunteer female farmers who talk to consumers about food and how farmers grow it.

"The people I visited with enjoyed the evening and appreciated learning more about the farm and how we produce grain, livestock and vegetables. We wanted to know what questions and concerns they had. and our conversations were open and honest," Neitzel said. "We learned a lot and I

New York business launches beef broth popsicle

Springbone Kitchen, a New York food business, has launched a beef broth popsicle that the founder promotes as a health benefit that helps the body heal. The popsicle is made with coconut milk, pomegranate juice, raspberry puree, maple sugar and one-third cup of beef bone broth.

To learn more, visit http://nypost.com/2016/06/28/ would-you-eat-a-meat-popsi cle/.

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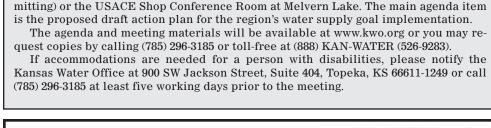
hope our guests did too." Guests reserved their seats with a donation to Douglas County 4-H. Organizations and businesses that helped with the dinner were Kansas Corn Commission, Frontier Farm Credit,

Kansas

Bichelmeyer Meats, Boulevard Brewing Co., Pendelton's Country Market. Kansas CommonGround, the families who are part of Nunemaker-Ross Farms and Bismarck Gardens and their relatives and friends.

hold a meeting to discuss current water issues affecting the basin as well as the state.





Marais des Cygnes RAC meeting to be held at Melvern Lake

The Kansas Water Office's Marais des Cygnes Regional Advisory Committee will

The meeting will be Monday, July 25, 1 p.m., at the Outlet Park Pavilion (weather per-



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Dave Lane • 316-650-3835 • Goddard, KS Varieties: LCS Pistol

Carl Wahlmeier • 785-678-2476 • Jennings, KS Varieties: T158, LCS Mint, LCS Wizard

Blankenship Seeds • 620-782-3443 • Udall, KS Varieties: LCS Mint

Le Clair Seeds • 785-410-2851 • Clifton, KS Varieties: T173, LCS Pistol

Neufeldt Seed Farms • 620-921-5529 • Inman, KS Varieties: LCS Mint, T158

Wildcat Agri Service • 316-772-7171 • Sedgwick, KS Varieties: LCS Pistol, LCS Mint, T158

Iron Horse Farm Seed Co. • 620-654-3907 • Galva, KS Varieties: LCS Mint, LCS Pistol, T158





Page 9

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Wichita • 316-943-0201	Linn • 785-348-5547
Blueville Nursery	Wall's True Value
Manhattan • 785-539-2671	Clay Center • 785-632-2851
Pioneer Farm & Ranch	Abilene Rent-All & Sales INC
Abilene • 785-263-7163	Abilene • 785-263-7668

Timken Seed Farms • 785-355-2285 • Timken, KS Varieties: LCS Mint

Tischhauser Seeds • 785-497-2888 • Wilsey, KS Varieties: LCS Mint, LCS Wizard, LCS Pistol

Solomon Rapids Seeds • 785-738-5134 • Beloit, KS 785-346-2104 • Osborne, KS • Varieties: LCS Chrome, LCS Mint, LCS Pistol, LCS Wizard, T154

Calvin Bonhert • 785-738-7589 • Jewell, KS

Varieties: LCS Mint

Mattson Farms • 785-586-2313 • Colby, KS Varieties: T158

Kauffman Seeds • 800-634-2836 • Haven, KS Varieties: LCS Chrome, T158, LCS Wizard, T173, LCS Pistol, LCS Mint



Around Kansas is a neverending adventure. People often ask, "What will you do when you run out of ideas?"

Not possible. There is just too much happening, too many interesting people and places. Plus, I have many friends who make me aware of those stories. This one I owe to Toni Boyles, who grew up in Independence:

In the movie Night at the Museum: Battle of the Smithsonian, a couple of Kansans are front and center of the story. One is fabled flyer Amelia Earhart. The other is Miss Able, the Space Monkey.

Amelia, of course, was born in Atchison, and famously disappeared in her attempt to fly around the globe. She was truly a pioneering figure in aviation, opening the skies to women

pilots. She became an iconic figure and is recognized around the world. Miss Able, a rhesus monkey, was born on Monkey Island in Independence, at the Ralph Mitchell Zoo. She, too, became world-famous after she was chosen to participate in the space program.

In May 1959, aboard the Jupiter AM-18, Miss Able, and Miss Baker, a squirrel monkey, became the first monkeys to successfully return to Earth after traveling in space. Their names were taken from a phonetic alphabet.

The pair traveled in excess of 16,000 km/h, and withstood 38 g's. Their mission was crucial in understanding the effect of these conditions on mammals.

Miss Able died June 1. 1959, while undergoing surgery to remove an infected medical electrode. She suffered a reaction to the anesthesia. Miss Baker died November 29, 1984, at the age of 27 and is buried on the grounds of the United States Space & Rocket Center in Huntsville, Alabama.

Miss Able was preserved, and is now on display at the Smithsonian Institution's National Air and Space Museum. In the movie, Miss Able (portrayed by Crystal the monkey) helps Larry the security guard (played by Ben Stiller), and Amelia (played by Amy Adams), exit the museum by opening a large roller door. In real life, Miss Able opened the door for humans to journey into space. She is among the more popular museum exhibits, and is rightfully taking her place in the long line of Kansans who have made history in air and space.

The next story was inspired by our wet spring:

Puffballs may very well be the favorite "mushroom" of childhood. What kid walking through the pasture hasn't stomped the brittle brown ball to watch the "smoke" puff out in one big whoosh? If the kid is really lucky, there is an entire fairy ring of puffballs for the stomping pleasure. Or, as some of my friends recall, they threw them at cows.

Fortunately, they are so light it is not likely the cows even noticed.

Puffballs are a fungus, and one of the delicious, edible fungus among us before it is ripe. Once the flesh gets a tinge of yellow, best to leave it for stomping later.

Puffballs range from marble-sized to the Giant Puffball, which reportedly can get as large as a sheep! Slicing into the puffball is like looking at a piece of white bread, and a true puffball will not have a stem visible on the inside. If it does, it is not a puffball but a stage of another mushroom's growth. The outer edge of the puffball, the skin, is rough and can appear white to brownish. While it is also edible, it bothers some folk-

s' digestive systems. It is easily peeled away.

The puffball itself does not have very much flavor, but takes on the flavor of whatever it is cooked with. While it is low on taste, it is high on texture and can only be likened to eating silk. They are commonly used in crepes and casseroles. As puffballs ripen, the outer skin becomes thin and brittle and the flesh dissolves into thousands of spores; hence the appearance of dark smoke when the puffball is crushed. As with any mushroom, exercise caution. While there are many edible mushrooms, most are non-edible and some are highly poisonous. Non-edibles are not really poisonous but often upset the stomach and can make you quite sick. Even edible mushrooms can cause upset stomach for people who are not accustomed to them, so when trying a new mushroom, best to do it in small quantities to make sure it sets well with you.

Your local Extension office can provide information on which mushrooms, or fungi, are safe, and which ones you can find in your yard or pasture, or perhaps clinging to the tree stumps on the creek bank, and when they are in season.

Happy Hunting!

Deb Goodrich is the cohost of Around Kansas TV Show, the Wednesday feature of AGam in Kansas. She may be contacted on Facebook or at author.debgoodrich@gmail.com.

Entertainer Jeff Davidson to be featured at National Day of the Cowboy supper

Jeff Davidson, president of the Kansas Chapter of the Western Music Association. will perform at a Kansas celebration of the National Day of the Cowboy. His performance will follow a supper to be held at the Lazy T Ranch near Manhattan at 6:30 p.m. on Saturday, July 23, 2016. The public is invited to sign up and enjoy the show.

"Jeff provides the very finest in western entertainment," said Ron Wilson, Poet Lariat and Lazy T

LGRASS

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Ranch co-owner. "There's no finer combination of western historian and talented musician. He will paint a picture of the history of the Kansas cowboy in song and verse, and share classic songs as well as original work," Wilson said.

Davidson lives near Eureka. He works as a watershed specialist for K-State Research and Extension.

More information is available at www. kans as day of the cowboy.com. At 6:30 p.m., a beef

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barbecue supper with all the trimmings will be served. Award-winning cowboy poet Dwight Burgess of Wamego will also perform. Reservations are required. "Many thanks to Kansas

Farm Bureau, Manhattan Commission Company and Lee's Western Wear for helping us honor the American Cowboy," Wilson said.

The National Day of the Cowboy has been commemorated on the fourth weekend of July by U.S. Senate Resolution since 2005. The Kansas legislature has enacted legislation which provides that Kansas will celebrate this event annually.

For more information or directions, contact the Lazy T Ranch at 785-537-9727 or lazytranchadventures.com. The Lazy T Ranch is located five minutes from Manhat-







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2016 Nemaha County Free Fair July 29 - Aug 1 25





Nemaha County Fairgrounds - Seneca, Kansas **Scheduled Events:**

FRIDAY - JULY 29 7:30 - 10:00 a.m. - 4-H Exhibits & Open Class check in 9:30a.m.- 4-H Food Judging begins 10:00 a.m. - All 4-H Exhibits & Open Class deadline 10:30 a.m.- Rabbits & Poultry Judged

12:00 p.m.- 4-H Food Sale Begins 12:30 p.m. - Woodworking, Electric & Metals Judged 4:30 p.m. - Table Setting Consultation

Judging 6:00 p.m. - Decorated Cake & Mavor Breadbasket Sale @ Livestock Show Arena

6:00 p.m. - 4-H & FFA Swine Show 6:30 p.m.- 4-H Horse Show Horse Arena

Meals: 9:30 a.m.-9:30 p.m. - 4-H Council Food Stand @ Community Building. 6:00 p.m. - Nemaha Pork Producers BBQ @ Show Arena Evening Entertainment: 6:00 p.m. -Hot Air Ballon Rides @ Skoch Park Shelter House. 9:00 - 12:00 p.m. - Big Time Grain Co. Band @ Skoch Park Shelter House

SATURDAY - JULY 30 8:00 a.m. - 4-H, FFA & Open Class Sheep Show followed by Meat & AOB Soat Show

10:00 a.m. - Pie Making Contest 11:00 a.m. - 4-H Bucket Calf Show 12:30 p.m. - 4-H, FFA & Open Class Dairy Show followed by 4-H Dairy Goat Show 6:30 p.m. - 4-H, FFA & Open Class Beef Show Meals: 9:30 a.m.-9:30 p.m. - 4-H Council Food Stand @ Community

Building. 6:00 p.m. - 4-H Council BBQ @ Show Arena, 6:30 p.m. - Ambassador Root Beer Floats @ Show Arena. 6:30 p.m. - HHHH Concessions @ Horse Arena

Evening Entertainment: 6:00 - 7:00 p.m. - Cruise Night - Registration @ Nemaha Valley Motors. 7:00 p.m. -Team Penning @ Horse Arena. 7:00 - 8:30 p.m. - Čruise Night

SUNDAY - JULY 31

9:00 a.m. - Registration for Car Show @ City Park 10:00 a.m. - Community Building Open for Viewing Exhibits 12:30 p.m. - Registration for Pedal Power Tractor Pull

1:00 p.m. - Pedal Power Tractor Pull

30th Annual



@ School - Antique Tractor Pull @ Old Golf Course 1:30 p.m.- Public Fashion Revue @ Community Building 3:00 p.m. - Barnyard Olympics @ Show Arena Meals: 10:00 a.m. - 10 p.m. - 4-H Council Food Stand @ Community Building

- Antique & Field Ready Tractor Show

Evening Entertainment: 6:30 p.m. PARADE "Sew it, Grow it, Show it" 8:00 p.m. - McCain's Muttor Bustin'@ Horse Arena. 8:00 p.m. Schmitz Blitz Band @ Fairgrounds

MONDAY - August 1 9:00 a.m. - 4-H Hand Pet Show

10:00 a.m. - 4-H Livestock Judging Contest

2:00 p.m. - 4-H Round Robin Showmanship Contest

5:00 - 6:00 p.m. - Exhibits & Oper Class released

7:00 p.m. - 4-H & FFA Livestock Premium Auction

Meals: 9:30 a.m. - 5:30 p.m. - 4-H Council Food Stand @ Community Building. 5:30 p.m. - Prairie Hills FFA Alumni BBQ @ Show Arena

2016 wheat crop has record-breaking potential

Based on July 1 conditions, Kansas's 2016 winter wheat crop is forecast at 454 million bushels, up 41 percent from last year's crop, according to the USDA's National Agricultural Statistics Service. Average yield is forecast at 56 bushels per acre, up 19 bushels from last year. If realized this would be a new record yield.

Acreage to be harvested for grain is estimated at 8.10 million acres, down 600,000 acres from last year. This would be 95 percent of the planted acres, virtually unchanged when compared to last year's percent harvested.

Oats production is forecast at 1.83 million bushels, down 30 percent from 2015. Yield, at 61 bushels per acre, is forecast to be down four bushels per acre from a year ago. Acreage for harvest, at 30,000 acres, is down 10,000 from last year.

Corn drought impacts examined

By Josh Coltrain, Crop **Production Agent, Wildcat Extension District**

While the old saying may have many different versions, the one I have heard most often is "You're two weeks from a drought, and two hours from a flood." Due to shallow soils, the water holding capacity is very low in southeast Kansas. Even with recent rains, corn in our area has experienced varying drought stress. Undoubtedly, this stress has impacted yields but we will not know the extent until harvest.

Corn yield is determined through several components that include ears per area, kernel rows per ear, kernels per row, and kernel weight. Each of these components is molded at specific growth stages.

The ears per area component depends is set during the VE growth. VE is the emergence growth stage (V stands for vegetative). Obviously, the most important factor of this component is emergence and plant population. Even though the seedling is not using much, adequate moisture is necessary for germination and emergence.

Kernel rows per ear are established during the V6 growth stage. In this case, the 6 stands for how many leaf collars are visible on the plant. During this time, the plant uses approximately 0.1 inches of water per day. According to the Parsons Kansas Mesonet site, the average precipitation between March 15 and March 31 was 0.0469 inches per day and between April 1 and April 15, it was only 0.05 inches per day. This suggests that corn in our area could have limited ear girth due to the lack of precipitation during this critical stretch.

During the V12 growth stage, kernels per row are determined. During this stage, the plants are using approximately 0.25 inches of soil moisture per day. Once again, according to the Mesonet, the average precipitation between April 16 and April 30 was 0.267 inches of moisture per day. During this time, moisture should not have been an issue. However, if the corn was late planted, the two weeks between May 1 and May 15 only averaged 0.009 inches of precipitation per day.

Once corn tassels (labelled the VT growth stage), water requirements rise to 0.30 inches per day. By this stage in the growing season, kernels per row have been set. This occurred at the V18 growth stage and during this time, the water is somewhere between the 0.25 required at V12 and the 0.30 required at VT. For Parsons, from May 15 to May 31, the average precipitation was 0.309 inches per day which hopefully points to ears with full rows of kernels.

After VT, the plant enters reproductive growth as corn is a determinate plant (all vegetative growth stops once reproduction begins). Silking is the R1 growth stage and during the early reproductive stages, water requirements are maximized. At R1, 0.33 inches of water are needed per day. If we assume this stage occurred in early June, once again at Parsons, the aver-

BE READY.

age rainfall was only 0.0847 inches per day from June 1 to June 15. The yield component linked to Silking is kernel weight so the lack of moisture during this period suggests smaller kernels.

After Silking, the plant progresses through R2 -Blister, R3 - Milk, R4 -Dough, R5 - Dent, and finally R6 – Physiological Maturity. Grain fill occurs from R2 through R5 with a gradual decline in moisture requirements. Drought stress during this time (especially through the Milk stage) can lead to kernel abortion limiting the kernels per ear as well. Even the kernels are not aborted, stress can limit grain fill which can make a huge impact on yield. At Parsons, from June 16 to June 30, the precipitation averaged 0.385 inches per day. With any luck, kernel abortion is limited and the plants are actively filling the kernels.

Even though most of our area has received some very welcome rainfall recently, the damage to corn yields may have already occurred. While not nearly as drastic as the drought years in 2010 and 2011, corn yields may not reach the potential we were hoping for at planting. For more information on corn growth stages, stop by your local Extension office for a copy of the new Corn Growth and Development Poster. If you have questions or would like more information, please call me at the office (620) 724-8233, or e-mail me at jcoltrain @ksu. edu, or visit the Wildcat Extension District website at www.wildcatdistrict.ksu.ed u.

Grass & Grain, July 19, 2016 **Bartholomew honored with 2016 4-H Distinguished Service Award**

For Ray Bartholomew it is seeing the "I got it" moment on a young person's face that keeps him involved. The Hutchinson man was honored with a 4-H Distinguished Service Award for his work with the Kansas 4-H Shooting Sports Program. The award was given at the annual Emerald Circle Banquet held recently in Manhattan.

"This distinguished service award is a special honor that our department gives to an individual who has contributed to 4-H across the state and to moving the 4-H program forward," said Pam Van Horn, K-State Research and Extension 4-H specialist. "This can be a volunteer, someone we work closely with on campus, or a special donor.'

"Ray has been a constant and strong volunteer on the Shooting Sports Committee," said James Eberwein, a volunteer who serves as a Kansas 4-H Lead Shotgun Instructor. "He has kept safety and education as his number one focus while striving to keep our program in the highest standard.'

Bartholomew has been involved with 4-H from an early age. He eventually served as a 4-H leader. His own children were involved in 4-H as well.

However, Bartholomew's involvement changed when his son wanted to do shooting sports through 4-H, as he could not participate in the program without a county coordinator.

"I said 'yes' and I've been saying yes quite a few times since then," Bartholomew said. "About 10 years ago I said yes to becoming the state volunteer coordinator for 4-H shooting sports."

For Bartholomew the ultimate achievement of participation is the individual youth. His reasoning behind that is the education that participating in shooting sports provides the youth. program The teaches firearm safety and other skills to 3,516 young people across the state every year that may not otherwise have the resources.

"It is extremely rewarding to see the numbers and the volume of other volunteers as well as the youth involved in the program today," Bartholomew said. "I believe the project is going to continue to gain momentum- we are not at our peak yet." The program currently is comprised of eight disciplines and ranks third among youth enrollment for all youth projects through Kansas 4-H. Many attribute the program's success to Bartholomew.

"One of my favorite interactions with the youth is when we use the BB gun and taking a young person who has maybe handled the equipment before or who has but hasn't handled it correctly or at the level where they can get BBs to hit the target in the pattern," Bartholomew said. 'Seeing the accomplishment of that youth getting started and them accomplishing the skill set."

Van Horn added that Bartholomew has shared with her that he loves seeing the "I got it moment" where



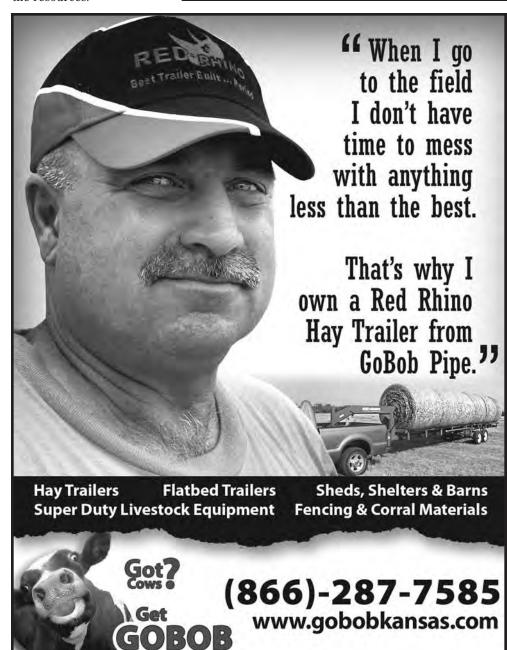


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Grass & Grain, July 19, 2016 Page 12 **Eastern Kansas Grazing School scheduled for September 20-21**

The sixth annual Eastern Kansas Grazing School will take place Sept. 20-21 at the Perry Community Building in Perry. The event is a hands-on school for Management intensive Grazing (MiG) for beginning and experienced grazers. It pro-

of hands-on activities, as well as classroom activities and demonstrations in the field.

Topics to be covered on the first day include: Art and Science of Grazing, Grazing Arithmetic, Farm Visit Pasture Allocation, vides a unique combination Animal Behavior and Inter-

action, Soil and Plant Basics, Resource Inventory and Stocking Rate, and Fencing.

Day two will include the following: Watering Presentation, Pasture Allocation and Field Exercises, Economics of Grazing, Layout and Design, and will wrap

up with a question-and-answer session. There will be a farm visit to Melvin Williams, where participants will observe a rotational grazing system and unique watering systems.

The event is capped at 35 farms and is on a first-come, first-serve basis. Registra-

tion is \$50 for the first person from each farm; registration includes lunches, snacks and handouts. Additional people from the same farm are \$25, and that registration includes lunches and snacks.

For more information please contact Meadowlark

Extension District agents David Hallauer at dhallaue@ksu.edu, or Jody Holthaus at jholthau@ ksu.edu. For the registration form, go online to the Meadowlark Extension District website: www.meadow lark.ksu.edu

Upstream trenches, downstream nitrogen – bioreactor trenches improve water quality

Laura Christianson is working on a solution to the "dead zone"—an area with dangerously low levels of oxygen- in the Gulf of Mexico. Christianson lives over a thousand miles north of the Gulf in Illinois. But human activity in the Mississippi River basin, which connects to the Gulf. can lead to major water quality issues downstream.

In many Midwestern states, farmers use tile drainage to keep their fields from being waterlogged. Pipes buried three to four feet below the surface route water into the Mississippi watershed. The tile pipes keep the fields dry, but they also send large amounts of nitrogen downstream. Nitrogen is a natu- bacteria extra energy to

Water quality scientist rally occurring nutrient in convert nitrogen into bethe soil and a common ingredient in fertilizer. Extra nitrogen in the water causes problems for aquatic ecosystems.

> Christianson researches ways to reduce the amount of nitrogen that moves downstream with wood chip-filled trenches. Their iob is to intercept the water's journey from field to rivers and streams. The trenches are called bioreactors

The trenches themselves aren't the main heroes. It's the bacteria that live in them that neutralize the nitrogen threat. "Good bacteria colonize the wood chips. and use them as food," said Christianson. This concentrated food source gives nign gas. Christianson said she was captured by the simplicity of bioreactors. "We're enhancing a natural process," she said. "There's an elegance to it.'

States in the upper Mississippi River basin like Minnesota, Iowa, and Illinois are hot spots for nitrogen in drainage water. "There are 10 million acres of tile-drained fields in Illinois alone," said Christianson

The EPA challenged the twelve states that border the Mississippi River to reduce the amount of nutrients that leach down the river and into the Gulf of Mexico. Rainfall and irrigation pulls nitrogen from the soil and deposits it in the ocean, where algae feed on it. Eventually the algae outcompete other life forms for sunlight and oxygen. Further, when the algae die, the decomposition process eats up all the dissolved oxygen in the water. The resulting "dead zone" in the Gulf of Mexico is over 5,000 square miles.

Bioreactors aren't only useful in the agricultural sector. Christianson said that in the last five to eight years, the interest in bioreactors as a water quality solution has grown. Scientists are using bioreactors as a low-cost way to reduce pathogens in municipal and aquaculture wastewater. More states are getting on board, and new studies from different parts of the world add location-specific complexity to the research.

Bioreactors have a simple construction. Although sizes vary, a typical trench is 100 feet long and 20 feet wide, and covered by one foot of top soil. The trench is generally 3.5 feet deep and filled with carbon-rich food sources for bacteria, like wood chips or corn. Tile pipes from the fields are re-routed through the trench before flowing into the stream.

Despite the simple design, there are complex challenges when using bioreactors. "We're constantly trying to improve the design," said Christianson. "Much like humans, bacteria don't do their job as well when they are cold." The bacteria aren't as efficient at reducing nitrogen in the Midwestern spring

months, when the snow melt starts filtering through. Bioreactors also need to be refilled every ten years or so with wood chips or another source of carbon to keep the bacteria well-fed.

Christianson said that although some grants offset the cost of installing a bioreactor, encouraging farmers to participate is a hard sell. "We're asking farmers to shell out money for a public benefit, and that's not easy when you're trying to make ends meet.' she said.

Despite the challenges, the uses of bioreactors to improve water quality continue to diversify and their performance continues to improve.

Annual K-State Horticulture Center Field Day planned for July 30

Come see the hottest and newest plants while enjoying cool classes in air-conditioned comfort and ice cold water while wandering the field trials. Learn about the latest and greatest before it ever hits the garden centers. It's all here at the K-State

Research and Extension Horticulture Center's Field Day, Saturday, July 30, from 8 a.m.-2 p.m. It's your chance to peek behind the scenes, talk with the experts and learn about the latest varieties and methods for achieving growing success.

Call us for: Catalogs Sale Flyers Magazines Calendars Brochures Books 785-539-7558 Ask for Sandra Newspapers SATURDAY, JULY 30 – 9:30 AN 5161 North Old 81 Hwy. – SALINA, KANSAS Directions: 4 miles north of I-70 on Old 81 Hwy



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This year we are celebrating twenty years of the research center in its current location.

Admission is \$5 per person, which includes ice cold bottled water, seminars, classes and demonstrations.

K-State Research and Extension horticulture research develops its list of recommended grasses, flowers or vegetable varieties through university research conducted in Olathe to determine what grows best in our Kansas City landscapes.

What you'll see

The Center conducts research in flowers and vegetables. Visitors can speak with university professors heading up the research and Johnson County Extension Master Gardener volunteers

Highlights -Flower Area

Annual flower trials -Companies from around the world submit their newest developments. This year 600 cultivars have been planted for evaluation. The research trials show which flowers can withstand the Kansas City climate. The trials illustrate that not all varieties are created equal. Check out the container plantings as some annuals are only meant for use in pots.

Year of the Begonia come see 45 varieties growing in containers or the soil. There are many new cool introductions.

Cannas and Dwarf Coleus – bigger is not always better. These hot new introductions are great for inground gardens but also shine in containers.

• Pollinator Friendly more annuals are being introduced for attracting butterflies and pollinators. See what's new with Salvia, Agastache, and Lantana cul-

tivars **Highlights – Vegetable** Area – Growing Local Food

Come and find out what K-State Research and Extension is doing to assist local farmers support the growing local food movement. While at the research center, you will learn about many of the innovative things that local farmers are doing. Projects include:

 High tunnel production systems with tomato, pepper, spinach, strawberries, blueberries, and brambles.

• Vegetable grafting · Soil health and microbiology studies using cover crops and no-till systems

• All America Selections Variety Trial program • KoolKat Mobile Pro-

duce Cooler Growing Growers:

Training first-generation farmers in the KC/Lawrence area

Extension Master Gardeners Backvard Garden Demonstration Garden

Vegetable gardening is as popular as ever. Join the craze of "foodscaping." That is incorporating vegetables into the landscape. This Extension Master Gardener's project demonstrates various methods of growing vegetables from raised beds, vertical gardening and a

new spin on the square foot concept. The garden also features a wide variety of herbs, a colorful flowering cutting garden and extensive fruit plantings.

Free soil tests

Johnson County residents can bring their soil and get one free soil test per Johnson County address, complements of Johnson County Stormwater Management. A soil test determines the nutrients in the soil. It is important to know the nutrient levels to grow healthy plants. Go to www.johnson. k-state.edu to learn how to take a soil sample. At least 2 cups of dry soil are needed for a proper test.

How to get there

The Research Center is located at 35230 West 135th Street, Olathe. The entrance is approximately nine miles west of Highway 7 on 135th Street. Admission is \$5 at the gate. Lunch will be available for purchase during the event. For information call (913) 715-7000, or visit www.johnson.k-state. edu.

Trailer: 1999 tandem axle car trailer.

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Tools: Contractors Brass bound level & tripod, sharp shooters, handyman jack, 6' ladder, air compressors, exhaust vent, bolt cutters, 24' extension ladder, mall, pony clamps, wheel barrow, shop vac, creeper, saw horses, Murray 22" mower, Little Giant ladder, Jump start kit, Full 3 stack Craftsman tool box, drill bits, Chanel locks, Dewalt compound miter saw, 10" table saw, aluminum scoops, shop boxes, hydraulic jack, flashlights, Tuff totes, brace and bits, clevis's, pins, draw bar, Sears 12" band saw, Dato blades, ratchet straps, wood clamps, bench vises, several cords of wood, Craftsman router, Craftsclining sofa, Sharp 52" flat screen TV, Walnut entertainment center, Oak hutch, stitch art, 5 bar stools, Whirlpool Hi speed front load washer, Kenmore 80 series drver. Old turn leg gateleg table w/4 chairs and side board, 5 drawer dresser, vanity lamps, end table, al abaster floor lamp, occasional plant stands, oval dining table/5 chairs. 2 drawer file. needlepoint chair, pressback rocker, swivel chairs, Art Deco coffee table granite top kitchen table w/pull out leaves, single pedestal walnut desk, big wood whisky barrel. American treadle sewing machine, Life time folding tables & picnic tables, Antique box cameras, Zenith Shortwave radio, Cuisinart pots & pans, dishes. Oster toaster oven. Nuwave cook top set, silver ware, stock pots, Salad shooter crock pots, Magic bullet, buffet server, 18 qt. roaster oven, Keg Roaster, coolers, thermos Hoover Vac, cream cans, UPS memorabilia, army blankets, duffle bags & metals, propane grill, old metal ricer, beater cream stirrer, cast iron skillets, and much more

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Grass & Grain, July 19, 2016 Page 13 Dairy producers can enroll now to protect milk production margins

The U.S. Department of Agriculture's (USDA) Farm Service Agency (FSA) in Kansas announced that dairy producers can enroll for 2017 coverage in the Margin Protection Program for Dairy (MPP-Dairy) as of July 1. The voluntary program, established by the 2014 Farm Bill, provides financial assistance to participating dairy producers when the margin - the difference between the price of milk and feed costs - falls below the coverage level selected by the producer.

The Margin Protection Program gives participating dairy producers the flexibility to select coverage levels best suited for their operation. Enrollment began July 1 and ends on Sept. 30, 2016, for coverage in calendar year 2017. Participating farmers will remain in the program through 2018 and pay a minimum \$100 administrative fee each year. Producers have the option of selecting a different cover-

age level during open enrollment each year.

USDA has a web tool to help producers determine the level of coverage under the Margin Protection Program that will provide them with the strongest safety net under a variety of conditions. The online resource, available www.fsa.usda.gov/mpptool,

allows dairy farmers to quickly and easily combine unique operation data and other key variables to calculate their coverage needs based on price projections. Producers can also review historical data or estimate future coverage needs, based on data projections. The secure site can be accessed via computer, Smartphone or tablet 24 hours a day, seven days a week.

To complete enrollment, producers must make coverage elections during the enrollment period and pay the annual \$100 administrative fee that provides basic catastrophic protection that covers 90 percent of milk production at a \$4 margin coverage level. For additional premiums, operations can protect 25 to 90 percent of production history with margin coverage levels from \$4.50 to \$8, in 50 cent increments. Once enrolled, dairy operations are required to participate through 2018 by making coverage elections each year. Producers can mail the appropriate form to the proadministrative ducer's county FSA office, along with applicable fees without necessitating a trip to the local FSA office. If electing higher coverage for 2017, dairy producers can either pay the premium in full at the time of enrollment or pay 100 percent of the premium by Sept. 1, 2017. Premium fees may be paid directly to FSA or producers can work with their milk handlers to remit premiums on their behalf.

Also beginning July 1, 2016, FSA will begin accepting applications for intergenerational transfers, allowing program participants who added an adult child, grandchild or spouse to the operation during calendar year 2014 or 2015, or between Jan. 1 and June 30, 2016, to increase production history by the new cows bought into the operation by the new family members. intergenerational For transfers occurring on or after July 1, 2016, notification to FSA must be made within 60 days of purchasing the additional cows.

Dairy operations enrolling in the new program must meet conservation compliance provisions and cannot participate in the Livestock Gross Margin Dairy Insurance Program.

For more information, visit FSA online at www.fsa.usda.gov/dairy or stop by a local FSA office to learn more about the Margin Protection Program. To find a local FSA office in vour area, visit http://offices.usda.gov.

Since 2009, USDA has worked to strengthen and support American agriculture, an industry that supports one in 11 American jobs, provides American consumers with more than 80 percent of the food we consume, ensures that Americans spend less of their paychecks at the grocery store than most people in other countries, and supports markets for homegrown renewable energy and materials. USDA has also provided \$5.6 billion in disaster relief to farmers and ranchers; expanded risk management tools with products like Whole Farm Revenue Protection; and helped farm businesses grow with \$36 billion in farm credit.

The Department has engaged its resources to support a strong next generation of farmers and ranchers by improving access to land and capital; building new markets and market opportunities; and extending new conservation opportunities. USDA has developed new markets for rural-made products, including more than 2,500 biobased products through USDA's Bio-Preferred program; and invested \$64 billion in infrastructure and community facilities to help improve the quality of life in rural America. For more information, visit www. usda. gov/results.



Red Angus Convention to spotlight excellence and progress in the beef industry

"Oklahoma, where the Red Angus Roam" is the theme for the 2016 National Red Angus Convention being planned for September 7-9, 2016 in Oklahoma City. With the spotlight on excellence and capturing additional dollars from the marketplace, Red Angus cattle raisers will not want to miss this informationpacked, three-day event.

The Commercial Cattlemen's Symposium "Putting Dollars in Your Pocket" on Wednesday, Sept. 7, will feature leading industry experts addressing opportunities in the beef industry to capture additional value for your business through innovative marketing, nutritional considerations of the cowherd and by using additional technology to improve profitability. Oklahoma State University's own coln. Friday, the RAAA

Clint Rusk will serve as emcee for the session. RAAA CEO Tom Brink will provide the keynote address. There is no charge for the Commercial Cattlemen's Symposium, although registration is requested to plan for the event. Lunch will be provided to Commercial Cattlemen's Symposium attendees and the Convention Trade show will be open to visit with vendors. Please register online at http:// goo.gl/forms/o3TTCftPiObp

DUsy2 to attend. The convention business session will begin on Thursday morning and include the annual Association update, committee reports and a keynote message from Dr. Tom Field, director of the Engler Agribusiness Entrepreneurship Program at the University of Nebraska, Linbusiness session will conclude with the election of new members of the Board of Directors as well as honor excellence at the annual awards banquet that evening.

Full convention registration is \$295 per person and includes most meals, socials and meeting breaks. Registration is available online http://redangus.org/calendar /national-convention.

Hotel headquarters is the Renaissance Oklahoma City Convention Center Hotel, 10 North Broadway Avenue, Oklahoma City, Oklahoma. Room rate is \$139 per night. Room reservations should be made directly with the hotel and be requested in the Red Angus room block. Rooms can be reserved online (http://bit. ly/2984ZvZ) or calling the hotel at (405) 228-8000.

Rabobank releases BBQ index

creates its BBQ Index utiliz- cue. Now that millennials sanal, for a party of ten, the ing data from the Bureau of make up approximately 25 millennial host is averaging

Labor Statistics to check percent of American con- \$11.91 per guest, or just over

Each year, Rabobank cost of a millennial barbe- local, free-range, and arti-

prices and track changes for everything from burgers to produce to ice cream. According to the report, since 2004, when the average cost of feeding ten people at a barbeque was just \$51.90, the price has steadily increased. This Independence Day, hosts of a traditional barbeque were expected to pay a total of \$69.05, up \$.83 from last year. The largest price fluctuations can be seen in beef prices (down 9.8 percent), chicken (down 7.2 percent), and beer (up 6.2 percent).

This is the first year that Rabobank has analyzed the

sumers and soon to be the group with the largest spending power, food and beverage companies are taking note of the demographic. The report indicates that the moderate shifts in the BBQ Index do not necessarily apply to the millennial group.

"We're seeing some really fascinating trends when it comes to consumer purchase preferences among millennials," said Ross Colbert, head of Food and Agribusiness Research at Rabobank. "Knowing the age group's partialities to food labels such as organic,

\$119 total. The discrepancy between the two barbeques is enormous."

To view the full report, http://tinyurl.com/ visit Rabo bank-7-8-16.

20' PIPE BUNK CLOSED END 30" \$67	5.00
20' BOTTOMLESS GROUND HAY	
FEEDER \$82	5.00 V
20' CONTINUOUS FEED BUNK	10.00
PANEL \$18	9.00
10' PORTABLE FEED BUNK PANEL \$22	5.00

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Grass & Grain, July 19, 2016



check out the on-line schedule at www.grassandgrain.com

July 19 — Real estate, guns, camper, scooters, household at Down for Max Goheen Estate. Auctioneers: Thummel Real Estate & Auction, LLC.

- July 21 200 acres m/l McPherson County farmland, grass & timber held at Canton for Carl C. Krehbiel Revocable Trust. Midwest Auctioneers: Land Specialists, LLC.
- July 22 Antiques, collectibles & household at Marysville for Mary Lou (Mrs. Tarz) Williams. Auctioneers: Olmsteds & Sandstrom.
- July 23 Large, well-located home, vehicles, furniture, household at St.

Marys for Wallace & the late Helen Becker. Auctioneers: Gannon Real Estate & Auctions. July 23 - 160 acres m/l Har-

vey County grass held at Newton for Carl C. Krehbiel Revocable Trust. Midwest Auctioneers: Land Specialists, LLC. July 23 — Farm equipment

at Bennington for Jim & Sue Henry. Auctioneers: Omli & Associates, Inc.

July 23 — Tractors, trucks, trailers, farm equipment & machinery, misc., shop, collectibles at Peabody for Edna (Mrs. Eldon) Andres. Auctioneers: Leppke Realty & Auction.

July 23 — Quilts, linens, fur-



- niture, glass & collectibles at Munjor, KS for Martina Auctioneers: Younger. Thummel Real Estate & Auction, LLC. July 23 — 80 acres, farm
- equipment, guns, antiques & personal property at Abilene. Auctioneers: Wilson Realty & Auction Service.
- July 23 200 acres Republic County farmland (pasture, cropland, ponds, timber,) held at Cuba for Tom & Kristi Blazek. Auctioneers: Raymond Bott Realty & Auction.
- July 26 121 +/- acres in Valley Center. Auctioneers: McCurdy Auction, LLC.
- July 28 285 +/- acres in Conway Springs. Auctioneers: McCurdy Auction, LLC.
- July 28 150 +/- acres in Cheney. Auctioneers: McCurdy Auction, LLC.
- July 29 232 +/- acres in Vernon County, Missouri. Auctioneers: McCurdv Auction, LLC.
- July 29 63 +/- acres in Stella. Missouri, Auctioneers: McCurdy Auction, LLC.

July 30 - Original White Eagle Gasoline statue, gas

pumps & globes, glass globe inserts, lawn & garden tractors, signs, 5 gallon oil cans, scale model gas related toys at Rossville for Brown Estate. Auctioneers: Gannon Real Estate & Auctions.

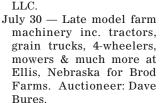
July 30 — Tractors, trucks, farm machinery & shop at McPherson for Loren D. Regier Rev. Trust. Auctioneers: Schmidt Auctions.

July 30 — 1750+ pieces of machinery, tractors, combines, platforms & corn heads, planters & drills, tillage tools, hay equipment, rotary cutters, construction pieces, lawn, garden & ATVs, grain, feed & material handling; sprayers & applicators; trucks, trailers, livestock equipment just West of Paris, Missouri. Auctioneers: Wheeler Auctions & Real Estate.

July 30 — Tractors, lawn mower, trailer, Spyder cycle, tools, household & antiques at Salina for Jerome A. Hein Trust. Auctioneers: Baxa Auctions.

- July 30 Real estate & collectibles at Frankfort for Margaret Elaine Kurtz. Auctioneers: Olmsteds & Sandstrom.
- July 30 Kubota 4x4 tractor. ZTR mower, new tools. household at Enterprise for Walton & Rene Cook. Auctioneers: Revnolds Auction Service.

July 30 — Pickup, Gator, auger, collectibles, household, tools at Mankato for Doris Alexander & the late Newell Alexander. Thummel Real Estate & Auction,



July 30 - Farmland (4 farms, 540 acres m/l) held at Marysville for Mike & Susie Wilson. Auctioneers: Raymond Bott Realty & Auction.

July 31 — Antique & modern furniture, glass, collectibles, cloth, etc. at Osage City for Mr. & Mrs. Don Boaz. Auctioneers: Wischropp Auctions.

August 2 — Tractors, sprayers, combine, trucks, pickups, trailers, farm equipment, other farm items, shed & camper, shop items, mower, guns near Leoti for Dennis Elder Farms. Auctioneers: Berning Auction.

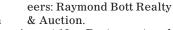
August 3 - Real estate (single story block/frame building), equipment at Holton for Ron's IGA. Auctioneers: Kull Auction & Real Estate Co., Inc.

August 3 - Farm & Industrial consignments at Beattie. Auctioneers: Rottinghaus Auction.

August 6 — Collectibles & household at Beattie for Lawrence V. & Caroline Mulhern Trust. Auctioneers: Olmsteds & Sandstrom.

August 6 — Farm equipment held at Wilson for Robert & Joan Malir. Auctioneers: Omli & Associates, Inc.

August 6 — Two farms (120+ acres cropland; 21 acres cropland) held near Morrowville for the Estate of Robert Burton. Auction-



- August 10 Restaurant real estate at Salina for Western Sizzlin' Buffet & Steakhouse. Auctioneers: Wilson Realty & Auction Service.
- August 13 Furniture, glassware, collectibles, china, household at Blue Rapids for Dorothy Hula. Auctioneers: Joe Horigan. August 13 — Complete auto

shop liquidation, car lift, SnapOn tools, brake equipment, car & trucks at Bennington for old 81 Auto Repair. Auctioneers: Reynolds Auction Service. August 13 — Commercial building & personal prop-

- erty held at Greenleaf for formerly Bright Beginnings Daycare/Greenleaf School. Auctioneers: Midwest Land & Home, Mark Uhlik.
- August 18 Tractors, harvesting equipment, trucks, hay & livestock equipment, farm equipment, tanks, shop, antiques & misc. at Lyons for Kenny & Judy Malone. Auctioneers: Carr Auction & Real Estate, Inc.
- August 20 91.5 acres m/l of Jackson County real estate with farmstead, tractors, machinery, trailers, trucks, pickups, cars, collectibles, toys & antiques, tools & salvage items, mower, misc., household, saddles, horses, guns near Holton & Soldier for Dan & Shelly Robinson. Auctioneers: Cline Realty & Auction, LLC.
- August 21 250+ lots of coins, 1909 SVDB, 1889CC, sets of sterling, bulk silver, gold pieces, art, glassware at Abilene for Dr. Frank Holtz Trust. Auctioneers: Reynolds Auction Service. August 27 — JD 4255, Cle-
- trac, F20 and farm machinery at Vermillion for John Bramhall Estate. Auctioneers: Joe Horigan.

August 27 - Complete mechanic shop, complete line of tools, trucks, trailers, track hoe, Cat, other equipment at Abilene for Frank Fry. Auctioneers: Reynolds Auction Service. September 5 — Harley Gerdes 21st annual Labor Day consignment auction at Lyndon. Auctioneers:

Harley Gerdes Auctions. September 10 — Pickup truck, tractor & equipment, JD Gator, lawn & garden, shop tools & equipment, household & more SE of Salina for John & Phyllis Sundgren. Auctioneers: Bacon Auction

LATE MODEL MACHINERY LIQUIDATION AUCTION

SATURDAY, JULY 30 - 10:00 AM

LOCATION: Ellis, NE or 8 miles west of Beatrice, NE on Hwy 136, or 18 miles East of Fairbury, NE on Hwy 136. Sale site is West of Grain Elevator along Hwy 136.

BROD FARMS "Complete Liquidation of Quality Well Maintained Machinery" Auctioneers Note: Brod Farms is discontinuing its farming operation. Seldom can you find this quality and amount of late model farm machinery in one sale. Machinery always shedded and field ready. Sale starts at 10:00 a.m. sharp with one trailer of shop and hand tools. Please plan to be on time.

MOWERS-UTV-4 WHEELER: 2013 Exmark Lazer Z x-series zero turn mower, 60" deck, Kawasaki FX801V engine, 250 hrs., SN: 313658488; 2012 JD ZTrak Z710A zero turn mower. 54" deck. Kohler 23 hp. engine, 177 hrs., SN 1TC710AVABT020358; 2013 JD XUV 825i Gator, 4x4, SN: 1M0825GEVDM067813, power steering, tilt bed, 253 hrs., 1807 miles; 2013 Polaris RZR XP 900 EPS, 4x4, SN: 4XAJT9EA2DF251484, 961 miles, 38 hrs., 2012 Honda Rancher ES 4 wheeler, 4x4, 61 hrs., 707 miles

TRACTORS-GRAIN TRUCKS: 2011 New Holland Boomer 50 Tractor, 4x4, 2 remotes, 3 pt., diesel, 300 hrs., hydro transmission, 420/70-24 rear rubber, 10-16.5 front rubber with Boomer 250 TL loader and 6' bucket, SN: 2105011831; 2006 New Holland TG215 tractor, MFWD 3 pt., power shift transmission, 5 remotes, mega-flo hydraulics, big and small 1000 pto, 22 40Kg. front weights, duals front and rear, 480/80R46 rear rubber 75%, 380/85R34 front rubber 75%, JD Auto Trac 200 steering kit, 2500 hrs., SN: Z6RW02383; 2013 Challenger MT 755D series track tractor, 18" deep lug tracks, 5 remotes, 734 hrs., 20-100 lb. front weights, JD auto steer ready, SN: AGC00755CDNB01088; 1994 White 6124 tractor. 32 speed transmission. 3 remotes. 5407 hrs.. 14.9/46 rear rubber on 13" rims, 11.00-16 front rubber, SN: 625016ML; 2005 Peterbilt grain truck, Cummins diesel engine, 225784 miles, 11472 hrs., 3060 automatic transmission suspension, twin screw with steerable pusher, all aluminum wheels. near new 315/80R22.5 front tires and 11R22.5 rear tires, ac, heat, am-fm, KANN commercial grade aluminum grain box, 21'Lx96"W x 60" side walls, 3 grain gates and Agri-Cover SRTelectric roll tarp, spool 2NPLHZ7X45M851850; 2001 International 4900 DT 466E grain truck, diesel, single axle with tag, International 6 Plus 1 transmission, cruise, heated mirrors, am-fm, ac, heat, 243505 miles, 11866 hrs., all aluminum wheels, 11R22.5 tires, Scott steel box, 20'Lx96"Wx60" side walls, 3 grain grates and Agri-Cover SRT-2 spool electric roll tarp. FARM EQUIPMENT: 2014 JD 1770NT CCS 24 row planter, 30" spacing 2pt. hitch, row command, variable drive, tru-v openers, walking gauge wheels, active pneumatic down force, steel long life scrapers, long parallel arms on row units, tire scrapers, promax 40 flat corn disc and sovbean seed metering disc, floater yetter trash whippers, Bauer Bilt markers, planter used on less than 4000 acres; J&M 1401 grain cart on 36" tracks, 22" unloading auger, Digi-Star GT400 scale, cameras on auger and on rear of cart with cab monitor, roll over tarp. SN: 1401374: 2013 Unverferth Seed Tender 3750 on triple axle trailer, 235/85R16 tires, belt conveyor unloading system, talc inducer, roll over tarp, Digi-Star scale, hand held remote, Honda GX 390 Engine with electric start; Quality Plus RRT 24' seed con-

veyor, hyd. driven belt conveyor; Hardi Navigator pull type sprayer, 1100 gal. poly tank, pto driven pump with Mustang 3500 sprayer control, 80' boom; 2012 LDJ Mfg. Thunder Creek Equip. Diesel and DEF fuel trailer, 235/80R16 tires, 750 gal. diese tank, Power Pro 6.5 hp motor with pump and electric start, 100 gal. DEF tank with 25' hose reel bumper hitch, VIN: 56ZL1UE2XCP001045; 2012 JD CX15 bat wing shredder, 15', 1000 pto, SN 1POCX15FVCP0250265; 2012 Titan 82"x18 bumper hitch utility trailer, 2 axle with 235/80R16 tires and unloading ramps; 2013 Duo Lift Mfg. bumper hitch water trailer, 1500 gal. poly tank, axle with 11-22.5 tires, Honda GX390 motor with pump and 3" plumbing; 36' Blu Jet Land Runner NH-3 applicator, 15 knives, Raven Accuflow controller. Green Star Rate controller. no-till opening disc, notched closing disc, used on 1500 acres 2011 Landoll VTplus 29' Vertical Till machine. Mod 7431-29, SN: 74L1102315; 2012 Landoll 1550 Deep Ripper, 3pt., 5 shanks, Mod. 1555B30, SN 15F200957, (like new); Blu Jet Track Closer with Level Master attachment, 3pt., SN009889; Land Pride Solid Seeder, Mod. APS1572, SN: 606444 Buhler Farm King 1395 13"x95' auger with swing away hopper, SN: 219058; Buhler Farm King 10"x36' grain auger; Class series 918 Mod. 12-30 corn head, poly snouts, SN: 91802143, to be sold with BBK header trailer, (used on 2700 acres); 2013 Flex Draper 30 175-9 ion adapter, SN:240752, to be sold with EZ Trail 880 header trailer; 2008 JD 4045TF285 Industrial Irriga tion Motor, Turbo diesel, 1730 hrs., Murphy Switch SN:1Y9965, no pump, on 2 wheel cart; JD 4 cyl. Ir rigation motor on 2 wheel cart, Murphy switch diesel, 4369 hrs., no pump, SN: 1V1575

Auctioneers: UPCOMING NEMAHA COUNTY



Offered in Two Tracts! Located NW of Holton, KS in Nemaha County. Auction held at the American Legion Building, 334 2nd St., Wetmore, KS. TRACT 1: 158.37 ± acres. Great hunting, cropland, timber, pasture, creek and pond. TRACT 2: 239.37 ± acres. Pond, great hunting, heavy timber, pasture, hay meadows

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Call Auctioneers John Rupp, ALC, Jake Steven, or Terry Rupp, ALC at 316-262-6400. J.P. Weigand & Sons Auctions

Jim Brod will sell his following personal property: Millermatic wire welder Mod. 210 w/bottle (this welder is still on the original spool of wire); older acetylene torch w/bottles: small torch set w/bottles Stihl chainsaw like new; p/u fuel tank w/pump; hy draulic engine hoist; motorized post hole digger; older chainsaws; small portable air compresso w/motor; socket sets; large assortment of other hand tools; hyd. Jacks; jack stands; portable air compressor w/gas engine; aluminum p/u tool box 2-tool chests w/assortment of tools: nut and bolt bins: aluminum ATV ramps: Fimco spraver w/boom Swisher trim-n-mow; JD lawn fertilizer spreader w/ss box; Craftsman shop vac; yard tools and many other shop items.

Wayne Trauernicht will sell the following: 1982 IH 986, 1 owner, cab, air, heat, 2 remotes, always shedded.

Ensz Feed Lot will sell: Perkins 510 V8 Diesel Ir rigation motor with clutch and stand; Ford 300 6-Cyl I P Irrigation motor with clutch and cart

For pictures go to: www.homesteadland.com & click on auctions. Sale day phone 402-239-9717

TERMS: Cash or Approved Credit. A Current Bank Letter of Line of Credit must be received prior to day of sale for the Major Machinery, Trucks and Tractors. Mail to: State Bank of Odell, PO Box 185, 215 Mail St. Odell, NE 68415, or fax to 402-766-3911. Please specify Brod Farm Sale. Announcements day of Sale take precedence. All bids off at Buvers Risk. Seller and Auctioneers Not Responsible for accidents or theft. Titles will be transferred upon checks clearing the bank. Loading available day of sale. All information concerning machinery is believed to be accurate but Buyers should make their own determination as to the condition of machinery. Clerk: State Bank of Odell. Lunch: Ellis United Methodist Women

AUCTIONEERS: Dave Bures Phone: 402-766-3743 or Cell: 402-239-9717 Lee Holtmeier Phone: 785-348-5468 or Cell: 785-747-7007



CTIC SATURDAY, JULY 30 - 9:30 AM

Est. 1902

IP WEIGAND

Auction will be held in the National Guard Armory - MANKATO, KANSAS

PICKUP, GATOR, AUGER 2002 Ford Ranger XLT extended cab pickup auto air; 2012 John Deere 828 I Gator w/windshield 4x4; Lawn General 13 hp 38" riding lawn mower; 10" 60' PTO auger; gas 5650 generator; fertilizer spreader.

COLLECTABLES, **HOUSEHOLD & TOOLS**

Antiques 48" round oak table w/3 leaves; 6 oak chairs; 2 door wardrobe; painted 2 door cupboard; oak dresser; trunk; 150+ collection pink dishes inc.: (pitcher & glasses, ice bucket, many serving pieces, cracker jar, plates, cups, saucers, glasses, creamer & sugar, salt & pepper; kerosene lamp); sheet music; music books; assortment dolls; Six Million Dollar Man; Geronimo; Johnny West; Beanie Babies; collection of brown inc.: (crocks, pitchers, jugs, chicken on basket, jug, cups & saucers, tea pots, baking dishes, pie plates, bowls); giraffe collection; JD toys; games; marbles; Ranger transceiver w/morse code; Hot Wheels; Big Jim sports camper & fishing trip set; covered wagon; race track; horse shoes; post cards; sunflower collection: Christmas decorations; lanterns; cream can; wall telephone; assortment picture frames; kerosene lamps; Curico cabinet; 4 drawer chest; Singer sewing machine in cabinet; new sewing machine; 2 bedroom sets 1 has box springs & mattress: gueen box springs & mattress; entertainment cabinet; book shelves; couch; wood stove; metal folding tables; lawn chairs; wooden

cabinet; 17 cu Whirpool refrigerator; 50's high chair; Gateway computer; baby bed; table lamps; record player; records; CD's; punch bowl; 30 cup coffee maker; 2 & 3 gal water coolers; dish pans; canning cooker; roaster; pans; glasses; table cloths; bedding; suitcase; office supplies; picnic table; window air conditioner; fans; heaters; ice cream freezers: paper shredder; electric typewriter; canning jars; new weed eater; wheel barrow; tool chest; 3 table saws; hand saws; other carpenter tools; assortment wrenches & hand tools: lumber; new shingles; ladders; spraver: step stools: grill: new fire extinguishers; tent; assortment of other items.

Note: Lunch by Rock Hills FBLA. Doris is moving into town. Check our web site for pictures at www.thummelauction.com

DORIS ALEXANDER & THE LATE NEWELL ALEXANDER

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

Grass & Grain, July 19, 2016 Page 15 SEFA member wins State Proficiency Award

Local FFA members compete in Agriscience Fair

Several members of local FFA chapters were recognized for placing in the state Agriscience Fair during the 88th Kansas FFA State Convention, June 1, 2016, on the Kansas State University campus.

The Agriscience Fair is a competition for Kansas FFA members interested in the science and technology of today's agricultural sector. Students can compete in a variety of categories in fields relating to STEM education, in either individual or team divisions.

The winner in the Animal Systems category, Division II (individual, grades 10-12), was Taylor Zamrzla, of the Ellsworth FFA chapter, with a display entitled "Comparison of Feed Types on Laying Hens Growth and Development."

Winners in each Food Products and Processing Systems division are as follows: In Division II (individual, grades 10-12), the winner was MiKayla Deters, Sabetha FFA, with a display titled "Shelf Life of Different Milks." In second place was Mary Winship, Southeast of Saline FFA, with a display titled "The Effects of Different Types of Packaging on Food Preservation." In Division IV (team, grades 10-12), the winning team was Alyssa Dunnivan and Morgan Jilek, Central Heights FFA, with a display titled "Venison Tenderness."

The winner in the Plant Systems category, Division II (individual, grades 10-12), was Rachel McPherson, Manhattan FFA, with a display titled "Carbon Dioxide Consumption in House Plants." In second place was Alexandrea Julian, Ells-worth FFA, with a display titled "Soil Erosion: No Till versus Conventional Till."

Winners in each Power, Structural and Technical Systems division are as follows: In Division II (individual, grades 10-12), the winner was Wyatt Rutherford, Southeast of Saline FFA, with a display titled "The Effects of Temperature on the Strength of Cured Concrete." In Division III (team, grades 7-9), the winning team was Hayden Peirce and Koby Royer, Haven FFA, with a display titled "Comparing Welding Pro-cesses for Use in Small Farm Settings."

Ethan Dickerson earns Junior Bronze and Silver awards

Ethan Dickerson, Paradise, has earned the National Junior Angus Association's (NJAA) Bronze and Silver awards, according to Jaclyn Clark, education and events director of the American Angus Association[®] in Saint Joseph, Mo.

The 16-year-old son of David and Stephanie Dickerson attends Natoma High School and is a member of the NJAA and the Kansas Junior Angus Association, where he has served as director.

He has participated in local, state and national shows and showmanship



Ethan has submitted weight data to the Angus Herd Improvement Records (AHIR) and consigned cattle in the Bar S Ranch Production Sale.

The Bronze and Silver awards are the first two lev-

els of the NJAA Recognition Program that began in 1972. Junior Angus breeders must apply for the awards, then meet point requirements in many areas of participation before receiving the honors. Applicants are evaluated in areas of junior Angus association activities and leadership, participation in showmanship, contests and shows, using performance testing to improve their herd and their progress in producing and merchandising Angus cattle.

Columbus FFA member wins State Proficiency Award A member of the Colum- dents for exceptional ac- This position has helped

bus FFA chapter was recognized for having one of the best career development programs in the state at the 88th Kansas FFA State Convention, June 1-3, 2016, on the Kansas State University campus.

Marilyn Crain received a State FFA Proficiency Award in Agricultural Sales Placement during the convention for outstanding accomplishments she has made in developing programs that will prepare her for a career in agriculture. This award is sponsored by the Kansas Grain Sorghum Commission.

The proficiency award program recognizes stu-

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dents for exceptional accomplishments and excellence in a Supervised Agricultural Experience (SAE) program. This program allows students to set goals and gain real-world experience in a chosen area of the agriculture industry.

Crain is a sales associate at Natalini's Automotive. She began at Natalini's because the owner bought her services at the FFA chapter's work auction. Crain was then offered a part-time position after her auction hours were up. Her duties include finding and retrieving correct parts, organizing inventory, checking in freight and mailing monthly statements to customers. This position has helped Crain gain customer service experience and hone her people skills. She plans to seek an opportunity in a veterinary practice with an emphasis on large animals after graduation.

Her parents are John and Karla Crain and her advisor is K.C. Youngblood.



7/26 AT 12 NOON: 121+/-ACRES IN VALLEY CENTER, KS 121.9% acres of undeveloped land zoned SF. Current oil production. 1/2 of mineral right interest transfers. Auction conducted <u>on-site</u>. Online bidding avail. [(Valley Center, KS) 69th & HWY 135]

7/28 AT 12 NOON: 285^{+/-} ACRES IN CONWAY SPRINGS, KS ABSOLUTE! No Min, No Rest 285^{+/-} Acres of land. Leased. Oil, gas and mineral rights intact and transfer. Auction conducted <u>on-site</u>. Online bidding avail. [(Conway Springs, KS) W 60th & Conway Springs Rd]

7/28 AT 3:00 PM: 150% ACRES IN CHENEY, KS ABSOLUTE! No Min, No Res! 150.4% Acres of cultivated land. Leased. Current gas production. Oil, gas and mineral rights intact and transfer. Auction conducted on-site. Online bidding avail. [(Cheney, KS) HWY 54 & 150 Ave]

7/29 AT 12 NOON: 232^{+/-} ACRES IN VERNON COUNTY, MO ABSOLUTE! No Min, Na Rest Offered Separate PARCEL A: 72.3^{+/-} Acres. Parcel B: 160^{+/-} Acres. Both leased. Oil, gas and mineral rights intact and transfer. Auctions conducted <u>off-site</u> at Americas Best Value Inn & Suites, 2345 E. Marvel Rd. in Nevada, MO. Online bidding available. [(Sheldon, MO) Waldo & I-49]

7/29 AT 3:00 PM: 63^{+/-} ACRES IN STELLA, MO Auctioning No Min, No Rest 63.2^{+/-} Acres of land. 2-BR, 1-BA farm home. Rolling hills, cross-fencing, well and outbuildings. Auction conducted <u>on-site</u>. [(Stella, MO) Route 76 & Spruce Rd - 369 Spruce Rd, Stella, MO]

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AUCTION AUTOR AUTO

(Munjor is located 3 miles South of the Hays airport or from I70 east of Hays take the Toulon exit South to Highway 40 then 1 mile West then 3 miles south to Munjor, Kansas).

QUILTS & LINENS

40 quilts (Yo-Yo, embroidered, pieced, signature, Dresden plate, fan, wedding ring, flower garden, others, heavy tied blankets, crazy quilts); crocheted bedspreads, tablecloths; doilies; table runners; granny square afghan; partially & unfinished quilt tops, blocks & quilt pieces; partially & unfinished embroidered quilt blocks & tops; fabric modern & vintage; flour sack material; pillowcase ticking; men's ties; aprons; large assortment linens: emproidered, cut & crocheted pillowcases, crocheted, embroidered, cut work, colored cut work, Battenburg lace & tatted sheet; pillow case sets; assortment bed sheets some new in pack: large assortment hankies: cut work, lace, crocheted, embroidered, fancy, every day, linen; curtains; silk scarves, End of World War II 1945; needlepoint collection; throw pillows; assortment baby clothes; bead work fabric/clothes; embroidery, tatting & crocheting thread, some on wooden spools; thimbles; sewing supplies; buttons vintage; assortment sugar feed sacks; tea towel transfers, quilt & quilting patterns; large collection Work Basket 1949-1990: Magic Crochet & other quilting magazines: weaving loom w/manual; empty thread spool boxes; round wicker sewing baskets w/lids; treadle Singer machine; electric Singer sewing machine.

stool; small tiered stand; Victorian pedal organ; shaving stand w/mirror & basin; Victorian chair; oak arm chair; pink "flower" floor lamp; tiered wooden stand; 2 wood burning cast iron stoves; Lowrey electric organ; large desk; blonde desk; blonde china hutch; blonde end tables: floor fan: tables: couch: chairs; quilt racks; floor lamp; shelving units; cast iron patio table chairs & bench; TV; CD VCR; DEV; radios; clocks; St. Anthony Hospital in hays picture (old & new structures); pictures (Munior interior c urch w/communion rail, angels, crewel embroidery, family record, crazy quilt, cut work, oval frame; frames on stands & document box; framed documents from railroad giving/selling land in Ellis Co.; quint's picture & article: Cupid Awake Asleep; barn books & signed picture); Victorian scrap book, photo album & quilt postcard book; Ellis Co. oil field map; Munjor cemetery plot map; Kansas maps; Atlas; stamp collection; pen & pencil collection; German books; sets silverware; collector info books depression, quilts other; large dictionary & globe; sad irons; shoe stretcher w/3 sizes; small wash board; retractable clothes line; curling iron collection; large flower vases: Snowbabies; Santa's of the World collection; Home Interior figurines; Seraphim Classic Angel collection; Birthday Girl figurines; assortment of jewelry racks; perfume atomizers; perfume bottles; jewelry boxes; Japan tea cups, saucers bowls; candle holders; Victorian photo al-

postcard collection; valentines; Avon cameo brush, comb, mirror & powder set; celluloid dresser sets; green dresser wets; mirrored dresser trays; shoe figurines collection; Indian beaded purse w/picture & article; beaded purses; large assortment jewelry (Czech, Sarah Coventry, Avon, broaches. necklaces, rings, bracelets, costume, gold, silver, sterling, pearls, coral, turquoise, beaded collars, boxes,); shoe clips; lipstick cases; compacts; pill boxes; hat pins; lapel pins; bead work & beads: chai beads/crystals; assortment of pins, tie clips, award pins, medals, religious & war medals, campaign buttons; hair combs; barrettes; Jadite; Camel & Coors cigarette lighters; Busch & Coors belt buckles; coin purses: dice collection; glass inc.: cut glass carnival glass, Iris & Herringbone clear & amber; yellow, pink, green, turquoise & clear depression glass; blue & clear bubble glass; hand painted china inc.: Prussia; wheat dishes; Fiesta; hobnail; Moonstone, Ruby Red; Avon Cape Cod; collection candle holders; Goofus; oatmeal; Platzgraff; collection salt & pepper; assortment small pitchers, sugars/creamers, cups, vases, candy dishes. butter dishes: areen depression night stand lamps; kerosene lamp; plates inc.:Ellis Co church, Jimmy Carter, other Presidents; glass rolling pins; glass nut grinder; Polaroid camera; record albums (Ellis county polka bands & other); 45 records; office supplies; 2 IBM Selectric typewriters; typewriter stand.

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FURNITURE, GLASS & COLLECTIBLES

Fender double neck steel guitar in original case; trumpet; banjo; oak claw foot parlor table; foot

Note: This is a very large auction, Martina collected glass, quilts, linens and many more items for many years. The auction will be a sit down auction in a metal building. No air conditioning. Check our web site for pictures at www.thummelauction.com.

bums; calendars inc 1932;

MARTINA YOUNGER

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

New Cambria cowgirl is 2016 Miss Rodeo K-State

It was watching the rodeo queens from the stands at the Abilene rodeo that made Brooke Wallace want to be one of them.

And now the New Cambria cowgirl is the 2016 Miss Rodeo Kansas State University.

Wallace, who is 21 years old, will be a senior at K-State this fall, majoring in apparel and textile design.

As a youngster, growing up in Dickinson County, she attended the rodeo with her parents, Mark and the late Julie Wallace, and watched

the rodeo queens as they rode by on horseback in glamorous outfits. "I'd love to have the job they have," she told herself.

Wallace was two years old when her dad led her, on horseback, through the show horse arena. She has shown horses in the Eastern Kansas Horseman's Association since her youth, and graduated from Solomon High School in 2013.

It was in high school she discovered her artistic bent. She made a dress out of pop cans, then, for her junior prom, she made a duct tape dress, complete with ruffles, using 57 rolls of tape. She also made a suit for her date, so they would match.

She loves doing anything creative, including painting, sewing and wood burning. She's currently painting designs on shirt sleeves and jeans for a cowgirl competing in a National Little Britches Rodeo queen pageant. Wallace has also competed in K-State's Showcase of Excellence, a contest for artistic exhibits which is judged. She had a blouse and slacks accepted into the show her freshman year, which got sixth place.

Her sophomore year, she got third place for a dress made out of plastic grocery sacks, fused together with an iron, and last year, she won best of show with a dress made of leather for her rodeo pageant.

Wallace's mother Julie passed away two years ago



Brooke Wallace was re-

cently crowned Miss

Rodeo K-State

from ovarian cancer. "She's always in the back of my mind," she said, and she tries to incorporate turquoise, the color symbolizing the fight against ovarian cancer, into her projects. "I see that color and think of her."

This summer, she's been on the road nearly every weekend, representing K-State at rodeos across the state. She'll be in Abilene for the Wild Bill Hickok Rodeo August 3-6, riding in the grand entry each night, the parade on August 4, and signing autographs after each night of rodeo.

And there just might be another little girl, sitting in the stands, watching Wallace ride by in her flashy clothes, and dreaming of being a rodeo queen.

Abilene rodeo tickets are \$10 in advance and \$13 at the gate. Children ages four through ten are \$7. They can be purchased online at CKFF.net and at various local retailers, including Astra Bank, First Bank of Kansas, Great Plains Federal Credit Union, Pinnacle Bank, Solomon State Bank, and West's Plaza Country Mart. For more information, visit the rodeo's website at WildBillHickok Rodeo.com or call the fairgrounds office at 785-263-4570



In feast or famine, at least examine

the game we came to play 'Cause win or lose, it's how we use

the card that come our way...



MID-CONTINENT ENERGY EXCHANGE Off And Gas Asset Auctions Selling Oil & Gas Assets At Auction: Mid-Continent Energy Exchange is Now Accepting Consignments for our Summer Auction at the Wichita Boathouse. For More Information Contact:

Charly Cummings - Auctioneer: 620-496-7108 Charlus Bishop - General Info: 316-772-3613 George Beck - Consignments: 620-825-6288 Mid-Continent Energy Exchange 6730 W Kellogg Drive, Suite #3 Wichita, KS 67209 Phone: 316-217-8820 Email: cjb@mceeauction.com www.midcontinentenergyexchange.com "Just let 'er rain," the rancher said, "We've built up quite a thirst.

I know the low road's plum washed out, the tank dam's bound to burst.

We'll have to plant the wheat again and clean the water gaps

But you won't hear this fool complain if it reaches to my chaps!

The truth is, friends, we've needed this. We've been so dry so long.

I thought I'd have to sell the cows and pay the piper's song.

The winter grass just lay there, stiff, for months it never changed.

I'd walk out through the cracklin' brown that covered all my range

And watch the wind blow dust clouds where the good grass shoulda been.

I'd count the bales in the stack and calculate again.

The days of feedin' I had left before I'd have to face

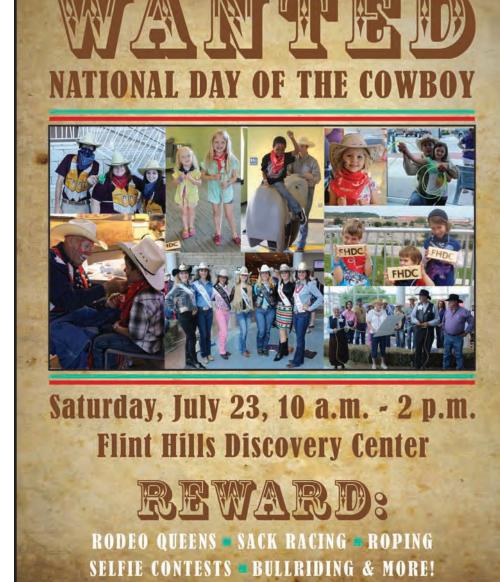
The ultimate decision, what I'd do to save the place.

The weatherman was helpful, 'cept he always told the truth!

Peddlin' chance of ten percent meant it just rained in Duluth!

That's nice for Minnesota but it don't help me a bit,

I gave up chewin' Red Man so I wouldn't have to spit!



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SCOTT SHUMAN 970.716.2120 JOHN WILDIN 620.662.0411 But he said last night, 'a chance of rain.' More than just a trace.

I washed the car and left the windows open just in case

And sure enough this mornin' big ol' clouds came rollin' in.

They parked above the driveway and the thunder made a din

That rattled all the winders in the house where I sat still.

And at two it started rainin.' I still ain't got my fill.

It's comin' down in buckets like it's payin' back a debt.

Me? I'm standin' in the front yard, in my shorts and soakin' wet!

When the sun comes out tomorrow and sparkles all around

Off pools and puddles standin' like big diamonds on the ground

I'll remember feast or famine, but when it comes to rain

Ya take the feast when offered, if ya live out on the plain."

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