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## Kassebaum Baker named 2016 Friend of the Flint Hills

By Lucas Shivers

Native daughter and former U.S. senator Nancy Kassebaum Baker of rural Morris County was named 2016 Friend of the Flint Hills on April 16 at the Flint Hills Discovery Center in Manhattan.

"Nancy was chosen for her exemplary leadership role and commitment to the Flint Hills as an elected official," said Bruce Snead, president of the Flint Hills Discovery Center Foundation.

Performing a piece of original poetry during the ceremony, Ron Wilson, who was hired by Kassebaum Baker as a legislative aide decades ago, said he saw Nancy's courage and love of Kansas first-hand when working with her.

"She helped thousands of visitors learn about the Flint Hills," said Wilson, Foundation advisory board vice president. "Nancy is a true friend of the Flint Hills."

Since 2012, the Foundation has awarded an individual, nongovernmental organization or public institution for significant time, effort and resources devoted to conserving the Flint Hills.

Alan Pollom, former director of Nature Conservancy Kansas, shared about how Kassebaum Baker prioritized Kansas natural re-



Nancy Kassebaum Baker was recently named 2016 Friend of the Flint Hills for her efforts to educate people about the value of the Flint Hills and helping to establish the Tallgrass Prairie National Preserve.

sources as a major ecosystem.

Kassebaum Baker's love of Kansas and the Flint Hills region was exemplified by her efforts, along with that of others, in the establishment

of the Tallgrass Prairie National Preserve near Strong City in 1996. 2016 marks the 20th anniversary of the Preserve and the 100th anniversary of the U.S. National Park Service.

The Preserve marked the first time a public and private entity came together and formed a partnership dedicated to preserving a portion of the last remaining stand of tallgrass prairie in North

America.

"When you ask people what they'd want in their elected folks, they'd say someone who could look at issues and propose solutions," Pollom said. "And that is exactly Nancy. Today, as a result of her vision, we have the Preserve."

As a politician who represented Kansas in the US Senate from 1978 to 1997, Kassebaum Baker introduced Pollom to several connections in her network to outline the plans for the protection of the prairie.

The Nature Conservancy and the National Park Service partnered in order to foster preservation with the opportunity to become inspired and to explore the ecological, geological and historical aspects. The Preserve is the only one of its kind in the National Park Service system.

Kent Glasscock, Foundation vice-president, reflected on words of Kassebaum Baker's father, Kansas governor Alf Landon. Landon called himself a "practical progressive and someone who knew how to recognize the problems of complex society."

Glasscock said Kansas runs on the essence of his words, and it is something all of us can learn from.

"I have never known a

more gracious legislator," Glasscock said. "Public service is the foundation of your family. We honor your phenomenal efforts – in tough times – to recognize these cherished hallmarks of the Flint Hills, cherished hallmarks of Kansas."

Accepting the award, Kassebaum Baker shared about the honor of being named the 2016 Friend.

"I know we're all here because we care about this part of the world," Kassebaum Baker said. "I came to the issue after everyone was worn out. The history goes back to the Dust Storms of the 1920s to get various efforts to support this land."

Through the 1950s and 1960s, there were many efforts to save the prairie. Kassebaum Baker shared helicopter rides and meetings to move the protection process forward in the next decades to create the Preserve in the 1990s.

"It takes an effort to understand the context and find a way forward," she said. "We did it. It was a good closing chapter – there were so many people who cared. It takes so many others."

After serving three terms in the U.S. Senate, Kassebaum Baker returned to her permanent home in the Flint Hills in 2014.

## Kuhn Krause celebrates 100 years of innovation

Kuhn Krause is celebrating 100 years of innovation during 2016. From small beginnings in Meade to the purchase of the Twin-Wheel Windmill Factory in Hutchinson (current home of Kuhn Krause), innovative ideas and equipment continue to flow and provide solutions to current farming challenges.

Innovations began in

1916, when Henry Krause (original company founder) developed the One-Way Disc Plow. The One-Way was a true innovation for the high plains wheat growing region of the United States, and soon became a staple item on many farms. These products proved to be extremely efficient in tilling the soil, managing the residue and preparing a good seedbed for the wheat of the high plains.

In later years, the Flex-Wing® Tandem Disc Harrow was developed. This innovation solved the need for larger folding equipment for increasing horsepower and farm acreage, while adapting to the rolling contours of the field. Simultaneously, the first Rock-Flex™ design was developed, which provided disc harrows the ability to work the rocky soils of the Upper Midwest and the Northeast.

In recent years, innovative products like the Gladiator® for strip-till, and the Excelsior® for vertical tillage, have become very popular among farmers. Again, the people of Hutchinson responded to the needs of farming operations

throughout North America and the world. These new product categories deliver

advanced practices for managing fertilizer placement and handling residue, while

preparing a seedbed.

As for the future, other innovations are already in

development. Once those projects have been proven

*Continued on page 3*

## Feeling the burn Kansas-style



Calmer winds for a few days in mid-April allowed for more controlled burns to be conducted, like this one near Olsburg, where the sunset added to the beauty of the scene.

*Photo by Rachael Sullivan*



## Farmers and ranchers cherish their land

By John Schlageck, Kansas Farm Bureau

Farmers and ranchers strive to protect our planet each and every day. On April 22, nearly two million agricultural producers celebrated the 45th observance of Earth Day with the rest of us who live in this country.

Like each day's sunrise and sunset, some take this

land for granted. Conservation of our planet can be a struggle because some regard the land as a commodity that belongs to them. Others see this earth as a community to which they belong.

Farmers and ranchers belong to this second category. They love, care and respect the land. Ag produc-

ers adhere to an ethic that enlarges the boundaries of our community to include soils, waters, plants, trees and animals – collectively – the land.

The fondest wish of farmers and ranchers is to pass their land on to their children. They work years to leave a legacy of good land stewardship.

There is no other way for land to survive the impact of technology and the demands put on it by man. Let us never forget that while our land yields fruits, vegetables and grains, it also yields a cultural harvest – one we as inhabitants all share and must nurture.

Today, less than two percent of our population makes its living directly

from the land. Middlemen, countless machines and sophisticated technology separate those who do not work the land from this valuable resource. Many have no vital relation to the land. To others the land is viewed as the space between cities on which crops and grass grow or cattle graze.

As we remember Earth Day, let's remember land use is not solely an economic question. Let's remember it in terms of what is ethically and aesthetically right, as well as what is economically

expedient.

The future of our land and its viability hinges on investments of time, forethought, skill and faith, rather than only investments of capital. We have continually modernized our farm equipment, plant foods, pesticides and other production inputs and we are proud of the abundance of the crops we produce.

We can never throw away these tools that have provided so much for so many. Let's renew our commitment to harmony with our life-giv-

ing land. Let's once again reaffirm our commitment to always hold sacred the land.

Renew your pledge to the earth as a community to which you belong. Nurture, love and respect this land that includes soil, water, plants, trees and animals.

*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.*

## ASA and 26 state soybean affiliates urge Congress to back TPP

In a bipartisan letter to House and Senate leadership, the American Soybean Association (ASA) and its 26 state and regional affiliates, along with more than 200 other farm and food groups, urged lawmakers to support the Trans-Pacific Partnership (TPP). The groups encouraged Congress to continue its work to approve

the TPP in 2016.

"If faithfully implemented, TPP will help level the playing field for U.S. exports and create new opportunities for us in the highly competitive Asia-Pacific region," wrote the groups. "The TPP is critical to the livelihood of the U.S. food and agriculture sector because it will create condi-

tions that encourage economic growth and increased employment in rural areas and throughout the supply chain."

ASA is a leader on trade issues, as soybeans are the nation's top agricultural export. Soybeans also see significant benefits from international trade in the form of increases in exported meats—particularly pork and chicken—from livestock that requires soybean meal as feed.

"Exports are fundamental to the success of the agricultural industry because 95 percent of the world's consumers live outside of the United States and 20 percent of U.S. farm income is from exports," said the groups in the letter. "According to the American Farm Bureau Federation, TPP will boost annual net farm income in the United States by \$4.4 billion."

ASA represents soybean farmers nationwide, and has state affiliates in Alabama, Arkansas, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New York, North Carolina, North Dakota, Oklahoma, Ohio, South Carolina, South Dakota, Tennessee, Texas, Virginia and Wisconsin, as well as regional affiliates representing the Mid-Atlantic and Georgia/Florida.



Every morning starts with chores. Really I don't mind chores and on the right morning I even kind of enjoy them. All right, maybe enjoy is a little too strong but I do like feeding animals most mornings. Sure, there are the odd mornings that I have somewhere to be or the conditions are not very nice when I think to myself, it sure would be nice not to have chores this morning.

The past couple of mornings chores have not been fun; slogging through the mud and dumping wet feed and water out of feeders is not something I enjoy. However, I have to tell myself that during this dry spell I have not had to slog through much mud or dump any water out of feeders. We need the rain so it is time to "suck it up, buttercup."

Chores are a necessary evil on any farm and deep down we all really like taking care of our animals even if it sometimes gets to be a grind. There is one chore that does make me grumble just a little more, especially when I am in a hurry. One of my best friends said it best. You don't just say, "I am going to feed the bucket calves," rather you say, "I am going to feed the bucket calves, hm-phhhh!"

Okay, before you all start calling me and offering to take them off of my hands they are not for sale for varying reasons. We have three calves; Buddy, Betty and Bunny. Tatum names the calves and loves taking care of them, when she has time. As with most teens, "when she has time" is the key phrase and the reason why Dad feeds them 95% of the time.

In the grand scheme of things I suppose they don't take all that long to feed and it really isn't the feeding process that takes that long. Making the bottles is what takes forever. I also suppose there is a better system than mine that would be more efficient and time-saving. But then what would I have to whine about? However, it does seem like feeding the bucket calves takes twice as long as the rest of the chores to do.

This morning I had a little extra time due to the rain and feeding them really wasn't a big deal. After all, it was delaying dumping wet feed and water out of the feed bunks, a chore even worse than feeding the bucket calves. Since I was not in a hurry to go about my day, I watched

the bucket calves just a bit and it was a fascinating study in animal behavior and maybe even applicable to human behavior.

Buddy is the oldest of the three and he was a twin, abandoned by his mother in favor of his sister. Buddy had some sort of a virus when he was younger that went into his knee joints and he does not move very well. Buddy is also the most laid back and friendly of the three. Betty is an orphan. Her mother was one of those ancient, good old cows that we kept one year too long. She is hyper, spoiled, and aggressive with a me-first attitude. Bunny is the product of a first calf heifer that prolapsed and despite her desire to raise her calf, did not have any milk. Bunny follows Betty and does whatever she does.

This morning I put the milk bottles out and watched. Betty pushed her way in and took the first bottle I put out, and then she changed her mind and pushed Bunny away from the second bottle. It was obvious Betty wanted to get her milk first. She attacked the bottle with such vigor that she knocked it off the fence. While I retrieved the bottle she pushed the mild-mannered Buddy away from his bottle. After scolding and pushing I got her back on the right bottle and wondered how often that happened when I was not looking.

Of course Betty finished first and then tried to muscle in on Bunny's bottle. When that did not work she went after Buddy's. Buddy was taking his sweet time and was only half-done with his bottle. With little more than a nudge he gave his breakfast up to the much more aggressive Betty. Again with a little more scolding and pushing I got her off of the bottle and Buddy back on.

It really was like little kids on the playground and, sadly enough, quite a bit like many of the adult activities I have been a part of. The more aggressive get what they want at the expense of the mild-mannered while others guard what is theirs and don't get involved. We all know people like Buddy, Betty and Bunny and can relate to them. After all, we are all animals, I guess. I will continue to grumble about feeding the bucket calves, but they are not for sale. I guess I still have a great deal I can learn from them.



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Rep. Tim Huelskamp, center, was presented an IFDA Thomas Jefferson Award by Mark Allen, left, president & CEO of IFDA and right, IFDA Chairman Andy Mercier, president & CEO of Merchants Foodservice.

## U.S. Rep. Huelskamp receives Thomas Jefferson Award

Rep. Tim Huelskamp has been named as a recipient of the 2016 Thomas Jefferson Award. The award is presented by the International Foodservice Distributors Association to lawmakers who support the free enterprise system. IFDA members touch American lives every day, helping restaurants and other food-away-from-home customers deliver a great dining experience. The Thomas Jefferson Award recognizes legislators whose work in Washington will help distributors accomplish this mission.

During each Congress, IFDA presents this award to Senators and Members of Congress who demonstrate, through their voting record, a commitment to increasing economic opportunity and reducing government regulation. The 2016 award is based on votes during the 114th Congress on issues critical to the health of the foodservice distribution industry and the nation's over-

all economy.

"The foodservice distribution industry is pleased to thank Representative Huelskamp for supporting policies that will help our members grow their businesses," said IFDA president and CEO Mark S. Allen. "Our industry still believes that Thomas Jefferson's vision of a strong free enterprise system, with limited government involvement in the economy, is the path to prosperity. We appreciate Representative Huelskamp's support for our industry."

The program was introduced in 1992 and was inspired by Thomas Jefferson, who in his first inaugural address said, "A wise and frugal government... shall leave men... free to regulate their own pursuits of industry and improvement, and shall not take from the mouth of labor the bread it has earned. This is the sum of good government."

## Should farmers share more? Consumers say yes

By Julia Debes

With wheat harvest quickly approaching, eyes all over the world are watching the Kansas crop. This includes consumers, who consistently report that they want to hear from the farmers who produce the foods they eat.

"There's nothing quite as personal as the food we consume and feed our families," the Center for Food Integrity (CFI) stated in its most recent research report, which detailed how farmers and food companies can meet consumer desires for more information on how their food is produced and processed.

Since 2007, the Center for Food Integrity (CFI) has conducted research on consumer trust as related to the U.S. food system. Their 2015 research report, titled "A Clear View of Transparency and How It Builds Consumer Trust," builds on three years of research into how consumers perceive food system transparency and what farmers and industry groups can do to more effectively communicate with consumers in a meaningful way.

### ISO: More Transparency and Engagement

CFI explored transparency as related to six different subjects: food safety, impact of food on health, environmental impact, labor and human rights, animal well-being and business ethics. According to CFI's research, consumers rated food safety and impact of food on health as top priorities for information. As stated in the report, that data includes ingredients, allergens and preservatives and if ingredients were derived from GMO seed.

In all categories, consumers wanted the ability to engage with food companies - not only by having information provided in easy-to-access ways like a company website, but also by having the ability to dialogue on issues with companies.

Just behind food companies, consumers ranked farmers as second in all six categories when asked who has the responsibility to demonstrate transparency. In particular,

farmers and food companies were virtually tied in responsibility for disclosure of environmental impact.

### Continuing a Positive Trend

Over the last eight years of study, CFI stated a larger percentage of consumers reported having access to information about food production and safety. Still, less than 30 percent of consumers overall strongly agreed with the statement "I have access to all of the information I want about where my food comes from, how it is produced and its safety."

To take these results a step further, CFI analyzed how this desire for information and engagement can turn into social outrage in situations like a food illness outbreak. CFI determined two elements contribute to triggering social outrage: "a high level of concern about the issue and a strong belief that the issue will have a personal impact, or impact vulnerable populations like children and the elderly."

CFI also examined the most effective ways for farmers and food companies to manage these social outrage situations. The report stated transparency plays a key role and broke down the concept into seven elements: motivation, disclosure, stakeholder participation, relevance, clarity, credibility and accuracy. CFI pointed out that motivation, or acting "in a manner that is ethical and consistent with stakeholder interests" is particularly important for consumers who perceive big companies - like commercial farms or large food companies - as "motivated more by profit than public interest."

Whether a food company is responding to a recall or illness outbreak or a farmer is simply trying to answer questions about the environmental impact of his operation, the report results boil down to one basic concept: "It's simple: If you increase transparency, you will increase trust."

## New method developed for testing herbicide resistance in weeds

Ask any farmer, and you'll hear that weeds are a major headache. Even worse are weeds that have developed resistance to the herbicides designed to kill them. This is the case for waterhemp, a broadleaf weed commonly found in corn and soybean fields. Many populations of waterhemp and its aggressive cousin, Palmer amaranth, have become resistant to atrazine, mesotrione, and a number of other commonly used herbicides, sometimes leading to significant yield losses in corn and soy crops.

"If you continue to spray the same herbicide on plants, there is a chance that a very small number of them will survive and reproduce. Some of their offspring will be resistant to the herbicide. By using the same herbicide over generations, we are selecting for weeds that are resistant to that chemical," says University of Illinois postdoctoral researcher Rong Ma.

Plants use a variety of mechanisms to avoid the toxic effects of herbicides. The most common mechanism, known as target-site resistance, comes from a gene mutation that keeps the herbicide from attach-

ing to the proteins it is designed to destroy. The presence of these mutations in waterhemp populations can be quickly tested genetically, if the site of the mutation is known in advance.

Another mechanism is known as metabolic resistance. In this case, the plant uses common enzymes to detoxify the herbicide before it even reaches the protein it is meant to destroy.

"Humans also have these broad, detoxifying enzymes. They can help detoxify drugs or chemicals we consume," Rong explains.

The enzymes responsible for metabolic resistance aren't always known, although they generally fall into one or two broad classes, P450s or GSTs.

"The problem is that plants have hundreds of these P450s or GSTs and we haven't yet identified which are responsible for resistance to the particular herbicide," says U of I weed scientist Dean Riechers.

Since the genes for those enzymes are usually unknown, it is not possible to test for them using the traditional genetic methods. Ma, along with a team of re-

searchers at U of I led by Riechers, have developed a new technique that can accurately test for metabolic resistance without relying on knowledge of the specific gene(s) involved.

The new method involves exposing a single small leaf blade to a radioactively labeled herbicide and then determining how much of the herbicide is left after the leaf has a chance to metabolize it. The less herbicide remaining over time, the more resistant the plant is.

The study tested three populations of waterhemp and two herbicides, mesotrione (Callisto®, an HPPD inhibitor) and primisulfuron-methyl (Beacon®, an ALS inhibitor). Although different populations appeared to detoxify the two chemicals using different biochemical mechanisms, the new method worked for both.

"The method should work for additional herbicides and even different weeds or crops," Riechers says. "We tested a third herbicide using the method with excised soybean leaves, and it worked. And

as long as the leaf or petiole can fit in the tube, it should work for almost any plant."

Although the new method does not pinpoint the exact genes responsible for enhanced herbicide metabolism in resistant populations, it does indicate the general class of genes and the mechanism involved. The next step for the research team is to identify specific genes and eventually develop markers for rapid testing using conventional genetic methods.

Riechers says that other universities and companies are already using the new technique.

The article, "Measuring rates of herbicide metabolism in dicot weeds with an excised leaf assay," is published in the *Journal of Visualized Experiments*. Joshua Skelton, also from U of I, was a co-author on the article with Ma and Riechers. Funding was provided by Syngenta Crop Protection.

A ten-minute video offering a step-by-step description of the new method accompanies the article; both are available at [www.jove.com/video/53236?access=6gkjgqfs](http://www.jove.com/video/53236?access=6gkjgqfs).

## Kuhn Krause celebrates 100 years of innovation

Continued from page 1

through rigorous testing, Kuhn Krause will deliver other innovative solutions to farmers and continue to enhance row crop production agriculture for another 100 years.

Kuhn Krause, Inc., a subsidiary of Kuhn North

America, Inc., is a leading innovator in the field of agricultural equipment, specializing in tillage and grain drill equipment. Kuhn Krause products are sold through farm equipment dealers throughout the United States, Canada and many other countries.

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**GRASS & GRAIN** *Our Daily Bread*  
 \*\*\*\*\* By G&G Area Cooks \*\*\*\*\*

*Jean Wilson, Alta Vista, Wins This Week's Grass & Grain Recipe Contest*

Winner Jean Wilson, Alta Vista: "I'm always looking for crock-pot recipes — this one is different and oh, so good!"

**CHICKEN FLORENTINE**

- (2) 10-ounce packages frozen chopped spinach
- 2 1/2 pounds thawed chicken breasts
- (2) 8-ounce packages cream cheese
- 1 cup finely grated Parmesan cheese (the canned one is fine)
- 1 teaspoon salt
- 1/2 teaspoon black pepper
- 1 1/2 teaspoons onion powder
- 1 teaspoon garlic powder
- 1 large onion, chopped
- 1 1/2 cups chicken broth
- Cayenne pepper to taste (optional)
- Cooked linguini

Put the frozen spinach in the bottom of the crock-pot. Add the thawed, drained chicken breasts. Blend the cream cheese with the seasonings (except the cayenne) and add to the crock-pot. Add the onion and broth. Cook on low heat for 8-10 hours or on high for 5-6 hours. Break up the chicken and stir into the sauce before serving over cooked linguini. Season to taste with the cayenne if desired.

\*\*\*\*\*

Ireta Schwant, Blaine: "This is a really good wake-up treat with your favorite cup of coffee."

**MONKEY BREAD**

- 3 tubes refrigerator biscuits
- 1/2 teaspoon cinnamon

- 1/3 cup sugar
- 1 1/2 sticks butter or oleo
- 1 teaspoon cinnamon
- 1 cup brown sugar

Combine butter/oleo, cinnamon and brown sugar; boil for 2-3 minutes. Pour over biscuits. Bake at 350 degrees for 25 minutes. Cool for 10 minutes and turn out onto a plate. These can be made up the night before, kept in refrigerator and baked in the morning.

\*\*\*\*\*

Nancy Horne, Alta Vista: "I made this recipe at our daughter & son-in-law's home. Our son-in-law liked it so much. He went out the next day after work and picked up the ingredients for me to make it again."

**CARAMEL APPLE DELITE**

- 1 (4 serving) package regular or sugar-free instant butterscotch pudding mix
  - 1 cup plain yogurt
  - 2 small apples, cored & finely chopped (1 cup)
  - 1 cup crushed pineapple packed in its own juice, undrained
  - 1 ounce or 1/2 cup miniature marshmallows
  - 1 cup whipped topping
- In medium bowl combine pudding mix, yogurt, apples and pineapple with juice. Mix well. Add marsh-

mallows and whipped topping. Mix gently to combine. Cover and chill until ready to serve.

\*\*\*\*\*

Millie Conger, Tecumseh:

- BAKED CHEESY GRITS**
- 1 teaspoon salt
  - 4 tablespoons butter
  - 1 cup stone ground grits
  - 1 cup mozzarella cheese
  - 1/2 cup cream cheese
  - Pinch of salt

Bring 1 quart water, the salt and butter to a boil in large saucepan. Slowly whisk in the grits. Lower the heat and cook, stirring often, until the grits become soft and creamy, about 20 minutes. Remove from the heat and fold in the cheeses, and more salt. Serve right from the pan or you can bake at 350 degrees for 15 minutes.

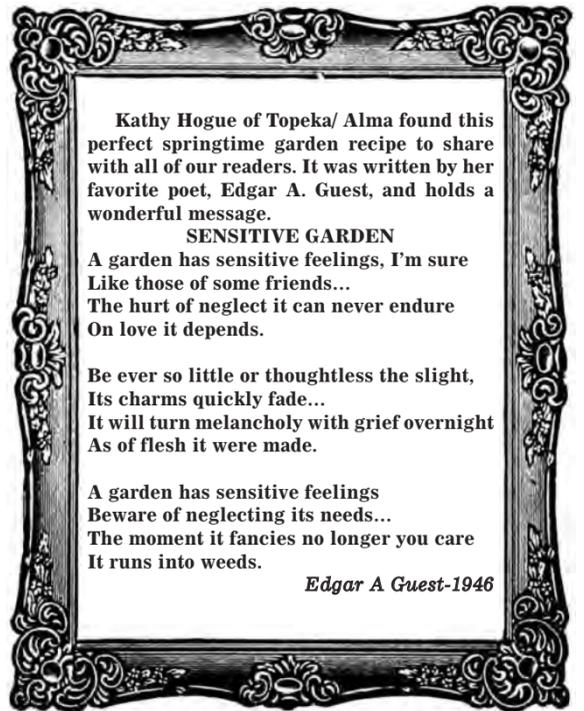
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Lydia J. Miller, Westphalia:

- CHOCOLATE TOFFEE CAKE**
- 1 box German chocolate cake mix
  - 14-ounce jar caramel topping
  - 14-ounce can sweetened condensed milk
  - 8-ounce tub whipped topping
  - 1 cup milk chocolate toffee bits

Make cake per the directions on the box. Let cool until just a little warm. Use the end of a wooden spoon and poke holes all over the cake. Pour the caramel over the top, smoothing evenly. Let the caramel soak into the cake. Pour the sweetened condensed milk over the top smoothing evenly. Cover and chill in the refrigerator. Cover with whipped topping then sprinkle the toffee bits over the top.

\*\*\*\*\*



Kathy Hogue of Topeka/Alma found this perfect springtime garden recipe to share with all of our readers. It was written by her favorite poet, Edgar A. Guest, and holds a wonderful message.

**SENSITIVE GARDEN**

A garden has sensitive feelings, I'm sure  
 Like those of some friends...  
 The hurt of neglect it can never endure  
 On love it depends.

Be ever so little or thoughtless the slight,  
 Its charms quickly fade...  
 It will turn melancholy with grief overnight  
 As of flesh it were made.

A garden has sensitive feelings  
 Beware of neglecting its needs...  
 The moment it fancies no longer you care  
 It runs into weeds.

Edgar A Guest-1946

**Homemade Salad in a Jar**

By Cindy Williams  
**Meadowlark Extension District Agent**

**Food & Nutrition, FNP**

Have you tried making salad in a jar? You can use a Mason jar (the type used in canning) or another large glass jar with a cover. The salads look very colorful and appetizing. Your layered salad is rich in fiber, vitamins and minerals. Here's an example of how to layer a salad in a jar.

\*Add 2 tablespoons of your favorite salad dressing to the bottom of the jar.

\*Add a layer of "hard" vegetables, such as carrots, cucumbers, broccoli and radishes. These vegetables protect the layers from getting soggy.

\*Add cooked beans or brown rice next.

\*Add protein such as canned tuna, hard-cooked eggs, leftover roasted chicken or other protein.

\*If desired, add soft vegetables or fruits such as avocado slices, tomato chunks, or diced strawberries.

\*Add nuts or seeds, such as almonds, walnuts, or sunflower seeds.

\*Add salad greens; especially dark green ones (romaine, etc.)

\*Top the jar with the lid and store in the refrigerator. When you carry it to work, try an insulated lunch bag to keep it cool or store in the refrigerator.

\*Use within four days for best quality.

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**FURNITURE/ HOUSEHOLD:** Pub-style table w/4 chairs, portable room air conditioner (floor model), 2 entertainment centers, couch, 4 piece queen newer oak bedroom set with lamp, 2 computer desks, chest of drawers, storage cabinet, cedar chest, bookcase, hall tree, full metal bed, wood drop leaf table, queen size bed frame, patio table with 4 chairs, outdoor bistro set (table & 2 chairs), lamps; Appliances: microwave, Kenmore electric dryer, GE electric dryer, Samsung over the range microwave; **GLASSWARE/DISHES:** red Amberina glassware (Fenton, Indiana Glass, Blenko, etc), asstd. Knowles/Bradford Exchange "Children's" collector plates, various dishes, pots & pans, canning jars, silverware, utensils, punch bowl w/ 8 cups; **ELECTRONICS:** 32" Vizio Flat Screen TV, surround-sound system; various computer components; stereo, surround sound speaker system, 2 dvd players; **COLLECTOR ITEMS:** thimble collection, angel collection, bell collection, NASCAR memorabilia; political & advertising memorabilia, Terry Redlin and Currier & Ives tins; **OUTDOOR/LAWN:** push mower, pull behind fertilizer spreader, Scotts fertilizer spreader, pull behind lawn trailer, 15 gallon pull behind sprayer with 12' boom, weed eater, Raintrain lawn sprinklers, power washer, garden hoses & garden tools, gas grill, 2 propane tanks; **TOOLS:** Stihl 16" chainsaw w/ case & extra chain, (excellent condition), combination ladders (10' and 28'), metal saw horses, router & bits, belt sander & palm sander, table top belt sander, small shop table, tool boxes, 5 socket sets, table vice, band saw, scroll saw, 2 metal shelf racks, table top grinder, car ramps, small dolly, 3 electric heaters, assorted tools; **DIY ITEMS:** large antique porch posts/pillars, furniture & pieces, including a fainting couch and tables, new wooden door w/frame, antique wheel barrel, doors (30" wide 2 panel doors); **MISC:** large assortment of outdoor Christmas decorations and lights, craft supplies, Pack n' Play, children's toys, snow skis, frosted angel glass window, 6 1/2 foot white pine Christmas tree, 3 drawer plastic storage container, shelves, pictures, cookbooks, bedding, blankets, yarn, fabric, quilts.

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## Stay Strong, Stay Healthy: K-State rolls out new program for Kansans

The eight-week program for older adults is designed to boost health and quality of life.

MANHATTAN — Eat healthy — check. Get aerobic exercise — check. Do strength training — not so much.

The loss of muscle mass can slip up on us without warning. At some point, we realize we can't do the things we used to but also don't know how to counter the process. Kansas State University has launched Stay Strong, Stay Healthy to help older adults regain strength while improving their balance, flexibility and overall health.

"Adults start to lose muscle mass, even as early as our 30s. And in our 50s, it starts to accelerate," said K-State Research and Extension family and consumer science specialist Sharolyn Jackson. However, older adults are sometimes reluctant to start strengthening activities to counter the effects of aging on their bodies. The idea of going to a gym or not knowing the proper exercises to do at home can keep people from starting.

"We're excited to bring Stay Strong, Stay Healthy to Kansas," said K-State family and consumer science specialist Gayle Price, who coordinates the program with Jackson. It originated at Tufts University and was initially designed for women. The University of Missouri adapted it for men and women. K-State is using the Missouri adapted program.

The program is offered at a minimal cost in many county and district K-State Research and Extension offices and starts at different times of the year, depending on location. To learn more about the program and find out if your local Extension office is offering the class, check the website <http://www.k-state.edu/staystrong/>. You can also contact Price at 620-820-6123 or [gprice@ksu.edu](mailto:gprice@ksu.edu), or Jack-

### Benefits of strength training for older adults

Research has shown the health benefits of strength training, including:

**Muscle mass and strength** — Muscle mass and strength decrease during the aging process. Several studies have shown increased muscle mass and strength in older adults after performing resistance exercise.

**Restoration of balance and flexibility and a reduction in falls** — A study in New Zealand showed a 40 percent reduction in falls with simple strength training in women 80 years and older.

**Arthritis relief** — A Tufts University study showed that strength training decreased arthritis pain by 40 percent. The effectiveness of strength training to ease the pain of osteoarthritis was as potent as medications for many participants. Similar effects of strength training in patients with rheumatoid arthritis have also been demonstrated.

**Sleep improvement** — Recent research showed improvements in sleep among older adults who participated in strength training.

**Cardiovascular health** — Tufts University found that cardiac patients gained strength, flexibility and aerobic capacity when they did strength training three times a week as part of their rehabilitation program. This and other studies prompted the American Heart Association to recommend strength training as a way to reduce the risk of heart disease and as a therapy for patients in cardiac rehabilitation programs.

**Improved glucose control** — Diabetes is common in American adults. A recent study of Hispanic/Latino men and women conducted by Tufts University showed that 16 weeks of strength training produced dramatic improvements in glucose control. Seventy percent reduced their medication.

— Source: K-State Research and Extension

son at 785-532-2273 or [sharolyn@ksu.edu](mailto:sharolyn@ksu.edu).

Participants in Stay Strong, Stay Healthy meet for one-hour sessions, twice a week for eight weeks. Activities include warm-up exercises, strengthening exercises with and without weights, and cool-down stretches. Class members are encouraged to do the exercises on their own once more per week. Most training locations will provide weights for use during the program.

Post-menopausal women can lose 1 to 2 percent of their bone mass annually, said Price, who noted that research has shown that strength training restores bone density and reduces the risk of fractures among women aged 50 to 70.

Other potential benefits of strength training include a decrease in arthritis pain, weight maintenance, and a reduction in the risk of diabetes, heart disease and depression. Stress management and improvement in sleep

quality and overall physical vitality are other potential benefits.

Price, along with Jackson and Extension agents, have been through the training course and are certified to teach the class.

"I'm a pretty active person. I try to walk every day. I thought I was in pretty good shape, but these exercises made a difference in me," said Price, who added that she's continued to do the exercises since going through the training and has improved her upper body strength, particularly.

## Eat the "Get Rich" Way

By Nancy C. Nelson  
Meadowlark District Agent  
Family Life

Is it possible to "get rich" from food? It certainly is, when "getting rich" applies to your health. This aspect is emphasized in the Walk Kansas health initiative.

Nutrient-dense foods offer rich benefits with relatively few calories. The term "nutrient dense" indicates that the nutrients and other beneficial components in a food have not been diluted by the addition of calories from added solid fats, sugars, sodium, or refined starches. Nutrient-dense foods also retain naturally occurring components such as dietary fiber. A good example of this is whole fruit and fruit juice. The fiber is retained in the whole fruit, making it nutrient dense.

All vegetables, fruits, whole grains, seafood, eggs, beans and peas, unsalted nuts and seeds, fat-free and low-fat milk and milk products, and lean meats and poultry are nutrient-dense foods, provided they are prepared without adding solid fats or sugars.

The American diet is said to be increasingly energy-rich (calories) yet nutrient-poor. There are many opportunities throughout your day to make the nutrient-rich choice. Take lettuce, for example.

Iceberg lettuce is very popular, but the least nutritious. It is a good source of water and very few nutrients. The nutrient value goes up as the green in leaves gets darker. Choose a dark green leafy lettuce or spinach for salads, on

sandwiches, and in wraps. Go for hummus and veggies instead of chips and dip. Choose whole-grain bread instead of white. Beans are a nutrient dynamo food high in low-fat protein, packed with fiber and containing a host of nutrients. Add them to soups, stews, burritos, or scrambled eggs. Sprinkle them in salads and blend with spices for great spreads or dips. Beans are the only food recognized in two food groups, vegetables and proteins.

Nutrient density applies to beverages also. Soda is a classic "empty calorie" beverage. Choose water, tea, or non-fat milk with meals, and drink water throughout the day. Fruit-infused water is a refreshing change from plain water.

## All about Asparagus

By Cindy Williams  
Meadowlark Extension  
District Agent  
Food & Nutrition, FNP

Asparagus is in season from April to May and is a fat-free, low sodium vegetable that provides lots of nutrients and only three calories per spear. Nutrients found in asparagus include:

\*Folate — reduces risk of heart disease, dementia and neural tube defects.

\*Vitamins A and C — reduces risk of heart disease and certain cancers, and protects eye and skin health.

\*Vitamin K — essen-

tial for bone formation and blood clotting

\*Potassium — maintains healthy blood pressure

\*Rutin — strengthens capillary walls

\*Inulin — a food source for the good bacteria in large intestine

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## Two canola field tours scheduled April 28 for south central Kansas

Two canola field tours will be held in south central Kansas on Thursday, April 28. The tours will present a good opportunity for producers to get the latest production information and check out how different cultivars are doing so far this spring, said Mike Stamm, Kansas State University canola breeder.

"After a couple of hard winters, this year's canola crop has come through the winter strong and has han-

dled the dry spring weather well," Stamm said. "We want to give producers an opportunity to see the latest winter canola varieties available to them. We'll talk about the variety differences."

"Also, K-State Research and Extension has partnered with AGCO to evaluate a novel residue management system for canola planting and common producer planting practices, and we would like to share

what we've learned from this on-farm research project," he added. The first tour will start at 10 a.m., just east of Conway Springs. To get to the location, drive east two miles on Parallel Street from the Kansas Route 49/Parallel Street junction and the plots will be on the south side of the road. At this site, producers will see a 30-entry winter canola variety trial that includes materials from nine different seed companies.

Growers will also observe canola planted with the AGCO residue management system and common producer planting practices.

Lunch will be sponsored by Triple Threat Ag Services. Please RSVP to the Sumner County Extension office before April 26 by calling 620-326-7477. There is no charge to attend, but an ac-

curate count is needed for lunch. The second tour will be held later on April 28 at 3 p.m. near Kiowa. To get to the location, drive three miles south of the state line on HW-8 and turn west on E0040 Rd for one-half mile. Producers will see a second site of the AGCO residue management system and producer planting prac-

tices. From here, the group will move to the National Winter Canola Variety Trial, which includes 24 open pollinated varieties and 24 hybrids in side-by-side trials.

For more information, contact Mike Stamm at 785-532-3871 or [mjstamm@ksu.edu](mailto:mjstamm@ksu.edu).

## Tractor and machinery safety trainings offered

Federal law requires youth ages 14 and 15 to participate in a Hazardous Occupations Training and become certified in order to work for hire for anyone other than their parents. Youth must pass a safe tractor and machinery opera-

tion program to be certified. To meet this requirement the River Valley Extension District will conduct a district-wide Hazardous Occupations Trainings/Tractor and Machinery Safety Training May 14th. The training provides trainees with knowledge of tractor, machinery, and other farm hazards to reduce the farm accident rate. It also provides sufficient information to pass a written examination and an opportunity to demonstrate their ability to pass a safe tractor driving examination.

The training will be Saturday, May 14, 2016 from 8:30 a.m. to 4:30 p.m. at CTI John Deere in Concordia.

Pre-registration has been extended to Monday, May 2nd. Register at any River Valley Extension District office. Cost of the course is \$20 and includes materials and refreshments. You must provide, name, address, date of birth, and contact information as well as pay the fee at registration time. Youth must complete assignments before coming to class, must attend the entire day, and then must complete a driving requirement in order to receive certification.

Contact the River Valley Extension Office at 785-243-8185 with questions or to register.

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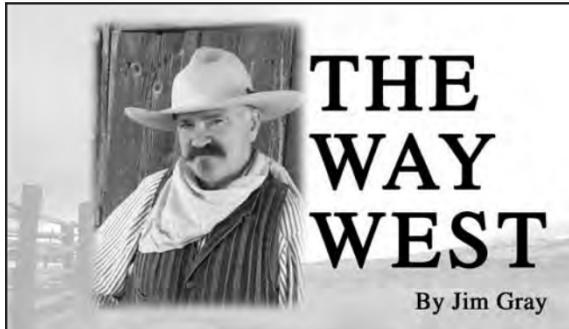
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## The Illusive "Cattle Highway"

Trailing cattle long distances has always come with its challenges. When Texans began driving cattle to northern states they found impediments along the way. There were the usual problems with storms, stampedes, flooded rivers, and paying Indians for passage through their reservations. But, nothing was as trying as the threat of Texas cattle fever.

Not that Texas drovers needed to fear Texas fever, their cattle were generally immune to the malady. Texas fever was identified as early as 1814 in South Carolina. In 1853 trail herds were blockaded by Missouri farmers fearing the transmission of Texas fever to

their domestic herds.

Throughout the 1850s a few bold Texans drove through Missouri to the market at St. Louis and the feed yards of Illinois in spite of the quarantine. A good drover not only had to know cattle and the business of trail driving, he soon learned the ropes of diplomacy as he carefully passed through the hostile stock farm country in Missouri. However, diplomacy could not overcome the War Between the States. Throughout the Civil War Texas cattlemen abandoned the idea of trailing to the Yankee markets in the north.

With the close of the war cattlemen returned to the trail in hopes of recouping

the losses incurred after four long years of war. Texas fever had not been forgotten. Drovers found the Missouri border blockaded.

In February of 1867 the *Emporia News* reprinted an article originally published by the *St. Louis Farmer's Advertiser*. The author, Albert Badger, hailed from Nevada City, Vernon County, Missouri, a county served by the major cattle trail of the time, the Shawnee Trail.

Mr. Badger was writing for Missouri stockmen; nevertheless, Texas Cattle Fever was of great concern to Kansans as well. By 1865 the movement of cattle had spilled over into the Kansas prairie. An eyewitness from Greenwood County reported that the route over which Texas cattle had been driven could be traced by the carcasses of domestic cattle around the watering and camping places.

Badger offered an interesting solution to the problem, with the suggestion that the state of Missouri sanction a toll road from the Missouri border to the nearest railroad, "running as much as possible through our prairies" while keeping the cattle segregated from the domestic herds. Unfortunately for Texas drovers, Missouri officials were content to deal with Texas fever

through existing quarantine law instead of implementation of the proposed "cattle highway."

Cattle buyers found Texas fever difficult to manage as well. The Northern appetite for beef was growing and traditional sources were rapidly being exhausted. Texas cattle offered a seemingly inexhaustible source of beef. But how could drovers and potential buyers get that beef past the stock farms of Missouri and the Midwestern states.

In 1867, the same year that Mr. Badger called for a cattle highway across Missouri, Joseph McCoy, an Illinois cattle buyer, established Abilene, Kansas, as a marketing center. Abilene was chosen for its access to the only railroad that had been built into the isolated plains. Texas fever was not expected to be a problem because few farmers and small stockmen had yet ventured that far west.

That situation would be short-lived. The open range around Abilene quickly filled up in a patchwork of small farms and ranches. McCoy was faced with the same problem of getting cattle past domestic cattle herds to his market. Turning to the governor and political sources McCoy hoped to have a "road" designated

for cattle traffic from the southern Kansas border to Abilene with protections built in for drovers and their cattle herds. The Chisholm Trail was being threatened by settlement. Again, nothing came of the proposal.

To the west, the town of Ellsworth hoped to cash in on the lucrative Texas cattle trade. The Kansas Pacific Railway was more than happy to provide a siding for Ellsworth to load cattle and present Joseph McCoy with competition. Ellsworth's crafty promoters worked closely with Topeka politicians in hopes of luring the cattle away from Abilene. Consequently, in 1869, Governor James Harvey signed an act to establish a new state cattle highway to Ellsworth. The proposed route of approximately 280 miles ran from Fort Cobb, Indian Territory, due north to Ellsworth. Ellsworth had every opportunity to take over the cattle trade,

but their efforts fell silent after Texans, loyal to Abilene, failed to drive their longhorn cattle to Ellsworth.

The idea of a protected cattle highway did not again come to light until the State of Kansas outlawed Texas trail cattle in 1885. Drovers and buyers alike united in a grand effort to influence federal legislation toward a National Trail from Texas to Canada, but once again politicians simply did not act. As the era of the long cattle trail came to a close the idea of a great cattle highway proved to be as illusive as a shimmering prairie mirage on The Way West.

"The Cowboy," Jim Gray is author of the book *Desperate Seed: Ellsworth Kansas on the Violent Frontier and Executive Director of the National Drovers Hall of Fame*. Contact Kansas Cowboy, P.O. Box 62, Ellsworth, KS 67439. Phone 785-531-2058 or [kansascowboy@kans.com](mailto:kansascowboy@kans.com)

## Grazing management: toxic plants publication aims to help producers

With so many potential dangers lingering in grazing pastures, it's crucial for producers to understand which plants could harm cattle and other livestock if they are consumed. A new publication available through K-State Research and Extension provides information on these potentially deadly plants.

"It is the first of any publication I have found that specifically looks at plants, or cover crops, that are issues for livestock," said Jaymelynn Farney, Kansas State University assistant professor of animal science and one of the publication's authors. "We don't want producers to plant some kind of forage without them knowing the potential issues that can come from it."

Some producers could be feeding their cattle toxic plants and not know it, which was one of the driving factors for creating the publication, said Farney, a K-State Research and Extension beef systems specialist located in southeast Kansas.

"When visiting with producers and traditional cover crop enthusiasts, some of the plants they said they put in the mixture made me a little nervous from the livestock side," Farney said.

The plant to be worried about the most, according to

Farney, is hairy vetch. It is unknown why it can cause death in livestock, and there is currently no way of managing it, which makes it such a threatening and silent killer.

"Hairy vetch grows well and contributes a lot of nitrogen, so people like to plant it. However, it is an indiscriminate killer," Farney said. "When you have cattle that are allergic to it, you have essentially 100 percent death loss. Now, you might have cattle that are perfectly fine (grazing) on it. But, then you might come out one day to find your cattle are dead."

Other plants that can poison cattle are lupin and amaranth. Lupin is a good source of protein and energy in livestock feeds, but its use should be limited to four nontoxic species. Six other species could be toxic to cattle and sheep, according to the publication.

Amaranth is a bushy plant that is related to pigweed, and it also has different species. Palmer amaranth is consistently high in nitrate and potentially toxic to cattle, so it is important for producers to know the amaranth species before using it as a forage crop for livestock.

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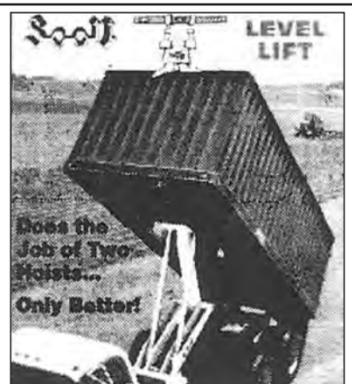
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# AROUND KANSAS



It has been a busy spring. For my birthday, Dr. Jake took me to Colorado to Bent's Old Fort National Historic Site. It is an incredible site with such great folks interpreting the history, including John Carson, descendant of the famed scout, who recreates his ancestor for audiences.

Then we went toward Lamar to see the site of Bent's New Fort, Fort Lyon, and Fort Wise. This was the place I had yearned to visit.

It is on private property, on a rise over a bend in the Arkansas River, much more scenic than the setting of

Bent's Old Fort. There are no buildings left, just ruins, banks and dips of earth. The Santa Fe Trail Society has marked the site well, however, the and the owner of the property is proud of the history and amenable to respectful visitors.

My personal interest stems from the fact that Lt. J.E.B. Stuart was stationed at Fort Wise and wrote letters from the site up until he left to resign the U. S. Army and pledge his sword to Virginia. Jeb was our hometown boy, born just three miles from my home place in Ararat, Virginia. It seems

I have followed him my whole life. From Ararat, to Richmond, and finally, to Kansas. He was at Leavenworth, Riley, Black Jack, the Santa Fe Trail, the Kaw, the Solomon, and all points in between. It was pretty emotional for me to stand in this spot.

The interconnectedness of all these sites and more is sometimes overlooked as we look back over the past. Each place, each person seems a stand alone when they were, as are we today, part of a community, which brings me to Fort Larned.

Like most of our western forts, Larned was designed to protect commerce. Located on the lucrative Santa Fe Trail, the post was originally located a few miles east of its permanent site. David Bell, an officer in the 1st US Cavalry, established a camp on the Pawnee Fork in October, 1859. It later became Camp Alert and finally, Fort Larned in honor of Col. Benjamin F. Larned, paymaster

general of the U.S. Army.

The web offers a great overview of the fort's history. Larned also served as a central location to distribute annuities to the Plains Tribes, as prescribed by the Fort Wise Treaty of 1861. Several Arapahoe and Cheyenne leaders had ceded to the U S government much of the land promised them in the Fort Laramie Treaty ten years earlier. (Interpretation of the Fort Wise Treaty only led to further conflicts, including the Sand Creek Massacre of 1864.) For several years, the agency for the Cheyenne and Arapahoe was located at Fort Larned.

Fort Larned was the site of a meeting between General Winfield Scott Hancock and several Cheyenne chiefs on April 12, 1867, in which Hancock intended to impress the Dog Soldier chiefs with his military power. Following that meeting, Hancock, along with George Armstrong Custer

and the 7th U.S. Cavalry traveled west of Fort Larned to a combined Cheyenne and Lakota camp, inciting the villagers to flee. Hancock ordered the village burned, beginning a summer of warfare known as Hancock's War. Fort Larned assisted in bringing Hancock's War to an end by supplying the Medicine Lodge Treaty.

During the winter of 1868-69, U.S. Major General Phil Sheridan launched a campaign against the Cheyenne, Kiowa, and Comanche Indians on the Great Plains. By the end of the Winter Campaign, Sheridan had successfully forced a majority of the Indians in the Fort Larned area onto reservations.

The post was abandoned in July, 1878, and five years later the Fort Larned Military Reservation was transferred from the War Department to the General Land Office of the Department of the Interior. From 1885 to

1966, the buildings were used to house the headquarters of a ranch. In 1957 the Fort Larned Historical Society was founded to develop and open the site as a tourist attraction. The fort was designated as a National Landmark in 1961 and in 1964 it was incorporated as a unit of the National Park System.

In celebration of the 100th anniversary of the park system, there is no admission charged to sites throughout 2016. Take advantage of this to see as many sites as possible, including Bent's Old Fort and the Sand Creek Massacre Site NHS, both of which would have been a part of the Kansas Territory (Dr. Jake and I walked the ridge line of the site and it is such a moving experience). Check out the great events at Fort Larned this year, and thank the lucky stars that it is so well-preserved and not ruins. It is a treasure.

## GENETRUST at Suhm Cattle Company announces sale results

Blue skies, blustery winds and Brangus bulls welcomed customers and friends of GENETRUST to the Flint Hills in Eureka on March 22, 2016 for the 24th annual installment of the event hosted by the Suhm family, in what has become one of the premier Brangus events of the year. One hundred sixty-three bulls sold from Florida to California and 12 states in between with a large number staying in the heart of the Midwestern cow country of Kansas, Oklahoma, Arkansas and Missouri.

For the better part of two decades Eureka has been the source for the breed leaders like BT, John Wayne, Affirmed, Alydar, Next Step, Coronado, Foundation, Three D and the like and this offering had no shortage of breed impacting herd sires. Starting the sale, and an individual who garnered lots of attention was Lot 43, TJM Three D 59C10 from long-time Brangus breeder Jack Moore and a herd sire prospect who follows that legacy. A unique combination of calving ease, growth, muscle and phenotype, he covered the economically relevant traits and following a hotly contested battle was selected for \$50,000 by a partnership of two entities who know a thing or two about finding herd sires in Eureka, in Draggin M Ranch, Eldorado, Ark. and Double W Ranch, Macomb, Miss. Following closely behind in popularity and sale order was the second lot in the ring was lot 28, SCC Three D 30C, from Suhm Cattle Company. A second generation Ultrablack, whose progeny will be Brangus when bred back to Brangus, this individual excelled in calving ease and power as a big ribbed, deep stifled specimen, recording nine traits in the top 35% of the breed or higher and was the second high seller of the day at \$37,000 to a partnership of Lake Majestik, Flat Rock, Ala. and Chimney Rock Cattle Company, Concord, Ark.

As the Ultrablacks continue to gain popularity across the country, this too remained true on March 22 as the next high-selling individual was a first generation Ultrablack who combined calving ease, growth carcass and near-flawless phenotype into a package as close to perfect as one could get. Selling as Lot 94, SCC Capitalist 415C19 from Suhm Cat-

tle Company gathered a final bid of \$24,000 from two astute cattlemen partnering on him, in Mike Vorel, Luther, Okla. and the 2016 IBBA commercial cattlemen of the year, Zac O'Brien, South Coffeyville, OK. Leading a number of good Guardian sons in the offering, Lot 97 from Suhm Cattle Company, Suhm's Guardian 416C14, was a big-middled, moderate framed calving

ease prospect who projects out to be the balanced trait, easy-fleshing kind for the times. A favorite of many of the cowboys in the auction, he landed in the hands of Mike Weathers, Genesis Ranch, Columbus, Texas for \$22,000. At days' end, 24 long yearlings averaged \$4781 and 139 yearlings averaged \$6050 to make 163 Brangus and Ultrablack bulls average \$5863. Randy Garrett,

Geary, Okla. and Paul Young, Austin, Nev. were volume buyers for the event.

Joe and Nancy Cavender and crew host the next offering of GENETRUST genetics at Cavender's Neches River Ranch in Jacksonville, TX, Saturday April 23, 2016, where 150 Registered Brangus and Ultrablack Females and 400 Commercial Brangus Females were available for appraisal. Shortly thereafter the second annual installment of the GENETRUST Spring Fling online embryo auction will be conducted on BrangusAuctions.com May 9-11, 2016, featuring embryos from some of the leading donors within the GT program. The fall sale season will be kicked off November 4-5, 2016 at Chimney Rock Cattle Company in Concord, Ark., with an elite offering of Brangus and Ultrablack Bulls, as well as Registered

and Commercial Brangus Females. For more information on breed leading Brangus seedstock, the nation's foremost line-up of Brangus & Ultrablack A.I. sires, embryos or private treaty bull offerings visit [www.genetrustbrangus.com](http://www.genetrustbrangus.com).

Brangus & Ultrablack Sale Averages  
24 Brangus & Ultrablack Long Yearlings \$4781  
139 Brangus & Ultrablack Yearlings \$6050  
Total 163 Brangus & Ultrablack bulls gross \$955,650 to average \$5863



Buyers peruse their sale catalogs at the GENETRUST at Suhm Cattle Company sale in Eureka on March 22.

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eral old quilts; Kenmore high eff. washer & dryer; Kenmore 18.1 cu. ft. chest freezer; '74 Ford F-350 w/flatbed & hoist; '92 Ford F150 pickup; '93 Polaris 350 as is; '85 Yamaha 200; glassware, shop, kitchen, antique, collectible, old toys, furniture, etc.

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# Killer disease: May 11 meeting is planned to inform, coordinate response to anaplasmosis in cattle

An unwanted visitor has arrived in parts of Kansas, and the results have been cattle death loss in some cases.

Anaplasmosis is a crippling, blood-borne disease carried by ticks and flies that can kill mature cattle if left untreated.

A May 11 meeting is planned in Salina to bring

cattle producers, veterinarians, Extension agents and others together to inform, educate and work toward a coordinated response to the disease, which surged into Kansas in 2015. The meeting starts at 11:30 a.m. at Kansas State University Polytechnic Campus's College Conference Center, at 2310 Centennial Road. The meeting

is hosted by the Kansas State Veterinary Diagnostic Laboratory and K-State Research and Extension, and it involves beef-focused faculty from K-State's College of Veterinary Medicine and College of Agriculture, plus leadership from the Kansas Livestock Association, Kansas Farm Bureau and Kansas Veterinary Medical Association. "In 2015, almost every county in the eastern two-thirds and several far-west counties of Kansas had samples that were tested and found to be anaplasmosis-positive," said Gregg Hanzlicek, director of production animal field investigations for the Veterinary Diagnostic Lab, noting that it's not unusual

for the disease to be found in eastern Kansas but had not been so much a problem in western Kansas until recently. "We don't know if the geography of this disease has changed or if veterinarians and producers are looking harder for it, but it is clear that there are positive herds in a very large percentage of Kansas."

Topics and speakers will include:

**Anaplasmosis in Cattle: Facts and Fiction** — Gregg Hanzlicek, Veterinary Diagnostic Laboratory, Kansas State University, and Mike Apley, Frick Professor, Clinical Sciences, Kansas State University;

**Diagnostic Considerations and Strategies** —

Gregg Hanzlicek, Veterinary Diagnostic Laboratory, Kansas State University;

**Keeping Anaplasmosis Out of your Cow Herd** — Dave Rethorst, Veterinary Diagnostic Laboratory, Kansas State University, and K.C. Olson, Department of Animal Sciences and Industry, Kansas State University;

**Flies, Ticks, and Anaplasmosis in Kansas** — Ram Raghavan, Diagnostic Medicine and Pathobiology, Kansas State University;

**Can I Vaccinate for Anaplasmosis?** — Gene Luther, AgCenter, Department of Veterinary Science, Louisiana State University;

**Treating Individual Cows and Herds for Anaplasmosis**

— Mike Apley, Clinical Sciences, Kansas State University;

The VFD and Anaplasmosis Infection — Bill Flynn, Deputy Director of Science Policy, Food and Drug Administration; and What Will Anaplasmosis Infection Do to Herd Productivity? — Max Irsik, Large Animal Clinical Sciences, University of Florida.

There is no cost to attend the symposium. Registration is required by May 6, as seating is limited. For more information or to register, contact Anthony Ruiz in the K-State Research and Extension Central Kansas District office at 785-392-2147 or anruiz@ksu.edu.



Lively discussions took place as customers gathered for the GENETRUST at Suhn Cattle Company sale on March 22 in Eureka.

## Study: Higher concentration of zinc improves cattle feed efficiency

Kansas State University researchers have found that feeding concentrations of zinc that are higher than recommended dietary concentrations can help improve the growth of finishing cattle, a finding that could lead to more profits

for the industry. Cadra Van Bibber-Krueger, a doctoral student in the university's animal sciences and industry department, reported results of a trial that fed zinc at concentrations ranging from 0 to 90 parts per million of the finishing diet. The National Research Council's current recommendation for nutri-

ent requirements of beef cattle is 30 ppm dietary zinc. "We found that supplementing up to 60 ppm zinc — for about 90 ppm total dietary zinc — optimized feed efficiency in finishing cattle," Van Bibber-Krueger said. "The study suggests that finishing cattle have requirements for zinc that are substantially higher than

the currently recommended concentrations." When selling cattle on a grid — a marketing system that takes into account such factors as carcass weight, yield and quality grade and other factors — Kansas State University's work predicted that supplementing 60 ppm in dietary zinc could result in an increase of \$25 in total carcass value for a trace mineral that costs less than a penny per day, said Van Bibber-Krueger.

"The potential to increase the value of carcasses by supplementing the proper concentration of zinc can have a big impact on the industry," she said.

Kansas State University trial tested just zinc, a mineral that is essential for normal function of more than 300 enzymes in microorganisms, plants and animals. Zinc and other minerals foster metabolism of nucleic acids, proteins and carbohydrates, all of which are essential for growth in cattle.

Improving feeding efficiency means that cattle grow more efficiently with less feed. No differences were found in marbling score, rib eye area or back fat. Van Bibber-Krueger said that increasing supplemental zinc to 90 ppm decreased performance, indicating excess zinc can be detrimental.

"This is just one mineral," Van Bibber-Krueger said. "If we can figure out what the actual concentrations that finishing cattle need for all of the minerals, think about the kind of impact we can have in the future."

The full study, "Supplemental Zinc Sulfate Affects Growth Performance of Finishing Heifers," was published in the proceedings of the 2016 Kansas State University Cattleman's Day.



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## Agricultural Air Quality Task Force meets in D.C.

The USDA Agricultural Air Quality Task Force (AAQTF) met recently in Washington, D.C. to discuss issues and make recommendations to Agriculture Secretary Tom Vilsack. The task force is composed of representatives from industry, agriculture, academia, government agencies, non-governmental organizations and other agricultural and environmental experts. In January, Vilsack appointed new members to the AAQTF for the 2016-2018 term, including TCFA vice president Ben Weinheimer.

The AAQTF promotes USDA research efforts and identifies cost-effective ways the agriculture industry can improve air quality. It also helps better coordinate activities and resources among USDA agencies and other federal partners such as the Environmental Protection Agency (EPA).

At the meeting, the task force heard updates from

EPA, NRCS, ARS, Forest Service and other federal agencies. Subcommittees were formed to continue work between meetings in the areas of air quality standards and regulations, reactive nitrogen, and climate change/GHGs.

The task force also approved four recommendations: to encourage USDA to revise and extend the terms of the task force members to provide continuity and retention of institutional knowledge in light of the relatively small pool of potential candidates for membership in the AAQTF; to establish separate and distinct research funding for air quality, and re-instate annual funding at a minimum level of \$40 million per year, focused on criteria air pollutants; to list air quality as a specific priority in the call for Conservation Innovation Grant proposals and give those proposals equal consideration in the review process; and to request that

NRCS and EPA reengage in research and policy discussions and provide a report on the status of several issues at the next AAQTF meeting, including exceptional events, prescribed burning, ozone, regional haze and greenhouse gas emissions.

Originally established by the 1996 Farm Bill, the task force is charged with: 1) Advising the Secretary of Agriculture on air quality and its relationship to agriculture based on sound scientific findings; 2) Reviewing research on agricultural air quality supported by federal agencies; 3) Promoting intergovernmental (federal, state, local and tribal) coordination in establishing agricultural air quality policy to avoid duplication of efforts; and 4) Ensuring that air quality conservation practices supported by USDA are based on peer reviewed research and are economically feasible for agricultural producers.

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Customers at the GENETRUST at Suhn Cattle Company sale discuss how the attributes of the various bulls will best meet the needs of their operation.

## Fredonia Livestock collecting fencing donations for wildfire relief

KLA and the Fredonia Livestock Auction are collecting wire and T-posts during April for wildfire relief efforts in Barber and Comanche counties. Individuals can donate a roll of wire or two bundles of posts at the Fredonia Livestock drop-off point and, in return, receive a free \$8 meal coupon redeemable at the Stockyard Restaurant.

Donations will be accepted Monday through Saturday from 8:00 a.m. to 8:00 p.m. Persons contributing to the cause can stop by the office at Fredonia Livestock for unloading assistance and a meal coupon. For more information, call KLA Wilson County Chair Russ Walker at (620) 235-9023 or the Fredonia Livestock Auction at (620) 378-2212.



Potential buyers look over the offering of bulls at the GENETRUST at Suhn Cattle Company Sale in Eureka on March 22.

## USDA proposes new standards for certified organic meats

USDA has proposed a rule to add details primarily related to animal welfare to its Certified Organic label standards. The new rule sets maximum and minimum living space requirements for animals, requires unencumbered access to the outdoors at all times except in the case of protection from predators, and sets euthanization and treatment requirements for sick and injured animals.

USDA estimates that the rule will cost organic farmers \$9.5 million to \$24.1 million per year over the next 13 years with the public benefit estimated at \$14.7 million to \$62.6 million per year.

Public comments will be accepted for 60 days following the proposal being published in the Federal Register. To learn more, visit <http://tinyurl.com/USDA-4-15-16>.

## AUCTION SATURDAY, MAY 7 — 9:30 AM

4125 N. Link Road — BROOKVILLE, KS

From Salina, KS West on I70 to exit 244 then N. 1 mi to Watkins Rd., then W. 2 mi. to Link Rd. then N. 1 mi. on Link Rd. to auction location. Auctioneer Note: Dean was a private electrical contractor for many years so we have numerous electrical items from his business. To view the auction bill on the internet in its entirety go to [www.wacondatrader.com](http://www.wacondatrader.com) and [www.ksallink.com](http://www.ksallink.com)

Consisting of Trucks, Campers, Boats, Gooseneck Trailers, Semi-Trailers, Tractors & Tillage Equipment, Livestock Equipment, Hay Equipment, Shop Tools & Equipment & Household Items

### TRUCKS, SEMI-TRAILERS, GOOSENECK TRAILERS, BOATS, CAMPERS, ATV

2010 Ram heavy duty, crew cab 4x4 w/5.7 ltr. engine, truck is loaded, cross bed tool box and tool cover, in excellent cond.; Glasstron boat with in-board/outboard motor, engine not running; canvas bottom canoe; Golden Jet 7hp boat motor; Evinrude motor; Road Ranger kit camper, sleeps 8 w/AC; Open Road slide-in pickup camper; 1964 Chevy #60 2-ton truck w/13' Giant bed, steel floor & racks with 8 1/2x20 tires; Studebaker truck Model M15A-20 w/flatbed and winch; 2002 Circle D gooseneck flatbed trailer 24' w/loading ramps & storage boxes; 2 older pickup toppers; Chevrolet Model 64 2 ton truck, sells as salvage; 1990 Great Dane Van Body Semi Trailer, 48' long, used for storage; ATV side by side Model XUV 500, 4-wheel drive, needs motor; 2 old van body beds for storage; 1992 Yamaha 4x4 ATV.

### TRACTORS & TILLAGE EQUIPMENT

Case 1070 Agri King tractor, has cab, air & heat w/dual hyd., 3 pt. hitch, PTO, standard trans, 18.4x34 rear rubber; Great Bend 800 Workmaster loader with bucket & bale spear, sells as unit; Ford 801 Powermaster Tractor w/loader, 3 pt. hitch, PTO & rear wheel wts.; Caterpillar D2 Dozer w/hyd. blade, motor not running; John Deere F145H 4x16 bottom moldboard plow w/cutters; Ford 3 pt. 3 bottom plow; International IHC 10' pull disk on hyd. lift; Ferguson 3 pt. hitch tandem disc; Ford 3 pt. hitch one way plow; Ford 3 pt. hitch, 3 section springtooth; Ford 3 pt. hitch 3 section peg harrow; 2 section peg harrow; Ford 3 pt. hitch single shank ripper; 3 pt. hitch box blade w/rippers, like new; 3 pt. hitch post hole digger; 3 pt. hitch bale carrier; Ford 3 pt. hitch 2 section rotary hoe; Dearborne 3 pt. hitch cultivator; IHC Model 109 grain drill w/fertilizer & press wheel; John Deere VanBuren steel wheel grain drill w/fertilizer 8" centers; Ferguson 2 row planter

TERMS: Cash. Not responsible for accidents. All items sell in "as is condition." Statements made day of sale take precedence over printed matter. Lunch served.

### DIANE HICKS, SELLER

Auction Conducted By: BACON AUCTION CO. Royce K. Bacon, Auctioneer, 785-392-2465

w/fertilizer boxes; small 5 or 6 hd. dirt scraper on hyd.; 2 wheel lime spreader; Ferguson 3 pt. hitch dirt scoop; 110-gal. field sprayer, 3 pt. hitch w/booms; Fimco ATV sprayer 25-gal., 12 volt w/boom & wand; 4 wheel running gear trailer; 2 wheel flatbed trailer w/8:25x20 rubber.

### HAY EQUIPMENT

John Deere 530 big round baler; Ford small square baler, twine tie w/Farmhand hay accumulator; Welco 8 bale fork; Hesston PT-10 pull type swather; Ford 3 pt. hitch side delivery rake on PTO; 3 pt. hitch, 2 wheel windrow turner; Ferguson 7' sickle bar mower on 3 pt. hitch; BMB 5' rotary mower, 3 pt. hitch.

### LIVESTOCK EQUIPMENT

Priefert 11 panel circle round pen; sm. stock tanks; round bale hay feeders, horse feeders; sm. metal stock gates, 4' & 6' homemade panels & gates; pipe and tubing; silver show halters, bridles & lead ropes.

### SHOP TOOLS & EQUIP.

Millermatic 210 wire welder; Lincoln 225 stick welder; EZ-MIG wire welder; Campbell Hausfeld air compressor; DuroCraft floor model drill press; B&D bench grinder 6"; cement mixer hyd. drive for skid steer loader; floor stand shop hyd. press welding tables; Black Bull chop saw 14"; elec. cement mixer, needs motor; homemade skid steer tree saw, needs hyd. motor; 4 drawer metal file cabinet; numerous light fixtures, electric breaker boxes, fuse panels, circuit switch, boxes, metal pallet racks; tripod frame to raise windmills; metal bed side tool boxes; homemade hog roaster; misc. shop tools, drills, grinders, hand tools; 10 used sheets metal barn siding; 9 sheets, various length new barn siding; much scrap iron, junk, old metal wheels.

### HOUSEHOLD

Swisher ZTR mower, 20hp, 50H cut, B&S motor, motor just overhauled; Fiesta BBQ gas grill; Magnavox TV w/digital box; lg. waterbed & frame; Zenith upright freezer; wooden frame baby crib.

## REAL ESTATE & PERSONAL PROPERTY AUCTION

SATURDAY, MAY 7 — 1:00 PM

AUCTION LOCATION:

809 Welch — COUNCIL GROVE, KS 66846

### PROPERTY OF STELLA M. SWISHER & THE LATE CLYDE SWISHER



3 Bedroom, 2 Bath Home Will sell at 3:00 PM 1:00 PM: PERSONAL PROPERTY: ANTIQUES & COLLECTIBLES:

Primitive pie safe type cabinet; vintage car mirrors; stop sign; wagon seat stool; double wash tub w/stand; antique walk behind garden cultivators; cast park bench; oak round pedestal stand; miniature knick knacks & china cabinet; John Travolta tin trashcan; Duncan Phyfe round parlor table, lions pull w/claw feet; Jesus picture; oak dining chairs x4; Waterfall headboard & mattress; oak 3-drawer dresser, vanity dresser, stool and chest of drawers; oil lamp; kids school chair; Gone with the Wind type electric lamp; Mid-Century dresser & chest of drawers; ornate frame; primitive 3-drawer stand; Willowware plate; vintage wicker bassinet; primitive chairs, table, stool, shelf, bench; egg basket; #8 cast skillet w/lid; Pyrex refrigerator dishes w/lids; Hibbard cream can; wire crate; die cast banks, True Value; baby crib; Lincoln Logs; Barbie dolls; ERTL farm truck; misc. toys; Masters of the Universe toys; Tonka toys; John Deere parts express semi-truck & trailer; doll clothes; Perfect smokeless oil heater; spindle bed; wooden barrel; Charlie Brown tin; White Mountain ice cream maker; primitive ornate wicker magazine rack; trunk; Wood Kraft cheese box; matching bar stools; primitive red wagon; metal lawn chairs; spindled parlor table; dropleaf end table; bushel basket; plaid lunch box; Barbie Jeep & convertible; Real Time Deluxe Log Kit; Nylint toy truck & stock trailer; primitive Crown wooden crate; vintage 6-pk soda bottles; cream separator; wood single tree; Grandfather clock. GLASSWARE: Pink Depression square & rectangular bowls, cream pitcher, cookie jar canister w/lid and cherry blossom covered butter dish; green Depression platter; Carnival footed bowl & double handle bowl; Amethyst carnival scalloped rim vase; Cobalt silverplate salt & pepper; 45-pc. "Elegance" porcelain china dinnerware set; wash basin & pitcher; clear divided bowl, etched serving pitcher & bowl, covered candy dish, pitcher, vase; Amber serving pitcher & glasses; misc. glass pieces; misc. 50th anniversary items; commemorative plate Central YMCA, Topeka, KS; china handpainted vase. HOUSEHOLD, FURNITURE & APPLIANCES: Oak corner TV stand; floor & table lamps; end table; misc. books; dropleaf table; La-Z-Boy recliner, tan & maroon; La-Z-Boy floral full size reclining couch; lamp w/lead stained glass shade; oval wall mirror; office chair; 4-pc. bedroom set (bed w/mattress, dresser, chest of drawers, end table); fan; painting supplies; Kirby 64 Tech drive vacuum; 2 drawer file cabinet; misc. linens, towels & table clothes; Sansui HD LCD 19" TV; misc. Corningware; electric skillet; kitchen utensils; glass measuring bowls; CDs; pots & pans; Tupperware; mixer; canning jars; exercise bike; silk flowers; Christmas tree & misc. decorations; Samsonite luggage; Body Shop 360; Kenmore HD 70 washing machine; Kenmore HD dryer; misc. pictures; walker w/seat & wheels; lighted cabinet; VCR; jewelry box. TOOLS, SHOP & LAWN ITEMS: Small socket set; plumb socket set; antique hand crank drill; Lawn Rain Train tractor; creeper; cooler; garden hose; ext. ladder; B&D 24V skil saw; tool belt; misc. garden tools; Craftsman 6-gal. shop vac; antique brace; 2-man saw; grease guns; misc. fishing tackle.

See [www.GriffinRealEstateAuction.com](http://www.GriffinRealEstateAuction.com) or call office for full details or showing.

RICK GRIFFIN Broker/Auctioneer Cell: 620-343-0473 Griffin Real Estate & Auction Service LC

CHUCK MAGGARD Sales/Auctioneer Cell: 620-794-8824 305 Broadway Cottonwood Falls, KS 66845 Phone: 620-273-6421 • Fax: 620-273-6425 Toll Free: 1-866-273-6421

In Office: Nancy Griffin, Heidi Maggard Email: [griffin123r@gmail.com](mailto:griffin123r@gmail.com) [www.GriffinRealEstateAuction.com](http://www.GriffinRealEstateAuction.com)

## AUCTION

SATURDAY, MAY 7 — 10:00 AM

Offering for sale at Public Auction, located at 1889 14th Ave., McPherson, KS; 5 miles north of McPherson on I-135 to Pawnee Rd. (Exit #65), 2 1/2 miles west, 1/8 mile south.

### TRACTORS, TRUCKS & FARM MACHINERY

2002 John Deere 8420 FWA tractor, 4 hyd. remotes, 3 pt. pto, duals, 3477 hrs., SF1 guidance system, clean; John Deere 3020 diesel tractor with 2000 Koyker 210 loader, like new 16.9-34 tires, 3 pt., single hyd., 6600 hrs.; 2006 IH 4300 truck, Scott 20' bed & hoist, 5+2, 49,799 miles; 1966 Chev. C-30 truck, 10' bed & hoist; 1997 John Deere 9600 combine, straw chopper, chaff spreader, 4067 eng. hrs., 2751 sep. hrs., \$12K repairs last year; John Deere 930 30' header; John Deere 925 25' flex header; Unverferth HT25 header trailer; B & B Tech. 30' header trailer; 1979 Gleaner N6 combine, 24' header, 3811 eng. hrs., 1521 sep. hrs., \$5,700 repairs last year; Great Plains Nutri-Pro NP-30 applicator with Raven Accu Flow control, like new; 2008 Krause Pro System 5200 30' DD folding drill, 13" blades, 2031 acres, clean; 2005 Krause 4995 31' tandem disc, 3 row tine harrow, 22 1/4" FB, 23 1/4" BB; John Deere 7300 Max Emerge 2 8 row 3 pt. planter; 2010 Bush Hog 12715 Legend 15' batwing mower, like new; E-Z Trail 510 grain cart; John Deere 1000 32' field cultivator; Westfield hyd. drill fill auger, like new; 10' speed mover; Westfield WR80-41 8"x41' auger, like new; John Deere 2800 6 btm. adj. semi mt. plow; John Deere 8300 18 hole DD drill with seeder; Howse 6' rotary mower; John Deere 4-16 semi mt. plow; 6"x26' auger,

motor; 3 pt. bale carrier; 3 sec. drag springtooth; shop built header trailer; 5'x8' drop deck 2 wheel trailer; 200 & 300 gal. field sprayers;

### SHOP EQUIPMENT & HOUSEHOLD ITEMS

Hobart Champion 10,000 watt generator, 230 amp welder; 500 gal. fuel tank & stand; Craftsman air compressor; Hobart Handler 125 EZ wire welder; Coleman Powermate 45 wire welder; Powr-Kraft 10" radial arm saw; Powr-Kraft 180 welder; Industrial Air 20 gal. air compressor; 18 gal. shop vac; Craftsman 5.5 hp 26" tiller; DeWalt cutoff saw; Craftsman miter saw; Craftsman chainsaw; DeWalt 1/2" impact; Lincoln grease gun; 15" Crescent wrench; John Deere combo & adj. wrenches; 24" adj. wrench; Craftsman sawzall; B&D circular saw; roto-zip; DeWalt 18 ga. nailer; Coleman air shear; nail puller; air tools; vise; DeWalt grinder; 1/2" drill; belt sander; sockets; bench grinder; log chains; shop fans; cutting torch; welding supplies; Craftsman & Homak roll away toolboxes; battery charger; Troy-Bilt pressure washer; ext. ladders; John Deere +50 oil; T-posts; hedge posts; milk buckets; Shopsmith; welding table; dog kennel; Logwood wood burning stove & pipe; Kenmore washer; Roper dryer; Whirlpool glass top range; Whirlpool side-by-side refrigerator with ice & water; Kenmore dishwasher; Apple computer; loveseat; porch swing; cast iron tub; Copper bucket; wooden table & chairs; baseball cards; misc. household items & more.

### JOE LEDELL ESTATE SHARON LEDELL, SELLER

TERMS: Cash day of sale. Statements made day of sale take precedence over advertised statements.

VAN SCHMIDT - Auctioneer/Real Estate 7833 N. Spencer Road, Newton, KS 67114

620-367-3800 or 620-367-2331

Schmidt Clerks & Cashiers/Lunch provided by: Trinity Lutheran Church [www.hillsborofreepress.com](http://www.hillsborofreepress.com)

## Goats Off Grid

By Jody G. Holthaus,  
Meadowlark Extension

District Agent, Livestock-Natural Resources

In my pre-dawn mind travels, I ponder the idea of invasive weeds and brush in pastures. We've spent a lifetime cleaning up a pasture, and just when you think you've really done something, you look closer and there are tiny little locusts, hedge or cedar trees coming in. Goats are the answer! Of course they come with their baggage, fencing, predator control and annoyance. My whole thought process morphed into a real project, which I applied for a SARE grant. That stands for Sustainable Ag Research and Extension, a program of the USDA.

I'm calling my project Goats Off Grid. Research shows that goat grazing can control and sometimes kill invasive brush and weeds. They can even suppress *Sericea lespedeza*. We all know goats browse on forbs, weeds and brush, while cattle only go for the grass. If you're lucky, cattle may pick on some of the weeds when they're young, they can even be trained to eat the leaves on brush, but that's another column.

Companion grazing goats and cattle works, but the largest drawback is the fencing to keep the goats in. They will respect electric fence, which is an alternative to woven wire, but it still requires a lot of time and labor.

My project is to use the wireless fence with a training collar. When the goat reaches the boundaries set by the wireless fencer, they get a couple of beeping sounds. If they proceed to the boundary they receive a gentle shock. This is used successfully with dogs. I will be training goats to respect the collars and have a nomadic grazing grid.

Because the pastures are remote, I'm rigging up solar energy to power the fencer, hence Goats Off Grid.

So I've planned the shelter for the goats, watering system and solar power; what else could be wrong? One night I was thinking, our bulls really wreak havoc on cedar trees in the pasture. It doesn't really hurt anything, but I'm fearful what they might do to my goat shed, water barrel and solar get up! Someone suggested I put up an electric fence to keep the cattle out of the goat camp. Then I thought about just using a bumper pull trailer as the goat shelter, but Jerry the bull would still have his fun with the trailer.

Stay tuned as this project evolves; next week the goat training will begin. Let me know if you have a cedar filled pasture, or lots of *Sericea lespedeza*, for the Goats Off Grid project. Maybe I should just invest in some sleeping pills!

## Prepare for the spring cattle breeding season

April is here, and many cattle producers are likely thinking about the spring breeding season. One key factor is making sure the herd sire or sires are up to the task. Nora Schrag, veterinarian in Kansas State University's College of Veterinary Medicine, said a bull breeding soundness exam conducted by a veterinarian can be a valuable tool for producers.

A breeding soundness exam sorts out bulls that are not capable of getting cows pregnant, Schrag explained, and also helps identify bulls that are going to be more efficient at breeding cows in the first 45 days of the season, rather than stringing the season out for a longer period of time.

On average, in pastures with more than one bull, there will be five more calves born in the breeding season if the bulls pass their breeding soundness exam prior to turn out, she said. "It's important that we're certain these bulls are capable of producing high-quality semen and being efficient breeders," Schrag said. "But, keep in mind it's not a perfect system. Even if he tested well on the day he was tested, you still need to watch for heifers or cows to come back in heat."

She said breeding soundness exams provide a breeding wellness benchmark. To be an efficient breeder, there are three main aspects to consider: service capacity, functional anatomy and semen quality.

Testing a bull's service capacity means testing his libido, or willingness and desire to breed a cow in heat. Schrag said testing service capacity on adult bulls is performed in some countries, but it requires a great deal of time and equipment. This testing is not common in the United States, where producers mainly rely on their observations to evaluate this aspect of fertility.

Schrag said assessing service capacity is especially difficult in a yearling bull, because he doesn't have any experience yet. "With yearling bulls, it's es-

pecially important to keep in mind you still have to watch him breed cows."

The breeding soundness exam will help identify any anatomic defect that might keep a bull from breeding. That means checking the eyes, including watching for old pinkey scars, because it's suggested that bulls need to have good eyesight to detect a group of cows in heat, she said. An anatomical exam also means palpating the testicles and other reproductive glands to make sure there are no signs of infection or injury.

"These bulls are generally coming off winter, so there is the potential for frostbite (effects)," Schrag said. "A lot of times it can be mild, and it doesn't do much. If it's severe, we might pick that up on palpation. We can also palpate them rectally, palpate their inner glands, and make sure there are no knots, signs of damage or any signs of a genetic defect."

Testing semen quality, she said, has two parts: one is motility, or watching how fast and vigorously sperm swim under the microscope; and the second is morphology, which considers the size and shape of the sperm and is probably the least understood both by producers and veterinarians. However, morphology is an extremely important part of a bull's fertility.

"Morphology in a yearling bull is especially complicated, because they've just barely reached maturity at the time of the test," Schrag said. "Some of these bulls are going to be fully mature and ready to breed cows at 12 months; some might be there at 11, but many probably won't be there until month 13 or 14 and fully able to show what kind of semen quality they have." "Yearlings are still developing, so if he's poor on this test day, there's a likelihood that just because of age, he's going to be quite a bit better later," she added.

Schrag said this poses the main disadvantage of a breeding soundness exam. While veterinarians would

like to have a test that would indicate or guarantee a bull will be good for the breeding season, other factors can affect the results. "We can do a pretty good job predicting (bull soundness) most of the time, but we're left with what that bull gave us for a sample on that day," she said. "Really, bulls are quite fragile, and it doesn't take much to knock them off balance. They can get sick. They can get injured. Maybe they get a fever one day. Maybe they have foot rot, and their foot hurts for a week. Then their semen quality is going to go down during that time."

Despite its imperfections, Schrag said a breeding soundness exam is a useful tool. Bulls that meet the semen quality requirements at 12 months are bulls that should be tagged and identified as early maturing. A producer needs to decide how much value he or she places on early maturation to determine if buying a bull that passes the breeding soundness exam at 12 months should be a priority.

"If you're keeping your own heifers, that value needs to be significant," she said. "Early maturing genetics will help (replacement) heifers mature early."

Bulls that do not pass at 12 months could pass in an-

other month of two. They could have great genetic value - desired carcass or growth traits, for example - but are just not early maturing. That would be one reason to re-test those bulls, Schrag said.

For adult bulls that do not pass their breeding soundness exam, the decision about what to do with them depends on the situation, she said. Because semen quality is somewhat variable, if a bull fails on semen quality alone it is rare that he should be culled based on one test. However, if he tests poorly multiple times, and no injury or sickness or other stress can be identified, it is safe to assume he will not be an efficient breeder. "I think there is no question that a bull should pass his breeding soundness exam before you turn him out with cows," Schrag said. "The accuracy of the breeding soundness exam and its relation to how that bull will perform is the highest when he's examined right before you turn him out."

Recommendations for exactly when to test are specific to different types of production systems. Producers should direct any questions related to breeding soundness to their regular veterinarian.

## Youth Fishing Clinic planned in Manhattan

On Saturday, June 4, Anneberg Park in Manhattan will be stocked with over 700 channel catfish for the Tuttle Creek Lake Association's 22nd Youth Fishing Clinic for youths 8-12. It's totally free but enrollment is required. Only youths who haven't previously attended a clinic may participate.

On Friday, June 3, there's an education session at 7 p.m. at Anthony Middle School. Youths are required to attend this session. An adult must accompany their youth.

At 9 a.m., Saturday, youths will fish Anneberg Park. Each youth will be given a free rod and reel. Bait will be provided. Numerous prizes will be awarded. An adult must accompany their youth.

Youths must apply. Application forms are available at all elementary schools in Manhattan, Wal-Mart, Boys and Girls Club, Wildlife and Parks office, Manhattan Parks and Recreation office, Derick's Bait and Tackle, Douglass Center and numerous sponsor locations in Manhattan and Wamego. Or enroll online at [www.tuttlecreek.org](http://www.tuttlecreek.org) and follow the instructions.

**CONSIGN TODAY FOR HARLEY GERDES 23RD ANNUAL MEMORIAL DAY CONSIGNMENT AUCTION**  
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# AUCTION

**SATURDAY, APRIL 30 — 10:30 AM**  
 Auction will be held at the farm located 3 miles West of TIPTON, KANSAS on Highway 181 on the curve.

**TRACTORS, COMBINE & GRAIN CART**  
 Ford TW 35 front wheel assist diesel tractor, 3 pt., 4 hyd, weighted 6900 hrs, 18.4-38 radials w/duals, 14.9-28 front tires; 1982 John Deere 4240 diesel tractor, quad range, 3 pt, dual hyd, w/ Farmhand F235 loader 8' bucket, 18.4-32 duals, 10,000 hrs, good condition; bale spear for loader; 1982 John Deere 6620 Turbo diesel combine w/220 20' header; 4 wheel header trailer; Brent 410 Grain Train 400 bu grain cart; Kory 150 bu gravity flow wagon on 4 wheel chassis; L Gleaner combine for parts motor good.

**TRUCKS, TRAILERS**  
 2007 Dodge Ram ¾ ton 4 wheel drive, Winkler flatbed, 5.7 Hemi, automatic, air, 85,000 miles; 1979 GMC 7000 Sierra Grande truck, V8, 5 sp, 2 sp, 64,000 miles, 16' metal box, power up power down hoist, 52" sides, roll over tarp; 2013 Titan gooseneck covered stock trailer 6'8" x 20' 14 ply tires; 18' x7' tandem axle tilt bed car trailer, like new; 1992 Ford ½ ton 4 wheel drive flatbed pickup, 352 engine, automatic; pickup bed for 1992 Ford; 1957 Ford F350 1 ton dual truck, V8, 4 speed w/hoist; 1937 IHC 1 ½ ton truck cab & chassis; King gooseneck tandem axle single row 7 bale trailer; 2 wheel utility trailer.

**MACHINERY, CATTLE EQUIPMENT & TOOLS**  
 1994 Great Plains double disc drill 24' 10" spacing; John Deere 7200 pull type 6 row planter vacuum w/markers, corn, bean & milo; Sunflower 1232 double offset 20' disc w/harrow (21 ½" disc, new bearings); Kent Series V 32' field cultivator w/harrow; Schaben 500 gal pull type tandem axle sprayer 40' boom; John Deere 535 big round baler; Sunflower 19' V blade; Brown 10' pull type box scraper; Terrain King 3 pt. 6' mower; Frontier 3 pt post hole digger 9" & 12" bits; JD 3 pt. 8' blade; Winkler 3 pt. bale fork; Hutchinson 6247 PTO 6" auger; Hutchinson 30' 6" auger w/220 electric motor; JD 830 self propelled swather needs some repair; Kent fold back springtooth; combine bin on wheels; 2 wheel wood side manure spreader needs work.

**4 WHEELER, MOWER, CATTLE EQUIP. & TOOLS**  
 Artic Cat 300 4 wheel drive 4 wheeler; JD Sabre I/C OHV 14.5 hp riding lawn mower; sprayer for 4 wheeler; Werkmeister double sided creep feeder on wheels; 2 Winkler round bale feeders; 14 Winkler 12' cattle panels; wire cattle panels; cattle guard; 3 700 gal poly stock tanks; 14' & 16' metal gates; 3 round bottom poly feed bunks; Legend golf cart, needs battery; 2 section scaffold; 500 gal diesel tank w/electric pump; 300 gal overhead gas tank; 130 gal pickup fuel tank; 130 gal L shape fuel tank; fencers; electric fence posts; 200 T posts; electric fence wire; pickup stock rack; 8' x 12' round top sheds; Craftsman 12" commercial 220 radial arm saw; 10" table saw; Lincoln 220 welder; twin cylinder air compressor; 12 drawer roll around tool chest; post vice; Handy Man jack; shovels; bolt cutter; pipe wrenches; assortment hand tools; metal lockers; log chains; 100' 220 extension cord; bin sweep augers; 14-38 tractor chains; set 18.4-38 rims; metal 18' fold down stock rack.

**Note: For pictures check our website [www.thummelauction.com](http://www.thummelauction.com). Duane & Judi are retiring. The machinery is field ready, The tractor, combine, truck, baler, drill & planter have been shedded.**

**DUANE & JUDI STREIT • 785-373-6351**  
 Auction Conducted By: THUMMEL REAL ESTATE & AUCTION LLC  
 785-738-0067

# AUCTION

**SUNDAY, MAY 1 — 1:00 PM**  
 Auction will be held at the home located at 404 Teal Road (Southeast corner) of JAMESTOWN, KANSAS

**GUNS Sell at 1:00 P.M.**  
 Stoeger Arms Luger 22 LR pistol; H & R model 929 22 rifle; Arms Co. Nashville 22LR pistol model Mark-059; Jennings Firearms J22 pistol 22 LR; Glock 40 cal pistol; Browning BL 22 rifle; Ruger carbine 44 mag; Ithica model 280 12 ga 2 ¾ chamber double barrel; Navy Arms black powder double barrel 12 ga; Winchester model 90 octagon barrel 22L; JC Higgins model 31 22 cal S,L,LR; 22 single shot rifle model 30 on top of barrel; Marlin model 80 22 L, S, LR; Thompson Center Arms 54 cal black powder; Weatherby Mark XXII 22 LR; Remington model 722 rifle 222 Remington rifle; 50 gun safe.

**TRACTOR, EQUIPMENT, HORSE EQUIPMENT & TOOLS**  
 Ford 3000 gas tractor w/ 5' loader, 3 pt., 2 hyd plus hyd for loader; Ford 3000 tractor for parts; 3 pt. King Kutter 5' disc; 3 pt. 6" blade; 3 pt. MF 5' rotary mower; 3 pt. bale fork; small 2 wheel manure spreader; lawn trailer; combine on iron wheels; yard trailer w/Fimco 40 gal 12 volt sprayer; **Horse Equipment**

2 wheel racing cart w/wood wheels, hard rubber tires, bicycle tires; 5 saddles; set driving harness (Bontriger made in Yoder); set work harness; set sleigh bells; assortment bits some Army; bridles; new driving lines; hames; horse tack; horse clipper; Rubbermaid stock tank; hay feeder; 12-8' heavy panels; Lincoln 225 welder; Chicago 4000 watt generator; portable air compressor; Stihl MS 250, 027 & 011AV chain saws; Sears 8" drill press; 12" band saw; 200 amp battery charger; table saw; 4" vice; shop vac; Ryobi gas weed eater; forge; transfer pump w/5 hp gas engine; 75 lb anvil; hardy; handy man jack; come along; set SK wrenches 3/8" to 1 ¼"; assortment of hand tools; hammers; 12 volt winch; wringer washer; Work Mate; 2 hp gas engine; Arens tiller; Yardman 5 hp trimmer; Snapper 33" riding mower 17 ½ hp.; Bolens MC 2500 chipper; chicken crate; cages; T posts; iron wheels; 500 gal overhead gas tank; flat bottom aluminum boat; 12' aluminum wheel chair ramp like new.

**COLLECTABLES & HOUSEHOLD**  
 Bassett king size bed, dresser & night stand; new oak curved glass china cabinet; floral couch, love seat & chair like new; flat top desk; dinette table & chairs; sewing cabinet; 2 green recliners; striped couch; pr. blue rockers; end tables; oak drop leaf table w/6 chairs & rocker; walnut drop leaf table; walnut china hutch; waterfall bedroom set; king size bed; day bed; single bed; **Antiques** round top kitchen cabinet; organ desk; Haddorff upright piano; 5 drawer highboy; cut down walnut buffet; 1 door painted wardrobe; 20 gal RW crock; blue band water crock; 2 gal crock jug; dinner bell; pitcher pump; kerosene lamps; angel collection; goose collection; assortment of glass & kitchen items; Christmas decorations; blow torch; fruit press; railroad jack; Underwood typewriter; fishing poles; 16 cu upright freezer; Kirby upright vacuum & shampoo; fans; lawn furniture; mans & women's bikes; banana seat bike; grill; assortment of other items.

**Note: For pictures check our web site at [www.thummelauction.com](http://www.thummelauction.com).**

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

# U.S. meat exports sluggish in February

February exports of U.S. pork and beef were roughly steady with last year's volumes but export value moved lower as prices continued to decline from the 2014 highs, according to statistics released by USDA and compiled by the U.S. Meat Export Federation (USMEF). The price reductions reflect more abundant red meat supplies and a fiercely competitive international marketplace.

Pork export volume was 171,413 metric tons (mt) in February, down 1 percent from a year ago, while value fell 12 percent to \$414.3 million. For the first two months of the year, pork export volume remained 1 percent ahead of last year's pace at 338,423 mt, but value was down 12 percent to \$819.1 million.

February beef exports totaled 83,203 mt, up slightly from last year, while value dropped 18 percent to \$437 million. January-February exports were up 2 percent in volume (165,504 mt) from a year ago but fell 16 percent in value (\$875.1 million).

USMEF president and CEO Philip Seng said the February results fell short of expectations.

"Given the headwinds U.S. exports faced early last year, including the severe congestion in the West Coast ports, we expected to see year-to-year increases in most markets, but the actual picture was mixed," Seng explained. "Beef exports did rebound in most Asian markets compared to February 2015, but these gains were largely offset by declines in our neighboring markets. U.S. pork continues to regain traction in China/Hong Kong, but exports slowed to our other major Asian destinations."

## 2016 pork exports off to strong start in China/Hong Kong, Oceania, Central America

Momentum continues to build for U.S. exports to China/Hong Kong, extending the trend that began in the fourth quarter of last year. Through February, exports were 86 percent above last year's pace in volume (73,536 mt) and 50 percent

higher in value (\$138.6 million).

"Declines in Chinese hog numbers and pork production have pushed prices to the highest level since 2011, triggering larger imports from all suppliers," Seng said. "To capitalize on these supply and demand dynamics, USMEF has stepped up efforts to educate importers about the availability, quality, consistency and affordability of U.S. pork. At the same time, the import market continues to receive large volumes of very competitively priced product from Europe. We are in a battle for market share, not only in China but also in all key Asian markets."

Other notable January-February results for U.S. pork include:

Pork shipments to both Australia and New Zealand were up substantially, as exports to the Oceania region increased 56 percent from a year ago in volume (11,379 mt) and 14 percent in value (\$31 million).

Exports to Central America were up 38 percent (10,322 mt) with value up 26 percent (\$23.6 million), driven by strong growth to Honduras and Guatemala.

Led by strong results in the Dominican Republic, exports to the Caribbean were up 12 percent from a year ago in volume (6,475 mt) and steady in value (\$15.3 million).

Export volume to the ASEAN region was steady with last year at 6,450 mt while value increased 13 percent to \$15.9 million, led by growth in the Philippines and Vietnam.

Exports to South Korea and Mexico were down significantly from last year's large volumes, while exports to Japan were also lower. Larger domestic supplies and lower prices have, to some extent, slowed import demand in these key markets. But exports to Japan are expected to regain momentum in coming months as Japanese ham and sausage manufacturers rebuild their frozen pork inventories and U.S. chilled pork continues to regain traction. Korea's imports are expected to slow slightly

from last year's large volumes, but frozen U.S. pork will benefit from zero duties. Further weakness in the Mexican peso is creating challenges in the top volume market for U.S. pork, as Canada has been gaining market share.

## Overseas gains for beef exports offset by slow demand in Mexico, Canada

Through February, beef export volume moved higher than a year ago in most Asian markets and Central America and was relatively steady in the Middle East and the Caribbean. Demand slowed substantially, however, in Mexico and Canada, last year's No. 1 and No. 4 volume destinations for U.S. beef.

"U.S. beef is well-positioned to regain market share in Asia this year," Seng explained. "Increased slaughter numbers are generating larger supplies of the cuts needed to serve our Asian customers, and this will bolster our marketing efforts in both the foodservice and retail sectors. But we need to find even more innovative ways to maintain beef demand in Mexico, where the weak peso has effectively offset any softening of U.S. beef prices."

January-February market highlights for U.S. beef include:

Japan reclaimed its position as U.S. beef's leading volume destination (32,890 mt, +11 percent year-over-year). Japan was also the top value market, though export value was down 12 percent to \$180 million. U.S. exports to Japan are expected to recover market share this year, with smaller available supplies (and higher prices) from Australia, as well as recent strengthening of the yen, helping offset some of Australia's tariff advantage.

Exports to Korea increased 28 percent from a year ago in volume (23,045

mt) but fell 2 percent in value to \$135.5 million. Smaller domestic production and high prices have helped stimulate demand for larger imports. High-quality U.S. beef is well-positioned to help meet this need, while also helping to fuel consumption growth in Korea.

Exports to Hong Kong rebounded to 20,545 mt (+18 percent) but value fell 14 percent to \$118.6 million.

Taiwan, where the U.S. is the dominant supplier of chilled beef, achieved year-over-year growth in both volume (5,052 mt, +25 percent) and value (\$44.2 million, +6 percent).

Exports to Central America increased by 50 percent (2,252 mt) with value up 37 percent (\$12.6 million), driven by strong growth to El Salvador, Panama and Honduras.

Exports to Mexico fell 18 percent in volume (31,850 mt) and 28 percent in value (\$143.4 million), while exports to Canada were down 11 percent (17,532 mt) and 25 percent (\$104.7 million), respectively.

## Lamb exports edge higher in volume; value trends lower

February exports of U.S. lamb were slightly higher than a year ago in volume (830 mt) but dipped 24 percent in value to \$1.3 million. For the first two months of the year, exports increased 17 percent to 1,801 mt but value fell 19 percent to \$2.8 million. Volumes increased to Mexico, Canada, Bermuda and Costa Rica, but were partially offset by lower exports to Saudi Arabia, the Bahamas and Panama.

Complete export totals for U.S. beef, pork and lamb are available from USMEF's statistics webpage. For more information, please contact Joe Schuele at jschuele@usmef.org or 303-547-0030.

## Kansas Society for Range Management announces the 2016 Range Youth Camp sign-up

The Kansas Section of the Society for Range Management will once again be sponsoring the Kansas Range Youth Camp this year from July 12-15th. This camp has been held for over 55 years, and the purpose of the camp is to educate youth about what rangelands are, why they are important, and how best to manage these lands sustainably.

The camp is held at Camp Mennoseh in Kingman County, and high school students that are currently freshmen, sophomores, or juniors are eligible to attend. Any student that is interested in livestock, wildlife management, soils, native plants, or natural resources is sure to learn something interesting and have a fun time doing it. There is a lot of time spent outdoors doing 'hands-on' activities, and several field trips will allow students to see first-hand some local operations. Registration is going on right now and ends June 1. The cost of camp is \$250, but many county conservation districts and other local organizations will sponsor a local student. Interested students are encouraged to contact the conservation district to inquire about funding. More information as well as forms can be found on the Kansas SRM website: <http://rangelands.org/kansas/kansas-range-youth-camp/>. The camp coordinator, Amber Johnson, can be contacted at aaj1@usa.com or 620-374-2511 with questions.

Call us for Catalogs, Sale Flyers, Magazines, Calendars, Brochures, Books, Newspapers. Ask for Sandra

# AG PRESS

785-539-7558

## ESTATE AUCTION

**SATURDAY, APRIL 30 — 10:00 AM**  
723 Curch, — EUDORA, KANSAS  
From Casey's North 2 Blocks! WATCH FOR SIGNS!!

**TRUCK/WOOD WORKING EQUIPMENT, VINTAGE LUMBER & HARDWARE, COLLECTIBLES/HOUSEHOLD MISC.**  
**IF YOU ARE INTO RENOVATION WORK DO NOT MISS THIS OPPORTUNITY!!**

See last week's Grass & Grain for listings & Please visit us online [www.KansasAuctions.net/elston](http://www.KansasAuctions.net/elston) for pics!  
Concessions: Happy Trails Chuckwagon

**SELLER: THE ESTATE OF LEONARD HOLLMANN**  
Auctioneers: Mark Elston & Jason Flory  
(785-594-0505) (785-218-7851)  
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# AUCTION

**SUNDAY, MAY 1 — 10:30 AM**  
Due to the death of Bill & Richard Estes the following will sell at 25450 S. HWY K-170, OSAGE CITY, KS.  
(from the west side of Osage City, JCT K-31 & K-170 2 miles south on K-170)

JD 4040 dsl. Tractor, SGB, 2 hyd outlets, 3 pt. w/JD 148 Loader; 2001 Dodge Ram 2500 Pickup Cummins Dsl, AT, Ext. Cab, 4WD, GN Hook-up, 8 ft; 2004 Travel-A-Long 'Stock' GN Trailer, 7x24', 2 Divider Gates, Fiberglass Roof; 1984 Ford F-250 Pickup, 4WD, V8, AT w/8 ft Steel Flatbed GN Hook-up & Luco Taskmaster Cake Feeder; 1988 Oldsmobile Delta 88 4 dr, Power, Cloth 3800 6 cy, A.T.; 2011 PJ 7x12 Utility Trailer, Fold Down Ramp, Single Axle; 1969 Chevrolet C-50 Truck, V8, 4-2 sp w/15' Grain Bed & Hoist; Honda Rancher ES 4WD ATV; Suzuki Quad Runner 4x4 ATV, May or May Not be Running; J.D. GT 275 Riding Mower w/ Deck May or May Not be Running; Vermeer 605F Big Baler; Krone AM 283S Easy Cut Disc Mower on Bairds Pull Type Caddy; Vermeer 12 Wheel Model WR-24 Wheel Rake; 2 Big Bale Forks off J.D. 148; IH 45 Vibra Shank w/Manual Wings; IH 10 Grain Drill; JD 110 12 ft Disk; J.D. 2 Bottom Pull Type Plow; 2 J.D. 3 Bottom Plows, 3 pt.; King Kutter, 6', 3 pt.; Gehl Mix-All Grinder-Mixer; Rhino Post Hole Digger, 3 pt., 2 Bits; Blade, 8', 3 pt.; Big Bale Fork, 3 pt.; Donahue Implement Trailer, 21'; Rotary Mower, 5', 3 pt.; 2 Portable Grain Augers, 1 Needs Repair.

**GRAIN BINS—To be moved**  
2 GSI 4 & 5 Ring Grain Bins; Bulk Bin, Needs Repair. Selection of Hand Tools, Nuts, Bolts, Lumber, Etc.; Filson Cat-

tle Tub & 3 Section Alley Way; 2 Pearson Squeeze Chutes; BBK Panel Trailer w/(16) 12' Panels; 2 Calf Creep Feeders, 1 Needs Repair; Cattle Guard 8x15'; King Portable Self Feeder; 22+ Steel or Poly Bottom Feed Bunks, Some Needing Repair; 10+ Big Bale Rings; 2 New Rolls Rangelmaster Woven Wire; Assortment of Wire Cattle Panels, Used Steel Posts, 20+ Gates or Panels; Selection of Vet Equipment; Lincoln 225 Amp Welder; Troy Blit Horse Tiller; Shopsmith; Generac C-4000 Series Portable Generator; Acetylene Welding Outfit; Slide-In 100 Gal Fuel Tank w/12V Pump; Set of Gear Pullers; Floor Jack 10 Ton; 2 Tap & Die Sets; 10+ Good Hedge Posts; Sears 8", 3 sp Bench Drill Press; Engine Hoist 1 1/2 Ton; Rolling Tool Chest + Small Tool Boxes; Gooseneck Trailer Hitch, 3 pt.; Kohler Courage XT-173 cc Power Washer; Lightning Rod w/Glass Ball; White Jeans & Cabinet Sewing Machines; 1984 & 1985 DC Comic Books; 2 Old Push Reel Type Lawn Mowers; 2 Stock Saddles, Some Tack; Child's Wagon; 8 Old Bikes; Several Tonka Toys; 2 Sad Irons; Antique Round Wooden Box; Several Vintage Ladies Hats; Antique Wardrobe; Enamel Cooker; Fruit Jars; Universal Food Grinder; Burlingame Bank Full Set of Xmas Ornaments; Pressure Cooker; Bread Machine; Kenmore 15' Chest Type Freezer.

**MANY, MANY OTHER ITEMS NOT LISTED—INSPECTION DAY OF SALE ONLY. NOTE: There will be at least five trailer loads of shop and farm miscellaneous equipment. Come early and plan to spend the day. Collectibles and household items may sell in double ring.**

**MRS. BILL (LOU) & MRS. RICHARD (NANCY) ESTES, Sellers**

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Pics & sale bill at [www.wischroppauctions.com](http://www.wischroppauctions.com)

## REAL ESTATE & PERSONAL PROPERTY AUCTION

**SUNDAY, MAY 1 — 12:00 NOON**  
1721 Little Kitten Ave. — MANHATTAN, KANSAS

4 Bedroom, 2.5 Bathrooms, 3,000 plus Sq/ft, 32,322 sq/ft lot. Storage shed, double car garage, walkout basement and two decks. Great Neighborhood on a large lot on the west side of town.  
TO VIEW THE HOME CALL FOR AN APPOINTMENT.

**AUCTIONEERS NOTE: Large house with new updates, Oversized Lot with mature Trees, Lots of Room here!**

Sofa, love seat, massage recliner, coffee table, sofa tables, end tables, sofa with matching wing back chair, oak dining room table with pedestal claw feet and 6 chairs, matching Lazy Boy recliners like new, bookcase, HDTV, 2 microwaves, queen size bed, box spring, mattress and matching dresser, full bed, box springs and mattress, black chest with open face Hutch, shelving, Parts bins, front-end rototiller, push mowers, microwave cart, dinette set with 4 chairs and matching bar stools, comforters, blankets, throws, pillows, sheets, roll top desk and matching chair, Corner TV table Cherry finish, office chairs, flatware, glassware complete sets, Trinkets and collectibles, hall tree Oak, ball cap collection, puzzles and games, washer dryer, refrigerator, miscellaneous books, and much more.

**Terms:** 10% earnest deposit down day of auction with the balance to be paid at closing on or before June 3, 2016. Closing costs split 50/50 between buyer and seller. 2016 property taxes will be prorated at closing. Property sells, As is where is. Announcements day of auction take precedence over any previous printed materials.

**Jeff Ruckert, Auctioneer/Broker**  
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### UNRESERVED ONLINE AUCTION WEDNESDAY, MAY 4, 2016

FEATURED SELLERS:	ITEMS SELLING:
• Fred Fehrenbach Retirement 785-418-1167 & 785-242-4554, Ottawa, KS 66607	• 2010 Convey-All BTS-290-SPEED Seed Tender
• V. Shawn Plummer, Shawn Plummer 785-694-3089, Winona, KS 67764	• 2007 John Deere 637 Tandem Disk
• Schrag Brothers Farm LLC, Randy Schrag 620-727-3509 & 620-459-6496, Pretty Prairie, KS 67570	• 1991 John Deere 9600 Combine
• B & J McClain Farms LLC, Brian McClain 785-294-0246, Goff, KS 66428	• 1985 Ford F8M Feed Truck
• C & W Farm Supply Inc, Jeff Sothers 785-374-4521, Courtland, KS 66939	• John Deere Turbo 7720 Combine
• Decatur Coop Assn, Steve Carter 785-675-1988, Oberlin, KS 67749	• Schaben ESF6500 Sprayer
• Gary & Jack Pancake 785-821-2213 & 785-821-3078, Sharon Springs, KS 67758	• 2001 Dodge Ram 2500 Pickup
• High C Farms, Chris Pinkston 620-786-1563, St. John, KS 67576	• 1996 Wilson Pace-setter Grain Trailer
	• Crustbuster 3400 Drill
	• Feterl Auger
	• PLUS MUCH MORE!

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# Auction Sales Scheduled

check out the on-line schedule at [www.grassandgrain.com](http://www.grassandgrain.com)

Online auction — soft close begins May 2 — trailers, equipment, containers, vehicles & more online at ([www.lindsayauctions.com](http://www.lindsayauctions.com)) for formerly dba International Electrical, Inc. Auctioneers: Lindsay Auction Service, Inc.

Online Auction closes May 2 — Large selection of Kansas Native Hardwood lumber online at [dlwebb.dvauction.com](http://dlwebb.dvauction.com). Auctioneers: Dave Webb, Webb & Associates.

April 27 — Farm equipment of all kinds online at ([www.bigiron.com](http://www.bigiron.com)). Held by Big Iron Online Auctions.

April 28 — Consignments at Salina. Auctioneers: Kings Auction & Appraisal.

April 29 & 30 — selling Friday near Hill City: lots of iron, vehicles, tractors, Caterpillars, farm equipment, 4-wheelers, mowers, trailers, tools, misc. farm items; selling Saturday at Lenora: Real estate, skid steer, tractors, vehicles & parts, tools, misc. household, collectibles, guns for Kenneth Best Estate. Auctioneers: Wolters Auction & Realty.

April 30 — Catipillars, tractors, trucks, vehicles, machinery, tools, misc., guns & ammo, collectibles, cattle equipment, salvage held South of Lawrence for L.A. (Art) Witham Jr. Estate. Auctioneers: Edgecomb Auctions.

April 30 — 3BR home on 158.1 acres in McPherson County, native & tame grasses, antiques, household, appliances & misc. at Inman for property of Menno & Edith Enns. Auctioneers: Griffin Real Estate & Auction Service.

April 30 — Real estate, home, hit & miss & other engines, lawn & garden,

tools & misc., antiques, collectibles, appliances, furniture, household at Hanover for Verla Rettig & the late Willard Rettig. Auctioneers: Schultis & Son, Inc.

April 30 — Tractor, mowers, vintage cars, household, antiques, shop & misc. at Inman for Terry & Nancy Masterson. Auctioneers: Triple K Auction & Real Estate.

April 30 — Tractors, combines & heads, trucks, trailers, ATVs, skid loaders & attachments, machinery, dairy equipment, miscellaneous at Seneca for Jerry & Sue Spielman. Auctioneers: Wilhelm Auction Service.

April 30 — 3 big auctions, silent, student live at Randolph for Blue Valley Randolph FFA Banquet.

April 30 — Truck, wood-working equipment, vintage lumber & hardware, collectibles, household & misc. at Eudora for Leonard Hollmann Estate. Auctioneers: Elston Auctions.

April 30 — Vehicle, guns, household, antiques, collectibles, tools & misc. at Belleville for Irene Hiatt Estate. Auctioneers: Novak Bros. & Gieber.

April 30 — Machinery, equipment, tools, shop items, possible antiques, collectibles, household near Salina for Doug Gommel's Family. Auctioneers: Post Rock Auction.

April 30 — Tractors, trucks & farm machinery, ATV, shop equipment & household items at McPherson for Verle Johnson Estate. Auctioneers: Van Schmidt.

April 30 — Antiques, collectibles, vintage, tools, trucks at Overbrook for Jim & Shirley Arnold. Auctioneers: Wischropp Auctions.

April 30 — Farm machinery, tools & misc. at Onaga for Kenneth & Gloria Falk and Tieler Stumpff. Auctioneers: Cline Realty & Auction, LLC.

April 30 — Tractors, combine, grain cart, trucks, trailers, machinery, cattle equipment, tools, 4-wheeler, mower West of Tipton for Duane & Judi Streit. Auctioneers: Thummel Real Estate & Auction, LLC.

April 30, May 1 & 2 — Tractors, combines, headers & augers, industrial equipment, trucks, pickups, antique & misc. vehicles, trailers, lawn, garden & TV, farm equipment, hay equipment, planters, drills, shop equipment & tools at Larned for consignments. Auctioneers: Carr Auction & Real Estate, Inc.

May 1 — Furniture, household, glassware, dishes, electronics, collector items, outdoor, lawn items, tools, DIY items & misc. at Washington for Lillies, Nelson & Nutsch families. Auctioneers: Burt Farm & Ranch Realty, LLC.

May 1 — Real estate (4BR, 2BA home with large lot) & personal property held at Manhattan. Auctioneers: Ruckert Realty & Auction.

May 1 — Guns, tractor, equipment, horse equipment & tools, collectibles & household at Jamestown for Jack Trussell. Auctioneers: Thummel Real Estate & Auction, LLC.

May 1 — Tractor, trucks, car, farm & livestock equipment, trailer at Osage City for Mrs. Bill (Lou) Estes & Mrs. Richard (Nancy) Estes. Auctioneers: Wischropp Auctions.

May 1 — 2 Auctions, same day. First auction; various

indoor and outdoor furniture, dishes, glassware and misc items, Linda Fetters Estate. Second auction; furniture CD's, dishes, books, kitchen appliances, various antiques and collectibles and other misc items, Mary Ann Berry. Gannon Real Estate and Auctions.

May 1 — Furniture & appliances, coins, glassware & collectibles, tools, and misc items. Craig J. Wellnitz, Estate & Others. Brown Real Estate & Auction Service, LLC.

May 1 — Furniture, tools, glassware, misc items, and various vintage & antique items. Estate of George & Darlene Bruner. Sundgren Auction & Realty.

May 3 — Guns, vehicles, jewelry, real estate, and misc items. Monte L. Ramskill Estate. Wischropp Auctions.

May 4 — Farm equipment of all kinds online at ([www.bigiron.com](http://www.bigiron.com)). Held by Big Iron Online Auctions.

May 4 — Harper County land in 2 tracts held at Attica. Auctioneers: Gene Francis & Associates.

May 4 — Real estate, 10,000 sq. ft. Strip Mall currently divided into 8 Units held at Junction City for F and L Enterprises, LLC. Auctioneers: Gannon Real Estate & Auctions.

May 5 — Land auction held at Leonardville for Evelyn Davies. Auctioneers: Gene Francis & Associates.

May 5th — Tools, yard items, mowers, van boxes and misc. at Clay Center for John and Cenith Cowing. Kretz & Bloom Auction Service

May 7 — ATV, zero turn mower, trailers, wood-working equipment & tools, collectibles, household & misc. at Berryton for Mrs. Dallas (Linda) Burton. Auctioneers: Mark Elston & Jason Flory.

May 7 — Snap-On, Mac, Craftsman, tools & Camaro car parts, household, antiques, boat, guns & coins at Cuba for Ronald K. Kauer Estate. Auctioneers: Novak Bros. & Gieber.

May 7 — Cars, tractors,

boats, tools, household & more at Salina for Betty Turner. Auctioneers: Thummel Real Estate & Auction, LLC.

May 7 — Tractors, farm equipment, semis, trucks, pickups, stock & other trailers, hay equipment near Osborne for Wayne "Bo" & Carla Wilcoxson. Auctioneers: Wolters Auction & Realty.

May 7 — Tents, blacksmith items, tools, camping items, guns, bows & misc. at Westmoreland for Estate of Don Harris. Auctioneers: Hinrichsen Auction Service.

May 7 — Real estate (3BR, 2BA home), antiques, collectibles, glassware, household, furniture, appliances, tools, shop & lawn items at Council Grove for property of Stella M. Swisher & the late Clyde Swisher. Auctioneers: Griffin Real Estate & Auction Service, LC.

May 7 — Tractors, trucks, farm machinery, shop equipment & household at McPherson for Joe Ledell Estate. Auctioneers: Van Schmidt.

May 7 — Auction at Salina for Grant Woodcraft Inc. Auctioneers: Wilson Realty & Auction Service.

May 7 — 2010 Ram 2500HD, Crew Cab pickup, farm machinery, hay & livestock equipment, goose-neck trailers, boats, campers, shop equipment & tools, household at Brookville for Diane Hicks. Auctioneers: Bacon Auction Co.

May 7th — Antiques, furniture and misc. at Clay Center for John and Cenith Cowing. Kretz & Bloom Auction Service

May 7th — Real estate, Medel cars, Vehicles/trailers/carpport, Guns, Antiques & collectibles, and shop & misc items. Archie M. Riggs, seller. Leppke Realty & Auction.

May 14 — Shop tools & access., lawn & garden, fencing, machinery, trailers, ATVs, livestock equipment, household at Soldier for Larry J. & Linda R. Savage and consignments by John Patch. Auctioneers: Harris Auction Service.

May 14 — Antiques & col-

lectibles at Salina for Jim & Ladonna Pangrac Estate. Auctioneers: Thummel Real Estate & Auction, LLC.

May 14 — Vehicles, lawn mower, household items, furniture, antiques, collectibles, tools at Abilene for Kenneth & Bonnie Bourbina, Sr. Auctioneers: Chamberlin Auction Service.

May 14 — Consignments at Salina. Auctioneers: Wilson Realty & Auction Service.

May 15 — Antique furniture, collectibles, crocks, art & pictures, toys, glassware, paper items, tools & more at Salina. Auctioneers: Thummel Real Estate & Auction, LLC.

May 16 — 160 acres m/l Reno County land held at Abbyville for Frank J. McBride Trust #1. Auctioneers: Hamm Auction & Real Estate, LLC.

May 17 — Sumner County land in 3 tracts held at Wichita. Auctioneers: Gene Francis & Associates.

May 17 — Cloud County farmland held at Glasco for Mike Loy & David Loy. Auctioneers: Thummel Real Estate & Auction, LLC.

May 21 — Abilene high school carpentry class 3BR house held at Abilene for USD 435. Auctioneers: Reynolds Auction Service.

May 21 — Tractors, trucks, semi trucks, tillage, irrigation and livestock equipment, shop items at Minneapolis for Rupert Land & Cattle Co. Auctioneers: Bacon Auction Company.

May 21 — 4BR, 3BA home, 80 acres at Rosalia. Auctioneers: Select Homes Auction.

May 24 — 9480 acres m/l in 5 tracts of Finney & Haskell counties held at Garden City. Auctioneers: Schrader Auction.

May 30 — Harley Gerdes 23rd Annual Memorial Day consignment auction at Lyndon. Auctioneers: Harley Gerdes Auctions.

June 4 — Real estate & personal property at Minneapolis for Leanna Crist. Auctioneers: Wilson Realty & Auction Service.

# AUCTION

SATURDAY, MAY 7 — 10:00 AM

Auction held at 502 Brandon Street in CUBA, KANSAS

## SNAP-ON, MAC, CRAFTSMAN, TOOLS & CAMARO CAR PARTS

**Snap-on tools:** 1990 Snap-on 18 drawer metal roller tool cabinet w. side packs, stack on, & base; 1/2 in., 3/8 in., & 1/4 in. sets of sockets; sets deep well sockets 1/2 in., 3/8 in. & 1/4 in.; ratchets, extensions, & breaker bars 1/4 in., 1/2 in. & 3/4 in.; 3/8 in. torque wrench; set angle wrenches up to 1 in.; sets open & box wrenches metric & SAE to 1 1/4 in. & 19mm; set stub wrenches to 3/4 in.; set crow foot wrenches; gear puller set; re-threading set; cobalt drill extractor; angle drill kit; set pry bars; 5 screw driver sets; punch sets; door handle wrenches; magnet & mirror tools; burr set; hex set; carbide bur set; tap & die set; screw extractor set; 2 digital volt meters; light duty puller set; old snap-on tool box & other Snap-on tools; Snap-on 69 Camaro toy & other cars; 3 snap-on toy tool cabinets; 5 Rusty Wallace Toy cars; **Mac tools:** 3/4 in. brake over socket; large 1/2 in. & 1/4 in. torque wrenches; 1/4 in. sockets; set snap ring pliers; 2 stud extractors; set bearing & seal drivers; set bolt grip pullers; **Blue Point tools:** ratchet wrenches to 7/8 in.; harmonic balancer & puller; screw driver sets; soldering gun; tap & die set; screw extractors; inferred thermometer; 2 micrometers; 2 Brown & Sharp micrometers; **Craftsman tools:** 4hp. air compressor; 16 gal. wet & dry vac; deep well & sockets 1/4 in. drive; set open & box wrenches to 15/16 in.; 2 drill bit sets; Matco set deep well sockets; impact socket to 1 1/4 in.; set open & box to 1 in.; Martin wrenches; 2 Makita cordless drills; Ryobi 18v shop vac, circular saw, & saws all, Air tools; new air buffer; air impact chisel set; buffers; air drills; cutters; ratchet; **Other tools:** 6ft. Fiber glass & 12ft.

Wood step ladders; creepers; 1 beam, Hyd., & floor jacks; car stands; space heater; 12v trouble light; belt sander; 10 tool boxes; lighted inspection mirror; crescent wrenches; C champs; electric drills; hollow, brass, & other punch sets; quick & vise grips; tin snips; adj., side cutter & needle nose pliers; Binks paint guns; allen wrench sets; lots small mechanic tools; hand & garden tools; **Camaro Car Parts:** fenders; fender welds; hub caps; front fenders; wheels; new heater core; air intake manifold; carb, alternator, starter; 2 bin full car parts; Chilton's repair manuals; Camaro tin sign; Camaro clock; Edebrock carburetor; helicopter tail rotar.

## HOUSEHOLD & ANTIQUES

New Kenmore frost free refrigerator w. ice maker; new Kenmore washer; Kenmore dryer; matching green couch & chair; glass door hutch; drop leaf table & chairs; sofa sleeper; coffee & end tables; entertainment center; ladies roll top desk; stuffed flying pheasant; Brother copier; other household; Antiques; Duncan Fife dining table, leaves, 6 chairs; 1930- 3 piece bedroom set; lard press; picture of Belleville race track; brass fire extinguisher; Toy Gleaner A combine; Hubley tractor; kids erector set; Beer stine; 4 Miller, Olympia, Michelob, & Lowenbrau beer signs; tin tackle box, fly tie, fishing lures; cuckoo clock; 8 green glass seine floats; wood bowls; Minolta film camera

**Lunch on Grounds. Terms Cash: Nothing removed until settled for. Not Responsible for Accidents**

## RONALD K. KAUER ESTATE

Idan Kauer Adm., 785-729-3310

AUCTIONEERS: NOVAK BROS. & GIEBER

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785-527-1302 (Cell) Troy Novak, 785-987-5372

Clerk: Scott Clerking, Belleville, Ks.

& lens; cap collection; shot glasses; blow torch; & other.

## BOAT, GUNS, & COINS

**Boat:** Fiberform 18ft. Inboard 120hp. w. trailer, engine needs work; Guns: Browning model 30 pump 10 ga. vent rib shotgun, choke tubes, 3 1/2 in.; Browning Light Twenty 20 ga. semi auto vent rib shotgun, choke tubes; Browning Buck Mark 22 cal. semi auto pistol & holster; Remington 870 Wingmaster pump 12 ga. shotgun, w. poly choke; Winchester model 1906 pump 22 cal. rifle; Smith & Wesson chrome 44 mag. revolver w. holster; Colt AR15A2 semi auto 223 cal. rifle w. extra clips; SK 7.62x39 semi auto rifle; Iver Johnson single shot 12 ga. shotgun; Hawkins 50 cal. muzzle loading black powder rifle; Daisy 880 pump BB gun; Browning compound bow 50-70 weight in case; shells for all guns; 4 Buck & Gerber 12in. hunting knives; Bushnell binoculars; 3 cleaning kits; 3 metal shell boxes; gun case; hunting clothes; **Coins:** 1880 ten dollar gold piece; 1984 gold Canada leaf coin; 7-1885-1921 Morgan silver dollars; 8-1972-76 Eisenhower silver dollars; 5-1987-09 silver Liberty coins; 2- 1993-09 silver Canada coins; Branchlike Alaska first city silver coin; 1987 Elizabeth II Canada silver coin; Hoover Dam com. Coin; 1928- 5-1976 2 dollar bills; 8 Indian head pennies; 2-1940 steel pennies; 50 wheat pennies; 4 Buffalo nickels; 1942-62 Quarters; 6-1951-64 dimes.

# REAL ESTATE AUCTION

TUESDAY, MAY 17, 2016 — 7:00 PM

Auction will be held in Glasco Senior Center, GLASCO, KANSAS

## Legal Description: SE 1/4 9-8-4 Cloud Co. KS

The farm is located on the NW corner Deer & 90th Road (Highway 24 & Delphos corner) east of Glasco, Kansas. There are 158.03 acres with 103.48 acre crop, 54.46 grass. The bases are 55.3 acres wheat, 50 bu yield, 21.0 acres grain sorghum, 96 bu yield, 7.3 acres soybeans, 39 bu yield, for a total base of 83.6.

Seller will pay 1/2 2016 taxes based on 2015 taxes. 2015 taxes were \$1,682.24.

**Possession:** Possession will be after 2016 wheat harvest on land planted to wheat. Seller will retain landlord share on 2016 wheat crop. Possession of

grass will be upon closing. Water & mineral rights pass with the land.

**Terms:** 10% of purchase price as down payment day of auction, the balance will be due upon closing on or before June 20, 2016. Down payment will be escrowed with Mitchell Co. Abstract. Escrow fees will be split 50/50 between seller & purchaser. Title insurance will be used, the cost will be split 50/50 between seller & purchaser.

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

## MIKE LOY & DAVID LOY

Auction Conducted By: THUMMEL REAL ESTATE & AUCTION LLC  
785-738-0067 • [www.thummelauction.com](http://www.thummelauction.com)

# AUCTION

SATURDAY, MAY 7 — 10:00 AM

Auction will be held at the home located at 6872 W. State Street, 1/2 mile South and 1/2 mile East of the Rolling Hills Zoo West of SALINA, KANSAS

**CARS, TRACTOR & BOATS**  
1964 Chevrolet Impala 2 door convertible, body good, new motor, transmission & brakes; 1966 Ford T Bird 428 engine, runs; assortment of Mustang parts; assortment car parts; engines; 1984 Cimmaron ski boat; 24' Wellcraft boat Mercury Cruiser motor w/living area; Ford 9N tractor, 3 speed, 3 point; loader for Ford tractor; Land Pride 3 pt. 6' blade.

## TOOLS, HOUSEHOLD & OTHER

5 hp. Upright air compressor like new; Craftsman stack tool box; 90 amp flux wire welder; parts washer; 10" Craftsman band saw; router; sander; planer; Craftsman table saw; bench grinder; 3/8" drill press; 4" vise; impact tools; large assortment of hand tools; floor jack; Handyman jack; gas weed eater; Ham radio equipment (several

pieces); dresser base; chest of drawers; octagon table & chairs; end tables; school desk & chair; Norditrac tread mill; Office jet printer; records; pressure cooker; buck saw; gas iron; sad iron; pop out toaster; baskets; yard tools; 2 coaster wagons; wood & wood racks; ammo boxes; assortment of other items.

Note: For pictures check our web site at [www.thummelauction.com](http://www.thummelauction.com).

## BETTY TURNER

Auction Conducted By: THUMMEL REAL ESTATE & AUCTION LLC  
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## New Propane Farm Incentive Program data reveals cost savings, efficiency of propane farm equipment

Results from the Propane Education & Research Council's 2015 Propane Farm Incentive Program reveal high performance ratings, improved efficiency, and cost savings for producers switching to propane-powered farm equipment.

The Propane Farm Incentive Program tests the performance of new propane equipment, including irrigation engines, grain

dryers, flame weed control systems, premium generator sets, and agricultural heating systems. Program participants are offered a financial incentive toward the purchase of new propane equipment in exchange for real-world performance data.

"The Propane Farm Incentive Program allows us to work directly with farmers to evaluate performance,

operating efficiency and financial impact of using propane-powered equipment," said Cinch Munson, PERC's director of agriculture business development. "This feedback provides vital, real-world information we are able to use to continue to improve propane technology in years to come."

Throughout the 2015 program, 87 participants from

20 states operated several models of propane-fueled irrigation engines, grain dryers, flame weeding systems, premium generator sets, and greenhouse heating systems. More than 80 percent of participants rated equipment a 4 or 5 on a 5-point scale, with 5 being the highest. Irrigation engine operators reduced fuel costs by 58 percent, while grain dryer operators reduced costs as-

sociated with yield losses and energy consumption by 43 percent.

"New propane-powered farm equipment is more efficient and reliable than ever before," said Munson. "The producers' experiences and equipment ratings confirm the high quality performance and significant savings available to farmers who operate new propane-powered equipment."

PERC's Propane Farm Incentive Program is now accepting applicants for the 2016 Propane Farm Incentive Program, which offers up to \$5,000 toward new propane engines, building heaters, and other agricultural equipment. Learn more about eligible equipment, see grower testimonials, and apply at propane.com/farmincentive.

## Hot topic, cool solutions, holistic approach to heat tolerance

Many challenges in the beef community are tackled with a two-pronged approach: genetics and management.

Heat stress should be no different, says Megan Rolf, Oklahoma State University Extension beef geneticist.

"Certainly from the feedlot side there has been a lot of work done on mitigation strategies, and I think we have a real opportunity in the cow herd to use genetics to work on adapting cows to the different environments," she says.

The animal scientist outlines some of those possibilities in her research review, "Genetic Selection for Heat Tolerance in Cattle."

For helping animals through heat events, many of the tips such as shading and altering feeding schedules apply to cattle on feed. Cow herds already have the distinct advantage of natural shade, like trees, and green grass that absorbs less sun than feedyard pens.

But interventions are also harder to manage at that level.

"Because they're out on pastures and living on grass, they're really not in a controlled environment where you can set up sprinklers, for example," Rolf notes.

That's why she and other researchers gathered with cattlemen and beef community partners more than a year ago to discuss the role of genetics in heat tolerance.

It all starts at a cellular level and cattle genetics

plays a role in heat stress.

"Heat stress responses are controlled by lots of small mutations, spread all throughout the genome," Rolf says, noting it could be a different fold in the protein due to a slight tweak in an amino acid string. "Just like weights and other production traits, it can be these little things that change a small molecular mechanism, but cumulatively they can have a big impact."

Much of the current research comes from the dairy production side, because data is easier to gather in those intensively managed herds.

"Heat tolerance is a heritable trait, so genetic selection can be utilized to increase heat tolerance," the paper notes.

The key to a selection program is defining the right phenotype. Two in the scientific literature are respiration rate (breaths per minute) and body temperature regulation. Both are heritable traits, but there are several practical disadvantages to selection. Respiration rate is very labor-intensive and body temperature regulation requires specialized equipment, Rolf says.

Location also matters. The best bulls for heat tolerance in the Midwest might be different than the best set for the Southeast, for example.

"When you have environmental differences that impact genetics, you have an

interaction," she says. In a favorable environment, there will be one outcome. "When you move those bulls and generate progeny in a really challenging environment, progeny performance might be different."

Adaptability can be increased by crossbreeding with a tropically adapted breed, or by improving the traits related to tolerance in Bos taurus breeds that have distinct performance and carcass quality strengths.

Results from one paper using simulated data suggested it might require fewer generations to take a high-performance breed and make it more heat tolerant, than to take an already-heat-tolerant breed and make it more favorable for some performance traits.

To make that significant improvement, there are a lot of questions: What are the best and most realistic measures to collect? Would it be easier to use the measures breed associations are already tracking that are collected in different environments? Should a selection index be created to balance selection for heat tolerance and performance traits?

"It's a high-hanging fruit, but there are some options and possibilities," Rolf says. "We have to consider thermo-tolerance really comprehensively with other traits. I think we can make progress with improving heat tolerance without making sacrifices in production traits, but we have to consid-

er them holistically."

Today, particularly in the Southeast, some cattlemen watch hair shedding, which could impact calves later on. One area study showed a 25-pound increase in calf weaning weight from cows that shed their hair quickly.

"There's no national genetic evaluation but hair shedding is heritable, so a producer could go out and take a look and try to keep replacement females that tend to shed hair earlier in the season," she says. "That's a win-win, because you're getting an advantage in terms of increasing heat tolerance and you get that advantage in weaning weight."

The Angus Foundation is also funding broader research at the University of

Missouri on adapting cattle and genetic selections to better fit nine regions across the U.S., furthering both animal wellbeing and producer profit in concert.

Starting at the beginning would be a boon to the entire system, Rolf says, because improving heat tolerance in herds should create progeny with increased ability to adapt in the stocker and feeding phase.

"Anytime we're trying to produce a great product for a consumer, it's a combination of a lot of different factors," she says. "Everything from the genetics and mating decisions all the way to the management choices you make. Anytime we can do things that reduce the stress on those animals, that's going to help translate

into a good quality product for the consumer."

The complete research paper is available at [www.cabpartners.com/educators](http://www.cabpartners.com/educators).

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# AUCTION

**SATURDAY, MAY 7 — 10:00 AM**  
204 Fulton Street — WESTMORELAND, KANSAS



Many items on this sale and many surprises. Too many items to mention! This is a high quality auction of hunting, camping, frontiersman, tools, and blacksmithing.

### TENTS

18' T-Pee; 8 man tents; 1 man tents; numerous canvas tents; 14x14 Diamond Fly tent; 10x12 Wall tent.

### BLACKSMITH ITEMS

B.F. Sturtvant Co. Forge; Lg. Anvil; Blacksmithing hand tools; antique drill press.

### TOOLS

10" Craftsman table saw; several elec. Drills; hand belt sanders; skill saws; tape measures; drill bits; bench grinder; numerous hand tools; wrenches; (2) vises; battery chargers; Blk & Decker miter saw; work lights on stands; Kinedyne jack bars; step ladder; ext. ladder; socket sets; KC conduit bender; pipe benders; screwdrivers; hand saws; pry bars; several tool boxes; shop vac; Dremel tools; pneumatic tools; brad nailers; electric chainsaw; band saw; drill press; small table saw; electrical OHM meters; amp meters; misc. electrical supplies; nut-bolts.

### CAMPING ITEMS

Jotul Wood Stove; homemade

lantern hangers-some with antlers; numerous gas lanterns; misc. supplies; many Axes; wool blankets; sheep skins; deer hides; Indian blankets; leather bags; rolls of leather; furs; **Throwing tomahawks**; hunting clothes; sleeping bags; green army wool blankets; cast iron cookware; cast pots; camping chairs; back packs; canteens; water containers; many antlers; skulls; metal folding table;

### GUNS

**Rifles/Shotguns:** Stevens 22 LR 410 ga., Savage Arms; HandiRifle SB2, 45-70 cal., New England Firearms; Winchester model 37, 20 ga.; Stevens single shot 22 LR; Marlin 22 LR, S, L model 97, Manuf 1905; Wards Wester Field 22 LR; Winchester, Schmidt Rueben Swedish straight pull 284; Mossberg, model 200K, 12 ga.; **Handguns:** FIE model TEX, 22 Cal.; Western 6-shooter model, 357 Mag, HyHunter; **Other:** Hahn "45" BB, single action revolver

BB gun; **Blackpowder/ Muzzleloader Handguns:** Single shot Derringer, small handgun; Rare Eig-Eibar 12 mm Percussion pistol; Hawken, 50 cal, percussion pistol; Pedersoli, 45 cal, percussion pistol; **Blackpowder/Muzzleloader Rifles:** Thompson Renegade, 50 cal, muzzleloader rifle.

### BOWS

Crossbow; arrows; compound bow.

### MISCELLANEOUS

McCall cabinets; 6 drawer dresser with mirror-matching headboard; kitchen table and chairs; Hand water pump; (3) ten speed bikes; wooden frame windows; (2) **Steam Trunks late 1800's and early 20's**; (2) Radio Flyer sleds; sewing machines; Cocks; wooden tables; drafters desk; fishing supplies; (2) desks; cigarette lighter collection; Antique Radio/Record player; Knife sharpener wheel; Dancing Lady Lamp; belt buckles; Wahoo Horns; Kenmore refrigerator/Freezer; TV's; Antique metal wheels. Small Cargo Trailer.

Announcements sale day take precedence over printed materials. Items sell as is where is. Cash or check only.

### ESTATE OF DON HARRIS

HINRICHSEN AUCTION SERVICE, Ron Hinrichsen, Auctioneer: 785-770-0222

★ [www.hinrichsenauction.blogspot.com](http://www.hinrichsenauction.blogspot.com) ★

## 3 BEDROOM HOUSE TO BE SOLD AT AUCTION

**SATURDAY, MAY 21 — 10:00 AM**



This home was the major construction project of the Abilene High School Carpentry Class under the supervision of Mr. Nathan Howard.

**House located south of vocational building on the Abilene High School Campus.**

**DESCRIPTION:** This home has 3 bedrooms. 1456 sq. ft. Crown oak cabinets, interior white paint & white baseboard & casing doors, 8' ceilings. Tub & shower, Heritage shingles, vinyl clad Anderson casement windows, 3/4" Huber moisture resistant sub floor, Pex plumbing, cable and phone lines wired to every room. Hardiplank lap siding with brick veneer in front. Installed ductwork. Electrical panel & wiring.

**OPEN FOR INSPECTION:** Any day between now and sale day by appointment only. School: 785-263-1260, Nathan Howard, 785-432-1367. For additional information go to [www.abileneschools.org](http://www.abileneschools.org)

**SOLD AS EXHIBITED:** The house must be moved from the present building site by August 1, 2016 unless special arrangements are made the day of the auction with the superintendent of schools. Moving will be at the owner's expense and in accordance with city ordinances.

**TERMS OF PURCHASE:** 10 percent of the purchase price and sales tax, paid on Building Materials ONLY, due on the day of auction with balance to be paid before the building is moved from school premises. Sale is subject to School Board approval.

**SELLER: USD 435**

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ABILENE & CLAY CENTER  
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# BAXTER BLACK

ON THE EDGE OF COMMON SENSE

## Lost

A source of pride amongst cowboys is knowin' the lay of the land.

And any poor fool that gets lost they figger ain't much of a hand!

They said, "We'll all meet at Bull Crick!" Then looked at me like a trainee! "Draw me a map and I'll find it! Columbus had nothin' on me!"

Daylight broke into my windshield, headed south and loaded for bear.

I turned at the Grasmere station; I should'a shot myself right there!

Nothin' was like they described it, no mailbox where it should be,

No coyote hide on the fence post, now where's Mary's Crick s'posed to be?

Their map showed tourist attractions including, I swear, Noah's Ark!

Little ol' tricklin' Sheep Creek was wider than Yellowstone Park!

I crossed the Cow and

the Horse Crick and cricks named for Nickels and Dimes

Through Nit Crick, Louse Crick and Crab Crick, Crossed Willer Crick twenty-eight times!

I drove demented and crazy! A'chasin' my tail like a dog!

Coursing through desert and mountain, brush thicket and cattail bog!

Fighting back panic, I'm thinkin', 'I could die and never be found!

Worse yet, I'll look like a gungel who can't find his way outta town!

Harold was the boss of the truckers. I figgered he might set me right.

So, I called him up on the two-way and explained my desperate plight.

He said, "Describe yer surroundings." I looked for a landmark somewhere.

"Ain't nothin' but rocks and sagebrush!" He said, "Sonny, yer almost there!"

## Gelbvieh and Limousin Juniors to hold second biannual POWER Conference

The American Gelbvieh Junior Association (AGJA) and the North American Limousin Junior Association (NALJA) are teaming up for the second biannual POWER Conference. The 2016 POWER Conference, Forging Friendships in the Flint Hills, will be held August 4-7 in Manhattan.

POWER Conference (Peers Organizing Winning Effective Results) is a leadership conference for junior members of both associations, ages 14-21 as of January 1, 2016. This conference is a four-day event which includes leadership workshops, motivational speakers and industry tours. The focus of the conference is to increase the young leaders' knowledge of the industry and organization, build leadership skills, and strengthen relationships between the next generation of the Gelbvieh and Limousin breeds.

Participants must be a member of either the AGJA or NALJA; it's not too late to become a junior member of ei-

ther organization. Membership applications can be found on both association websites.

The registration fee for the conference is \$200. After May 15, 2016, prices increase to \$250 with a late entry deadline of June 15, 2016. Juniors interested in attending the event can find the application under the juniors section of both [www.gelbvieh.org](http://www.gelbvieh.org) and [www.NALF.org](http://www.NALF.org). For questions about POWER Conference, contact Katie Campbell at the North American Limousin Foundation at [Katie@nal.org](mailto:Katie@nal.org) or 303-220-1693 or Mary Bea Martin at the American Gelbvieh Association at [marybea@gelbvieh.org](mailto:marybea@gelbvieh.org) or 303-465-2333.

The American Gelbvieh Association is a progressive beef cattle breed association representing 1,000 members and approximately 40,000 cows assessed annually in a performance-oriented total herd reporting system.

## Nine things to know about animal vaccine development from Kansas State University experts

Animal diseases pose significant threats to health and food security. Here are nine things to know about animal vaccine development according to three Kansas State University scientists involved in vaccine research.

1. Developing a vaccine has many steps that range from finding the weaknesses in organisms to finding ways to deliver the vaccine and test its effectiveness. Because the knowledge required spans disciplines, collaboration is vital. "Vaccine design is problem-solving," said Raymond "Bob" Rowland, professor of diagnostic medicine and pathology in the university's College of Veterinary Medicine.

2. A vaccine's purpose is to stimulate the recipient's immune system so it produces antibodies to fight off disease. Every vaccine must contain an antigen, the substance that induces the immune response. The antigen can be a live attenuated — or weakened — virus; an inactivated virus; or a subunit, a protein that doesn't cause infection. "The challenge is finding what's efficacious," said Jishu Shi, professor of anatomy and physiology in the College of Veterinary Medicine.

3. Adjuvants, another component of vaccines, are added to make the vaccine more effective by enhancing, accelerating or prolonging immune response to antigens. These are particu-

larly important in vaccines that don't use a live attenuated virus as an antigen to ensure the desired immune response occurs. "Evaluating adjuvant takes time," Shi said. "After you formulate a good adjuvant, it takes two more years to do the studies."

4. Animal vaccines need to be inexpensive. "As soon as someone said Zika, Obama said \$1.8 billion," Rowland said. Animal diseases don't tend to get that kind of response. "We have to take rational approaches that are doable and also fundable," he said. "Pig vaccines have to be 20 cents apiece so producers can afford them," he said.

5. Human vaccines must be tested to find out how they affect animals and the ecosystem. This is known as the One Health concept, which recognizes the interconnections between the health of animals, humans and the environment. A vaccine developed against the Zaire strain of Ebola is one example. The vaccine uses genetically engineered vesicular stomatitis virus, an animal disease, to express Ebola glycoproteins and provoke an immune response against Ebola. That means testing the vaccine to see how it affects animals is a crucial step in determining its overall safety profile. "We support public health when we study the safety profile in animals of a vaccine that will be used for humans, too," said Jürgen Richt, Regents distinguished professor of veterinary medicine and director of the U.S. Department of Homeland Security's Center of Excellence for Emerging and Zoonotic Animal Diseases in the College of Veterinary Medicine.

6. Inactivated and subunit vaccines against animal diseases are good because they don't introduce a live virus into the environment and because they allow us in some cases to differentiate infected from vaccinated animals in the event of a disease outbreak. This is known as a DIVA vaccine. "Governments want DIVA compatibility," Richt said.

7. The realities of producing DIVA vaccines are complicated, because some high-consequence animal diseases, such as Rift Valley fever, classical swine fever and African swine fever, exist only outside the U.S. "It's very easy to say, but much more difficult to do to move a product that doesn't have a market here in the U.S.," Richt said. "It costs money to do the efficacy tests and work on a dossier for the USDA. We need companies that see a market for

their product in African, Asian and Arabian countries and are willing to sell it to the national stockpile in the U.S."

Rowland said the ultimate goal is to both help the world and "create Fortress America" by protecting it from animal diseases that are present outside our borders. Existing vaccines for Rift Valley fever, classical swine fever and African swine fever use attenuated live viruses. Introducing a live virus of any kind entails risk, and if the disease ever breaches our borders, we want to have safe, effective, and relatively inexpensive vaccines on hand to protect domestic livestock, he said.

8. Vaccine studies often need to be conducted in containment, which requires specialized facilities and equipment to maintain safety of people, animals and the environment. Kansas State University researchers use the university's Biosecurity Research Institute for this. "We have the people, the facilities, and the capacity to do this kind of work," Richt said. "BRI is crucial to what I'm doing," Shi said. "It's an important part of our daily work and our success."

9. Future goals include development of universal vaccines that protect against existing and emergent strains of diseases such as influenza and understanding the mechanisms of genetic resistance to disease so we can fight disease in new ways. "What's so cool about genetics is we say, 'We found a cure!' We start with a cure, then refine it backward," Rowland said.

Richt, Rowland and Shi share the goal of developing rationally designed vaccines that are safe and efficacious and preferentially offer DIVA compatibility. Their vaccine development and testing projects are in various stages, but all of them guard animal health and help keep food on our tables. Richt's team is developing Rift Valley fever and African swine fever vaccines. Rowland is working with both classical swine fever and African swine fever, and is collaborating with researchers at the University of Missouri and a private company to develop pigs that are resistant to porcine reproductive and respiratory syndrome, or PRRS. Shi's ongoing projects include a DIVA classical swine fever vaccine and a universal PRRS vaccine. All three researchers manage labs staffed by scientists, doctoral students, postdoctoral researchers and students.

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