



Walkin' (chorin') in a Winter Wonderland

The weather has been the big story the last couple of weeks as much of the state was covered with ice and snow. Slick roads and accidents closed highways and forced schools to shut down. Highway crews reported the frigid temperatures made it too cold to treat the roads for ice, compounding the problem.

The red of this barn on Hwy. 24 outside of Leonardville stands out against the winter sky and accumulated snowfall.

Photo by Kevin Macy



Vanessa Avara, assistant director at Milford Nature Center, shares live birds of prey at Eagle Day event on Jan. 5 at the Manhattan Fire Station and Tuttle Creek Lake.



Pat Silovsky, director at the Milford Nature Center, discussed eagles and other birds of prey at the Jan. 5 Eagle Day event.

Eagle Day draws hundreds to Tuttle Creek event

By Lucas Shivers

Even the partial government shutdown preventing some of the U.S. Fish and Wildlife Service and U.S. Army Corps of Engineers from working couldn't stop nearly 200 participants from attending the Eagle Day event on Jan. 5.

A packed crowd of all ages took part in the Eagle Day program at the Manhattan Fire Station and Tuttle Creek Lake.

Showcasing bald eagles and information about their remarkable recovery, participants learned about eagles, saw other birds of prey and took bus tours of eagle nesting spots at Tuttle Creek.

"The best time to view bald eagles in Kansas is in the winter on cold days," said Pat Silovsky, director at the Milford Nature Center. "The lousier the weather,

the better the changes to see eagles as they often concentrate over open water. You'll see a lot more birds when there is only a little open water."

Bald eagles have made a remarkable comeback from a population low of 400 total nesting pairs in the 1960s across the continent to over 10,000 pairs today. North central Kansas is home to several nests and provides prime habitat for bald eagles and other birds of prey.

Kansas Department of Wildlife, Parks and Tourism, U.S. Fish and Wildlife Service, Northern Flint Hills Audubon Society, Tuttle Creek Lake Association and Milford Nature Center all partnered together to sponsor Eagle Day at Tuttle Creek.

Eagle Details

To start the Eagle Day program, Silovsky shared several stories, facts and details to orient nearly 200 participants.

"Eagles are migratory across North America," Silovsky said. "They come to Kansas in winter in big numbers as the solid ice covers northern habitats. They come here because we often have open water."

If Kansas has a strong cold snap, eagles may head farther south.

"We usually have a large number of nesting spots for raising their young, and eagles can be frequently seen over open water hunting fish or water fowl," she said. "They can also be seen in tall trees around lakes and reservoirs as they nest."

Bald eagles have the largest nest of the avian

world, and they add to it each year.

"Trees have collapsed from the weight of the nests," Silovsky said. "They typically lay two eggs."

Female eagles are larger and weight up to 14 pounds with an eight-foot wingspan. Like all raptors, eagles have great eyesight. For example, an eagle perched on one end of a football field could read the headlines of a newspaper on the other goalpost.

"This eyesight helps as they are predators with large talons to grab mostly fish," she said. "They have special sandpaper on the bottoms of their feet to grab a hold of the slippery fish."

Eagles live about 25 years in the wild and up to 50 years in captivity. There's an 80% mortality rate for eagles, meaning four out of five chicks will not make it a full year. Power line deaths, habitat loss and shootings are major problems.

"Eagles are not born with any white coloration on their heads, because white feather plumage is the color of an adult," Silovsky said. "They grow quick and are ready to fledge in ten weeks."

Kansas Eagles

U.S. Fish and Wildlife Service leads the data, research and banding of eagles in Kansas to learn about the patterns and predictions.

"We do leg bands to learn a few things," Silovsky said. "The trees are not easy to climb so we use a bucket truck or professional tree climbers to get to the nests to weigh and

take specific measures of beaks to tell the gender of the chicks."

Even with explorer field notes of bald eagles in Kansas from the 1800s, one of the first Kansas eagle nesting pairs was documented in 1989 at Lake Clinton near Lawrence.

"Now we have a large number of nests with 137 active pairs in Kansas in 2018," Silovsky said. "The numbers have really grown since eagles were once endangered."

The original eagle pair from Clinton had two male chicks in the first year, and the eaglets decided to bring females back the next year.

"Hatching male eagles is one of the best ways to grow populations since they often return within 100 miles of where they fledged," she said.

One of the males from the Clinton nest, now returning for 20 years if he comes back again in 2019, has raised 16 young.

"There are quite a few nests at Milford and five nests at Tuttle," Silovsky said. "It's spectacular."

Eagle Rehabilitation

Silovsky and her team at the Milford Nature Center often rehabilitate wildlife that are facing emergencies. While they accept injured or orphaned animals for rehabilitation, it is their intent to give an animal every opportunity to stay wild. Silovsky shared a eagle success story.

"In May 2016 on private property near Tuttle, a tree with a large eagle nest was hit with lightning. It smoldered for quite a while before coming down," Silovsky said. "When the tree

eventually collapsed, there were two fledgling eaglets found."

One chick suffered a broken back, but the other chick was healthy and otherwise unhurt.

"With the help of our team and Westar, we rebuilt a new nest and replaced it on a new platform nearby," she said.

By noon of the next day, the parent eagles came back and successfully returned to raise the chick.

"The following year, the parents returned to the nest in both 2017 and 2018, adding to it each year," Silovsky said.

Look for other Eagle Day events at other nature center sites across the state.

NRCS Kansas announces February 20 deadline for 2019 Conservation Collaboration Grants or Agreements

USDA's Natural Resources Conservation Service (NRCS) is seeking proposals for Conservation Collaboration Grants or Agreements (CCGA) to help address Kansas' most pressing natural resource concerns. Proposals are due by 4:00 p.m. Central time on February 20, 2019.

NRCS will select proposals that leverage USDA and partner resources and effectively implement projects. Successful proposals will address at least one of the following:

1. Improve soil health
2. Improve water quality
3. Provide habitat for local wildlife species of concern.
4. Improve the environmental and economic performance of working agricultural lands.
5. Assist communities and groups to build and strengthen local food projects that provide healthy food and economic opportunities.

An emphasis will be placed on projects that implement Farm Bill Conservation Programs, support NRCS and partner field conservation employees, encourage local partners to develop and implement effective projects, and leverage non-federal and non-government resources to achieve positive natural resources conservation outcomes.

The opportunity number USDA-NRCS-MULTI-STATE-CENTRAL-19-01 is posted on www.grants.gov. For more information about the CCGA proposal process, visit the NRCS Kansas website at <https://www.nrcs.usda.gov/wps/portal/nrcs/main/ks/people/partners/> or contact Gaye L. Benfer, Assistant State Conservationist for Management and Strategy, at (785) 823-4508.

USDA is an equal opportunity provider, employer, and lender.

More women returning to the farm in management roles

Knowing that women approach business with different priorities can help farm and ranch families maximize their effectiveness in management roles.

This was the theme of the "Making Room for Women Managing Family Business" workshop, presented by Jeanne Bernick, principal and market strategist with KCoe Isom, at the American Farm Bureau Federation's 100th Annual Convention.

"We're seeing more and more women come back to the farm - and all kinds of family businesses," said Bernick.

Today, women comprise 31 percent of all U.S. farmers and ranchers, run 14 percent of all U.S. farms and ranches, and own 30 percent of all

farmland in the country, said Bernick. Forty-four percent of FFA students are girls.

"Yet women are still less than 10 percent of senior executives at major agribusiness companies. But that's changing," she said.

Bernick helps families transition businesses between generations. She has worked with many daughters, nieces, and sisters-in-laws who are returning to the farm and are interested in management roles.

Women want fulfillment in their work.

"Women bring heart to business. They want to do what they're passionate about," said Bernick.

Women also want to leave a strong legacy.

"They're interested in what is going to happen

to the family business in the next generation and beyond. 'How do we make this legacy stick?' This is what I hear most," she said.

Having a plan is an effective way to maximize a woman's success in a leadership role.

"It works well for women in managing a family business when they run from a plan rather than off the cuff," said Bernick. "Map out a one-year plan, a five-year plan. Once they have a plan, women are incredibly focused. This makes them incredible leaders."

Women are also more inclined to continue learning on the job, proactively seeking knowledge in books, trainings, online classes and support groups.

Women in leadership

roles make great mentors; they're interested in paying it forward.

"Women supporting other women is really important. They're really community-based. When we feel like we have a community we can be a part of, we blossom," she said.

It's also important to teach women their value.

"I find women tend to see their value in what they do, like raising kids or meal planning. I help them remember they're also valuable for who they are. Their ideas are valuable."

While it can be a change for a farm or ranch to have a woman assume a leadership role, there are many advantages to be gained.

Bernick quoted Kevin

O'Leary, "Mr. Wonderful" from the *Shark Tank* TV show: "My most successful business ventures are those with women leaders."

"There are lots of rea-

sons for this, but the one that sticks out: women can multitask," said Bernick. "There's a reason for the old saying, 'If you want something done give it to a busy mom.'"

PRECISION AERIAL APPLICATION: Pasture \ Crop \ Government



VersaAir
SERVICES, LLC

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

SUBSCRIBE TO 785-539-7558
GRASS & GRAIN or online at:
grassandgrain.com

wRe
WERTZBERGER RANCH EQUIPMENT LLC
28998 BURR OAK RD ALMA, KS 66401 785-765-3588

HYDRABED
STOCKING DEALER



LIFETIME WARRANTY ON BALE LOADING ARMS
5 YEAR STRUCTURAL
2 YEAR SYSTEM WARRANTY

wertzbergerranchequipmentllc.com

OUR OTHER BRANDS: Winchel, Cobett, ARROWQUIP, Vermeer, INTERSTATE BATTERIES



BEHIND EVERY GREAT TRACTOR IS A GREAT TRACTOR.

Since 1989, Maxxum® series tractors have earned a reputation for longevity, reliability and productivity. For the next generation, Case IH introduces the new ActiveDrive 8, 24-speed transmission - featuring eight powershift speeds in three electronically shifted ranges. Use the middle range for working speeds between 2.4 and 10.7 mph, without torque interruptions or range changes. The new Heavy-Duty MFD front axle - the toughest front axle ever offered on Maxxum tractors - is built to take on your toughest tasks. Ideal for beef, dairy and row crop operations, models range from 116 to 145 HP and include a 2WD option. Choose from three configurations: the ActiveDrive 4 semi-powershift transmission, new ActiveDrive 8 dual-clutch transmission, and CVXDrive™ continuously variable transmission. To learn more, visit caseih.com/Maxxum.

Bruna Implement
5 Kansas Locations
www.brunaimplementco.com

SEE US TODAY!

Rossville Truck & Tractor
Rossville, KS
785-584-6195

Straub International
7 Kansas Locations
www.straubint.com

CASE IH
AGRICULTURE

UPCOMING SPECIAL ISSUES

- Seed & Chemical - Feb. 12th Edition
- Farm Building - Feb. 26th Edition
- Sheep & Goat - March 5th Edition
- Bring On Spring - March 12th Edition
- Hay & Grazing - April 9th Edition

DEADLINES:

- Seed & Chemical - Feb. 6th, before 12pm
- Farm Building - Feb. 20th, before 12pm
- Sheep & Goat - Feb. 27th, before 12pm
- Bring On Spring - March 6th, before 12pm
- Hay & Grazing - April 3rd, before 12pm

To advertise in one of these special issues, contact your GRASS & GRAIN sales rep:



Donna Sullivan
- Managing Editor -
Cell: 785-632-7001 • Office: 785-539-7558
gandgeditor@agpress.com



Steve Reichert
- Sales Representative -
Cell: 785-341-6507 • Office: 785-539-7558
steve@agpress.com



Shelby Mall
- Sales Representative -
Cell: 303-518-0327 • Office: 785-539-7558
shelby@agpress.com



Kurtis Geisler
- Sales Representative -
Cell: 785-293-2221 • Office: 785-539-7558
kurtis@agpress.com

Never miss an issue of

GRASS & GRAIN

Subscribe or renew today!

New Subscription _____ Renewal _____

Name: _____
Address: _____
City: _____ State: _____ Zip: _____
Phone: _____
Email: _____

Activate Online Edition? _____
Online Edition is FREE with purchase of Print Subscription; Email is required.

In-State Print Edition Rates:

1 Year; \$41 + sales tax _____
2 Years; \$76 + sales tax _____
3 Years; \$105 + sales tax _____

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

Out-Of-State Print Edition Rates:

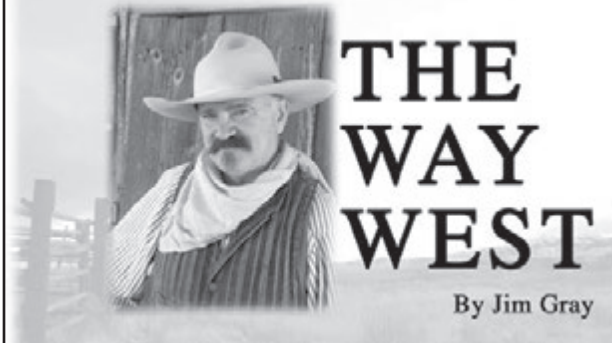
1 Year; \$51 _____ 2 Years; \$95 _____ 3 Years; \$132 _____

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

Check/Cash Enclosed: _____
or
Credit/Debit Card:
Visa, Master Card, Discover, American Express

Expiration Date: ____/____/____
V-Code (3 digits on back of card): ____
Signature: _____

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



The End of Time

The Delaware people were given reservation land in Kansas in 1829 and began moving from Missouri in 1830. Delaware men were adventurers who prided themselves on their hunting and trapping skills and their knowledge of the land. Their appearance was that of the frontier "longhunter" of their

Pennsylvania and Ohio Valley roots, rather than the traditional image of the Plains Indian.

Delaware Agent Thomas Moseley, Jr. recorded in 1852 that, "The Delawares are brave, enterprising Indians. They hunt and roam throughout the length and breadth of the great western plains, some

as far as California. It appears that quite a number of this tribe... are annually killed by wild tribes or die from great exposure." They were famous for their knowledge of the isolated grassland trails of the plains and the canyons and peaks of the Rocky Mountains. Being in demand as fighters and pathfinders, travelers sought them out for protection and guidance before venturing beyond the bounds of civilization.

1852 had seen two attacks on "enterprising" Delaware men. In January a large band had traveled into the southwest on a trading expedition. A traveler from Santa Fe reported to a correspondent for the Missouri Republican that "Quite a number" had been killed by Comanches.

In a separate incident two sons of principal chief Captain John Ketchum led a hunting expedition returning from the west along "the waters of the Platte" in present-day Nebraska. Between Fort Laramie and Fort Kearny a Sioux war party attacked the Delaware hunters, killing both of Captain Ketchum's sons. Agent Moseley reported that despite being shot through the leg

one of the hunters "made his escape," leaving all of their furs, horses, traps, and blankets in the hands of the Sioux.

Captain Ketchum was described as "a good and kind chief... a preacher and spiritual advisor, a wise counselor." The term "Captain" was given to Delaware war leaders who were responsible for declaring war and protecting the people. Only a chief could declare peace. When Ketchum became chief his people continued to call him Captain. Ketchum's Delaware name was Tah-lee-a-ockwe meaning "grab them" or "catch them" so the Americans called him "Ketchum." He was converted to Christianity, attending the Delaware Indian Mission, a Methodist mission established in 1832, near a spring in a beautiful grove of trees. The log church, five miles north of the Delaware Crossing on the Kansas River was painted white and referred to by the Delaware people as "White Church."

Although the elder members in the tribe maintained long-held prejudices against Christianity, Ketchum was appointed Principal Delaware Chief.

Also of the Turtle Clan, Captain Ketchum was the first Christian leader in the Delaware tribe. His son, James, was the first ordained minister in the Delaware nation. He began preaching at White Church in the Delaware language. Another son, Charles, was also a prominent member and preacher in the Methodist Church. The brothers disagreed on affiliation, Charles following a northern branch while James remained in the southern branch at White Church.

Captain Ketchum was faced with the incredible dilemma of protecting his people as his reservation was being overrun with illegal settlement. Even before the Territory of Kansas was opened in 1854 squatters moved onto the rich bottomland of the Kansas River valley, ignoring the rights of the legal Delaware owners. More than one thousand land-hungry emigrants were intruding on the reservation, surveying and laying out claims.

Without legal purchase of the land, the town of Leavenworth was established next to Fort Leavenworth almost before the ink had dried on the Kansas-Nebraska Act. Every resident of the new town was an illegal squatter on Delaware land. At one point the army was ordered to clear the town of its inhabitants, but the

order was delayed when the Leavenworth Town Association agreed to pay twenty-four thousand dollars for a three hundred twenty acre thriving town-site that for all intents and purposes was already developed.

In the meantime, the United States government negotiated a treaty in which Delaware lands would be held in trust to be sold at a future date for the benefit of the tribe. Nine Delaware chiefs led by Captain Ketchum signed the treaty on May 6, 1856. The first sale of tracts was held on November 17, 1856.

The tribe was stunned when death came to Captain Ketchum on July 1, 1857. As the procession slowly followed the body of the dead chief over the winding road to White Church, they were losing their land. The once proud hunters and guides were gone. Nothing would ever be the same. The end of time had dawned upon the trails and canyons that had once been the domain of valiant Delaware pathfinders on The Way West.

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

- FOR SALE -
OLPE LOCKER

Operating meat locker with building, all equipment & smokehouse. Trained employees & owners will be providing training if so desired.

Qualified buyers please call
Dwayne 620-794-2061 or
Carmen 620-341-0838
Tri County Real Estate Office 620-256-6331

SHAWNEE COUNTY, KANSAS

XIT FARMS

301± Acres In 2 Tracts & Combinations
AUCTION | FEBRUARY 21ST • 10AM CT

AUCTION LOCATION:
Citizen Potawatomi Community Building 806 Nishnabe Trail, Rossville, KS 66533

- Conveniently Located Between Topeka & Manhattan
- Beautiful Frontage along the Kansas River
- Pivot Irrigation on Both Tracts
- Substantial Paved Road Access
- Great Addition to Any Farm Operation
- Recreational Enthusiasts – Seldom will a property hit the market with Kansas River Frontage along with hunting opportunities!

INFORMATION DAY:
Thurs., Feb. 7th • 1-3pm
Meet an Auction Representative on Tract 1

John Wildin, Broker #BR00017131
www.HallandHall.com | 800.829.8747

LAND AUCTION

SATURDAY, FEBRUARY 16, 2019 — 10:00 AM
Waterville Community Center — WATERVILLE, KANSAS

391.3 AC.± MARSHALL COUNTY LAND
SOLD IN 3 TRACTS (T1 238.41 AC.; T2 36.54 AC.; T3 48.47 AC)
Producers, Ranchers & Recreational Buyers ... Don't miss your opportunity to add Little Blue River Bottom acres, quality dry land acres, clean northern Flint Hills pasture, or a nice recreational tract for hunting Whitetail & Turkeys.

FREIDA NIEMEIER TRUST, SELLER

See January 22 Grass & Grain's for more details!
For a VIRTUAL TOUR of this property visit
www.MidwestLandandHome.com
To stay up to date on auctions and listings LIKE our Facebook page Midwest Land and Home.

Midwest Land and Home
Jeff Dankenbring – Listing Broker - 785-562-8386
www.MidwestLandandHome.com
When you want the Best, Call Midwest!

LIVESTOCK SERVICES

AT KANSAS STATE UNIVERSITY

Our team provides routine and specialty veterinary care for all livestock species.

On-Farm

- Herd-health programs
- Calf processing
- Breeding soundness exams
- Pregnancy diagnosis
- Reproductive services

Hospital

- Advanced diagnostics
- Lameness evaluation
- Specialty care
- Surgery
- Neonatal intensive care



24-hour Emergency Care

Helping livestock producers reach their health and production goals while teaching the next generation of veterinarians is our passion.



Contact us today for assistance with your operation's health program or to make an appointment.

1800 Denison Avenue
Manhattan, KS 66506
785.532.5700
www.vet.k-state.edu/vhc
facebook.com/VeterinaryHealthCenter

Veterinary Health Center

AT KANSAS STATE UNIVERSITY



On February 3rd and 17th, I will be leading a seminar on the history of Fort Wallace. It will not be boring, I promise. It was inspired by our friend Jerry Prawl, who grew up in Wallace and was instrumental in founding our Guardians of Fort Wallace, as we prepared for our first Guard-

ians Banquet last year, held on St. Patrick's Day in honor of the fort's most colorful commander, Capt. Myles Keogh. As we made table decorations and filled baskets for the auction, we talked about the handsome Irishman and his impact on the fort. She acknowledged that even

though she had grown up in the neighborhood, she knew precious little about the post itself. She asked questions and borrowed books. Her curiosity was kindled and her enthusiasm was fanned. I treasured the opportunity to hear her stories and share mine.

Jerry died weeks later. She left many broken hearts and many wonderful memories. She also left me with an idea.

There were other folks like her who had grown up in the neighborhood but knew little about the army post around which their community was built. Leo Oliva's *Fort Wallace*, one of the fort series books produced by the Kansas State Historical Society, is

a must-have, as is every other volume of that series. It is a marvelous read and hints at the volumes of other stories yet to be told. The exciting thing about teaching this class is how much I have to learn in order to teach it. As I peruse old newspapers, documents, and photos, I utter over and over, "You really can't make this up!"

I have always considered myself a missionary for history, evangelizing on the American West with Kansas at its center – spiritually and geographically. Whether at the museum, in books or speaking engagements, or on *Around Kansas*, I am passionate about the stories – the incredible circumstances and the unique personalities. I de-

light in the discoveries – mine and those of the folks I bring to the table.

While the 19th century is generally my focus, I ventured into the 20th century for the Trego County Historical Society's Kansas Day Program and presented, *The Soldier State in the Great War*. While I am more than just passingly familiar with the era, I had to do quite a bit of research. Again, I knew that Kansas was again the epicenter for many events such as war efforts and the flu epidemic, but I learned new stories, met new peo-

ple. For example, I was not aware that the first officer killed in World War I was a physician from Kansas, Lt. William Fitzsimons. His story will bring you to your knees. He had gone to England as a Red Cross volunteer in 1914, long before America joined the war. His ability and dedication are simply staggering.

This is why I love history.

Deb Goodrich is the host of the *Around Kansas TV show* and the *Garvey Historian* at Fort Wallace Museum. Contact her at author.debgoodrich@gmail.com.

Industrial hemp information meeting set for February 12th in Parsons

Industrial hemp has been a hot topic of conversation around the state of Kansas and certainly in the southeastern part of the state. The opportunity to grow a new specialty oilseed crop in Kansas offers potential for diversification for Kansas farmers looking for an alternative crop, or for new farming enterprises interested in cultivating industrial hemp. There have also been many questions and

concerns about the matter.

The Wildcat Extension District will host a FREE public meeting on Industrial Hemp on Tuesday, February 12th, 2019 at the Southeast Research and Extension Center from 6:30 to 8:30 p.m. Registration starts at 6:15 and the program will begin around 6:30. The Extension Center is located at 25092 Ness Rd, Parsons.

Dana Ladner, Kansas Department of Agriculture

(KDA), will discuss the regulatory aspect and KDA's role. Jason Griffin, K-State Research and Extension, and director of the John C. Pair Horticultural Center near Wichita, will discuss the basics to growing industrial hemp as well as K-State Research and Extension's role in providing reliable research based information. Please RSVP to the Independence office at 620-331-2690 to reserve a seat at this event.

Please join us February 12th to learn more about industrial hemp and what impact it may have on Kansas residents.

An informational flyer can be downloaded from the Wildcat District website at www.wildcatdistrict.k-state.edu. For more information, contact Jeri Geren, Diversified Agriculture and Natural Resources, jlsigle@ksu.edu, (620) 331-2690.

Feeders PLUS LLC

HAY FEEDERS AND BUNKS
 Calvin D. Wiebe
 (620) 242-6410 cell
 (620) 732-2143 home
calvin@feedersplusllc.com

See all our products at: www.feedersplusllc.com

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

Since 1954

GRASS & GRAIN

Subscribe today at 785-539-7558 or online at grassandgrain.com

- Classifieds
- Our Daily Bread
- Baxter Black
- Yard & Garden Tips
- Auction Listings
- Special Issues

HYDRA BED

BY TRIPLE C, INC.

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

BEDS IN STOCK
 INSTALLATION AVAILABLE

BOOT HILL SALES

CLAY CENTER, KS • 785-388-2245 | 785-632-2632

Cow Camp Ranch

50 YEARS BREEDING REGISTERED SEEDSTOCK

ANNUAL SPRING BULL & FEMALE SALE

FEBRUARY 15, 2019 • 1 PM • AT THE RANCH, LOST SPRINGS, KANSAS
 SELLING OVER 200 HEAD OF SIMMENTAL & SIMANGUS™ GENETICS
 Fall 18 Month Old Bulls, Spring Yearling Bulls & Registered Spring Bred Heifers

Cowboy Cut

CCR COWBOY CUT - 20 SONS SELL!
 CE 13.6 / BW 2.6 / WW 91.9 / YW 126.3
 MB .39 / RE .87 / API 158.8 / TI 91.0

Abilene

CCR ABILENE - 23 SONS SELL!
 CE 10.4 / BW 2.8 / WW 84.1 / YW 123.0
 MB .48 / RE .92 / API 134.9 / TI 83.1

RAISED ON ONE RANCH
 CARRYING ONE BRAND

COW CAMP RANCH - LOST SPRINGS, KS
 FAMILY OWNED & OPERATED FOR 5 GENERATIONS

Kent Brunner (785) 466-6475
 Mark Brunner (785) 258-0173
 Nolan Brunner (785) 466-1129
 Tracy Brunner/Feed Yard (785) 965-2228
bullsale@cowcampbeef.com
www.CowCampBeef.com

SUPERIOR Productions

BREDEMEIER ANGUS FARMS ANNUAL BULL AND FEMALE PRODUCTION SALE

In Conjunction with the 3 State Stockyards
Commercial Female Sale
 Sunday, March 3, 2019 • 1:00 PM
 3 State Stockyards, Falls City, NE
APPROXIMATELY 250 HEAD SELL:
 35 Registered Angus Bulls • 40 Registered Angus Females, Cow/Calf Pairs, Bred & Open Heifers • Expecting 200 Commercial Females

Bredemeier Cow Time 8019

Sire: HA Cowboy Up 5405
 Dam's sire: SAV Brilliance 8077
 BW+4.6; WW+69; YW+123; Milk+13; RE+.77

Bredemeier Cow Time 8071

Sire: Riverbend None Better Y095
 Dam's sire: SAV Net.Worth 4200
 BW+2.2; WW+62; YW+104; Milk+31; RE+.65

FEATURED SIRE:
 SAV Resource 1441 • HA Cowboy Up 5405
 KM Broken Bow 002
 Riverbend None Better Y095
 Tex Playbook 5347 • CTS Rememdy 1T01
 SAV Bismarck 5682 • EXAR Resistol 3701B
 Sandpoint J Edgar Hoover

BREDEMEIER ANGUS FARMS
Mike Bredemeier
 64415 719th Road • Stella, NE 68442
 Home (402) 883-2422
 Cell (402) 883-7113

For your free reference sale booklet, contact anyone in the office of the Sale Manager, TOM BURKE, KURT SCHAFF, JEREMY HAAG, AMERICAN ANGUS HALL OF FAME, at the WORLD ANGUS HEADQUARTERS, PO Box 660, Smithville, MO 64089-0660. Phone: (816) 532-0811. Fax: (816) 532-0851. E-Mail angushall@earthlink.net.

CENTRAL KANSAS MOST MODERN LIVESTOCK AUCTION SALE EVERY THURSDAY
 Hogs - Cattle

FARMERS & RANCHERS LIVESTOCK COMMISSION Co

West on Old Hwy. 40 Salina

— WELCOME —
 Producers and buyers to the Midwest's newest and finest sale pavilion. Everything is new, but the people who run it are old hands in the business. Completely air-conditioned, heated in improved facilities. A full range of services available. For further information call in KPM, Salina, daily 6:30 AM & 12:30 noon.

BOODEE - LICENSER
 LAURENCE CLEMENCE
 Auburn - Phone CO 3-3891
 NERRILL CHRISTIANSEN
 Durbin - Phone SE4871
 BOB MUIR
 Salina - Phone TA 3-2963
 Auctioneers -
 LEE BECK - DEAN BOGHOE

BARN PHONE TA 5-0211

Farmers & Ranchers

has been advertising in **Grass & Grain** for 52 years.
 Their first ad in **Grass & Grain** was June 28th, 1966 announcing the opening of their barn.

Sales Manager Mike Samples says ...
 "Farmers and Ranchers Livestock has been using **Grass & Grain** for many years and we know Salina and surrounding areas are a big part of **Grass & Grain's** readership."

"Grass & Grain is a paper that people enjoy getting every week and my customers know it is a good place to look up the market reports."

Since 1966
 Farmers & Ranchers Livestock
 Salina, Kansas

KANSAS AG REPORT

Ken Rahjes, Host

For TV Show times check your local listings or watch at kansasagreport.net

You too could be reaping the benefits of **Grass & Grain** advertising!

Don't hesitate, call TOLL-FREE TODAY:
1-877-537-3816

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

Since 1954
GRASS & GRAIN
 1531 Yuma St. Manhattan, KS

KCA accepting scholarship applications through March

As a “for producers, by producers” non-profit organization, KCA offers education scholarship programs designed to give back to the communities that support KCA and the independent cattle producer. Funding of these programs is made possible by contributions from KCA partnering organizations, membership donations, and county meeting support.

Purpose
The Kansas Cattle-men’s Association and the Go Bob Pipe & Steel Scholarship are designed to ease the financial burden of qualified scholars seeking higher education, including: four-year college/university, junior college, vocational/trade, or technical training for the school year beginning this fall.

The following must be met or completed to be considered:
1. Applicant must be a high school or college student with a GPA of 2.5 or higher. Applicant must plan to attend a junior college, 4+ year college/university, vocational/trade school or enrolled in technical training for the fall of 2019.
2. Applicant must write a short essay on one of

the following topics. The essay must be 250-500 words.
A. How do alternative proteins compare to conventionally produced wholesome beef?
B. Explain the positives and negatives of Animal Disease Traceability programs. Provide your own original arguments for and against such programs.
C. A popular buzzword

in today’s industry speak is “Sustainability.” How would you define “Sustainable Agriculture” and how does your definition apply to independent beef production?
3. Applicant must completely fill out the application, including signatures from respective schools, and return it to the KCA office by March 31, 2019.
4. Include the appli-

cant’s most-recent school transcript.
5. Provide an updated one-page resume that outlines education achievements, related work experience, and extra-curricular activities.
Applications are available at www.kansascattlemen.com/scholarships or by contacting KCA at 785-238-1483. Completed applications are to be returned by March 31, 2019.

Kansas Corn 2019 Seed to STEM workshops to offer three tracks for science teachers

The Kansas Corn Commission has announced the dates of its popular 2019 Seed to STEM workshops for middle school and high school science teachers. The workshops will be in Olathe May 30-31 and in Maize June 4-5. Kansas Corn pays the on-site expenses for teachers who are selected to attend the workshop, and gives the teachers over \$500 worth of science lab ma-

materials upon completion of the workshop.
In its fourth year, the workshop program focuses on teaching labs with corn, biotechnology and ethanol. Seed to STEM will offer three tracks: middle school, high school as well as new Seed to STEM 2.0 tracks, available to those who have previously attended a Seed to STEM workshop.
The Seed to STEM 1.0

workshop will be available to middle school teachers and high school teachers at both locations. The Seed to STEM 2.0 track for high school teachers will be offered only at the Olathe location, and the Seed to STEM 2.0 middle school track will be hosted only at the Maize location.
The applications for Seed to STEM 1.0 middle and high school tracks are due April 1. The applica-

tions for the Seed to STEM 2.0 track for teachers who have previously attended a Seed to STEM workshop, are due March 1. Participants will be selected based on the quality of their application. Visit ks-corn.com/6-12-training/ to apply.
“Teachers who have attended a Seed to STEM workshop before keep requesting to come back and have asked for more labs,”

says Kansas Corn Commission director of education Sharon Thielen. “Seed to STEM 2.0 will allow the teachers to learn more labs enabling them to keep the conversation going about the agriculture industry all year long.”
Seed to STEM 2.0 workshop participants will practice up to eight new labs, attend a farm tour and dinner and will have time for collabora-

tion. Teachers selected for the Seed to STEM workshop 1.0 will practice 12 labs that they can use in their classrooms to help students learn about the role agriculture plays in science, attend a farm tour and dinner and visit an ethanol plant.
For more information on the Seed to STEM workshops visit ks-corn.com/6-12-training/.

Plenty of ag trade opportunities for U.S. and Europe

There continues to be abundant opportunities for farm trade between the United States and the European Union despite the omission of agriculture in the European list of negotiating areas on a potential free trade agreement, European agricultural leaders said during a workshop at the American Farm Bureau Federation’s 100th Annual Convention.

U.S. farmers and farm state lawmakers have pushed hard to include agriculture in trade talks. But European officials excluded farm goods to streamline the negotiations and to concentrate on vehicles and industrial products, said Jesus Zorrilla, counselor on agriculture for the European Union.

Zorrilla was joined by Lorenzo Terzi, counselor on food safety for the European Union, and Sylvain Maestracci, counselor on agriculture for the French Embassy, to provide a European perspective on trade and agriculture.

Key issues, such as geographic indicators for dairy products and the approval of genetically modified crops, still separate the United States and the EU. But the European leaders said there continues to be opportunities for U.S. products in Europe, including soybeans, biofuels and other products even without agriculture in the free trade negotiations.

“The perception that the European market is closed is misleading,” Terzi said. “We are a huge market of 500 million people that is a big importer of food.”

Terzi noted that the United States and Europe have recently worked through several key food safety issues on products such as almonds and Florida oranges.

European farmers share many of the same concerns as their American counterparts, such as low commodity prices, changing demand from consumers and an aging farm population, Maestracci said. In addition, he said, European farmers face a continued barrage of environmental demands from European consumers.

Like their American counterparts, European farmers have seen a reduction in farm subsidy payments and a more market-oriented farm program. But European farmers do not have a robust crop insurance system like the one which provides the backbone of the farm safety net in the United States, Maestracci said.

The need for crop insurance showed up in 2018 when drought gripped much of Europe and drastically reduced harvests.

“The drought has definitely affected farmers and hurt our ability to export barley and other crops,” Maestracci said.



CASE IH MAGNUM AND KANEQUIP HAVE POWERED THROUGH THE TOUGHEST CONDITIONS.

For over 50 years, Case IH and KanEquip have left the competition with some pretty big tracks to fill. But in the rush to keep up, there are a few things the copies have missed. KanEquip offers a FULL PARTS DEPARTMENT and CERTIFIED TECHNICIANS. SERVICE AFTER THE SALE IS IMPORTANT TO CASE IH & KANEQUIP.



Ottawa, KS Wamego, KS
3313 Nebraska Terr 18035 E Hwy 24
785 • 242 • 1463 785 • 456 • 2041
Your Partner and Full Service Dealership

UNCONDITIONAL PERFORMANCE FOR THE TOUGHEST CONDITIONS.

RELENTLESS/BLACKSTAR
795E PB SM

783E PB AN
PRIMO/INSIGHT

737E PB SM
ONE EYED JACK/POWERDRIVE

878E PA SM
EXECUTIVE ORDER/ GRANDMASTER

E01 PB SM
ANCHOR/WHEELMAN

UNFINISHED BUSINESS-WIDE TRACK



SELLING
60 BULLS
followed by 1,000 commercial females!
12:00 P.M.
2.16.19



GB Cattle 405-780-0372
Owen Bros. 417-830-8180
Gerdes Cattle 319-850-1694

FOR CATALOG, PLEASE EMAIL GREG BURDEN:
GREG.GBCATTLE@GMAIL.COM

CoBank releases 2019 year ahead report – forces that will shape the U.S. rural economy

The U.S. economy is still performing well by most key measures. However, consumers, investors, companies and other market participants have become more wary about the near-term future with seemingly good reason. Global and U.S. economic prospects are weakening and the agricultural economy shows few signs of an imminent comeback, according to a comprehensive 2019 outlook report from CoBank's Knowledge Exchange Division.

"Trade uncertainty, rising debt levels and market volatility are threatening to derail the global economy and creating difficult operating environments for U.S. agriculture," said Dan Kowalski, vice president of CoBank's Knowledge Exchange Division. "Trade is the outsized risk. Unresolved disputes with Mexico, Canada, Europe and China are the greatest collective threat to the U.S. economy in 2019."

The CoBank outlook report examines ten key factors that will shape agriculture and markets sectors that serve rural communities throughout the U.S.

Global Economy: Trade-Induced Slowdown to Hit U.S. Shores

The global economy is slowing and the effects will spread to U.S. shores in 2019. World economic output hit an eight-year high in 2018, powered by both advanced economies and emerging markets. But challenges mounted in late 2018 and risks are decisively weighted to the downside for the coming year. Trade is the biggest risk, as the world's two largest economies test each other's willingness to accept economic pain. Trade policy between the U.S. and China will remain the leading risk to the global economy. The rising of debt levels is another undercurrent that threatens to derail the global economy. Total global debt levels (all public and private debt) are now more than three times greater than in 2001.

U.S. Economy: Slowing Growth, Accelerating Risk

The U.S. economic expansion is set to become the lengthiest in history this summer. But clouds forming on the horizon suggest more modest growth in 2019 and greater concerns for 2020. Therefore, we can expect a delicate balance of consumer strength to offset a slowing housing market and weaker business investment

to keep the U.S. economy growing between 1.75 and 2.25 percent in 2019.

Monetary Policy: Tightening Margin for Error

The world's largest economies were widely expected to grow in concert in 2018. That growth did not materialize. As a result, the major central banks are now attempting to guide their economies through very different stages of the economic recovery. Japan is committed to stimulating its economy for the foreseeable future. The European Central Bank will not raise interest rates until at least the third quarter of 2019. China's economy is slumping and its central bank has indicated that it's ready to loosen monetary conditions as needed. Gross domestic product forecasts have been cut over the past month amidst a darkening outlook for the U.S. and Chinese economies. If this slowing materializes, it will become very difficult for the Federal Reserve to raise rates this year absent a spike in inflation.

U.S. Government: Split Congress, More Opposition

With a split Congress, finding consensus over the next two years to move large legislation will be difficult, but there are reasons for managed optimism. One of the final bills out of the 115th Congress reauthorized the Farm Bill. HR 2 passed the Senate and the House by very large bipartisan margins, showing that Congress can still work together when there is strong constituent support and engagement on an issue. The administration's efforts on trade have many in agriculture nervous. The agriculture industry will be very focused on the need to get the United States-Mexico-Canada Agreement (USMCA) completed. Further, it is imperative that the U.S. negotiates a resolution to the trade dispute with China and reaches a successful conclusion to conversations with Japan, the EU and a post-Brexit U.K. There is work needed to re-establish these major trade relationships before any further damage is done to U.S. agriculture.

U.S. Farm Economy: Higher Costs and Debt to Hamstring Producers

With agricultural commodity markets depressed by global supply abundance and ongoing trade disputes, farmers and ranchers face the arduous task of cutting production costs. However, continu-

ally rising costs in agriculture are expected to squeeze producers, causing further margin erosion and financial stress in 2019. Farmers should not bank on a fourth consecutive year of above-trend crop yields to make up for low commodity prices and rising costs. To steady the agricultural economy, and boost revenues, the sector is dependent on substantive breakthroughs in trade policy. Strong land values remain the positive for farmers and ranchers, although land values could face downward pressure.

Ag Trade Policy: Seeking Resolution

Ongoing tariffs and trade negotiations continue to hang over the U.S. ag economy with no clear sign of resolution, clouding agriculture's trade outlook for 2019. Three significant trade-related issues must be solved this year to restore some normalcy to agricultural markets: Legislative approval of USMCA, removal of the steel and aluminum retaliatory tariffs and substantive improvement of trade relations with China. Progress in negotiations on all fronts is likely to be slow, which spells more pain for months to come. As a result of the trade war, the value of total U.S. agricultural exports in 2019 is expected to fall to \$141.5 billion, down \$1.9 billion from 2018, according to the Department of Agriculture's (USDA) latest projections.

Grain, Farm Supply and Biofuels: The Rise of Competition

2019 will be a year of new and intense competition for the grain, farm

supply and biofuels sectors. These competitive changes will benefit a few while hurting many along the supply chain. The most impactful competitive pressure will come from outside the U.S. Global crop production has been increasing for decades, but abundant U.S. supplies and a protracted trade dispute with China has enhanced foreign opportunities. Brazil's projected record crop, Argentina's production rebound and continued agricultural expansion in Eastern Europe will further inundate a bloated market. Trade dynamics will also impact an ethanol industry that is already struggling. Large supplies have caused some producers to cut output amid negative margins. Competition will also increase in the farm supply sector, squeezing margins. Ag retailers will also face price hikes from a more concentrated supplier base.

Dairy and Animal Protein: Output Grows Again

In 2018, the U.S. animal protein sector began suffering from the same oversupply and weak margins that have plagued U.S. dairy producers since 2015. Despite the less favorable profitability environment, the protein and dairy sectors will continue to expand production in 2019, prolonging the margin squeeze.

Of the three major animal protein species, beef appears to be weathering the animal protein oversupply situation best, with favorable fed cattle prices and historically high packer margins resulting from tight processing capacity.

Conversely, the pork and poultry sectors reflect the impact of plant expansions which will deliver double-digit increases in processing capacity for both species by 2020.

Rural Electricity: Data Analytics Become a Necessity

2018 will go down as a turning point for the role data analytics will play in transforming the rural electric co-op industry. Optimization of the grid offers many benefits in cost savings and member relations. However, if co-ops do not harness the power of data to unlock value, third-party providers will step in to provide this service. Co-ops cannot afford to delay adopting strategies for a more distributed future that includes automated controls, tailored rate structures, enhanced customer engagement and sophisticated data analytics.

Rural Communications: Electric Co-Ops Gain Appetite for Broadband

Over the last few years, electric distribution cooperatives have been building fiber networks, causing some angst in the rural LEC community as they fear this will lead to increased competition. For 2019, rural America should expect to see a continuation of these network builds, but the risk of co-ops overbuilding in rural LEC markets is low. Their primary focus is to build networks in underserved

markets for the benefit of their own operations, and their customers.

Silver Lining

The global and U.S. economic prospects are weakening, and the agricultural economy shows few signs of an imminent comeback. There are silver linings, however, and many of them hinge directly on the prospect of favorable trade developments, particularly with China.

"There is a 50 percent probability that some form of a deal with be struck with China by the second quarter of 2019," said Kowalski. "Also, there's a 50 percent probability that most or all the tariffs will be lifted on U.S. exports in the first half of the year. Should that scenario develop, our outlook will improve considerably."

The report, *The Year Ahead: Forces That Will Shape the U.S. Rural Economy in 2019* is available at cobank.com.



ESTATE AUCTION

SATURDAY, FEBRUARY 2, 2019 — 10:00 AM
 2248A ZZ Road — STRONG CITY, KANSAS
 Auction is in the Saffordville Community Bldg. Saffordville is about 7 mi. East of Strong City & 10 mi. West of Emporia, on Hwy. 50.

Doors Open at 8 AM. Good Food Available after 9 AM!
 See last week's Grass & Grain for listings!

There are a few hundred photos at www.hancockauctionandrealestate.com

PATENT MODEL & SALESMAN SAMPLES • TOYS & CHILDREN ITEMS • GUNS • ADVERTISING • TOBACCO • BANKS • BRASS TOOLS • ICE CREAM FREEZERS • WATCH FOBS & SMALL ADV. ITEMS • TRAPS • CAST IRON SEATS, DRILL ENDS, PLANTER LIDS, TOOL BOXES • SCALES • HAMMERS & TOOLS • OIL COLLECTIBLES • PRINTS • BRIDLE BITS & RELATED HORSE ITEMS • OTHER GREAT COLLECTIBLES • FURNITURE • WOODEN BOXES • PHOTOS. Toward the end of the auction there will be at least 100 Edison phonograph records.

Paul Hancock, Auctioneer • 620.340.5692

Annual Angus Bull Sale

Friday • 1:00 p.m.
February 1, 2019

Cammack Farms Beatrice 77 Livestock Sales
 BEATRICE, NE

George, Troy & Mike Cammack
 DeWitt, NE 68341
cammackfarms@diodecom.net
 402-683-3415
 402-683-6645 (fax)

- 29 Angus Bulls (2 yr. old)
- 5 Simm Angus Bulls (2 yr. old)
- 4 Simm Angus Bred Heifers

Krogmann BaleHandler

For the serious cattlemen

USER FRIENDLY CONTROLS & FEATURES

THE LEADER IN BALEBED ENGINEERING WITH PATENTED ARM & SPINNER DESIGN

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

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

Custom built shorter or longer beds. Standard Equip: arm extensions, gn & receiver hitches, side rails, lights, trailer plug & pioneer quick connects. Lift, Haul and dump with the Krogmann Carry-All

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

1-877-745-3783 • WWW.KROGMANNMFG.COM

HEAVY SAVERS

From Wilgers Welding

Extra heavy bottom ring on feeders

High strength one-piece construction with heavy gauge steel for long life and durability.

WILGERS WELDING

PALMER, KANSAS • 785-692-4289

SHAMBURG FEED Beloit, KS, 785-738-5181
 KEY FEEDS Clay Center, KS, 785-632-2141
 T&H FEEDS Marysville, KS, 785-268-0430

CONCORDIA TOWN & COUNTRY Concordia, KS, 785-243-7900
 SUGAR CREEK SALES Partridge, KS, 620-200-4412
 181 AG SUPPLY Sylvan Grove, KS, 785-420-7037
 Tescott, KS, 785-526-7200

SHOW STEERS FOR SALE

WINNING GENETICS AT BARGAIN PRICES

AI Sires: Bandwagon, Unfinished Business, Wizard and Dream Look

Camerlinck Cattle Co
Bob: 785-556-0207

Crownline Hay Beds

Starting At \$4195 Starting At \$6695

Cattle Feeders

- Direct drive enclosed motor
- 6" auger • 10 ga. metal
- Sliding lid • Digital counter
- Optional auto. chute
- Powder coat paint

22"(1100lb.) - \$1850 32"(1500lb.) - \$1950
 42"(2100lb.) - \$2050 *In Stock*

DIAMOND L SUPPLY

White City, KS • 785-466-6495

FARM TUFF

New, Remanufactured and Recycled Ag Replacement Parts

Planter and Drill Parts

Think of Abilene Machine When Rebuilding Your Planter & Drill – We Offer Great Quality and Price!

Gauge Wheel Assemblies For John Deere, Kinze & White

4.5" x 16" \$115 #AMX55039
 3" x 16" #AMX55041

18" Seeder Blade \$27.50 #AMN283804

Drill Boots for John Deere

\$27.00 #AMN280446 - RH #AMN280447 - LH
 \$30.00 #AMN284044 - RH #AMN284045 - LH

Toll Free: 800-255-0337 • www.AbileneMachine.com • See Us on Facebook

