





# Stutzman Receives Elite Accredited Land Consultant (ALC) Designation

The REALTORS Land Institute proudly announced that Tobias (Toby) Stutzman, Broker Associate with United Country Stutzman Realty & Auction of Ulysses, Kansas, has officially joined the ranks of those holding the elite Accredited Land Consultant (ALC) Designation on July 20, 2022. The REALTORS® Land Institute provides the expertise, camaraderie, and resources that are the foundation for all land real estate professionals to become the best in the business.

Stutzman is now among the most dedicated land professionals from around the globe, joining an elite group of over 500 land specialists who hold the designation across the globe. With more than 18,000 licensees throughout Kansas, Stutzman is 1 of 12 professionals that have achieved the ALC level. In addition to subscribing to the REALTORS® Code of Ethics, ALCs support the high standards of conduct and experience that directly relate to their specialty. As an ALC, Stutzman has access to the best industry knowledge, an unprecedented network of fellow land professionals, and a variety of resources to help best serve his clients.

Through RLI's Land University (LANDU), he will continue to gain expertise through an unparalleled land real estate education program that offers topnotch educational courses and webinars for land professionals. Land is a unique real estate specialty that requires the kind of specialized professional education which can be found at LANDU of the REALTORS® Land Institute. This depth of knowledge translates into the highest level of service to clients, ensuring they receive the best services in the business when buying, selling, managing, or investing in a property.

Stutzman specializes in farm and ranch land sales throughout Kansas, Colorado and Oklahoma. Upon receiving the designa-



**STUTZMAN RECEIVES DESIGNATION** — Toby Stutzman of Ulysses now holds the elite Accredited Land Consultant (ALC) Designation.

tion, he said, "It is an honor to have achieved this designation. As I continue the processes of uniting buyers and sellers, I am aware that this accomplishment was made possible by the trust and confidence that previous buyers and sellers held in me, and for that I am extremely grateful."

The REALTORS® Land

Institute confers the Accredited Land Consultant (ALC) Designation only to its members who meet the rigorous knowledge and experience requirements. The ALC Designation is recognized throughout the industry as the pinnacle of achievement for land real estate professionals.





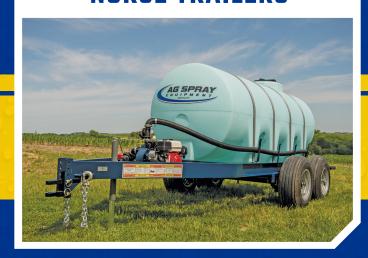


Newton, KS 7000 Schaben CT 67114

800.394.7662

4 Miles South Of Newton, KS EXIT 25 ON I-135

#### **NURSE TRAILERS**



#### **DOUBLE CONE BOTTOM TRAILERS**



# **Cattle U Award** Winners Recognized

By Lacey Vilhauer, The High Plains Journal August 20, 2022

Cattlemen and women from across the High Plains gathered Aug. 4 and 5 for High Plains Journal's Cattle U & Trade Show in Dodge City, Kansas, and two producers received Cattle U awards at the event. Nominees are submitted through www.cattleu.net and selected by the Cattle U event committee.

The Cattlewoman of the Year award was sponsored by HPJ and the 2022 recipient was Marcella Warner Holman. Holman is a fourth-generation rancher and operates Black Diamond Angus Ranch in Ford County, Kansas, with her husband, John Holman and their sons, Ethan and Eli. Her primary focus is raising Angus cattle descended from her great-grandfather's herd who homesteaded the ranch in 1884. She was named Agriculture Department Head at Dodge City Community College,

for U.S. Department of Agriculture Food Safety and Inspection Service before coming back to the ranch full time following her father's passing in 2009. Her focus is producing high quality beef from Angus cows adapted to her specific ranch environment.

The ranch retains ownership on calves and utilizes artificial insemination extensively. The family also manages a farming enterprise primarily dedicated to forage production and regenerative grazing as conditions permit. Holman was nominated for this award by Dr. Ashley Fischer, DVM.

"As the main operator of the ranch, Marcela not only makes the management decisions but also does the physically taxing tasks including but not limited to fencing, feeding, and tagging calves," Fischer said. "Throughout her experience managing the ranch, she has maintained a balance between honoring the ranch's heritage and making sure it will be sustainable for the next generation by being open-minded to new programs and technologies in the beef industry."

The Cattleman of the Year award was sponsored by Croplan by Winfield United. Jeff Jackson, alfalfa and forage specialist and national forage sorghum product manager at Croplan, presented the award to Tom Jones, managing member

an associate professor and also worked of Hy-Plains Feedyard in Montezuma,

In 1999, Jones put an investment group together to purchase the feedyard. Seeing the advancement in the quality of the animals provided from the cow-calf producers and the need to make further advancements led to the opening of the Education and Research Center in 2017. The Education and Research Center hosts multiple meetings throughout the year ranging from appropriate antimicrobial use, water conservation, farming practices, and community development.

The overall goal with these meetings is to educate the producers and consumers. There are also multiple groups that come together to identify issues for the industry, collaborate on research projects, and help make improvements throughout the entire supply chain. Jones was nominated by Megan Elsey at MJE Livestock Equipment.

"Tom has an open-door policy regarding his research and education center in Montezuma," Elsey said. "His dedication to community outreach and solidifying relationships throughout the region are all part of his service to the beef industry. He is an effective communicator with a remarkable ability to share his knowledge about cattle and the beef industry to a wide variety of audiences."



Photo By: Kylene Scott, HPJ

The Cattleman of the Year Award recipient was Tom Jones, managing member of Hy-Plains Feedyard in Montezuma, Kansas. The award was sponsored by Croplan by Winfield United. Pictured are High Plains Journal publisher Zac Stuckey, Jones and Jeff Jackson, alfalfa and forage specialist and national forage sorghum product manager at Croplan.



Photo By: Kylene Scott, HPJ

The Cattlewoman of the Year award recipient was Marcella Warner Holman. Holman a fourth-generation rancher who operates Black Diamond Angus Ranch in Ford County, Kansas. Holman is pictured with her family.





Personal Banking | Ag & Business Banking

Checking | Savings | Loans

1110 W. Oklahoma | (620) 356-5555 | Ulysses, KS



620-492-6210

www.skylandgrain.com

For all of your Grain, Cotton, Agronomy and Fuel needs!

# Mathew Medill, CPA, CFE Certified Public Accountant mmedill@pld.com (620) 356-4951 Lakin, KS Ulysses, KS 67860 67880 117 N. Main St 104 N. Main St

# **USDA** Issues Helpful Reminders For Your **School Lunch** Prep

Posted by Jesus Garcia, Public Affairs Specialist, Food Safety, and Inspections Service, USDA August 17, 2022

More than 50 million youth are expected to attend U.S. schools this fall, and a good portion will be taking their own lunches to school. To help parents and caregivers prepare to-go meals safely, the U.S. Department of Agriculture (USDA) offers some advice.

Homemade school lunches strive to contain healthy nutrients to fuel the day, but perishable lunches do the body no good if they cross over to the "Danger Zone" in poorly insulated bags with no cooling or heating option. If these lunches are kept in temperatures between 40 F and 140 F for more than two hours (or one hour when it's to keep items at 140 F or above. 90 F outside), bacteria will multiply



are some tips:

Use an insulated lunch bag. Avoid brown paper bags. Purchase an insulated bag and add a frozen gel pack and a frozen juice box or bottle of water to keep items at 40 F or below.

Keep it hot. If soup, chili or stew is on the menu, use an insulated container to keep food heated. Fill the container with boiling water, let it stand for a few minutes, empty it, and then pour in the hot liquid meal. Keep the insulated container closed until lunchtime

Choose non-refrigerated items.

quickly and make food unsafe. Here Include options that don't require refrigeration in your child's lunch, like whole fruits, raw and uncut vegetables, hard cheeses, unopened shelf stable meats and fish cans and pouches, chips, bread, crackers, peanut butter and jelly.

> Learn how to keep meals safe with USDA's Four Steps to Food Safety. For more information, contact the Meat and Poultry Hotline from 10 a.m. to 6 p.m. Eastern Time, Monday through Friday via:

Phone: 1-888-MPHotline

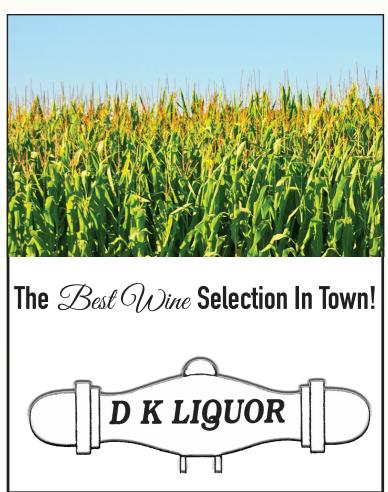
(1-888-674-6854)

Email: MPHotline@usda.gov

Live chat: ask.usda.gov









### Handling Large Round Bales

UNMC, Central States Center for Agricultural Safety and Health, Omaha, Nebraska

How can the weight of a large round bale become a deadly force?

Aaron Yoder, PH.D., Associate Professor, Department of Environmental, Agricultural & Occupational Health at the University of Nebraska Medical Center (UNMC), says understanding the role center of gravity (CG) plays in handling bales that weigh between 500 and 2,500 pounds is key element of avoiding a tractor or loader rollover.

A tractor's CG is the point where all parts balance one another. Approximately 30% of the tractor weight is on the front axle and 70% is on the rear axle. Adding weight to the tractor can affect the CG.

For a tractor to stay upright, it's CG must stay within the stability baseline or where the tires touch the ground. The position of the CG can change if the tractor moves from a level position onto a slope, or significant weight is added to either the front or rear of the tractor.

"When a tractor or loader carries a bale, the center of gravity on that equipment shifts," Yoder says. "The center of gravity raises, increasing the risk for a tractor or loader rollover. That risk is increased if the equipment loses traction when operating on rough or wet terrain."

To offset the center of gravity shift, Yoder advises modifications to the tractor/loader such as widening the wheelbase or using ballast fluid in the tires or additional counterweights. If the center of gravity shifts to the rear of the tractor, it can cause the front end to rise. If the front rises too much, the front tires lose stability and steering is impaired.

Tractors used to move bales should be equipped with a rollover protective structure (ROPS), and the operator should always buckle the tractor's seatbelt. A

ROPS limits the degree of rollover, helping protect the operator. Be aware that a ROPS is not designed to protect the tractor operator from the weight of a falling bale.

Most front-end loaders have a load capacity either stamped on the equipment or listed

in a decal on the machine. The information should also be found in the equipment manual. Overloading the equipment greatly increases the risk of injury to the operator as well as damage to the machine.

"Using a grapple hook or bale spear to move a bale reduces potential for the bale to roll back onto the loader arms or operator," Yoder says. "If the bales are stored uncovered outside, be aware that recent moisture can add a significant amount of weight to the bale."

While moving a large round bale, avoid lifting it too high off the ground, which also results in a center of gravity shift. The bale should be high enough off the ground that it doesn't come in contact with anything, but it should never be lifted high enough that the equipment operator can see beneath the bale.

"Make sure you can see over the top of the bale," Yoder says. "Lifting it any higher increases the risk of a rollover."

Be aware of any overhead wires in the vicinity where bales are being moved. Keep speed at a minimum during the move, avoid "jerky" movements, and drive along terrain that's as flat and even as possible. Even a slight embankment can lead to a tractor overturn.

Yoder notes that co-workers, bystanders, or children should not be allowed to be in the area when bales are being moved should not be allowed.

"Vision is hindered when you're moving can fail, a large bale," Yoder says. "There should be could fa no reason to have anyone else close to beneath the bales or the equipment when bales in the a are moved. Be aware of any animals that loader."



might be in the vicinity, too."

Because of their tremendous weight, if a large round bale falls from a stack or tears loose from a grapple hook, it can crush nearly anything in its path.

"Even in agritainment, you see people stack bales to create shapes or mazes," Yoder says. "If you're doing something like that, make sure you're stacking the bales on a stable, flat, solid surface. Use good formation to reduce the chance that a bale will fall. Keep in mind that, over time, bales will deteriorate, which can lead to unstable bale piles."

If multiple bales are being moved, the appropriate respiratory personal protection equipment (PPE) is recommended.

"Animals like to build nests in bale piles," Yoder says. "When you move bales, you may be exposed to animal feces and any of the diseases that go along with that, such as hantavirus. You may also encounter the animals themselves, including bees or wasps. Proper clothing and footwear will help protect against these hazards."

Use of respiratory equipment is especially critical when bales are ground. Tub grinders produce an immense amount of dust.

If the equipment operator must exit the equipment before depositing a bale on the ground, they should lower the bale to ground level and turn off the engine before getting out of the tractor/loader.

"The stored energy in a hydraulic system can fail, with the potential that the bale could fall on anyone or anything that's beneath it. Never leave a bale suspended in the air if you must leave the tractor/loader"



# Matkin Accounting Services

#### Focused Service Packages can include:

Advisory
ENTITY STRUCTURE PLANNING
BUSINESS START-UP

CASH FLOW PLANNING & REVIEW
BUSINESS OPERATIONS & DOCUMENTATION
INCOME STRATEGIES
EQUITY PLANNING-POST TAX NET WORTH

ESTATE AND SUCCESSION PLANNING

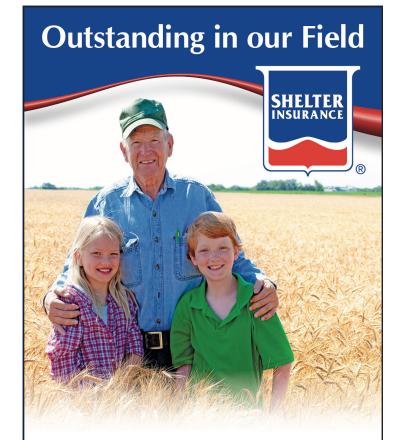
Maintenance

INCOME TAX RETURN
TAX RETURN REVIEW
ACCOUNTING
PAYROLL
SALES TAX

And More!

123 N. Glenn Ulysses,Ks 67880

Call Today For An Appointment 620.356.1036



No one puts their money where our mouths are like the American farmer. We see the results of your hard work and commitment three times a day. We depend on it. You can depend on the folks at Shelter to take the same pride in our performance as you do in yours. *Call us today to find out how we can help*.

Jeri Lynn Wells 111 S. Glenn St. Ulysses, KS 67880 620-356-3300 JWells@ShelterInsurance.com



We're your Shield. We're your Shelter.
ShelterInsurance.com

### Kansas Farm Bureau President to Retire

After serving as president of Kansas Farm Bureau since 2014, Montgomery County farmer Rich Felts has announced he will retire Dec. 5. Felts previously served as vice president of the organization for three years and on the board of directors before moving into leadership of the organization.

"The decision to retire was not an easy one," Felts, says. "I have enjoyed my time working for and with Farm Bureau members of Kansas. My wife, Shirley, and I look forward to returning to the farm and know our organization will continue to advocate, educate and serve Kansans."

"Rich has been a steadfast and strong leader of our farm organization," Terry Holdren, KFB CEO, says. "His work on behalf of our members, our state and agriculture has put us in a great position for the future."

Felts began his service to Farm Bureau at the county level and held leadership and volunteer positions for extension, conservation, rural fire, church and township boards.



RETIRING — Rich Felts will reture as President of the Kansas Farm Bureaur on December 5, 2022.

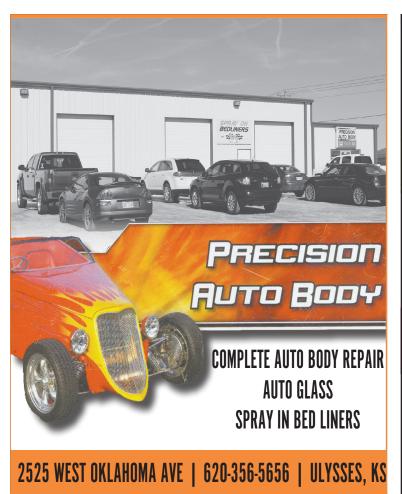
At Kansas Farm Bureau he served on the American Farm Bureau Federation board of directors; chaired the board of Farm Bureau Mutual Insurance Company and affiliated boards and committees; and was appointed to numerous taskforces by governors and others on behalf of Kansas farmers and ranchers.

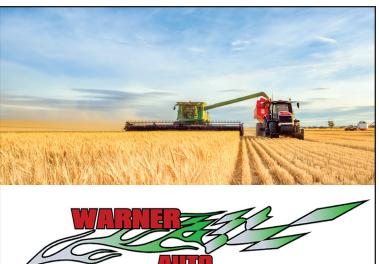
Under his leadership, Kansas Farm Bureau Health Plans was created; more than \$150,000 was raised and shared across the state to end hunger in Kansas communities; support and expansion of mental health resources was created; consumers were educated about sustainable agriculture; and innovation and entrepreneurship were improved in rural communities.

A new president will be elected at the organization's annual meeting on Dec. 5 in Manhattan.



KANSAS FARM BUREAU\*
The Voice of Agriculture\*





# WE DO HEADLIGHTS, TAILLIGHTS & EVERYTHING IN BETWEEN!

2485 N. Oklahoma Ave Ulysses, Ks 67880 620-356-5599





# Strengthening agriculture and the lives of Kansans through advocacy, education and service.

For more information or questions about Grant County Farm Bureau Association call, email or stop by 620-356-5677 | grantfb@kfb.org | 924 W Oklahoma, Ulysses, KS 67880



# Kansas Wheat Farmers Hold Stakeholder Round Tables by Julia Debes, Kansas Wheat

The single-largest research investment by Kansas wheat farmers came to life almost ten years ago when the Kansas Wheat Innovation Center opened its doors. Since that time, the center has set a standard of excellence for wheat research and worked to meet the specific needs of Kansas wheat growers. In recognition of the upcoming decade milestone, the Kansas Wheat Commission embarked on a statewide effort to gather Kansas wheat farmer feedback on the future — positioning the commission to continue finding innovative solutions to position wheat growers for success.

The effort included eight round table discussions involving 120 Kansas wheat farmers. Farmers shared insights on obstacles like infrastructure, market volatility and supply chain disruptions as well as the value they see in improved genetics, sustainable production practices and regionally specific management practices.

"One of the participants in the round tables said, 'It's the little things together that make wheat pay," said Justin Gilpin, CEO of Kansas Wheat. "Helping farmers manage all of those little things well is our role as the checkoff. We need farmer input to ensure we're doing that as effectively as possible."

The round table discussions indicated Kansas wheat farmers particularly appreciate programs that highlight best practices, provide opportunities to connect with others in the industry and offer guidance specific to operations or regions. One of the Kansas Wheat programs that received high praise in the discussions was the Kansas Wheat Rx program, which helps farmers make management decisions and choose varieties based on their individual growing region's characteristics.

Based on the feedback, Gilpin said Kansas Wheat's team will continue to focus on research, education and information services that address farmers' concerns and promote market development.

"Every day, our team focuses on providing the information and services needed to make all the elements farmers can control — genetics, agronomic and management decisions — work together," he said. "The input provided through the statewide discussions strengthened our focus as a team and will help us determine how to

better meet the needs of wheat farmers in Kansas."

Farmers in these round tables also confirmed the following commitments:

Using cutting edge research to purposely select wheat varieties and use regionally specific management practices to produce the best wheat crop possible.

- --Exploring new marketing opportunities presented by preferred variety programs and producing high protein wheat to meet market demand.
- --Making agronomic decisions and applying research to reduce inputs and to select wheat varieties that will perform well in their region.
- --Ensuring transparency with consumers to share the story of how a safe, nutritious wheat crop is produced.
- --Continuing to work to get improved wheat varieties into the hand of farmers faster.
- --Helping producers practically apply research innovation to their on-farm management decisions through regionally held Wheat Rx programs and other outreach.

# Kepleys Honored as Kansas Master Farmer and Master Farm Homemaker

#### **Tammie Hensley - The Ulysses News**

The odds are - if you've lived in Grant County for any length of time or if you've attended the Home Products Dinner, an agriculture meeting or took a field trip to the Kepley farm as a fifth or sixth grader - you have met Larry Kepley or his wife, Virginia. Larry grew up in the Ulysses area while Virginia was raised on a farm southeast of Clearwater. They met at Kansas State University where both were education majors - Virginia in home economics and Larry in agriculture and have spent the past 61 years plus farming in addition to educating young and old alike.

The couple moved with their two children to Grant County. Larry farmed with his father, Ralph, while Virginia concentrated on raising Tad and Kim and helping on the farm. As the kids grew older, Virginia was able to return to the work force as the educational director at the United Methodist Church. She then became a paraprofessional for gifted students, eventually earning her gifted education teaching certificate and facilitating for students in Holcomb, Lakin, Deerfield and Ulysses. She was also an "Odyssey of the Mind" coach.



Photo By: Jennifer M. Latzke

MASTERS — Virginia and Larry Kepley were honored by Kansas State Research and Extension as recipients of the Master Farmer and Master Farm Homemaker in the Class of 2021.

Meanwhile, Larry was looking for opportunities to diversify the farm. One of those opportunities presented itself about the time that he was elected to the Kansas Association of Wheat Growers board of directors. Hard white winter wheat was being developed at K-State and Larry saw his opportunity. The American White Wheat Association was formed, later becoming Farmer Direct Foods. He served a board chairman for ten years and used his education background as he talked to farmers around the state of Kansas about white wheat.

After retiring from teaching, Virginia took a class at K-State called "Ag in the Classroom." Educational models are created and brings the farm to the classroom. Virginia created a lesson plan on trees which revolved around the orchard on the Kepley farm that includes 25 different varieties of trees as well as a mature windbreak.

Larry and Virginia Kepley have decided to retire from farming so that they can spend more time with their grandchildren. But that doesn't mean that they won't continue to educate their community about agriculture. It's just one of the reasons they were chosen as Kansas Master Farmer and Master Farm Homemaker -- their giving and sharing hearts.

The Kansas Master Farmer Association and the Master Farm Homemakers Guild were formed in the late 1920s to publicly recognize excellence in farming, homemaking, farm living and rural citizenship. Local K-State Research and Extension councils and districts submit nominations and a committee picks one couple from each area, plus two couples at large.

Larry and Virginia Kepley were recognized at a program on March 11, 2022. They were nominated by Elizabeth Rogers and Monica Walker.



Moundridge, Kan. farmer Ray Flickner (left) recently hosted a group of earth scientists from NASA, who were interested in learning how farmers use satellite data and other products on their farms.

Of all the folks that might visit his central Kansas farm, Ray Flickner probably never figured a group from the nation's space agency would be among them.

Yet, there they were: A small group of NASA scientists pulling up in SUVs to quiz Flickner about his farm just west of Moundridge.

In these parts, Flickner is pretty well known. He's the fifth generation owner and operator of what is known as the Flickner Innovation Farm, a partnership with Kansas State University to implement and test such leading agricultural technologies as moisture sensors, GPS guidance systems, drones and more.

But this is NASA, right? Space suits and rocket ships...

"Well, NASA does some great things in space," said Brad Doorn, the program manager of the agency's agriculture and water resources program, which is part of the earth science division, "but NASA also spends a lot of time providing information about Earth. And we have an agriculture program."

Doorn was among five scientists who came to Flickner's farm in late August to better understand the challenges farmers face related to agriculture and using water resources.

"We want to learn the decisions they're facing, the technologies they're working with...so that we can get better acclimated to those challenges," Doorn said.

The program he leads focuses on "reaching down to end-users in agriculture and water" to understand how the information gathered daily from 22 satellites orbiting the Earth can be used for the benefit of farmers.

"We then reach back to NASA and explain the possibilities," Doorn said. "It could be that it's a future (space) mission, 10 years down the road. It could be something that we've already developed; we just need to say, 'hey what's been done over here, we need to bring over here."

"The Flickners and all agricultural producers and industry need to understand that they have an agricultural program in the nation's space agency."

Deann Presley, a soil management specialist with K-State Research and Extension, was among those who came to listen and share with the NASA scientists.

"I just think it's fantastic that they're willing to listen and have that conversation with farmers," Presley said. "They (NASA) are the ones taking these measurements of Earth; they're the one's helping with drought prediction and looking at food security around the globe. But they want to take it farther; they want to learn what kinds of tools and products can be useful to farmers."

Flickner said it's important that farmers are active in the partnership.

"What I can offer them is I might be able to 'ground-truth' some of their findings," he said. "They've got a lot of

#### NASA Official Says 22 Satellites Help Boost U.S. Agriculture Production

# Pat Melgares K-State Research and Extension News Service

information that they're getting from satellites, but is that information legitimate? Is what I'm seeing on the ground the same thing they're seeing on the satellites?"

During the visit, Flickner's grandsons – Owen, age 8, and Miles, age 5 – showed up wearing shirts that read "NASA" across the chest, eager to meet the group that had come to their grandpa's farm. Owen proudly proclaimed he wanted to be a NASA engineer one day. The boys left with shiny 'NASA' pins and a backpack full of other gifts.

"NASA is super excited about engaging youth all the way up to college," Doorn said. "We need agricultural expertise in the space agencies. One of our satellites coming up in the next decade...is a hyperspectral satellite in which many of the requirements came from the agricultural industry."

"So," he added, "we need those agronomy departments, biology departments (and others)...all to be thinking that there's a capability available for assessing our vegetation and understanding our Earth. We want to get students engaged in that (type of work)."

The visit by the team from NASA was organized by the Kansas Center for Agricultural Resources and the Environment, housed at Kansas State University.



#### It's Sunflower Season In The Sunflower State

#### Maddy Rohr, K-State Research and Extension News **Service** September 1, 2022

the sunflower state and harvest is just around the corinto October.

ripen, protecting them from birds is essential., said Kansas State University horticulture expert Ward Upham, who recommends covering the heads once the petals begin turning brown year, he added. with a paper sack or cheesewith a rubber band.

"This will not only help keep the birds out, but will prevent ripened seeds from dropping out of the head," he said.

shriveled florets in the cen-removed by rubbing gently.

It is sunflower season in ter of the flower disk, the backside of the head turning a lemon-yellow color and ner, starting mid-September heads facing down. "The ultimate check is to pull a As seed heads begin to few seeds to see if they have turned black with white stripes, the typical color," Upham said.

> If there are empty shells, this usually indicates a lack of pollination earlier in the

To harvest the seeds, cut cloth and securing the cover the heads and place them in a paper sack, or leave a foot of stem attached and hang the heads upside down to dry. Cover the heads to prevent seeds from dropping as they dry, he said. Once Maturity is indicated by the heads dry, seeds can be Roasting

Prepare the seeds for roasting by removing the shell and covering with salted water (2 quarts of water to ¼ to 2 cup salt). Then, bring them to a boil and simmer for two hours, or soak in the salt solution overnight. Then, it is important to drain and dry the seeds on absorbent paper.

To roast the seeds, spread them in a shallow pan in 300 degree Fahrenheit oven for 30-40 minutes, stirring occasionally until they appear golden brown, according to Upham. Then, remove the seeds from the oven and add one teaspoon of melted butter or margarine.

If they are to be eaten immediately, Upham suggests replacing the butter Extension office.

or margarine with one teaspoon of cooking oil per cup of seeds and stirring to coat. Complete the process by drying seeds on an absorbent towel and adding salt.

Upham and his colleagues in K-State's Department of Horticulture and Natural Resources produce a weekly Horticulture Newsletter with tips for maintaining home landscapes and gardens. The newsletter is available to view online or can be delivered by email each week.

Interested persons can also send their garden and yard-related questions to Upham at wupham@ksu. edu, or contact your local K-State Research and



#### Wheat Protein **Plant Opens in** Phillipsburg, Kansas

Area Development News Desk August 10, 2022

Amber Wave, a leader in sus- in 100 miles of the plant. tainable agriculture, food ingredients, and low-carbon fuels, opened its state-of-the-art wheat protein ingredients facility in Phillipsburg, Kansas. The \$250 million project is expected to create 60 jobs.

The facility will be the largest wheat protein producer in North America within two years, according to state officials. All the wheat the company needs is grown with-

"Recognizing rising demand for high-protein ingredients and innovative feed products, coupled with renewable fuels that reduce our carbon footprint, this investment fits with what we have successfully done many times in Summit's history," said Bruce Rastetter, CEO of Summit Agricultural Group, Amber Wave's parent organization. "We evaluated several sites in various

wheat-growing areas and Prairie Horizon is ideally located. The wheat protein we will produce is a healthy ingredient used widely within baked goods, pet food and growing aquaculture feed markets."

In addition to building a wheat mill and vital wheat gluten plant, the company retrofitted the existing Prairie Horizon Agri-Energy corn-based ethanol plant to produce ethanol from wheat starch.

The plant will use the latest technology in wheat milling and protein extraction while creating a significantly lower carbon footprint than traditional corn ethanol plants to produce biofuels.

"This is a big win not just for Phillipsburg and western Kansas but the entire state," Lieutenant Governor and Secretary of Commerce David Toland added. "Amber Wave's facility underscores Governor Kelly's continued commitment to increasing prosperity in all areas of Kansas."

#### Worms at Work, **Recycling Food Waste**

#### Nina Bhattacharyya, USDA Office of Urban Agriculture and Innovative Production May 4, 2022

Did you know that worms can recycle your food scraps? Vermicomposting, or worm composting, turns food scraps into a beneficial soil amendment that can be used in home gardens, landscaping, turfgrass, farms and more. Over one-third of all available food goes uneaten through loss or waste. Composting keeps food waste out of landfills where it decomposes and releases methane, a potent greenhouse gas.

vermicomposting Start by following these easy steps from North Carolina State University Extension:

Select Container: Make your own bin from plastic or wood storage containers or purchase one. Worm bins require holes for aeration and drainage.

Bin Location: The temperature inside a worm bin should be 59-77 degrees F. The bin can be kept indoors or outdoors in the shade. During colder months, insulate an outdoor bin with blankets, straw, or other material to keep it warm.

Worm Bin Setup:

Create a bedding of shredded paper (black and white newspaper, non-glossy office paper, paper bags, or cardboard) or dried leaves. Soak the material for ten minutes, wring out excess water, and place it in the bin with a handful of soil.

Add at least one pound of worms to your bin. There are over 9,000 species of earth-

worms, but only seven are suitable for vermicomposting. Red wigglers, which you can buy from a worm grower, are recommended. Do not use worms from a bait shop or your garden since they will not thrive in your bin.

Feed your worms vegetable and fruit scraps, coffee grounds, tea bags, and crushed eggshells. Avoid meat, fish, dairy products, citrus, twigs, and branches.

Harvest your vermicompost

after about four months and use it immediately or store it for later use. Learn three different methods to harvest your vermicompost.

Households, schools, businesses, farms, and municipalities can all vermicompost. Visit the USDA Food Loss and Waste website for overall composting resources and learn about the USDA Composting and Food Waste Reduction pilot program.



## Kansas Signs Significant Wheat Deal With Taiwan

During a state visit from a Taiwanese delegation, officials from the east Asian country agreed to purchase 66 million bushels of wheat from U.S. farmers over the next two years. The grain deal, which is worth approximately \$576 million, will be fulfilled significantly by Kansas wheat farms.

The Kansas Departments of Agriculture and Commerce jointly hosted a Taiwanese Wheat Procurement Signing Ceremony at the Kansas Capitol today as part of the current Taiwan Agricultural Trade Goodwill Mission. Representatives from the Taiwan Flour Mills Association (TFMA) and Taipei Economic & Cultural Office (TECO) were included in the event.

"Through strong partners like Taiwan, Kansas is indeed feeding the world," Governor Laura Kelly said. "Last year, Kansas' agriculture exports surpassed \$5 billion for the first time in history. Our farmers, ranchers and producers are contributing mightily to the state economy – and solidifying our status as a global powerhouse in agriculture."

Since 1998, Taiwan has dispatched a total of 13 agricultural trade missions to the U.S. in an effort to strengthen trade relations. This year's mission Page 18



included a to visit Washington, D.C. and select agricultural states, including Kansas, to demonstrate Taiwan's intention to continue purchasing quality wheat from the United States.

"We are sincerely grateful for our continued partnership with the Taiwanese people and their commitment to purchase wheat from Kansas," Lieutenant Governor and Secretary of Commerce David Toland said. "Taiwan continues to be a significant partner in many of our export markets, including wheat, soybeans, aircraft and aerospace components, to name a few. We value our relationship and will continue to pursue even more mutually beneficial opportunities moving forward."

The TFMA and the Kansas Wheat Commission signed a joint letter of intent related to Taiwan's purchase of 66 million bushels of wheat in 2023 and 2024. While a significant portion of this commitment will be from Kansas farmers, the terms, quantities, prices and conditions for the purchase and sale of wheat will be negotiat-

ed privately between the individual importers and suppliers.

In 2021, Taiwan was the fifth largest export market for Kansas agricultural commodities – with the procurement of more than \$224 million of Kansas agricultural goods including beef, oilseeds, cereal grains and wheat flour.

"Kansas values its economic and agricultural trade relations with Taiwan. This goodwill mission showcases the close relationship that has developed between Kansas and Taiwan over decades of agricultural trade," Secretary of Agriculture Mike Beam said. "We give heartfelt thanks to the representatives from TECO and the Taiwan Agricultural Trade Goodwill Mission for spending time in Kansas. These agricultural purchase commitments will directly benefit Kansas farmers, agribusinesses, and rural communities across our state." Taiwan Agricultural Trade Goodwill Missions take place every two years and demonstrate Taiwanese consumers' preference for top-quality U.S. agricultural products.

# **How The Drought Killing Kansas Corn Crops Could Make You Pay More For Gas**

**And Beef** 

#### **David Condos, Kansas News Service High Plains Public Radio** ksnewsservice.org

claimed its share of victims in Marc Ramsey's cornfields.

Fewer than seven inches of rain have fallen this year in the area he farms between Dighton and Scott City nearly one foot below the Ramsey said. "It's hard not historical average.

"This is a year unlike anything I've ever seen," Ramsey year's poor corn harvest said. "There are lots of times this year I've just kind of been at a loss for words."

Across western Kansas, shriveled corn plants succumbed to the oppressive weather before reaching more than a couple of feet tall. Others grew ears with no kernels or no ears at all. Some of Ramsey's stalks that stretched to six-feet-tall on July rains withered down to nothing under the late summer sun.

The harvests from these bushel. western Kansas cornfields typically fuel billion-dollar industries, such as feeding cattle. But with so little corn to go around this year, those industrial customers are paying a premium to ship grain in from other states running.

Even during the region's last big drought a decade ago, Ramsey said, his cornfields

This dry, hot summer has still had a decent number of bushels to harvest. This year, he estimates roughly half of the corn he planted won't yield a single piece of grain.

> "Just saying 'zero yield' is a painful thing to say," to be disappointed."

The ripple effects of this in Kansas will extend well beyond stressing farmers and their livelihoods.

As it becomes more diffivast swaths of brown, cult and expensive for cattle feedlots — where animals are fattened up for slaughter — and ethanol plants to get the corn they need, people across Kansas could face higher prices at the grocery store and the gas pump.

The Corn Crunch

Historically, it's been common to see corn sell in western Kansas for about \$4 a

Dan O'Brien, a Kansas State University agricultural economist based in Colby, said that number has roughly doubled. Prices had already been creeping up since Russia invaded Ukraine — another major just to keep their operations corn exporter — and now thanks to the drought-fueled shortage, the price in western Kansas is around \$8 per bushel.



**Drought Effects** — Many corn fields in Western Kansas, like this one just outside of Garden City, have been parched by the drought.

"The reason that we built els could add up quickly. those grain-using industries out here had to do with availability of grain, and now they're crunched," O'Brien said. "That sets off a whole series of responses ... all of forced livestock owners to them not good."

The lack of local corn supply is already pushing Kansas cattle and ethanol companies to bring in grain by rail from places like Iowa, Illinois and Ohio. That'll inflate corn prices across the Midwest, as local corn-dependent industries in those states suddenly have to compete with more buyers from operate on the margin." Kansas.

But it'll especially hurt Kansas. O'Brien estimates it'll cost Kansas industries an extra \$1 per bushel to ship in corn from other states.

Each steer at a feedlot can eat up to 60 bushels of corn before it gets turned into beef. Kansas feedlots have 2.35 million bovine mouths to feed. So paying an extra dollar to ship in those bush- corn in western Kansas to

In the short term, O'Brien expects the corn crunch to push meat and ethanol prices up. Beef prices had fallen recently as the drought sell off more of their cattle.

But even those higher prices might not be enough to keep corn-dependent companies profitable in western

"Is that enough to offset the major increase in the cost of corn?" O'Brien said. "Whether it's livestock feeders or ethanol plants, they all

Feedlots that can't afford to pay a premium for getting corn from out of state may have to send some animals to slaughter early. And if the drought continues and corn prices remain high for months, it could start to reshape the future of those industries in western Kansas.

There might not be enough

keep ethanol plants going here for the long term, O'Brien said, when they could shift operations to the other parts of the Corn Belt where the grain is more readily available. Likewise, some Kansas feedlots may buy less cattle next year because of the rising cost of grain.

Cattle ranching and feeding has the largest economic impact of any agricultural sector in Kansas, contributing roughly \$9 billion to the state economy. Ethanol production contributes another \$850 million.

"If things get rough enough out in the west," O'Brien said, "it affects the economic livelihood of everybody in the whole state."

Breaking the Drought

The U.S. Department of Agriculture estimates that Kansas farmers will harvest 628 million bushels of corn this year. That would be 122 million bushels less than last year.

If you multiply those 122 million missing bushels by

the elevated \$8-per-bushel prices, it means the state's agricultural economy missing out on nearly \$1 billion due to the drought.

"If you just look at the typical annual Kansas corn and sorghum production," Kansas State University agronomist Lucas Haag said, "and then figure the reductions that are going to be due to drought, we're talking huge sums of money."

The USDA says more than half of the state's corn is in poor or very poor condition. That's up from around 20% at this point last year.

It's a similar story for sorghum, which is typically considered a more drought-tolerant alternative to corn. More than half of Kansas sorghum is in poor or very poor condition — up from just 15% last year.

While irrigation has helped some farms avoid the worst, Haag said, many fields with center pivot sprinklers will still be abandoned because farmers just couldn't pump enough water to save them.

the state where we actually have wells that have the capacity to match up for when we're this short of precipitation," Haag said.

Water levels in the Ogallala aquifer — the primary water source for most of western Kansas — have been declining for decades since the dawn of irrigated farmland. Estimates show that if pumping trends continue, more than two-thirds of the water under Kansas will be gone within 40 years.

And it's unclear when farmers in western Kansas will feel some relief.

It's the first time in decades that a La Niña weather pattern, which fueled droughts across the West and Great Plains in 2022, will show up for a third consecutive winter. And the National Drought Mitigation Center expects drought to persist across Kansas through at least the end of this year.

To make matters worse, a poor crop this season will likely leave fields with less

"There's very few areas of residue — the pieces of plant matter that remain on the ground to help soil store moisture. And with so much of western Kansas already in a deep precipitation deficit, Haag said, it'll take more than a few rains here and there to get the region back on its feet.

> "We can really end up in one of these death spirals," Haag said, "until we get a really above-average year in terms of precipitation and crop yields that then kind of pulls us back out of it."

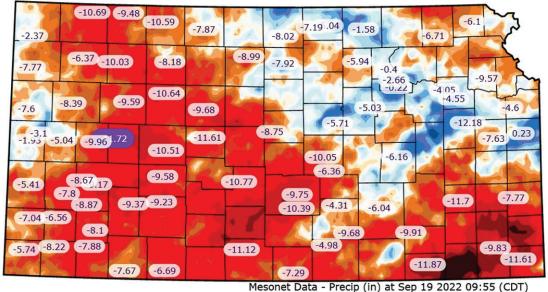
> Marc Ramsey has heard from other western Kansas farmers who consider him lucky for having anything to harvest at all. Lots of folks who planted dryland, or nonirrigated, corn this year won't even bother taking a combine into their fields.

> "I guess they get to relax a little bit more in the next couple of weeks," Ramsey said. "But, you know, that's the kind of relaxation none of us want."

Last year was dry too, Ramsey said, but his soil still had enough residual water to produce more than 50 bushels of corn per acre. This year, one of the hottest, driest summers on record has rung that dirt dry — the USDA reports that 86% of the soil across Kansas doesn't have enough moisture.

And just a couple of weeks from now, Ramsey and farmers across western Kansas will be planting their winter wheat crop into that same dry ground.

"Hopefully we've taken care of it, and it'll give us another shot."



Drought Precipitation — This map from Kansas Mesonet shows how many inches below-average precipitation totals are for various places across Kansas. A higher number (and darker red coloring) means that a location is more dry this year compared with historical averages.

Page 20

# **GPS Signals May Be Disrupted By Solar Flares And Other Activity**

#### Pat Melgares, K-State Research and Extension news service August 15, 2022

Among the many issues farmers must balance when planting or harvesting crops, one would think that the sun's energy is not one of those.

Terry Griffin thinks differently.

That's because Griffin - a precision agriculture economist with K-State Research and Extension - has studied the potential impact of space weather on agriculture, and specifically how solar flares and other activities in the solar system affect GPS signals to farm equipment.

The bottom line: "Space weather does impact our ability to use GPS for agricultural purposes," he said.

In fact, in a paper now available from K-State's Economics, Griffin con-



information from satellites.

longer have access to GPS idea. technology, also known internationally as Global Navigation Satellite System (GNSS).

GNSS access for an entire year, it could be a billion dollar loss in efficiency just for the Midwest," Griffin said.

has evidence to show the just not as efficiently. Add done if they don't have a effectiveness of using GPS harvesting Decades ago, Griffin notes, farmers would use visual nothing that humans can do row markers to guide those two chores.

"GPS guidance was cheap-Department of Agricultural er than having physical row most sensible approach for Assessment of GNSS Outage markers," Griffin said. "It farmers is to plan for the to Agricultural Productivity. cludes that U.S. farmers became one of those tech- unexpected.

stand to lose big if they no nologies that was just a good

we have planters that are really big and we do not have markers on those. So "If we assume that we lose what would happen if we did not have access to GPS on the day we are trying to plant?"

have inefficiencies. We can The agriculture industry still do some things, but all those (inefficiencies) up monitors on planting and across large regions, and it equipment. becomes a lot of money."

Griffin admits there is

"Ask yourself, 'how would I do things if I did not have "Fast forward to today and access to GPS? And do I have a Plan B?" Griffin said.

"I'm not suggesting farmers go out and buy row markers for all of the 48 row planters out there, but I am suggesting having a conversation with their partners, The answer: "We would service providers, manufacturers and dealers about things they can actually get GPS (signal)."

More details on Griffin's work, which is supported by The Aerospace Corporation, is available online from about events on the sun, or K-State's Department of other space phenomena that Agricultural Economics. The affect satellite signals, so the paper is titled, Global Cost

#### **Rodriguez** is **Intern for From** the Land of Kansas

#### **Josey Mestagh** From the Land of Kansas

Casandra Rodriguez is a senior at K-State studying hospitality management from Ulysses in southwest Kansas. She grew up participating in 4-H by showing sheep, goats and cattle. Rodriquez also had a front row seat to the ag industry due to her family's farm and trucking companies. She is most excited to learn more about our members and all their unique Kansasmade products.

Since she joined the From the Land of Kansas team in May, she has assisted with numerous projects. One of these projects is organizing holiday gift boxes. "I have learned a lot about the design aspect of the holiday gift boxes," Rodriguez says. "It has been fun and rewarding to curate a box full of flavors and designing our marketing campaign."



Page 22



INTERN — Cassandra Rodriguez enjoys sharing products from the land of Kansas. The Ulysses native is learning about marketing.

ficial for her future career so she can in that field in the future."

During her time with the program, display all the opportunities for cusshe hopes to gain more knowledge tomers in an appealing way. "I truly about marketing. This will be bene- enjoy marketing and hope to continue

#### Teeter is a Kansas Ag Innovator

#### **Brianna Gwirtz Farm Flavor**

If you ask Monty Teeter what his passion in life is, his answer is simple: to make every drop of water count. The ag innovator, developer and CEO of Dragon-Line from Ulysses, Kansas, started in the irrigation industry in 1971 at 19 years old. After almost four decades in his own business, Teeter noticed

water problem that needed fixing.

"In our area, we pump water from the Ogallala Aquifer. Every year, the aquifer becomes more depleted," Teeter says. "We have to be better stewards of our natural resources."

Teeter designed a mobile drip irrigation system that combines the mechanics of a pivot system with drip technology. Instead of nozzles continuing serious mounted along the pivot,

a manifold comprising specially designed drip tubing drags behind the frame, delivering water directly to the soil and not on the plant or in the wind. This system saves 20% to 50% of water being used by reducing evaporation, soil sealing and runoff.

"Our population is continuing to grow," Teeter says. "We need to think about how to produce more food with less than half the water. Dragon-Line systems can be part of that solu-





