TYLER HUSA TO JOIN RIVER VALLEY DISTRICT AS DISTRICT EXTENSION AGENT, CROP PRODUCTION

I am excited to be the new crop production extension agent in the River Valley District. I officially become part of the team on June 12, 2017. I am looking forward to meeting with producers, 4-H members, as well as all others who play a key role in Kansas agriculture in the River Valley District.

I feel that it is important to use this time to allow you to get to know a little bit more about me. I grew up on a row-crop and cow/calf farm by Wymore, Nebraska (which is approximately 20 miles north of Marysville, Kansas) where I acquired a great respect for the land, animals, producers, and all other aspects that make agriculture possible. From early on, I knew that I wanted to help out in agriculture in any way possible. While in grade school (and throughout high school) it was helping out dad and learning as much as I possibly could along the way. During that time, I learned how to perform many of the farming operations including: row-crop cultivating, windrowing, baling, planting, and much more. After graduating high school, I decided to continue on my education in agriculture at Southeast Community College in Beatrice, Nebraska. I attained my Associate of Applied Science in Diversified Agriculture Production, as well as my Associate of Arts in General Education from SCC in 2014. During my time at SCC, I served as Ag Club president and helped organize and run many events for the SCC Ag Club.

From Southeast Community College, I attended Northwest Missouri State University in Maryville, Missouri where I attained my Bachelor Degree in Agricultural Sciences in 2016. The Agricultural Sciences degree from NWMSU, is a diversified degree focusing on three subject areas: agronomy, livestock, and agriculture business. I took classes in all three subject areas, but my main focus was the agronomy side. Moreover, I participated under the supervision of Dr. Nigel Hoilett for his soil biochar experiment analyzing the carbon, hydrogen, and oxygen contents as a part of my agronomy independent study. I was also a member of the Sigma Alpha Pi honor society, where we discussed leadership roles and other activities, as well as helped coordinate community activities in Maryville.

My objective as the new crop production agent is to provide individuals in the district with education and programming from my own experiences, as well as through the dissemination of research from Kansas State University and other land grand institutions, with a goal to provide the most pertinent and beneficial information that benefits your individual agriculture operation. Feel free to stop by my office, call, or email me with any of your questions.
SIDEWALL COMPACTION FROM PLANTING INTO WET SOILS

Conducting field work -- including planting, tillage, or traffic in general -- after wet weather can cause soil compaction, and in particular sidewall compaction in the seed furrow. The worst cases of sidewall compaction are seen after a field has been planted when the soil was too wet, followed by a period of dry weather. If the soil stays moist, the roots are usually able to grow through the walls of the seed furrow. But if the soil gets dry, the roots can have a harder time growing through that seed furrow wall, and instead grow along the furrow, resulting in what is referred to as sidewall compaction.

With corn, the plants might look fine for a while, but the symptoms of this problem will probably show up after the plants get to be several inches tall. Symptoms will look like drought stress, nutrient deficiency, or both.

Since there aren’t any good ways to fix sidewall compaction once it exists, the best practice would be to avoid creating the problem in the first place. This means waiting until soils are dry enough to plant. The way to test for this is to dig down to the desired planting depth, and try to make a ball with the soil. Next, see if the ball will crumble or crack apart, or if it deforms like molding putty. If it crumbles, it’s ready to plant. If it deforms, it would be best to wait before resuming field operations. Even waiting as little as half a day could make a big difference.

This photo by Stu Duncan, K-State Research and Extension, NE Area Agronomist shows the sidewall and seed zone compaction in a heavy clay soil.

Thanks to DeAnn Presley, Stu Duncan, and Ignacio Ciampitti for the information in this article.

Driftwatch™ is trademarked specialty Crop Site Registry where commercial specialty crop producers my sign up and map locations of specialty crops. Field signs are available as another communication and awareness tool.

Beecheck™ is another program available where bee keepers may register and map the location of their apiaries to help protect bees from nontarget insecticide losses.

Finally, FieldWatch™ is a program where licensed applicators can sign up to receive information about driftwatch and beecheck sites in their area.

For more information, or to sign up, visit the Kansas Department of Agriculture, Pesticide & Fertilizer Program website at http://agriculture.ks.gov/divisions-programs/pesticide-fertilizer

DEFENSIVE DRIVING CLASS CHANGE OF LOCATION

Sharpen your driving skills! Prevent an accident from happening. Lower your auto insurance premium too. Enroll in the upcoming day Defensive Driving Course offered in the 4-H Conference Center at the fairgrounds in Clay Center. (Note the change of location for the workshop.) The class will be Monday, June 12, 9 a.m. - 3 p.m. There is a $20 registration fee per person due by June 5th. In order to have a class, a minimum of 15 people have to sign up.

Many defensive driving tips will be presented by Trooper Ben Gardner from the Kansas Highway Patrol. The class is completed in one day. Participants can bring their lunch with refrigeration available or break for an hour lunch. Breaks and snacks are provided. Participants do not drive or take a test. Several insurance companies recognize the benefits of defensive driving classes and provide a 5-10% premium discount to graduates of this course. The certificate received is effective for three years.

The 4-H Fair Conference Center is located at 205 South 12th Street at the south end of the Clay County fairgrounds beside the grandstand. Traveling from the north, go south at the junction of Highway 24 & 15 down 6th Street to Bridge Street. Turn east on Bridge Street. At the stop sign, turn right on County Road 396 and continue around the Armory to the main entrance. Coming from the south on Highway 15 turn east on Bridge Street, and at the stop sign turn right to the fairgrounds main entrance.

For more information or to pre-register Call the Clay Center office at 785-632-5335.

KDA DRIFTWATCH, BEECHECK, & FIELDWATCH PROGRAMS

Kansas growers of sensitive and organic crops are increasingly concerned about drift damage from commonly used pesticides. To help reduce the risk of pesticide drift damage, the Kansas Department of Agriculture has become a partner state of DriftWatch Inc. DriftWatch Inc. is an online service that provides a place for producers of pesticide-sensitive specialty crops to map their crop locations. Pesticide applicators can use the website to find sensitive-crop locations in an effort to minimize the potential for damaging pesticide drift. Pesticide applicators can use the registry to identify where extra care should be taken to protect these vulnerable crops.
DEADHEADING ANNUAL AND
PERRENNIAL FLOWERS

Are you looking for a way to increase the amount of flowers you get on your plants? Are you tired of the one and done flowers? Have you ever tried deadheading your plants? Some plants will bloom more profusely if the old, spent flowers are removed. This is a process called deadheading.

Annual plants especially, will focus their energy on seed production once they have flowered instead of on producing more flowers. If you remove old flowers, the energy normally used to produce seeds will be used to produce more flowers.

Perennial flowers can also benefit from deadheading and will increase the length of the blooming season. However, some gardeners enjoy the look of spent flowers of perennials such as sedum or purple coneflower. The seed produced is a good food source for birds.

Deadheading will not help all plants produce another round of flowers. Some plants that don’t produce flowers again are ‘Autumn Joy’ sedum, impatiens, most flowering vines and periwinkle. These plants only produce one round of flowers whether you deadhead them or not. So it’s totally up to you as the gardener on whether you like the look of the spent blooms or if you’d rather take them off.

Plants that do increase bloom production in response to deadheading include geraniums, petunias, marigolds, snapdragons, roses, blanket flowers, and zinnias. These are just a few in a long list of annual and perennial flowers that will bloom repeatedly if you deadhead them.

Deadheading is easily accomplished and doesn’t take much time to complete. With some plants, pinching the bloom between a thumb and finger will pop off the spent blooms. Others will be a bit tougher and will need pruning shears to remove the blooms. Deadheading can increase the length of the gardening season, but it is up to you the gardener on whether you choose to deadhead your plants.

WATERING MAY BE NEEDED
THIS SUMMER

Most of us here in district have gone through an extremely wet spring. Gardeners may assume that little watering is needed this summer as the soils were completely recharged this spring. However, more watering will have to be done than expected.

With all the rainfall we saw this spring, we are likely to have damage to our plants. Rain saturated soils can damage root systems. The excess water drives oxygen out of the soil as the pore spaces are filled with water. Every living cell in a plant must have oxygen to live. If there is no oxygen in the soil, roots will die. Therefore, many of our plants may need to be watered throughout the summer, especially since it has turned so hot so quickly. Damage could have been done to any plants, but newly planted will be effected the hardest.

ARE YOUR TREES LOSING LEAVES?

Are you noticing that your trees are losing some of their leaves this summer? There are three situations that may be causing your tree to lose it’s leaves this summer.

The first situation could be the tree is producing yellow leaves throughout the whole tree canopy. If the yellowing leaves are well distributed throughout the tree and result in a general thinning of the leaves, this is not a serious problem. Trees will often set more leaves in the spring than they can support during the summer. Heat and drought stress will cause the tree to lose leaves. This can happen when the tree produces more leaves than it can support with the available amount of soil moisture. The leaves that drop are most often yellow with no discernible disease spots. However, at times, we can drop green leaves that appear perfectly healthy. As long as the leaf drop results

Newly planted trees are especially vulnerable, as they have not established the extensive root system needed to absorb enough water during hot, dry windy summers. Even trees two or three years old should receive special care even if the root system was not damaged by saturated soils. It’s hard to see right away if the root systems on mature trees have been damaged. It takes multiple years to show signs of problems.

A way to help your trees through this difficult summer is by watering. Deep, infrequent watering and mulching can help trees become established. Newly transplanted trees need at least 10 gallons of water per week, and on sandy soils, they will need much more. The secret is getting that water to soak deeply into the soil, so it evaporates more slowly and is available to the tree’s roots longer. One way to do this is to drill a small hole (1 1/2") in the side, near the bottom, of a 5-gallon bucket and fill it with water. Let the water dribble out slowly, refill the bucket once, and you have applied 10 gallons. Newly planted trees and trees that were planted two to three years ago will require more water.

An inexpensive method of watering trees is using soaker hoses. Soaker hoses are notorious for non-uniform watering. In other words, you often receive too much water from one part of the hose and not enough from another. Hooking both the beginning and the end of the soaker hose to a Y-adapter helps equalize the pressure and therefore provides more uniform watering. It’s also helpful if the Y-adapter has shut off valves so the volume of water flow can be controlled. Too high of water flow will increase the amount of water running off instead of soaking in. On larger trees, the soaker hose can be circled around the dripline of the tree. The dripline of the tree is the outermost reach of the tree branches. A perforated soaker hose is a great way to water larger trees, a newly established bed, or a foundation planting.

Regardless of method used, soil should be wet at least 12 inches deep. Use a metal rod, wooden dowel, electric fence post, or something similar to check depth. Dry soil is much harder to push through than wet. By watering your young trees, shrubs and other plants throughout the summer you should see them start to thrive and grow.
The event will be held at Downard Family Farms. Go East through Barnes on HWY 9 and turn North on HWY 148. Go three miles north on HWY 148 to 13th Road. Turn right (East) on 13th Road and go 1.6 miles to the site. Attendees are encouraged to bring lawn chairs and dress for outdoor activities. In case of inclement weather, the event will be held at the Barnes Firehouse. Pick up a registration form at any Extension or NRCS office or by going on-line at www.kansasforests.org/events/index.html. Registration cost is $10.00 payable to Kansas State University FEIN # 480771751. For questions call 785-532-3300. The event is hosted by the Kansas State University, Kansas Forest Service in cooperation with the USDA Forest Service.

**CALL 811 BEFORE YOU DIG**

Are you planning an improvement project such as planting a tree, installing a fence, building terraces, installing drain tile, or updating that rusty mailbox? Remember to “know what is below and always call 811 before you dig! Pipelines, fiber optic lines, water lines, gas lines, and electrical lines are just a few of the things that are often buried underground and may be running through properties where we live or rent. For the safety of everyone, and for liability reasons it is vital that we call 811 before we dig. Kansas belongs to the 811 system and works through the Kansas One-Call System, Inc. located in Wichita. The call center is available 24 hours per day 7 days per week to call in advance notice. Here is how the system works:

1. **Notify** the One Call center by making an on-line request for by calling 811 2-3 days prior to any digging.
2. **Wait** 2 full working days for affected utility operators to respond to the ticket. This does NOT include the day the request was made. For example: I place my call on Monday then Tuesday is Day 1 and Wednesday is Day 2. Therefore, Thursday is the earliest day that I can expect to have utilities flagged for digging.
3. **Confirm** that all utility operators have responded to the request and the marks are accurate. If you see above-ground indications of buried utilities, like a vent pipe or utility marker, but no flags then call 811 so the utility operator may be notified.
4. **Respect** the locate marks
5. **Dig Carefully**—Keep in mind that if you must dig near the locate then carefully dig by hand to prevent damage to the buried utility. Generally, state laws prohibit using mechanized equipment within 18 to 24 inches of the marked utility. In Kansas, the marks are valid for 15 days only. If work does not start, or extends beyond the 15-day period then another locate must be ordered by going on-line or calling 811.
River Valley Extension District
2017 Wheat Plot Tours

Tuesday, June 6th

8:00 a.m.  Zoe Auld 4-H Variety Trial Plots
Location: From Wakefield 1.5 East on Hwy 82
Breakfast: Juice and Rolls provided by American AgCredit

12:00 Noon  LeClair Seed & Clifton/Clyde FFA Variety Trial Plots
Location: From Clyde 3 South on 280th then 1.5 East on Plum Road
Lunch: Provided by Clifton/Clyde FFA & LeClair Seed

6:00 p.m.  Ohlde Seed Variety Trial Plots
Location: From Linn, 3.5 South of Osage, ¼ West on 4th Rd.
Dinner: Provided by Ohlde Seed following the tour.

Wednesday, June 7th

7:30 a.m.  NCK Experiment Field Belleville Variety Trial Plots
Location: 1.25 West of Belleville on US Hwy 36
Breakfast: Juice and Rolls provided by Belleville Chamber & Main Street

10:00 a.m.  Christain Tipton 4-H Variety Trial Plots
Location: From Munden, 1 South on 220th Rd and ½ East on Hickory Rd
Refreshments: Kolaches provided by the Tipton family

12:00 noon  Republic County High School FFA Plot
Location: From Cuba, 1.25 West on Penn Road
Lunch: Provided by: Astra Bank at the plot site

6:00 p.m.  Polansky Seed Wheat Plot
Location: From US 36, Belleville, 1 South of Dollar General on Bell Road
Dinner: Provided by Polansky Seed at the East Plant, US Hwy 36 following the tour

Featuring K-State Agronomy Specialists: Romulo Lollato, Stu Duncan, Erick DeWolf, and Company Reps

Tour refreshments provided by:

For additional information or questions contact: John Forshee, District Director
785-632-5335, 785-447-1291, or jforshee@ksu.edu

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The topic of current and future land values has become a topic of discussion amongst farmers, ranchers, lenders, and other types of investors. As extension begins to get questions on what land is worth right now, as well as predictions for land values in the future, the data presented in this article could be helpful in navigating a struggling farm economy. As in previous articles that have been published, Dr. Mykel Taylor, K-State Research and Extension Economist, will be referenced for her work and what she has done to prepare extension professionals to better answer these tough questions. Will it be another repeat of the 1980’s farm crisis? How will the economy respond? How quick will land values fall and how long will it take for them to rise again? What data should farmers and ranchers be paying attention to in order to stay ahead of the tough times that they are currently withstanding and appear to be facing for the next few years?

Let’s start out with a bit of a background on where we have been in the past for farmland. The data presented first in this article is taken from Kansas Farm Management Association (KFMA). From around 1999 to 2007, farmers were barely breaking even on wheat, corn, beans, and milo. In 2008 commodity prices started to improve and continued with that trend until 2013. Profitability then took a downward turn in 2014 and 2015 where farmers went from approximately $50 an acre of profitability to a loss of approximately $50 an acre. When analyzing 2016, farmers had great yields but not great commodity prices. However, the positive that came from the year 2016 was that yields were able to help stabilize the downturn in commodity prices. One topic of concern for upcoming years is having decreased yields along with lower commodity prices.

When looking at the whole farm and net income per operator, 2015 shows a net farm income of $4,500 for dryland crop farmers. This is a drastic decrease in net farm income when compared to a profitability of approximately $90,000 in 2014. When looking at cattle operations difference in net ranch income, 2014 was a record high of a little over $180,000 in profitability. In 2015, that profitability declined to approximately $75,000 in net ranch income, which is a 41% decline. The year 2016 will probably be even lower profitability yet for both the crop and cattle farmers.

When comparing the net farm income numbers published by Kansas Farm Management Association (KFMA) and the USDA numbers for Kansas, it matches up well with what is going on in the great plains and the rest of the Midwest. The 2015 numbers from KFMA declined much more than the USDA numbers. However, it is important to keep in mind that USDA also includes specialty crops. Those specialty crops have not taken as big of a hit when compared to those that are commonly grown in Kansas.

When looking at Kansas Ag Statistics survey, 2016 cropland values averaged $2,050 an acre which is down by 7% from the previous year. This average includes both irrigated and non-irrigated land. However, when looking at Kansas as a whole, it is mostly dryland so this number is more of a representation of dryland than it is irrigated. Pasture land values in 2016 averaged $1,290 an acre with a decrease of 7% from the previous year. When analyzing the land market in previous years, it began to increase in 2008 and peaked in 2014 for cropland values for dryland. Since 2014, dryland values have decreased by 10%. Pasture land values peaked in 2015 and decreased by 8% from 2015 to 2016.

The data presented from Kansas Ag Statistics is a survey. One of the challenges with surveys is that an opinion or a best guess type of scenario can be formed. It is also not a market based estimate, and it only presents the average and not the spread. The next data that will be shared is based off of market transaction data from the Property Valuation Department (PVD) in Topeka. This is sales data from 2014 to 2016 and must meet certain criteria. For specifics on what that criteria entailed, feel free to contact Katelyn in the Washington office for details.

The average parcel size in Kansas was 156 acres with around 4.5% having CRP contracts and the average sales per county was approximately 25. The total sales transactions from 2014 to 2016 was 6,845. It is also important to note that there was a 18% drop in sales transactions from 2015 to 2016. No sale options are not counted within these statistics.

When looking at cropland pasture sales according to PVD, the average was $3,027 collectively. This was a 10.4% decline from 2015. Both the USDA and sales market data are comparable with both numbers close to 10%.

According to PVD numbers, non-irrigated land showed a decrease of 17% from 2015 to 2016. When comparing the USDA land value numbers to the PVD numbers, then one can see that USDA land values are about 30% lower than PVD sales. While there might be a slight discrepancy amongst the numbers, the trend is still the same on dryland acres. Pasture land was comparable with both USDA and PVD numbers showing a decrease of 7 and 8% respectively from 2015 to 2016.
It is time to dig into the North Central Kansas area land value numbers, which includes the counties from the River Valley District. The average value of non-irrigated land in 2016 was $2,530 an acre. This is a better representation rather than taking an average of the state as a whole, but it is also noteworthy that this number does come from a smaller sample size. When we look at pasture values in the North Central Kansas area, the average value is $1,821 an acre.

Now that we have looked at where we have been in the past, let’s see where things are projected to go into the future. It has been quite apparent that we have had 3 years in a row of poor returns to farming and that 2016 is looking to continue that trend. When these numbers are put into a statistical model, the results portray somewhere around a 4.6% capitalization rate. A capitalization rate is the rate of return on an investment property based on the income that the property is expected to generate. In other words, this is the rate that is used to estimate the investors potential return on their investment. According to Dr. Mykel Taylor, if we see a 4.6% capitalization rate partnered with approximately $1,000 projected long run Kansas land price, then the projected net farm income per acre would be $46. When comparing this to previous years, it is about a 50% decline from the year 2014. When looking at the long run and the projected capitalization rate, the values have only decreased by 17% thus far. If this capitalization rate turns out to be accurate, then we are not done with the decline in land values. This means that farmers could potentially still be faced with a 20-30% additional decrease in land values for the state of Kansas. It is important to note that these are only projections, and it is unknown as to how the markets could change and affect the outcomes of these numbers.

While this information has similar qualities as to what farmers went through in the 1980’s, there is more information available to assist farmers and ranchers through trying times. Extension professionals around the state have been trained in a program called FINPACK. This program is designed to assist producers on a one-on-one basis with not only the current financial situation but also possible changes producers could make to increase farm profitability and cash flow. When going through this program, the producer will come away with a balance sheet, enterprise budgets, a base business plan, and alternative business plan scenarios. If this is something that fits the operation, then please feel free to contact Katelyn Brockus or John Forshee. The next step in the process will then pair the producer with an extension professional trained in FINPACK within the state of Kansas.

While farmers and ranchers might be facing tough times in the future, there will always be opportunities to look to advance both cattle and farming operations. Some of those options might be sharing risk through becoming a diversified operation or considering planting forage or specialty crops. With the expected decline in land values, this might also provide an opportunity to expand land mass or could also provide an opportunity to get started in farming or ranching. Please feel free to reach out to extension professionals to explore options. Please contact Katelyn Brockus 785-325-2121 or kbrockus@ksu.edu with any questions regarding this article.
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<td>9am-Noon</td>
<td>Babysitting Class</td>
<td>Belleville-Astra Bank Basement Meeting Room</td>
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<td>June 6</td>
<td>8am</td>
<td>RVED 2017 Wheat Plot Tour</td>
<td>Wakefield-1.5 miles east on Hwy 82</td>
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<tr>
<td>June 7</td>
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<td>RVED 2017 Wheat Plot Tour</td>
<td>Belleville-NCK Experiment Field –1.25 west on US Hwy 36</td>
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<td>June 8</td>
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<td>June 20-23</td>
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<td>Kansas Range Youth Camp</td>
<td>Murdock, KS-Camp Mennoncah, Kingman County</td>
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<td>June 24</td>
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<td>Chef Alli-Pressure Cooker Class</td>
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<td>Extension Fall Fling</td>
<td>Clay Center-4-H Conference Center, Fairgrounds</td>
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