

# Agriculture

## CENTRAL KANSAS EXTENSION DISTRICT NEWS

[centralkansas.ksu.edu](http://centralkansas.ksu.edu)

**July 2018**

### Upcoming Events

#### July

- 10** CKD-Salina Office Open House
- 17-20** Ottawa County Fair

#### August

- 7-9** KGLC Short and Mid-grass Range School
- 8-11** Tri Rivers Fair
- 15** K-State Ranching Summit
- 16** Corn Production & Technology Field Day, Gypsum, KS, 9:00 a.m.
- 16-17** K-State Risk & Profit Conference
- 21** NCK Experiment Field Day, Belleville, 6:00 p.m.
- 21-23** KGLC Tallgrass Range School

**K-STATE**  
Research and Extension

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[ksre.k-state.edu](http://ksre.k-state.edu)

## OPEN HOUSE & YOU'RE INVITED!



Join us on July 10th, 2:00-5:30 p.m.  
to celebrate and view our new office!

### K-State Research & Extension CKD—Salina Office

**From Centennial Road, turn West on Tonys Rd.,  
South on Scanlan Ave. to Science Center**

**Phone: 785-309-5850**  
**[centralkansas.k-state.edu](http://centralkansas.k-state.edu)**



## 2018 KGLC Range Schools

Short and Midgrass School

August 7-9, 2018

Ringneck Ranch

655 Solomon Lane

Tipton, KS

Tallgrass School

August 21-23, 2018

Camp Wood YMCA

1101 Camp Wood Road

Elmdale, KS

The theme for both schools this year is *“Managing Challenges, Opportunities or Disasters for Successful Ranching”*. There will be rancher and expert panels that will talk about how to plan for droughts, disasters like wildfires and how to care for your greatest ranching asset, your native grasslands.

Besides learning plant identification, stocking rate calculation, vegetation monitoring, and drought mitigation planning, discussions will be had about how to plan ahead for whatever nature or market forces bring to your ranching enterprise and how to respond to keep your rangeland health high and your livestock productive.

The schools cost \$350 per student which covers room, board and tuition for the 2 ½ day schools. Scholarships of \$175 are available for most ranchers and eligible college students.

For more information or to get registered, visit [www.kglc.org](http://www.kglc.org), email [barth.crouch@gmail.com](mailto:barth.crouch@gmail.com) or call 785-452-0780. Registration deadline is July 23<sup>rd</sup>.

## Corn Production and Technology Field Day near Gypsum –

August 16<sup>th</sup>

K-State Research and Extension and the Central Kansas Extension District will host a Field Day on August 16<sup>th</sup> near Gypsum, KS highlighting variable rate corn seeding, satellite imagery, use of high-speed planters and use of mobile devices and myFields as well as other topics of interest to corn growers.

The Field Day will be held at Knopf Farms located 1 mile west and 1 mile north of Gypsum, KS. The field day will start at 9:00 a.m. and will conclude with a meal sponsored by Kansas Corn. Participants should RSVP for the noon meal by calling the CKD-Salina office at 785-309-5850 or e-mail [tmaxwell@ksu.edu](mailto:tmaxwell@ksu.edu)

### Topics and Speakers

Ignacio Ciampitti, K-State Extension cropping systems – Using on-farm research and satellite imagery

Stu Duncan, K-State Extension agronomist - Corn growth and development, 2018 corn issues

Brian McCornack, K-State Extension entomologist – Use of mobile devices and my Fields

Ajay Sharda, K-State Extension ag engineer – Use of high-speed planters and machinery technology

Update from Kansas Corn representative

All corn growers, consultants, and agribusiness representatives are encouraged to attend this timely event. For more information about the field day, contact Tom Maxwell, Crop Production Agent at the CKD-Salina office.



## K-STATE RANCHING SUMMIT

### K-State Ranching Summit

Date: Wednesday, August 15, 2018

Time: 8:30 AM – 4:00 PM

Location: KSU Alumni Center,  
Manhattan, KS

The theme for the 2018 KSU Ranching Summit is *“Beef 2030 – Pursuing technology, transparency, and profitability.”*

Cost to attend is \$40 per person and due by August 8. Registration forms can be picked up at either CKD Extension Office or you can go online at [www.KSUBeef.org](http://www.KSUBeef.org).

### A View From the Basement

I consider myself to be an “old school” kinda guy. I don’t have a Facebook page, I prefer my coffee black and one of my core beliefs is that a handshake is worth more than any amount of legal paperwork.

I have long held that when you tell someone that you’re going to do something and you shake on it, end of story – it’s gonna happen. Unfortunately, I have come to realize that fewer and fewer people subscribe to this approach nowadays.

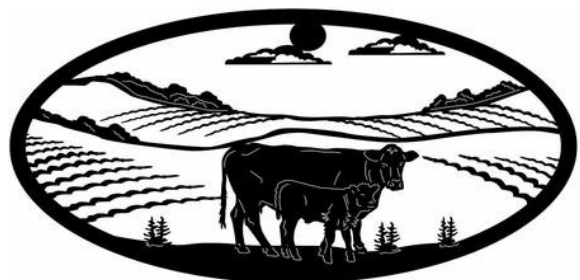
This really hit home for me a couple weeks ago when I signed a purchase agreement and offered a standard deposit only to have the sellers promptly ask for five times that amount “so that I wouldn’t back out.” At first I was greatly offended at their notion that I wouldn’t honor my commitment, but as I thought more about it, I just chalked it up to changing times. I guess I’m just too trusting of folks.

This whole incident, though, did remind me of something that all of us in farming and ranching need to make a priority – counterparty risk. Counterparty risk is the risk that the party on the other side of a contract will not perform the contract as agreed. This can range from pre-paying fertilizer at the dealer, to selling alfalfa to a hay broker, to forward contracting cattle. Losses from counterparty risk may come without warning and they may be significant.

As agricultural producers, we are no strangers to supply and service deals, marketing agreements, or production contracts – whether they be written or via handshake. Heck, most of the business we do is with outfits that we’ve worked with for 10, 30, maybe even 50 years. Even so, I would caution that we need to continually monitor the current assets that are listed on our balance sheets as pre-pays, priced inventories, and accounts receivable can (and do) make up a significant portion of this asset class.

In tough times like we’re in right now, we need to pay more attention to the dynamics of where our working capital is and how solid our counterparties are. Lenders are asking more questions of us, so why shouldn’t we perform our own due diligence with our input providers and commodity buyers in order to make sure that handshake means what it should?

Cade Rensink, Livestock Agent



## Soil Test To Monitor Critical pH Levels

We continue to hear more about some of the “new tools” available in precision agriculture such as variable rate fertilizer and lime applications available. However, we still need to continue doing the best job we can of optimizing crop yields and profitability by using some of the “old tools” in our tool box. Soil testing is the “old tool” I’m talking about. With the thousands of acres of soybeans planted in the Central Kansas District it is critical that growers monitor their soil pH. Wheat is probably one of the most responsive crops we grow to starter phosphorus and identifying low phosphorus fields or using grid sampling to identify areas of fields low in phosphorus is critical. So, you decide whether to grid sample or sample each field individually. The key is to use this “old tool” to manage pH and crop nutrients in an efficient manner.

The critical soil pH levels for our most commonly grown agronomic crops at which we would expect to see a yield response to liming are as follows:

### Crop Critical pH Level for Central Kansas

|           |           |
|-----------|-----------|
| wheat     | 5.2 - 5.3 |
| milo/corn | 5.4 - 5.5 |
| soybeans  | 5.7 - 5.8 |
| alfalfa   | 6.4 - 6.5 |

Based on K-State research, we would expect to see a yield response to liming with pH levels at or below these critical levels. That’s not to say we should allow pH levels to drop to the critical level before liming, but economics will dictate this. If soil pH’s for the crops in your rotation are at or below critical levels, be sure to apply recommended rates of ag lime or fluid lime before the soil pH becomes yield limiting. For no-till fields, the rule on liming is 1/2 as much lime

applied twice as often. This is because when lime is applied without tillage to incorporate it, the lime only moves about 3” deep in the soil vs. a 6” in incorporation depth with conventional tillage.

K-State has a soil testing lab that we use for samples coming into our offices or you can use an independent lab. The key is to collect good representative soil samples to have analyzed. The Salina office has grant money available through the Saline County Conservation District to help reduce the cost of soil testing on up to 5 samples per operator. Both CKD offices have soil sample bags and probes available loan, call for more information.

Tom Maxwell, Crop Production Agent



## Seed Wheat

I’ve had some questions regarding the minimum test weight of wheat saved for seed. I would use 57 lb/bushel as a minimum test weight. Having the seed cleaned will help bring test weight up some. Checking the germination would also be a good idea and you may also want to have the lab run a seeds/pound analysis to get your seeding rates accurate since the berries are fairly small this year. The Kansas Crop Improvement Association can run these tests on your seed. Bring 1.5 pounds of seed in a zip lock bag to our office and we can mail them to the lab.

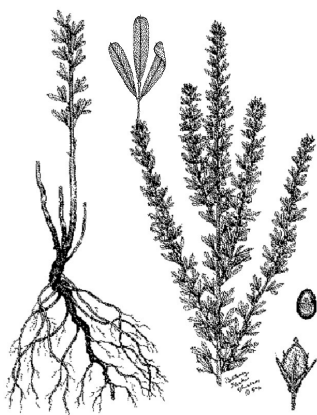


## **Sericea lespe—What?!?**

Sericea lespedeza. This is the name of a plant that I want you to get real familiar with, if you aren't already.

The reason that I bring this up is that I am seeing more and more of it around the grasslands of the district. I got to know this rascal fairly well when I was living and working in eastern Kansas and it's making me nervous that we aren't talking about it more here.

Sericea lespedeza, is an introduced perennial legume native to eastern Asia. It is recognized as a prolific seed producer and it has ability to thrive under a variety of conditions. Its tendency to crowd out more palatable forages are among the reasons it has been declared a noxious weed in Kansas.



It that was first recognized as a potential weed problem in southeast Kansas in the early 1980s. Since that time, sericea has spread profusely throughout southeast Kansas and beyond. It has now been reported in over half of the counties in Kansas.

Research has shown that the most effective way to control this invasive specie is an integrated approach that includes herbicide application.

Early summer is maybe the best time to consider spraying sericea lespedeza. Remedy Ultra (triclopyr) and PastureGard HL (triclopyr

+ fluroxypyr) can still be applied into early July and provide effective control as long as the plants are in still in a vegetative stage. Broadcast applications of Remedy Ultra at 1 to 1.5 pts/acre and PastureGard HL at 0.75 to 1.5 pts/acre should be applied in spray volumes of 10 to 20 gal/acre.

Products containing metsulfuron, such as Escort XP, Cimarron Plus, and Chaparral, are generally more effective in the late summer when sericea is blooming. Recommended rates are 0.5 oz/acre of Escort XP, 0.625 oz/acre Cimarron Plus, and 2.5 to 3 oz/acre Chaparral. Use a non-ionic surfactant with all of these products. Normally plants will go to seed the first part of September. Once they do, spraying will no longer do any good for that year.

For spot applications, mix 0.5 fl oz PastureGard HL per gallon of water, use a 1 percent solution of Remedy Ultra in water, or 1 gram Escort XP per gallon of water. Aerial applications of these products should be done with a minimum spray volume of 3 gallons per acre. Higher volumes (e.g. 5 gallons per acre) will generally be more effective.

Herbicide treatments will likely need to be repeated every 2 to 4 years to keep sericea in check. Left untreated, sericea lespedeza will dominate a site, greatly reducing forage production and species diversity.

If you are unfamiliar with sericea lespedeza, give me a call or stop by the office. There's much more to cover on this topic and I'd be more than happy to talk with you about it.

Cade Rensink, Livestock Agent

## Watch for blue-green algae in farm ponds



The hot, summer weather and potential for lots of sunlight may bring with it a cause for concern among livestock producers. Those conditions, combined with potentially low water levels and stagnation of stock ponds, heightens the risk of toxic levels of blue-green algae in our watering sources.

Blue-green algae, actually, is not an algae at all, but rather a bacteria that lives off the sun and it can be toxic to livestock, pets and people.

Blooms of cyanobacteria can build up in a pond and form into distinct blooms, often looking like paint sliming around in the water. The paint-like texture of cyanobacteria is what differentiates it from non-harmful moss in a pond. Often times a simple “jar test” or “stick test” can distinguish between cyanobacteria and actual algae or moss.

The harmful cyanobacteria can look green or dark green, but can turn more to a bluish tint, thus leading to its more common name as blue-green algae. At times, it can also appear reddish brown or gray.

Cyanobacteria can release two types of toxins which affect an animals’ nervous system and liver function of cattle. Ultimately, both toxins can cause death, which sometimes is the first signal to producers that they have a problem with their watering source.

Cyanobacteria is known to form along the perimeter of a pond, usually on the downwind side as it can be “pushed” to the edge by the rippling effect of wind. If a producer suspects that a pond contains dangerous levels of blue-green algae, it’s important to keep animals and people out of the area.

During hot stretches, it’s especially important to be aware of cyanobacteria and to monitor ponds daily. These blooms can pop up pretty quickly and can double in less than 24 hours.

Producers who suspect blue-green algae in their ponds should test their water immediately. This involves capturing about 500 milliliters of water in a sealed container, refrigerating that sample, and shipping it with an ice pack to a testing facility.

The K-State Veterinary Diagnostic Lab in Manhattan conducts reliable testing for cyanobacteria. The lab can be reached online at <http://www.ksvdl.org> or toll-free at 866-512-5650.

If you think you have an at-risk pond, start to sample right away, send those off to the lab and try to get a realistic expectation of whether it’s a problem or not.

Cade Rensink, Livestock Agent

## 2018 CKD-SALINE & OTTAWA COUNTY WHEAT VARIETY PLOTS

| Brand            | Variety                         | Vaughn Isaacson & Sons<br>Mentor, KS      |            | Tim & Ryan Myers<br>Minneapolis, KS     |           |           |
|------------------|---------------------------------|---|------------|---|-----------|-----------|
|                  |                                 | Planted: Oct. 30, 2017                    |            | Planted: Sept. 30, 2017                 |           |           |
|                  |                                 | Bu/Acre                                   | TW lbs./bu | Bu/Acre                                 | TW lbs/bu | % Protein |
| Dyna Gro         | Long Branch                     | -   | -          | 53                                      | 53.5      | 14.0      |
| Limagrain        | LCS Pistol                      | 29  | 57.0       | 42                                      | 52.7      | 14.6      |
| Limagrain        | LCS Mint                        | 37  | 60.5       | 45                                      | 55.3      | 15.6      |
| Limagrain        | LCS Link                        | 29  | 57.0       | 43                                      | 53.7      | 15.5      |
| Limagrain        | LCS Chrome                      | 33  | 56.0       | 45                                      | 55.3      | 16.0      |
| Limagrain        | T-158                           | 31  | 59.0       | 52                                      | 55.9      | 14.1      |
| OGI              | Doublestop CI+                  | 32  | 58.0       | 51                                      | 55.6      | 15.5      |
| OGI              | Gallagher                       | 25  | 57.0       | 54                                      | 54.5      | 15.0      |
| Syngenta         | SY Flint                        | 34  | 58.0       | 47                                      | 56.4      | 14.7      |
| Syngenta         | SY Wolf                         | 30  | 58.0       | 47                                      | 53.8      | 15.6      |
| Syngenta         | SY Benefit                      | 31  | 58.0       | 48                                      | 55.5      | 15.0      |
| Syngenta         | SY Monument                     | 35  | 58.5       | 47                                      | 54.1      | 15.0      |
| Syngenta         | SY Grit                         | 33  | 56.0       | 45                                      | 51.8      | 16.1      |
| WestBred         | WB 4458                         | 32  | 57.0       | 45                                      | 55.5      | 15.5      |
| WestBred         | WB Grainfield                   | 32  | 57.0       | 58                                      | 54.0      | 14.1      |
| WestBred         | WB 4303                         | 31  | 55.0       | 48                                      | 51.8      | 15.3      |
| Wildcat Genetics | 1863                            | 30  | 58.0       | 55                                      | 55.8      | 14.6      |
| Wildcat Genetics | Everest                         | 31  | 57.5       | 46                                      | 55.8      | 15.0      |
| Wildcat Genetics | KanMark                         | 33  | 59.0       | 50                                      | 55.1      | 14.3      |
| Wildcat Genetics | Larry                           | -   | -          | 49                                      | 55.0      | 15.2      |
| Wildcat Genetics | Zenda                           | 33  | 57.0       | 53                                      | 55.7      | 14.5      |
| Plot Average     |                                 | 33  | 57.5       | 49                                      | 54.6      | 15.0      |
|                  | Previous Crop & Tillage System: | Conventional till wheat after corn silage |            | Conventional till wheat after alfalfa   |           |           |
|                  | Fertilizer:                     | 40-20-0 pre-plant<br>40 lbs. N topdress   |            | 30-20-0 pre-plant<br>30 lbs. N topdress |           |           |
|                  | Seeding Rate                    | 72 lbs./acre                              |            | 75 lbs./acre                            |           |           |

All yields adjusted to 12.5% moisture.

The results presented here are from unreplicated demonstration plots.

For replicated research plot results farmers will want to study the

2018 K-State Wheat Performance Test Results available on the web

at <http://www.agronomy.k-state.edu/services/crop-performance-tests/>

Special Thanks to: Vaughn Isaacson and Sons; Tim and Ryan Myers; and Tom, Pat and Luke Ryan for planting and harvesting the plots.



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**Central Kansas Extension District  
Salina Office**

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Address Service Requested

The enclosed material is for your information. If we can be of further assistance, feel free to call or drop by the Extension Office.

Sincerely,



**Thomas M. Maxwell, MS**  
District Extension Agent  
Crop Production  
tmaxwell@ksu.edu

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