

## Agriculture

#### CENTRAL KANSAS EXTENSION DISTRICT NEWS

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October 2019

**Upcoming Events** 

#### October

31 Kansas Crop Insurance Workshop, Salina

#### November

- 7 Saline Co. Women in Ag Meeting, Salina
- 22 CattleTrace Symposium, Manhattan

#### **December**

10 Cover Crop Economics Salina

#### **January**

- 13 Soybean School, Salina
- 23 KSU Calving School, Salina (Tentative)
- 28- No-Till on the Plains
- 29 Winter Conference, Wichita

## K-STATE Research and Extension

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\*\*Research\*\*
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#### Garten to retire from the Central Kansas Extension District

After 41 (and a half) years with K-State Research and Extension, all in Saline County / CKD, I have decided to retire as Central Kansas Extension Director. My official retirement date will be January 3, 2020.

I have enjoyed my tenure here. I am thankful for having been employed by KSRE and appreciate the working relationships I have had with all the office professionals, fellow agents, Extension specialists, board members and the Extension clientele. The opportunity to serve the needs of the public has been gratifying to me.

Thank you to all who have contributed to the success of the Extension Program in the Central Kansas District.

Carl Garten, District Director

#### **Probes Available for Soil and Forage Testing**

The Central Kansas Extension District has several probes available in each of its offices that producers can use to better sample soils and forages for lab testing. Many operators don't want to purchase these items as they are expensive, can be easily misplaced and may only get used once or twice per year.

To purchase a forage probe, you'd be looking at around \$150 for the Penn State model. On the soil side, a decent probe will run you about \$150 for a standard design and over \$500 for a mechanical one.

The district does require a deposit at the time of check-out. For the forage and standard soil probe, we require \$150. For the "Backsaver" soil probe, the deposit is \$200. These deposits are returned to you once you turn the probe(s) back in—as long as they are still in working order.

If you have questions or would like to use these items, please don't hesitate to call or stop by.

#### Saline Co. Women in Ag Meeting

Date: Thursday, November 7

Time: 6:00 PM

Location: American Ag Credit

925 W. Magnolia Rd.

Salina, KS

Mark Nelson will join us for the evening to present Benefits of Free Trade and the Economy. Trade has been a hot topic in the news recently with a direct effect on farmers. Mark has been a farm and commodity sector analyst for just over 30 years and currently serves as the Director of Commodities with Kansas Farm Bureau.

The program will review the economic concepts, and illustrate the benefits of free trade and why trade agreements are, and have been, great for agriculture and the state of Kansas. In the time allowed, it will seek to address many of the current issues and rhetoric surrounding trade discussions and policy in a reasoned and easy to understand manner.

If you are a woman involved in agriculture, whether producer, spouse, or landlord, or are simply interested in learning more about trade, plan to attend this free Women in Ag program. Drinks and dessert will be served. Pre-registration is requested. Call the K-State Research & Extension office in Salina, at 785-309-5850 by November 1 to register.

This Women in Ag meeting is sponsored by K-State Research & Extension Central Kansas District, Farm Service Agency, Natural Resources Conservation Service, American Ag Credit, Saline Co. Conservation District, and Saline Co. Farm Bureau.

#### **CattleTrace Symposium**

Date: Friday, November 22

Time: 8:00 AM-200PM

Place: KSU Student Union

918 N 17th St

Manhattan, KS

After nearly two years of planning, development and implementation of a cattle disease traceability infrastructure, this program will be an opportunity for industry stakeholders to provide important feedback about CattleTrace while also continuing to chart the path forward for disease traceability in the beef industry.

#### Speakers:

#### Dr. Andrew Moxey - ScotEID

Learn about the history of traceability in the United Kingdom and Scotland's experience in transitioning to ultra-high frequency technology for cattle

#### Under Secretary Greg Ibach--USDA (invited)

Traceability: The current state and what's next?

<u>Dr. Dustin Pendell and Hannah Shear, PhD Candidate - KSU Ag Economics Dept.</u>

Making Cents of CattleTrace: Costs and Economic Impacts

#### CattleTrace Team

First look at the database and mock trace demonstration

The event is free, but <u>attendees must RSVP by November 7 by visiting www.cattletrace.org</u>.

#### **Crop Trends in the Central Kansas Extension District**

It is easy to notice by driving around the countryside that farmers have been planting more soybeans relative to recent history. So, with the help of our local FSA office, I was able to put some numbers together to quantify what I believed to be true.

My original plan was to check 2019 vs. 1999, a 20-year gap. The furthest back I could easily get, though, was 2008 due to a change in computer systems. As evidenced in the table below, the results are very clear. Producers have trended away from wheat and towards soybeans and corn.

The reasoning behind the trend is simple. Farmers are going to plant the crops they believe will provide the best opportunity to succeed.

How you come to this conclusion is more complex. Though it is easy to look at the grain markets and see that they play a critical role in this equation, you should also consider input costs and our ability to grow each crop. Other factors that play a role as well include crop rotations, weed management, or integrating livestock into a cropping system.

To better analyze the crop options, it is best to create a crop budget. The easiest way to create an accurate crop budget is to go to the KSU Extension Agriculture Economics website (www.agmanager.info) and use the farm management guides.

There you will find a variety of budgets to choose from based on different crops, from different regions of the state in both non irrigated, and irrigated fields. These budgets have all the different inputs with general numbers that you can customize to fit your situation.

The more numbers you can provide, the better this tool will work to match your farming situation.

Jay Wisbey, Crop Production Agent

**CKD Crop Acreage Trends** 

CKD Crop Acreage Trends									
	2008	2019	Net Change						
Alfalfa OT	12,218	10,106	-17%						
Alfalfa SA	13,807	12,235	-11%						
Total Alfalfa	26,025	22,341	-14%						
Corn OT	2,387	15,289	541%						
Corn SA	2,795	12,796	358%						
Total Corn	5,182	28,085	442%						
CRP OT	15,943	8,251	-48%						
CRP SA	18,968	9,091	-52%						
Total CRP	34,911	17,342	-50%						
Sorghum OT	23,300	30,919	33%						
Sorghum SA	29,028	29,491	2%						
Total Sorghum	52,328	60,410	15%						
Soybeans OT	26,276	61,029	132%						
Soybeans SA	31,007	75,346	143%						
Total Soybeans	57,283	136,375	138%						
Sunflowers OT	5,685	225	-96%						
Sunflowers SA	1,801	550	-69%						
Total Sunflower	7,486	775	-90%						
Wheat OT	112,238	57,095	-49%						
Wheat SA	146,733	99,860	-32%						
Total Wheat	258,971	156,955	-39%						
Total Reported	442,186	422,283	-5%						



#### Dealing with wet hay: Part 3

Moldy hay. No matter how hard you tried, last summer you baled some hay a little too wet and now you have some mold. Heavy, flooding rainfall even left many hay storage areas in standing water or, at best, on wet, soggy ground. So how do you go about feeding this moldy hay safely?

Feeding moldy hay to livestock is a tough decision. Although all hay contains some mold, when it becomes easily noticeable, the decision becomes important.

Usually, mold makes hay less palatable, which can result in lower intake or in animals refusing to eat the hay. Poor weight gains or loss in body condition may result from the lack of nutrient intake. Many other problems from mold occur because of mycotoxins produced by certain mold fungi.

This also is part of the decision problem since not all molds produce mycotoxins and the amount produced by those that do is unpredictable. Mycotoxins are not part of the mold, but the molds produce a toxin that is specific to that mold. There are hundreds of strains and each is unique. Visual assessment of hay is not a conclusive method to confirm mycotoxins are present. It's possible to have high mold levels with trace amounts of mycotoxins. Conversely, it's also possible to see little visible mold and have mycotoxin levels that are off the charts. Short of submitting a forage sample, there is simply no easy way of knowing if hay contains mycotoxins.

Direct negative effects of moldy hay are difficult to document. We do know that horses are more sensitive to mold than ruminants such as cattle. For instance, mold spores often contribute to respiratory and digestive problems like colic or heaves in horses. Ruminants seem to be more resistant to mycotoxins, but they could cause decreased feed intake, immunosuppression, aspergillosis, liver disease, infertility or abortion.

People, too, can be affected by mold spores which cause a condition called "farmer's lung" where the fungus actually grows in lung tissue. So try to avoid breathing in many of these spores.

The best course of action often is to minimize feeding moldy hay to more sensitive animals, like horses or pregnant cows. If at all possible, use other feedstuffs for pregnant beef cows and heifers. Mixing moldy hay with other feedstuffs can dilute problems sometimes, but be careful that you don't make your animals sick by tricking them into eating bad hay that they normally would refuse. All said and done, using the moldy hay as erosion control may prove more valuable than feeding it and potentially causing abortions.

Mold is a difficult problem to deal with. Common sense and good observation often are your best decision aids. This may require a keen eye or sensitive nose when selecting hay to feed each day. Consult with your veterinarian for assistance with decisions concerning feeding or testing moldy hay.

As promised, this was the third and final installment on dealing with wet hay. Hopefully this little series has offered you some things to consider given the challenges Mother Nature dealt us this year when it came to harvested forages.

Cade Rensink, Livestock Production Agent



#### **Time for Wheat Pasture**

We've got a lot of feed this year, but we've also got decent soil moisture and a fairly good start on earlier planted winter wheat. So, despite those good hay inventories, graziers will be looking to take advantage of wheat pasture this fall and coming spring.

In central Kansas, wheat pasture is generally available for 120 to 150 days starting around the first of November and ending around jointing in March (if not grazing out). Given this time frame and traditional markets, stockers and culls cows can usually utilize this forage resource most profitably. Grazing can begin once pasture has 6 to 12 inches of top growth and adequate crown root development to anchor the plants. Cattle should not be able to pull the plants out of the ground as they graze.



Wheat pasture is a valuable source of high-quality forage, typically available when other forage sources are in low quality and quantity. Crude protein content ranges from 20 to 30 percent and, depending on growing conditions, fall stocking rates for grower cattle can range from 250 to 500 pounds per acre while spring rates may be increased up to 1,000 pounds per acre.

Some operators also feed ad libitum silage while on wheat that allows them to double the

stocking rate on good forage. With energy supplements at 0.75% of body weight, stocking rates can be increased by as much as a third. These supplements can provide balance in the nutrient supply and offer the ability to add ionophores, such as monensin, which can increase efficiency. Research out of Oklahoma State outlines giving an ionophore in a small packaged energy-based supplement of two pounds per head per day, something such as corn or milo. From a labor standpoint, four pounds per head every other day could be applied. The supplement can be self or hand fed, although hand feeding is encouraged because it increases efficiency.

As for full-time grazing stocking rates with cows, the range is 4 to 7 acres per head depending on production. If utilizing a limit grazing system, you can get by with about an acre per cow if only using it as a supplement. Full access is fine when looking to add weight to culls and capture a better market. However, given that cows can gain upwards of 300 pounds while out on wheat pasture, limit grazing is the preferred method for bred cows or pairs as we don't want to facilitate parturition or breeding problems by getting them too fat.

Two potential problems associated with grazing wheat are bloat and grass tetany. To aid in preventing bloat, do not put "hungry" cattle on lush pasture (fill them up before turning out) and use a poloxolene product such as Bloat-Guard. Tetany is a function of low magnesium levels in livestock. While common in older cows, it may affects stockers as well. The easiest prevention is providing 6-8% magnesium in a palatable, freechoice mineral.

Cade Rensink, Livestock Production Agent

### Do You Have Soybean Cyst Nematode Problems?

Soybeans Cyst Nematode (SCN) is a microscopic roundworm creature that lives in the soil and infects the root of growing soybean plants; these nematodes are the leading cause of soybean yield loss in North America. Symptoms of a yield-limiting nematode infestation are sometimes not visible. When they do appear, it can mimic the symptoms of other soybean issues, making it difficult to notice.



Now is a good time to sample for soybeans cyst nematode because the harvest is fresh on your mind. Thus you have a better chance of remembering where the areas are that most likely to contain nematodes. Fields after harvest are easy to travel in, making these areas more accessible.

What areas do nematodes concentrate? High soil pH, high moisture content with poor drainage, high traffic areas with compaction, and sandy areas. Fields with a history of soybeans and other non-crop hosts like henbit, shepherds purse, field pennycress, or wild mustard. Fields near streams that occasionally flood are suspect as nematodes move through soil movement and with water. Areas of the field that had disease present. Particularly areas with sudden death syndrome are common to find Soybean Cyst Nematodes. Nematodes cause injury in the root system, leaving an entry place for other pathogens to infect.

Historically, Soybean Cyst Nematodes have not been a large problem in our area. I believe there are several reasons for this; many of the practices used in managing nematode populations we do without intention. Producers rotate to nonhost crops such as corn, sorghum, and wheat. Several soybean varieties already have been selected to have resistance to nematodes. We have not historically had a large soybean acreage, although maybe that is changing. Nematodes are small and tend to concentrate in areas that have other agronomic problems making lower yields not that alarming. Not a lot of sampling has happened in our area, creating an unknown factor.

If you believe you may have these areas present and would like to know if nematodes are causing

# What's your number? Take the test. Beat the pest. The SCN Coalition™

Funded by the soybean checkoff

problems, please call or email me. The Soybean Cyst Nematode Coalition has provided funding to do sampling, so if you have the conditions that might warrant examination, now is a good time.

Jay Wisbey, Crop Production Agent



#### **BCS: Not Just for College Football**

As we head further into the fall, many of us get to thinking about the BCS. For those that are college football enthusiasts, such as myself, the Bowl Championship Series (BCS) may come to mind. However, the other BCS that I readily think about this time of year is Body Condition Scoring.

The most important time during a cow's production cycle to evaluate BCS is at weaning, especially for spring-calving herds. Body condition scoring is an objective visual assessment of the herd's nutritional status. Standard body condition scores for beef cattle range from 1 (emaciated) to 9 (obese), with a BCS of 5 considered optimum in most operations. Below is a BCS guide developed by Dr. Justin Waggoner here at K-State. I also have these printed off on card stock if you'd like a bigger one for the dashboard of your feed truck. Just give me a holler.

#### **Body Condition Scorecard for Cattle**

	Physical Attribute								
	BCS	Spine	Ribs	Hooks/ Pins	Tailhead	Brisket	Muscling		
Thin	1	Visible	Visible	Visible	No fat	No fat	None/atrophy		
	2	Visible	Visible	Visible	No fat	No fat	None/atrophy		
Borderline	3	Visible	Visible	Visible	No fat	No fat	None		
	4	Slightly visible	Foreribs visible	Visible	No fat	No fat	Full		
Optimum Condition	5	Not visible	1 or 2 may be visible	Visible	No fat	No fat	Full		
	6	Not visible	Not visible	Visible	Some fat	Some fat	Full		
	7	Not visible	Not visible	Slightly visible	Some fat	Fat	Full		
Over- Conditioned	8	Not visible	Not visible	Not visible	Abundant Fat	Abundant Fat	Full		
	9	Not visible	Not visible	Not visible	Extremely Fat	Extremely Fat	Full		

Adapted from Herd & Sprott, 1986; BCS = body condition score

Anyway, the importance of evaluating a cowherd's BCS is that it can affect a producer's bottom line in many ways. It takes about 80 to 90 pounds of weight gain to increase a cow one body condition score. The best time to add weight to a cow is when her nutrient requirements are the lowest. This time frame typically is the first 60 days post-weaning, as lactation requirements have ended and pregnancy demands will be relatively low.

Making sure cows are in proper condition entering the calving season is a must. A 2003 KSU study summarized data of over 3,200 cows with BCS taken just prior to breeding. The percent of cows cycling prior to the start of the breeding season was 42, 59 and 80 for cows with body condition scores of 4, 5 and 6, respectively. Bottom line, cows that are not cycling at the beginning of the breeding season will calve later and wean lighter calves the following year.

Cade Rensink, Livestock Production Agent



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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,

Jay Wisbey

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