

# Agriculture

## CENTRAL KANSAS EXTENSION DISTRICT NEWS

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**September 2018**

### Upcoming Events

#### September

- 11 Feeder Calf & Stocker Management Meeting, Mankato
- 20 2018 KSU Beef Stocker Field Day, Manhattan
- 21 Grazing Management for Improved Soil Health, Salina

#### November

- 1 K-State Crop Insurance Workshop, Salina

### Managing wheat for forage and grain: The dual purpose system

Dual purpose wheat management spreads production risks by providing producers a second source of income in addition to the harvested grain. If wheat grazing is managed properly, its grain yield penalty can be minimized.

**Seeding date** - Early-planting is essential to ensure good fall forage production as long as soil moisture and temperature allows. Wheat grown under dual-purpose management is usually sown in September, at least two to three weeks earlier than wheat sown for grain-only.

**Seeding rate** - Research has shown that the increase in fall forage yield associated with increasing seeding rate from 90 to 120 lbs/acre pays for the increased seed cost in regions with approximately 30 inches annual precipitation or more, especially when planting is done early-to mid- September.

**Seeding depth** - Earlier planting date results in wheat planted in hotter soils. Increased soil temperature decreases the coleoptile length of germinating wheat, which can affect emergence of deep-planted seeds. Therefore, if moisture is not available in the top inch or inch-and-a-half of the soil profile, it is preferable to seed shallower and hope for rain than to try to reach moisture in the profile.

**Nitrogen fertility** - Approximately 30 pounds of nitrogen per acre are needed to produce 1000 pounds of wheat forage in the fall/winter in dual-purpose systems. Thus, nitrogen requirements of dual-purpose wheat are generally 60 to 90 lbs N/acre greater than that of grain-only wheat.

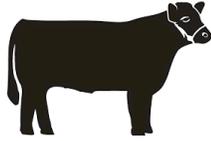
**Stocking rates** - Climatic conditions such as precipitation and temperature will influence the optimum stocking rate, which will vary from year to year. Generally for fall grazing, the recommendation is 250 to 500 pounds of animal per acre (1 to 2 acres per stocker, depending on weight).

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Kansas State University Agricultural Experiment Station and Cooperative Extension Service



## Feeder Calf & Stocker Management Meeting

Date: Tuesday, September 11  
Time: 6:30 PM  
Location: Mankato Livestock Inc.  
Mankato, KS

### Speakers

- Dr. Dale Blasi of K-State Research & Extension will discuss stocker nutrition for receiving calves with an emphasis on limit-fed programs to increase efficiency.
- Dr. Tim Parks with Merck Animal Health will give an overview on health protocol for high risk and bawler calves.
- Dr. Stephen Russell, Downs Vet Clinic, will provide insight on dealing with mycoplasma and foot health in starter yards.

There is no charge to attend the meeting, but please RSVP by Friday, September 7<sup>th</sup> to ensure an accurate meal count. For more information and to RSVP, contact any Post Rock Extension office or go online at [www.postrock.ksu.edu](http://www.postrock.ksu.edu).

## 2018 KSU Beef Stocker Field Day

Date: Thursday, September 20  
Location: KSU Beef Stocker Unit  
4330 Marlatt Ave.  
Manhattan, Kansas

The event starts with registration and coffee at 9:30 a.m. and the program at 10:15 a.m. A barbecue lunch is provided and the day ends with an evening social, the "Cutting Bull's La-

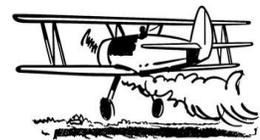
ment 2018", at 5:30 p.m. featuring prairie oysters and Call Hall ice cream. Attendees will also have a chance to tour the new student housing at the Beef Stocker Unit and observe some of the new products from Moly Manufacturing Inc.

Topics for this year's agenda include:

- The Role of Stocker Producer Expectations in Cattle Buying Decisions
- Producer Panel: Why Silage Fits in my Growing Diets
- An Update on Pain Management in Cattle
- Quality Stocker Production Considerations
- The Tech Revolution, Wall Street, Baseball and the Cattle Industry
- Rethinking BRD Diagnosis
- Livestock Theft in Kansas
- Treatment Failures that are not BRD Related

This year's event is sponsored by Merck Animal Health. Pre-registration fee for the Beef Stocker Field Day is \$25 if paid by Sept. 13. More information and online registration is available at [www.ksubeef.org](http://www.ksubeef.org) or you can contact Lois Schreiner at 785-532-1267 or [lschrein@ksu.edu](mailto:lschrein@ksu.edu).

## To spray or not to spray, that is the question



Late summer rains in the southern two-thirds of the district have improved attitudes and have helped green up many pastures. However, the drought this year not only reduced forage production, but it also caused some changes in plant composition.

Cover of our primary warm-season native grasses has declined and broadleaf weeds like

western ragweed and Baldwin's ironweed have thrived because of their deep root systems. As the native sod thins, Mother Nature fills in the gaps with other plants when rainfall returns.

So, as you might expect, the popular question coming in lately has been "*should I spray my pasture?*" As with any good Socratic, I promptly answer that question with another question: "*for what reason?*"

Some tell me that their pastures simply look "bad". Honestly, this isn't a good reason to spray. While herbicide can certainly improve the aesthetics of a landscape, cattle really don't care what the pasture they are grazing looks like. In fact, they prefer and perform better in a vegetatively diverse environment. Attempts at weed control during or immediately following drought may not be very successful anyway because of poor herbicide absorption (not to mention this is the wrong time of year for most weeds). It's also important to note that treating poisonous plants generally enhances their palatability and increases consumption, which can be dangerous.

Others will say that they want to increase production. The old saying "a pound of grass for a pound of weeds" has always brought visions of increased cattle production to ranchers, but does spraying weeds translate into increased beef production or profits? To date, research conducted on native plant communities has documented no increase in livestock production following herbicide application for the control of forbs. Besides, other than regrowth of "grazing lawns" most of the forage production potential occurred by mid-July. Late summer rains won't provide for much now other than grass seed heads, minimal leaf growth and germination of annual forbs.

Annual deviations in precipitation are going to cause fluctuations in production and species composition of the forb community. So, we have to closely weigh the cost-benefit of herbicide application. Large amounts of forbs found in one year due to weather are not unusual and those forbs often decrease or disappear the next year. More times than not, climatic variation makes weed control unnecessary because the plant communities naturally shift without chemical intervention. Therefore, broadcast herbicide application seldom yields much benefit, except if we are targeting a noxious or highly invasive species.

Still, large amounts of forbs that occur following a dry spell or poor grazing management will not be resolved without matching the stocking rate to the production potential of the site. Stocking rate is the primary management principle that impacts plant and animal response. Aside from drought, unpalatable weeds usually become established in pastures after grass is weakened by heavy grazing pressure and they thrive when grazing management fails to encourage vigorous grass regrowth. Unless pasture and livestock are managed to benefit both plants and animals, the weeds will be back despite any spraying that you might go ahead and do.

Adjust stocking rates as needed to maintain plant health and vigor. If at all possible, try to avoid heavy use of native rangelands in late summer. Rest during these months is critical for warm-season grasses to store carbohydrate reserves and initiate spring growth.

So why spray pastures? If you want to improve grazing distribution or have a serious invasive plant or noxious weed problem, those are very good reasons. Otherwise, spraying may be simply cosmetic and a waste of money.

Cade Rensink, Livestock Agent

## Volunteer Wheat Control: An Important Step In Protecting The Wheat Crop



Now is a good time to plan for controlling volunteer wheat. Volunteer wheat within a half-mile of a field that will be planted to wheat should be completely dead at least two weeks before wheat planting.

This will help control wheat curl mites, Hessian fly, and greenbugs in the fall.

The most important threat from volunteer wheat is the wheat streak mosaic virus complex. These virus diseases cause stunting and yellow streaking on the leaves. In most cases, infection can be traced to a nearby field of volunteer wheat, although there are other hosts, such as yellow foxtail and prairie cupgrass. Control of volunteer is the main defense against the wheat streak virus complex. Wheat streak mosaic virus is carried from volunteer to newly planted wheat by the wheat curl mite. The curl mite uses the wind to carry it to new hosts and can travel up to half a mile or more from volunteer wheat.

Destroying volunteer after the new wheat emerges is too late. Producers should leave enough time to have a second chance if control is incomplete. Tillage and herbicides are the two options available for volunteer control. Tillage usually works best when plants are small and conditions are relatively dry. Herbicide options depend on cropping systems and rotations. Glyphosate can be used to control emerged volunteer wheat and other weeds during the fallow period in any cropping system.

If glyphosate is used too close to planting time, volunteer may stay green long enough to trans-

mit diseases and insects to the new crop. It may take as long as one week following glyphosate application before the wheat will die, so that needs to be considered when timing the application to break the “green bridge” for insects and diseases. The optimum time to treat with glyphosate is when most of the volunteer has emerged and is healthy and actively growing. Glyphosate can effectively control volunteer wheat that has tillered.

Those who may be planting a cover crop will need a plan to deal with volunteer wheat that comes up. Will you graze the cover crop and/or terminate it ahead of wheat seeding time? Remember, all volunteer wheat needs to be dead at least 2 weeks ahead of seeding wheat. Be a good neighbor, control your volunteer wheat.

Tom Maxwell, Crop Production agent



## Soybean Defoliators and Podworms

Soybeans seem to be attracting the attention of many different types of pests, including many defoliators. Currently, they are mainly green cloverworms, yellowstriped armyworms, and thistle caterpillars. Fortunately, populations of these species, or any others for that matter, have not reached densities that have warranted insecticide applications for the most part.

Unfortunately, soybean podworm (a.k.a. corn earworm/sorghum headworm/cotton bollworm) populations are on the increase in north

central Kansas. These worms eat right through the pod to get at and consume, the seeds within. So, as the seeds are filling, they are susceptible to being fed upon by these podworm larvae. They will feed on smaller, more succulent beans for 10-14 days, then cease feeding to pupate. Since they are feeding directly on the marketable product, it doesn't take much of this feeding to reduce yield.

One important point to remember relative to treating for soybean podworms: these are contact insecticides and thus they must physically contact the targeted pest. Therefore, you need to utilize enough carrier (water) to penetrate throughout the soybean canopy to get to where these larvae are feeding. But, you need to do this while the larvae are still small and before they have negatively impacted the yield. There will probably be at least one more generation this year, so monitoring needs to continue as long as plants are adding pods and there is succulent green reproductive tissue to feed on. For treatment thresholds and insecticide information, please refer to the 2018 Soybean Insect Management Guide available at: <https://www.bookstore.ksre.ksu.edu/pubs/mf743.pdf>

Tom Maxwell, Crop Production Agent

## **Catch your refrigerator**

One of my favorite crank calls (not that I did these) was: Caller - "*Is your refrigerator running?*" Answerer - "*Yes.*" Caller - "*Well, you'd better go catch it!*"

For most of us, our refrigerators are usually

running. However, while it wouldn't work for the joke, the question to us should be: is it "running properly?"

I think most producers are aware of the issues surrounding chute side vaccine handling and the need to keep bottles out of the sunlight, on ice, and syringes clean.

Where I think he get loose in our quality assurance is before we ever head out to the pens. Sometime before, we drive over to the vet clinic or order from a drug retailer to purchase our medications and then go home and throw them in the fridge in the house, shop, or barn.

These biological products should be stored under refrigeration at 35-45°F unless the nature of the product makes storing at a different temperature advisable. Have you ever actually thought about if your refrigerator is doing its job in accomplishing this?

Researchers from Arkansas and Idaho analyzed the consistency of temperatures for different types, ages, and locations of refrigerators over a 48-hour period. They found that only 26 to 34 percent of refrigerators were within the acceptable temperature limit 95 percent of the time. A Nevada study indicated an even lower 25 percent (but obviously it's much hotter there, right?). Also, as you'd expect, the older the unit, the worse it did (i.e. >15 yrs old = 21%).

My point here is, to see if your refrigerator is running.....properly, catch it by putting a thermometer inside to monitor and make adjustments as needed to keep those expensive vaccines as effective as possible.

Cade Rensink, Livestock Agent

## Scouting Sugarcane Aphids



Sugarcane aphids (SCA) were found in Saline County a couple weeks ago at below threshold levels and sorghum growers should be actively scouting for this insect. Some growers have already sprayed sorghum for head worm infestations and these applications while effectively eliminating that problem may have reduced the beneficial insect populations that feed on SCA.

Timing effective treatment to control SCA in sorghum depends on the size of the SCA population. To estimate the number of SCA in a field, follow these steps for scouting the field and use the sampling protocol and % plants with honeydew to make treatment decisions.

### First Detection: Is the Field at Risk?

Once a week, walk 25 feet into the field and examine plants along 50 feet of row:

- If honeydew is present, look for SCA on the underside of a leaf above the honeydew.
- Inspect the underside of leaves from the upper and lower canopy from 15-20 plants per location.
- Sample each side of the field as well as sites near Johnsongrass and tall mutant plants.
- Check at least 4 locations per field for a total of 60-80 plants.

**NOT Present?** If no SCA are present, or only a few wingless/winged aphids are on upper leaves, continue once-a-week scouting.

**Present?** If SCA are found on lower or mid-canopy leaves, begin twice-a-week scouting.

Estimate the percentage (%) of infested plants with large amounts of sugarcane aphid (SCA) honeydew to help time foliar insecticides for SCA control on sorghum.

### Growth Stage Threshold for Treatment

Soft Dough	30% plants infested with localized area of heavy honeydew and established aphid colonies
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Dough	30% plants infested with localized area of heavy honeydew and established aphid colonies
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Black Layer	Heavy honeydew and established aphid colonies in head—only treat to prevent harvest problems
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\*\*observe pre-harvest intervals

Learn more about sugarcane aphids at:  
<http://myfields.info/pests/sugarcane-aphid>

Tom Maxwell, Crop Production Agent

### **New Publications**

- Wheat Variety Disease and Insect Ratings 2018

# Grazing Management for Improved Soil Health

**Friday, Sept. 21, 2018**

**8:00 AM – 5:00 PM**

Kansas State Polytechnic Campus  
College Center Conference Room  
2310 Centennial - Salina, KS

**\$25 per person (includes lunch)**  
**Registration due by September 19**

*Featured Presenter:*

*Jim Gerrish - American Grazing Lands Services, May, Idaho*

Jim's experience includes over 20 years of beef-forage systems research at the University of Missouri as well as 20+ years of commercial cattle and sheep production. His work encompasses many aspects of plant-soil-animal interactions and provides foundation for many of the basic principles of Management-intensive Grazing (MiG).

Topics of this workshop will include:

- Grazing Management Based on Ecological Processes
- Developing Off-stream Livestock Water Systems
- Cost Effective Fencing for Riparian & Wetland Management
- Cost-Benefit Analysis for Alternative Management Systems

For more information or to RSVP, visit [www.kaws.org/events](http://www.kaws.org/events) or call the CKD Extension Office in Minneapolis at (785) 392-2147

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Kansas Grazing Lands Coalition



**Central Kansas Extension District  
Salina Office**

K-State Polytechnic  
2218 Scanlan Ave  
Salina, KS 67401-8196

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

**Salina Office**  
K-State Polytechnic  
2218 Scanlan Ave.  
Salina, KS 67401-8196  
785-309-5850  
Fax: 785-309-5851



**Cade B. Rensink, MS, PAS**  
District Extension Agent  
Livestock Production  
crensink@ksu.edu

**Minneapolis Office**  
307 N. Concord, Suite 190  
Minneapolis, KS 67467  
785-392-2147  
Fax: 785-392-3605