



# News from KSU Animal Sciences

February, 2017

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**Department of Animal Sciences and Industry**  
 Kansas State University  
 218 Weber Hall  
 1424 Claflin Road  
 Manhattan, KS 66506  
 785-532-6533  
[www.asi.ksu.edu](http://www.asi.ksu.edu)

## UPCOMING EVENTS...

➤ **Make plans to attend Cattlemen's Day 2017** –The 104<sup>th</sup> annual Cattlemen's Day will be Friday, March 3, 2017. All events for Cattlemen's Day will be held in Weber Hall on the Kansas State University campus. The schedule includes:

8:00 a.m. Commercial Trade Show  
 10:00 a.m. Morning Presentations:

**Welcome** – *Dr. Ken Odde, Department Head, AS&I*  
**Vision for K-State** – *KSU President Richard Myers*  
**Ag Policy in the Trump Administration** –  
*Dr. Barry Flinchbaugh, KSU Professor Emeritus*  
**Beef Cattle Economics Trilogy**  
*Glynn Tonsor, Robin Reid and Dustin Pendell, KSU Agricultural Economists*

12:00 noon Lunch - Commercial Trade Show  
 Afternoon Break-out Sessions:

**Weber Hall Room 111**  
 1:00 p.m. Integrating Cover Crops & Soil Health into Commercial Beef Production Systems – *Shawn Tiffany and KC Olson*  
 2:00 p.m. Optimizing Value of Cull Cows – *Justin Waggoner and John Jaeger*

**Weber Hall Room 123**  
 1:00 p.m. Reproductive Management Options to Improve Profitability – *Sandy Johnson*  
 2:00 p.m. Antimicrobial Resistance, Beef Production, and Implementation of the Veterinary Feed Directive (VFD) – *Mike Apley*

**Weber Hall Room 146**  
 1:00 p.m. Genetics and Profit: Balancing the Bottom Line – *Megan Rolf*  
 2:00 p.m. Preconditioning for Profit – *A.J. Tarpoff*

**Call Hall Room 205**  
 1:00 p.m. How Safe is Your Silage Program? – *Keith Bolsen*  
 2:00 p.m. How Can We Reduce the Cost of Feeding Silage? – *Keith Bolsen*

Registration for KSU Cattlemen's Day will be \$20 per person in advance or \$30 per person at the door. Morning refreshments and lunch are included with registration. For more information and a schedule, visit <http://www.asi.k-state.edu/events/cattlemens-day/index.html> or call 785-532-1267.

If you are interested in exhibiting at Cattlemen's Day or have any questions, please contact Dale Blasi ([dblasi@ksu.edu](mailto:dblasi@ksu.edu); 785-532-5427) or Jim Drouillard ([jdrouill@ksu.edu](mailto:jdrouill@ksu.edu); 785-532-1204).

➤ **Dedication of new Purebred Beef Barn** – Plans are underway for the dedication of the new KSU Purebred Beef Barn. The Dedication Ceremony will begin at 3:00 p.m. on Friday, March 3, following Cattlemen's Day.

➤ The **40<sup>th</sup> annual Legacy Bull and Female Sale** will be held on Friday, March 3, 2017, at the conclusion of the dedication for the new Purebred Beef Barn. The sale will begin at 4:00 p.m. at the Stanley Stout Center. To view the catalog, visit <http://www.asi.k-state.edu/bullsale>. For more information or to request a sale catalog, contact Tyler Leonhard at 785-565-1881 or [john56@ksu.edu](mailto:john56@ksu.edu).



↪ The **2017 K-State Sheep Producer Day** will be held on Saturday, March 4, at the KSU Sheep and Meat Goat Center, 2117 Denison Avenue, Manhattan, KS. The schedule is as follows:

8:15 a.m. Registration  
Coffee and donuts, courtesy of Mid-States Wool Growers, South Hutchinson. Registration at the door -- \$15 for KSA members, \$25 for non-members. Lunch is provided with registration. (KSA membership dues are \$25 individual and \$50 corporate)

8:55 a.m. Welcome, Pledge of Allegiance  
*Gary Jorgensen, Kansas Sheep Association, President*

9:00 a.m. Phil Berg, Pipestone Method of Sheep Production

9:45a.m. Dale Thorne, American Lamb Board

10:30 a.m. Break and Silent Auction Bidding

10:45 a.m. Dr. Jaymelynn Farney, Multi-Species Grazing in Kansas

11:30 a.m. Producer Panel (small and large producers will be represented)

12:00 noon Lunch sponsored by Superior

1:00 p.m. Phil Berg, Reduced Labor Intensive Sheep Production

1:45 p.m. Katie Olagaray, Tri-Lamb Tour to Australia and New Zealand

2:15 p.m. Dale Thorne, Michigan Sheep Production and State Organization

3:00 p.m. Break and Silent Auction Bidding

3:20 p.m. Kansas Sheep Association Annual Meeting, *Gary Jorgensen, KSA President*  
Business Meeting  
Make It With Wool Program Update  
Awarding of 2017 Starter Flock

4:20p.m. Adjourn

The K-State Sheep Producer Day is sponsored by the Kansas Sheep Association and the KSU Department of Animal Sciences and Industry. No pre-registration is necessary. For more information, contact Deb Simon, Kansas Sheep Association ([kssheep@ruraltel.net](mailto:kssheep@ruraltel.net)).

↪ **Kansas Junior Swine Producer Day – March 11, 2017** - The 2017 Kansas Junior Swine Producer Day is scheduled for Saturday, March 11, 2017, in Weber Hall on the Kansas State University campus. This event will be a fun-filled, educational day of activities in which youth, parents, swine project leaders, and adults can increase their knowledge and experience of swine production and management. This interactive, hands-on educational event will stimulate enthusiasm and provide a foundation for the management and care of youth swine projects. Presentations and demonstrations will be provided by K-State faculty and graduate students, as well as our guest speaker Kade Hummel. Kade works for JBS United as the Lindner United sales manager and was formerly a field representative for the National Swine Registry for seven years. He has judged many prestigious shows across the country including the Houston Barrow Show, National Western, and numerous other state and county fairs. Topics that will be covered include project selection, meat science, swine breeds and ear notching, proper grooming and clipping, nutrition and daily feeding, Youth PQA+ certification, daily care, the state nomination processes and update, VFD implications for show feed, and showmanship. A complimentary lunch and t-shirt will be provided for participants. Registration is due by February 22, 2017, and is \$15/person. Registrations received after February 22nd cannot be guaranteed a t-shirt and will be \$20/person. More information, a promotional flyer, and registration information may be found on the K-State Youth Livestock Program website: [www.youthlivestock.ksu.edu](http://www.youthlivestock.ksu.edu) under Kansas Junior Producer Days. Participants may register online at <https://commerce.cashnet.com/KSUASIND>. This event has been added to the university Pulse calendar. For more information, contact Lexie Hayes (785-532-1264; [adhayes@ksu.edu](mailto:adhayes@ksu.edu)).

↪ **Kansas Junior Meat Goat Producer Day – March 25, 2017** - The 2017 Kansas Junior Meat Goat Producer Day is scheduled for Saturday, March 25, 2017, in Weber Hall on the Kansas State University campus. This event will be an interactive, educational day in which youth, parents, meat goat project leaders, and adults can increase their knowledge about youth meat goat production and management. K-State faculty, staff, and guest speakers will cover topics such as market and breeding project selection, nutrition, health and wellness, the state nomination processes and updates, showmanship, and grooming. All ages and skill levels are invited to attend. A complimentary lunch and t-shirt will be provided for all participants. Registration is due by March 3, 2017 and is \$15/person. Registrations received after March 3, 2017 cannot be guaranteed a t-shirt and will be \$20/person. More information, a promotional flyer, and registration information may be found on the K-State Youth Livestock Program website: [www.youthlivestock.ksu.edu](http://www.youthlivestock.ksu.edu) under Kansas Junior Producer Days. Participants may register online at <https://commerce.cashnet.com/KSUASIND>. This event has been added to the university Pulse calendar. For more information, contact Lexie Hayes (785-532-1264; [adhayes@ksu.edu](mailto:adhayes@ksu.edu)).

The K-State Sheep & Meat Goat Center will be having their annual sale on the same date, following the Junior Meat Goat Producer Day. The program schedule will allow participants who would like to participate in both events to do so.

- ↪ **Deadline for K-State Animal Sciences Leadership Academy applications is April 1:** Students from across the country with an interest in the livestock industry and related careers can apply now for the Kansas State University Animal Sciences Leadership Academy. The academy is an intensive four-day educational experience designed to enhance the leadership skills and animal science knowledge of students in ninth through 12th grades. Kansas State University will host one session of the K-State Animal Sciences Leadership Academy in 2017 for young livestock industry leaders on June 14-17. Selection is limited to 20 students. Applications are available on the website <http://bit.ly/KSUASILeadershipAcademy> and are due April 1, 2017. For questions about the academy, please contact Sharon Breiner, Director, at [sbreiner@ksu.edu](mailto:sbreiner@ksu.edu). You can also follow the K-State Animal Sciences Leadership Academy on Facebook at <https://www.facebook.com/KSUASILeadershipAcademy>.
- ↪ **Make plans to attend Roundup 2017** – The 103rd annual Roundup will be held Thursday, April 20, 2017. The Roundup will be held in the Auditorium at the KSU Agricultural Research Center – Hays. Registration for KSU-ARCH Roundup is free at the door beginning at 9:00 a.m. The Trade Show and educational exhibits will open at 9:00 a.m., with the program beginning at 10:00 a.m. Morning refreshments and lunch are included with registration. If you are interested in exhibiting at Roundup or have any questions, please contact John Jaeger ([jrjaeger@ksu.edu](mailto:jrjaeger@ksu.edu); 785-625-3425 x211).
- ↪ **Save the Date – Kansas 4-H Livestock Sweepstakes August 19-20!** - The 2017 Kansas 4-H Livestock Sweepstakes will be held August 19-20, 2017, in Weber Hall on the K-State campus. Livestock Sweepstakes is an event that includes the state 4-H livestock judging contest, meat judging contest, livestock skillathon, and livestock quiz bowl over the course of a weekend. This is a great opportunity for 4-H member to display their knowledge of the livestock industry in a variety of ways. The young people who will be representing Kansas 4-H at each of the four national 4-H livestock contests will also be selected during this weekend, through the state contests. Rules and registration information will be distributed to agents and posted to the K-State Youth Livestock Program website (<http://www.asi.k-state.edu/research-and-extension/youth-programs/4-h-livestock-sweepstakes.html>) by early summer. Please make sure to share this information with any 4-H members, coaches, or project leaders who may be interested. Members are highly encouraged to ask any questions about eligibility prior to the registration deadline. The deadline to register will be August 1, 2017. All 4-H'ers must go through their local Extension Office to register.
- ↪ **Livestock Nomination Information Coming Soon!** - The 2017 Kansas Youth Livestock Nomination Information will be released soon, hopefully the first part of March. Families must submit the updated 2017 forms, or their nominations will be incomplete. Nomination forms, guidelines, updates, and the Rookie Guide will be posted on the K-State Youth Livestock Program website on the “Nomination Information” page as soon as the materials are finalized and approved by both state show boards. The updated Rookie Guide will include example completed forms for each specie. There will also be a Facebook Live prior to the market beef and small animal deadlines that will cover the nomination process and correctly completing the paperwork. Watch the Kansas State Youth Livestock Program Facebook Page later this spring for more details! The market beef postmark deadline will be May 1, 2017. All swine, sheep, meat goat, and commercial heifer nominations must be postmarked by June 15, 2017. Certified Mail is HIGHLY encouraged. All nominated animals must be tagged with a Kansas 4-H eID tag by the appropriate deadline. Please contact Dave Kehler for tag ordering information. All DNA samples must be submitted in an official DNA envelope, which may be obtained by Extension Offices from the KSRE Bookstore. For livestock nomination questions, please contact Lexie Hayes at [adhayes@ksu.edu](mailto:adhayes@ksu.edu) or (785) 532-1264.
- ↪ The 2017 **Applied Reproductive Strategies in Beef Cattle Conference** will be held August 29-30, 2017, in Manhattan, KS. Watch for more details coming soon.

<b>CALENDAR OF UPCOMING EVENTS</b>		
<b>Date</b>	<b>Event</b>	<b>Location</b>
March 3, 2017	KSU Cattlemen's Day	Manhattan
March 3, 2017	KSU Purebred Beef Barn Dedication	Manhattan
March 3, 2017	Legacy Bull and Female Sale	Manhattan
March 4, 2017	KSU Sheep Day	Manhattan
March 11, 2017	KS Junior Swine Producer Day	Manhattan
March 25, 2017	KS Junior Meat Goat Producer Day	Manhattan
April 1, 2017	Deadline for applications for AS&I Leadership Academy	
April 20, 2017	Hays Roundup	Hays
August 19-20, 2017	Kansas Livestock Sweepstakes	Manhattan
August 29-30, 2017	Applied Reproductive Strategies in Beef Cattle Conference	Manhattan

# WHAT'S NEW.....

## Management Minute "What's Your Organization About?"

↙ **Management Minute** – Justin Waggoner, Ph.D., Beef Systems Specialist  
*"What's Your Organization About?"*

Have you ever given any thought to what your organization, farm, feedlot or operation is really about? Do you have a mission statement, a set of core values that you believe your organization or operation embodies? Previously, I used to think that mission statements and core value statements were idealistic and a waste of thought. However, my attitude has changed. These statements provide the organization with a foundation, a clear objective that serves to guide the organization as it makes decisions that hopefully move the organization forward into the future. Regardless of the size of the enterprise, putting some thought into what an organization or business is really about has value. These statements do not have to be long or dramatic. I recently visited family livestock operation in which the sign on the front lawn (along a major highway) simply said "Our Family Feeding Yours". This simple statement tells everyone that drives by that this is a family operation that is foremost engaged in the process of sustaining not only themselves but other people. Why do we do what we do?

The other aspect of evaluating the purpose and objective of the operation is that once we have identified what our purpose is. We can hopefully foster an environment among the leaders and employees based on that central purpose or ideal. The tough part comes when an effective leader comes to the realization that people or aspects of the organizations policies conflict with the mission or core values statements. What then? Well it may be time for that dreaded word C-H-A-N-G-E.

For more information, contact Justin at [jwaggon@k-state.edu](mailto:jwaggon@k-state.edu).

## Feedlot Facts "Body Condition Scoring: It's About More than the Score"

↙ **Feedlot Facts** – Justin Waggoner, Ph.D., Beef Systems Specialist  
*"Body Condition Scoring: It's About More than the Score"*

Body condition scoring is one of the most valuable management tools at the disposal of the cattle manager. This one number gives us a direct indication of an individual cow's previous plane of nutrition and future reproductive capability. Although the individual body condition scores are important, we don't necessarily manage individual cows, we manage groups of cows. Thus it is important for us to look beyond the individual scores and look at the distribution of body condition scores within the herd. If we have a herd (Herd 1) with an average body condition score of 5 that is essentially characterized by the classic bell curve, with a few thin cows (3.5's), the bulk of cows in the middle (4's and 5's) and few over-conditioned cows (7's) everything is good. Alternatively we could have a herd (Herd 2) with an average body condition score of 5 that is essentially the result of a few thin cows (3's) and some over conditioned cows (6's and 7's). Body conditioning scoring also has more value when it is done on the same group of cows at multiple times during the production year. If Herd 2 was scored at calving and had been previously scored at weaning and had an essentially normal distribution (similar to Herd 1). We need to ask ourselves what happened. Did we change anything? Although these examples are somewhat extreme they illustrate that we have to look beyond the individual body condition scores of cows at one point during the production year to get the most of body condition scoring.

For more information, contact Justin at [jwaggon@k-state.edu](mailto:jwaggon@k-state.edu).

↪ **Pressed Juice Percentage Can Accurately Sort Beef Into Categories of Predicted Juiciness**– To determine the accuracy of previously established Pressed Juice Percentage (PJP) juiciness threshold values by testing consumer juiciness ratings in relation to objective juiciness measures.

Treatments for this study were selected specifically to maximize variation in juiciness. Six treatment groups were utilized: Strip loins (n = 12 per treatment) graded USDA Prime, Low Choice, and Low Select with half of the loins from each quality grade enhanced to 108% with a water, salt, and phosphate solution. Steaks (1 inch) cut from the loins were cooked to rare (140°F), medium (160°F) or very well done (180°F) degree of doneness on a clamshell grill to create additional juiciness differences. Consumer panels were conducted and pressed juice percentage objective measurements were evaluated on paired samples. The PJP values were used to sort steaks into predetermined juiciness categories, and then the accuracy of the predetermined thresholds categories were tested.

**Bottom Line...** These data indicate the Pressed Juice Percentage was able to accurately segregate steaks into categories based on the probability of being rated juicy by consumers. Therefore, the PJP method was confirmed as an established juiciness predictor similar to the Warner-Bratzler shear force method. View the complete research report at [www.asi.ksu.edu/cattlemensday](http://www.asi.ksu.edu/cattlemensday). For more information contact, Travis O'Quinn (785-532-3469; [travisquinn@ksu.edu](mailto:travisquinn@ksu.edu)).

↪ **Effects of Lysine on Performance of Lactating Primiparous Sows** - A total of 111 primiparous sows (Line 241; DNA, Columbus, NE) were used in a 21-d study to determine the effect of lysine (Lys) intake during lactation on sow and litter performance and subsequent reproductive performance of primiparous sows. At d 110 of gestation, sows were weighed and randomly assigned to treatment based on weight block. Dietary treatments consisted of increasing levels of standardized ileal digestible (SID) Lys (0.80, 0.95, 1.10, and 1.25% with other AA meeting or exceeding NRC [2012] recommendations as a ratio to Lys). All other nutrients met or exceeded the NRC (2012) estimates. During the lactation period, there were no differences in ADFI or sow BW at d 0 or weaning, resulting in no differences in BW loss. However, backfat loss during lactation decreased as SID Lys increased. Regardless of treatment, there were no differences in litter weaning weight or litter gain from d 2 to weaning. In addition, no differences were observed for wean-to-estrus interval or the percentage of females bred by d 7 after weaning. However, d 30 conception rate increased as Lys increased up to 0.95% SID Lys, but then decreased as SID Lys reached 1.25%.

On the subsequent cycle, there was a tendency for decreased percentage born alive as Lys increased to 0.95% SID; however, percentage born alive increased thereafter. Reciprocally, percentage of mummies tended to increase with the greatest percentage mummies at 0.95% SID Lys.

**Bottom Line...** Overall, this study would suggest that in primiparous sows, there was no effect of increasing SID Lys above 0.80% on sow or litter performance. This study suggests that sow BF loss through lactation was decreased as SID Lys increased; however, little change on reproductive performance was observed. Additional research should be conducted with a larger group of sows housed under commercial conditions to confirm our findings. More information is available on this experiment and others in the KSU Swine Day Report at [www.KSUswine.org](http://www.KSUswine.org). (This study conducted by K.M. Gourley, J.C. Woodworth, J.M. DeRouchey, M.D. Tokach, S.S. Dritz, and R.D. Goodband.)

↪ **Effects of Dietary Standardized Ileal Digestible Valine:Lysine Ratio on 14 to 22 lb Nursery Pigs** - A total of 280 nursery pigs (PIC 327 x 1050; initially 14.4 lb BW) were used in a 28-d growth trial to evaluate the effects of increasing dietary standardized ileal digestible (SID) Valine:Lysine (Val:Lys) ratio on nursery pig growth performance. Pigs were weaned at approximately 21 d of age and allotted to pens according to BW and gender. A common starter diet was fed for 5 d, and then pens were allotted to 1 of 7 dietary treatments in a randomized complete block design according to BW. Experimental diets were fed for 14 d, which included SID valine concentrations of 50, 57, 63, 68, 73, 78, and 85% of Lys. Then pigs were fed a common Phase 3 diet for 14 d.

From d 0 to 14, when experimental diets were fed, ADG, ADFI, and F/G improved as SID Val:Lys ratio increased. For ADG, the best-fitting model was the broken line linear (BLL). This model resulted in a maximum ADG to be achieved when feeding a minimum of 62.9% SID Val:Lys ratio. For ADFI, the quadratic polynomial (QP) was the best fitting model, predicting maximum feed intake at 73.7% SID Val:Lys ratio and 99% of maximum performance achieved with 68.0% SID Val:Lys ratio. For feed efficiency, modeled as G:F, the best-fitting model was the QP, estimating maximum G:F at 71.7% SID Val:Lys ratio.

**Bottom Line...** In conclusion, this experiment demonstrated that the SID valine requirement for 14 to 22 lb nursery pigs ranged from 62.9 to 73.7% of Lys depending on the response criteria modeled. More information is available on this experiment and others in the KSU Swine Day Report at [www.KSUswine.org](http://www.KSUswine.org). (This study conducted by A.B. Clark, M.D. Tokach, J.M. DeRouchey, S.S. Dritz, K.J. Touchette, R.D. Goodband, and J.C. Woodworth.)

↪ **Effect of Feeding Varying Levels of *Lactobacillus Plantarum* on Nursery Pig Performance** - A total of 360 pigs (PIC C-29 × 359, initially 13.1 lb BW) were used in a 42-d growth performance trial evaluating the effects of feeding varying levels of *Lactobacillus plantarum* on nursery pig performance. Pigs were allotted by BW and sex, and randomly assigned to 1 of 4 dietary treatments in a completely randomized design. Experimental diets were fed in three phases (Phase 1, d 0 to 7; Phase 2, d 7 to 21, and Phase 3, d 21 to 42). Treatment diets were formulated to include 0, 0.05, 0.10, or 0.20% *Lactobacillus plantarum* product (LP1; Nutraferma Inc., Sioux City, IA). *Lactobacillus plantarum* is a facultative heterofermentative plant-associated lactic acid bacterium that is tolerant against bile salts and low pH, improving survivability in the GIT (de Vries et al., 2006; da Silva Sabo et al., 2014).<sup>4,5</sup> All experimental diets were pelleted. During Phase 1 and 2, there were no differences in growth performance among dietary treatment. During Phase 3, ADG and ADFI were not influenced by treatment; however, increasing LP1 tended to improve F/G up to the 0.10% level.

**Bottom Line...** Overall (d 0 to 42), no differences in growth performance were observed among dietary treatments. In conclusion, increasing dietary levels of LP1 did not impact nursery pig performance. More information is available on this experiment and others in the KSU Swine Day Report at [www.KSUswine.org](http://www.KSUswine.org). (This study conducted by A.M. Jones, J.C. Woodworth, J.M. DeRouchey, S.S. Dritz, M.D. Tokach, and R.D. Goodband.)

↪ **Effects of Feeding a Finishing Diet Blended with Different Phases of Nursery Diets on Growth Performance and Economics of Nursery Pigs** - A total of 1,260 weaned pigs (PIC TR4 × (Fast LW × PIC L02); initially 12.9 lb BW) were housed in a commercial research barn and used in a 47-d study to determine the effects of blending a finishing diet into different phases of nursery diets on pig growth performance. Pens of pigs were blocked by initial BW and gender and allotted to 1 of 4 treatment groups (15 pens/treatment). In a 5-phase feeding program, the 4 treatments were: 1) standard nursery diets throughout (control); or standard nursery diets with 5.5 lb/pig of late finishing feed blended at the beginning of 2) Phase 2; 3) Phase 3; or 4) Phase 4. Phase changes were based on feed budgets. From d 0 to 7, all pigs received the same standard Phase 1 diet and had similar growth performance. Compared with pigs from control, blending finishing feed into the Phase 2 period resulted in poorer ADG, ADFI, and F/G from d 7 to 14, poorer F/G from d 21 to 28, decreased ADG from d 28 to 35, and decreased ADFI and F/G from d 35 to 47. Blending finishing feed during Phase 3 resulted in worsened ADG and F/G from d 14 to 21, decreased ADG from d 21 to 28, and lower ADFI and F/G from d 35 to 47 compared with control pigs. Pigs that received blended diet in Phase 4 had impaired ADG and F/G from d 21 to 28, but had improved F/G from d 35 to 47. Overall (d 0 to 47), blending the finishing diet into Phase 2 decreased ADG, ADFI, and final BW, but did not affect F/G compared with control pigs or pigs that had finishing feed blended into the Phase 4. Blending finishing feed into Phase 3 or 4 did not influence overall growth performance. Pigs that had finishing feed blended into Phase 2 or 3 had lower overall feed costs than pigs from control and Phase 4 blending treatments. Gain value was decreased when finishing feed was blended into Phase 2 compared with the control or when feed was blending into Phase 4. However, no differences in feed cost per lb of gain and only numerical differences in income over feed cost were observed among the treatments.

**Bottom Line...** In conclusion, feeding finishing feed in early nursery phase negatively affected pig growth performance; however, blending approximately 5.5 lb/pig finishing feed into nursery diets for pigs greater than 22 lb BW did not affect overall growth performance. More information is available on this experiment and others in the KSU Swine Day Report at [www.KSUswine.org](http://www.KSUswine.org). (This study conducted by F. Wu, K.F. Coble, C.W. Hastad, M.D. Tokach, J.M. DeRouchey, S.S. Dritz, J.C. Woodworth, and R.D. Goodband.)

# AS&I Faculty Spotlight



**Charlie Lee ([clee@k-state.edu](mailto:clee@k-state.edu); 785-532-5734)**  
**Extension Specialist/Wildlife Control/Instructor**

Charlie completed a B.S. degree in 1975 at Kansas State University in Wildlife Biology. After several years of business and being involved with the family farm and feedlot he returned to Kansas State where he completed a M.S. degree in 1988 in Animal Science. He previously worked for Kansas Department of Wildlife and Parks for six years directing private land wildlife management programs and Farm Bill conservation issues. Charlie was first employed as an extension assistant and now as Extension Specialist, Wildlife. Responsibilities include conducting a statewide program in wildlife damage control, wildlife enhancement on private lands, youth outdoor environmental programs, and aquaculture. Current areas of interest include prairie dog and cattle interactions, bird damage control at feedlots and rodent damage in conservation tillage systems.



**Chris Mullinix ([cmullinix@k-state.edu](mailto:cmullinix@k-state.edu); 785-532-1917)**  
**Livestock Judging Coach/Instructor**

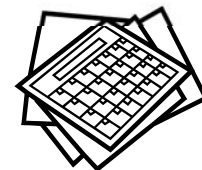
In the fall of 2013, Chris Mullinix returned to Kansas State University as an Instructor of Animal Sciences and head Livestock Judging Team Coach. Chris was born and raised on a diversified cattle and farming operation in central Maryland where his family continues to run a Hereford cow herd, an Angus herd and a small feedyard. Chris received his Animal Science degree at K-State where he was a member of the 1995 National Champion Intercollegiate Livestock Judging Team and was recognized as the contest High Individual. During his undergraduate days, Chris also participated on winning Wool Judging, Dairy Judging and Academic Quadrathlon teams while serving leadership roles in the National Junior Hereford Association, the Little American Royal and Alpha Gamma Rho. For the sixteen years prior to his return to Manhattan, Chris was an Associate Professor at Butler Community College where he coached more than 30 national contest winning teams. Chris has been recognized with numerous teaching/student advising awards at a regional and national level. Most recently, Chris coached K-State's Livestock Team to the 2016 Reserve National Champion title. Additionally, Chris and Dr. Travis O'Quinn co-coached the 2016 National Champion Meat Animal Evaluation Team, capturing K-State's first national title in the 53 year history of the event!

In his free time, Chris is an avid K-State sports fan and enjoys working with youth and breeders at livestock events. To date, Chris has judged cattle exhibitions in 41 different states including prestigious events such as the North American in Louisville, the American Royal, the Houston Livestock Show and Rodeo, the Fort Worth Stock Show and Denver's National Western.

Chris is married to another K-State Animal Science graduate, Elissa (Good) Mullinix. Elissa completed both her B.S. and M.S. degrees in the department and currently teaches Ag and Environment Science at Manhattan High. Chris and Elissa have two beautiful children – Mason, age 4, and Kinsley, age 1.

# What Producers Should Be Thinking About.....

## WHAT PRODUCERS SHOULD BE THINKING ABOUT IN APRIL.....



### BEEF -- *Tips by Dale Blasi, Extension Beef Specialist*

Many producers should consider calving in this month. Stress is minimized and forage/grass management may be optimized.

- Keep calving areas as clean and dry as possible. Give each calf a dry, comfortable and clean environment.
- Supplement and feed cows to maintain or improve body condition prior to the breeding season (cows should be in moderate body condition by the start of the breeding season to maximize fertility).
- For thin, young cows, consider feeding fat to improve rebreeding rates. Research indicates that when feeding about 0.4 lb. per head per day of a plant source (soybean, sunflower, safflower oils), fat can increase first-service conception and pregnancy rates (0% to 15%). Feeding fat can be effective both before and after calving. Consult your nutritionist.
- Mineral supplementation should include greater levels of magnesium (intake should be between 15 to 30 grams (g) per head per day, or at least 11% of the mineral mix) for grass tetany prevention.
- Plan your breeding season, both AI and natural service. Make sure all supplies and semen are on hand prior to the breeding season. For natural-service programs assign yearling bulls to 10-15 cows, 2- and 3-year-old bulls to 20-25 cows, and older bulls to 25-40 cows. Breeding for 65 days should be long enough; less than 90 days is a key sign of good management. Some suggest the service capacity of a yearling bull (less than 24 months) is equal to his age in months at turn out.
- Bulls should be in good body condition prior to the breeding season. Thin bulls can run out of stamina. Now is the time to make sure bulls are physically capable of performing for the upcoming summer breeding season.
- Breeding soundness examinations are recommended for all bulls!
- Consider using estrus synchronization and AI. Several synchronization systems to overcome anestrus are available. Selection depends on labor, facility and implementation costs.
- Consider breeding heifers three weeks prior to the mature cow herd to give them a greater chance to rebreed.
- Maintain top management concerning calf scours (sanitary conditions, early detection, electrolyte/dehydration therapy).
- Vaccinate calves as per veterinarian consultation. Castrate males that are not candidates for breeding stock prior to pasture turnout. Implant calves that will be sold at weaning.
- Wait for fly control until critical numbers are reached (100 to 200 horn flies per animal).
- Deworm cows and bulls if needed. Expect performance response to be variable dependent on location, weather, grazing system, history, infestation level and management.
- Use prescribed burning techniques to eradicate Eastern Red Cedar trees and improve forage quality.
- Good fences make good neighbors. Summer pastures should have had fences checked, repaired or replaced by now.
- Check equipment (sprayers, dust bags, oilers, haying equipment) and repair or replace as needed. Have spare parts on hand; downtime can make a large difference in hay quality.

*We need your input! If you have any suggestions or comments on **News from KSU Animal Sciences**, please let us know by e-mail to [lschrein@ksu.edu](mailto:lschrein@ksu.edu), or phone 785-532-1267.*