



News from KSU Animal Sciences

June, 2016

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UPCOMING EVENTS...

↪ **State Livestock Nominations – Due June 15th** – All small animal state livestock nominations (non-market beef) are due June 15th. This includes commercial heifers, market swine, commercial gilts, market lambs, commercial ewes, and ALL meat goats. There is not a separate division for registered breeding does at either state show, so all meat goats must be nominated in order to be eligible to show. The 2016 nomination information has been distributed to county offices and may be found on the Youth Livestock Program website. The 2016 Declaration and Specie Nomination Forms **MUST** be used for nominations to be accepted. All families are encouraged to use the specie checklist as a guide to ensure their nominations are complete upon submission. This resource may be found on the Youth Livestock Program website, or through the local county office. Please double check that there are not any blank fields or questions on the Declaration and Nomination Forms before placing them in the mail. As a reminder, ear notches are required for swine nominations and scrapie tag numbers are required for sheep and goats. Nominations received without this information will be considered incomplete and returned to the family for completion. Confirmation letters will be sent to families once their nominations have been processed, and reports will be updated on the Youth Livestock Program website on Tuesdays and Fridays until we reach the deadline, then more frequently after that. Families are encouraged to use one of these options to verify their nominations. A complete nomination does **NOT** constitute show entry. The Kansas State Fair and KJLS will release entry information to agents and through their respective websites as entry season draws near. State Fair Grand Drive entries will be due July 15th, and KJLS entries will be due August 15th. Animals who are nominated, but do not follow the appropriate entry processes set forth by each show, will not be permitted to show. For nomination questions, please contact Lexie Hayes at adhaves@ksu.edu.

↪ **Youth PQA+ Certification** - All exhibitors who state nominate swine projects **MUST** have a Youth PQA+ certification number at the time of nomination, or by June 15th. There is a field for this information on the swine nomination form, under the contact information. Any nominations received without the appropriate Youth PQA+ number will be considered incomplete. Kansas youth may obtain their certification by participating in a class provided by an extension agent who is currently certified to teach Youth PQA+, or by completing the Pork Board's online Youth PQA+ training. If you are an agent interested in becoming certified to teach Youth PQA+, please contact Lexie Hayes at adhaves@ksu.edu. The youth and adult PQA+ certifications are separate processes. So, if you are certified to teach the adult portion, you may not certify youth without going through the appropriate training. If you have questions about youth who are too young to receive a certification number (less than 8 years old), please contact Lexie at adhaves@ksu.edu.



↪ The **2016 Dr. Bob Hines Kansas Swine Classic** is scheduled for July 8-9, 2016, at CiCo Park in Manhattan. This two-day event includes swine skillathon, showmanship contest, and a prospect and market hog show. It is open to all Kansas youths ages 7 through 18 as of Jan. 1, 2016. New for this year—all market pigs will be shown together and divided into classes based on breed and weight. There will no longer be separate barrow and gilt classes.

This year's Classic will feature a Swine Photography Contest. For the contest, youth may submit up to 2 swine photos. Photos should be 8x10 size and should not be framed or matted. Photos will be placed in plastic sleeves and displayed throughout the weekend. Outlined below is a schedule of this year's program.

Friday, July 8

8:00 a.m.	Barn open for arrival
12:00 p.m.	All hogs in place
1:00 p.m.	Swine photo check-in by the show ring
1:00 – 3:00 p.m.	Swine Skillathon in the show ring
4:00 p.m.	Ice cream party by the show ring
5:30 p.m.	Showmanship Contests

Saturday, July 9

8:00 a.m. Prospect Hog Show followed by Market Hog Show

Entries must be postmarked by June 25, 2016. More information and registration is available at www.KSUswine.org. For more information, contact Joel DeRouchey (785-532-2280; jderouch@ksu.edu) or Lexie Hayes (785-532-1264; adhayes@ksu.edu).

↪ **Kansas 4-H Livestock Sweepstakes – August 20-21** - The 2016 Kansas 4-H Livestock Sweepstakes will be held Aug. 20-21 on the K-State campus in Manhattan, KS. This is the corresponding date to previous years. The 4-H Livestock Sweepstakes event includes the state 4-H livestock judging contest, meat judging contest, livestock skillathon, and livestock quiz bowl. The members who will represent Kansas at the national 4-H contest for each of these events will be selected during the livestock sweepstakes weekend. The deadline to enter will be Aug. 1. All entries must be made by the local Extension Office using Cvent. Additional details will be released soon.

↪ **2016 Applied Reproductive Strategies in Beef Cattle (ARSBC) Workshop** - The premier national event in beef cattle reproductive management will be held at the Embassy Suites in Des Moines, Iowa on Sept. 7-8. The Applied Reproductive Strategies in Beef Cattle Workshop will include information for cow-calf producers, bovine veterinarians, industry representatives, extension personnel and students. It is provided through a cooperative effort by Iowa State, Iowa Beef Center and the Beef Reproduction Task Force, and will highlight the latest information on reproductive technologies in beef cattle.

Registration is now open with an early registration fee of \$200 per person when received by midnight, Aug. 8. It increases to \$250 for late registration after that date, including onsite registrations. Students receive a \$100 discount based on the fee in effect at the time of registration. Online registration and a link to print a form for mailing are on the conference website at <http://www.aep.iastate.edu/arsbc/>. The website also provides the workshop schedule, including a printable version, as well as links to lodging options, sponsorship opportunities, and travel and direction details. For more information, contact Sandy Johnson at sandyj@ksu.edu.

↪ The **2016 KSU Beef Stocker Field Day** will be held on Thursday, September 22, 2016 at the KSU Stocker Unit, Manhattan, KS. Watch for more details coming soon to www.KSUbeef.org. For more information, contact Dale Blasi (dblasi@ksu.edu; 785-532-5427).

↪ Join us for the 2nd annual **AS&I Family and Friends Reunion to be held on Friday, October 7, 2016**, from 6:00 – 9:30 p.m. at the Stanley Stout Center, 2200 Denison Avenue, Manhattan, Kansas. Last year's event was truly amazing with over 1,100 family and friends reuniting at the inaugural event. The Don L. Good Impact Award will be presented to Certified Angus Beef. Other activities will include great food, live music, Junior Wildcat Barn Yard and more surprises!! Check www.asi.ksu.edu/familyandfriendsreunion.html for updates.

CALENDAR OF UPCOMING EVENTS		
Date	Event	Location
June 15, 2016	State Livestock Nominations Due	
June 17-19, 2016	K-State Livestock Judging Camp	Manhattan
June 25, 2016	BBQ 101 Workshop	Wichita, KS
June 29 – July 2, 2016	Animal Sciences Leadership Academy	Manhattan
July 8-9, 2016	Dr. Bob Hines Kansas Swine Classic	Manhattan
August 20-21, 2016	Kansas 4-H Livestock Sweepstakes	Manhattan
September 7-8, 2016	Applied Reproductive Strategies in Beef Cattle Workshop	Des Moines, IA
September 22, 2016	KSU Beef Stocker Field Day	Manhattan
October 7, 2016	AS&I Family and Friends Reunion	Manhattan

WHAT'S NEW.....

Management Minute “Quit Interviewing Wrong!”

☞ **Management Minute** – Chris Reinhardt, Ph.D., Extension Feedlot Specialist

“Quit Interviewing Wrong”

As managers, we trust our people-reading skills and intuition. Good managers certainly can read people. But the problem is that we will ultimately be wrong. We will be right, and we will also be wrong at the very same time.

The truth is, people act and behave and respond differently under different circumstances and environments. It's not that people “lie”, but instead, people either consciously or subconsciously assess the interviewer and the environment and they adapt their responses to the environment.

People will be “different people” in different environments and with different interviewers. So the point is, a single interview will likely reveal certain characteristics or mannerisms of the candidate, but you will only see a small slice of the total of who the candidate is. A friend of mine says, “Anyone can clean up for a 2-hour interview.”

If you want to be certain that you understand who the candidate is, you will need to dig a little deeper than a single brief interview. There is a company in Nebraska whose owner insists on interviewing every candidate for every open position a minimum of 4 times in 4 different locations, and 1 of which includes the spouse, if applicable.

If you run a business which needs a large number of unskilled workers, and you will likely have a large percentage of turnover, this model will not work. But if you're trying to build a team of individuals who will be with you for the long haul, who fit your team culture, who will enhance team chemistry, and who will not only grow into their individual role but who will become future team leaders, you need to spend time and invest in the interview process.

Suggestions for interviewing environments might include the business office, a neutral off-site location such as a restaurant, and the actual workplace. It may also help to have others interview the candidate other than the manager, especially people who will need to work with this person on a daily basis. The key is to alter the environment and circumstances of the interview to (1) see a more complete picture of who the candidate is under different circumstances, and (2) to get feedback from a trusted colleague who may have the ability to see different characteristics of the candidate.

The future of your team is too valuable to trust to a single 30-minute or even a single 2-hour interview; it's not that your assessment will be wrong, it's that your picture of the candidate will be very incomplete. Take the time to invest in the future of your team by giving candidates an opportunity to show you a complete picture of who they are.

For more information, contact Chris at 785-532-1672 or cdr3@ksu.edu.

☞ **Feedlot Facts** – Chris Reinhardt, Ph.D., Extension Feedlot Specialist

“Antimicrobial Resistance”

A very smart scientist once said, “Anyone who claims they fully understand antimicrobial resistance simply hasn't studied it enough yet!” Development of antimicrobial resistance by bacteria is a very complex issue that even the brightest in the human health and animal health communities do not fully comprehend, let alone can unequivocally say it's an issue for which they have identified definitive causes and solutions. So if a lay person, a talking head, or a blogger claims to have all the answers, we're best off to take their opinion with a grain of salt and keep searching.

That said, there are few issues with so broad a gap between the potential future human and animal health ramifications and our collective impotence at devising truly effective control practices. We know that unchecked growth in resistance could be disastrous, yet none of the smart people who study this and who I trust can say with any degree of certainty that any of the proposed measures---including complete abolition of use---will have any significant impact on resistance.

Feedlot Facts “Antimicrobial Resistance”

↪ **Feedlot Facts – “Antimicrobial Resistance”** (cont.)

In light of that uncertainty, some argue for a “stay the course” approach until science and understanding can provide some sure solutions. Others suggest a “precautionary principle”, choosing instead to err on the side of logic, even if that logic is unproven, hoping that some action is better than none at all.

So (1) we lack comprehensive understanding of the underlying science behind the issue, (2) we lack a consensus among reasonable and influential parties as to practical and useful solutions, and (3) we lack an even remote illusion that we can control what happens in other parts of the world in which there is less robust oversight of antimicrobial use in humans and animals and of food production practices in general, and oftentimes greater and more widespread prevalence of infectious diseases which encourages the use and often abuse of any available antimicrobials.

The point is that if use and abuse of antibiotics do in fact perpetuate growth in bacterial resistance to antimicrobials, there is concern regarding the current inability of some countries or regions of the world, due to insufficient funding and infrastructure, to police any future policy designed to limit use in order to control the growth of resistance.

H.L. Mencken, another smart person, said, “For every complex problem there is an answer that is clear, simple, and wrong.” I paraphrase and shorten this to, “Complex problems have no simple solutions.” We’ve got to do the seriously heavy lifting to get to meaningful outcomes. Einstein is credited for saying, “We cannot solve our problems with the same thinking we used when we created them.” I doubt Alexander Fleming in 1928 knew the next-level challenges that would arise nearly 100 years after his discovery of penicillin.

The good news is that the debate continues, and the smart, reasonable-thinking, people are at the table, here and abroad, trying to hammer out solutions which are not clear or simple but which hopefully will be right long-term for human health and for food production, which will be forever inextricably linked.

For more information contact Chris at cdr3@ksu.edu.

↪ **Effects of Growing-Season Prescribed Burning on Vigor of the Noxious Weed Sericea Lespedeza (*Lespedeza cuneata*) in the Kansas Flint Hills**– The objective was to evaluate the effects of growing-season prescribed burning of native tallgrass range on vigor of sericea lespedeza. We burned nine fire-management units (12 ± 6 acres) at one of three prescribed-burning times: early spring (April 1), mid-summer (July 30), or late summer (September 1).

Bottom Line... Compared to traditional spring, dormant-season burning, burning during the summer months resulted in significant decreases in seed production by SL. Growing-season prescribed burning may be an inexpensive and fairly comprehensive means to control sericea lespedeza propagation. View the complete research report at www.asi.ksu.edu/cattlemensday. For more information contact, KC Olson (785-532-1254; kcolson1@ksu.edu) or Bob Weaver (785-532-1460; bweaver@ksu.edu).

↪ **Does Knowing Brand or USDA Grade of Beef Strip Steaks Affect Palatability for Consumers?**– The objective of this study was to determine how consumer palatability ratings of beef strip loin steaks are affected when products are identified with a brand or USDA grade.

Strip loins were selected to represent five quality levels - USDA Select, Choice, Prime, Certified Angus Beef (CAB; upper 2/3 Choice), and Select from phenotypical Angus cattle. Consumer panelists evaluated samples for tenderness, juiciness, flavor liking, and overall liking in two evaluation rounds—blind and non-blind testing. Additionally, consumers rated each palatability trait as either acceptable or unacceptable.

Bottom Line... Prime, CAB, and Angus Select products received increased ratings when brand was disclosed indicating a “brand lift,” while Choice and Select products received no benefit from brand disclosure; indicating the impact of branding and brand or grade perception on beef eating quality. View the complete research report at www.asi.ksu.edu/cattlemensday. For more information contact, Travis O’Quinn (785-532-3469; travisquinn@ksu.edu).



Effects of Grinding Corn through a 2-, 3-, or 4-High Roller Mill on Pig Performance and Feed Preference of 25- to 50-lb Nursery Pigs

A total of 410 pigs were used in two experiments to determine the effects of grinding corn through various roller mill configurations on feed preference and performance of nursery pigs. In Exp. 1, 320 pigs (DNA 400 × 200, initially 23.6 lb) were randomly allotted to 1 of 4 dietary treatments with 16 pens per treatment and 5 pigs per pen for a 21-d growth trial. The 4 dietary treatments used the same corn-soybean meal-based formulation that was mixed from the same batch of ingredients. Corn was ground through the same 4-high roller mill, but using different roller configurations. Experimental diets were: (1) feed with corn fraction ground to 650 µm using 2 sets of rolls (2-high), (2) feed with corn fraction ground to 495 µm using 3 sets of rolls (3-high), (3) feed with corn fraction ground to 340 µm using 4 sets of rolls in a fine grind configuration (4-high fine), and (4) feed with the corn fraction ground to 490 µm using 4 sets of rolls in a coarse grind configuration (4-high coarse). The same roller mill was used for all configurations with the appropriate lower rolls completely open when using the 2 or 3 sets of rolls configurations. In Exp. 2, 90 pigs (PIC 327 × 200, initially 27.0 lb) were randomly allotted to one of three diet comparisons to determine feed preference. The 3 diets used were from the 2-high roller mill configuration or the fine or coarse 4-high roller mill ground corn. Each pen contained 2 feeders, each containing 1 of the 3 treatment diets. The 3 diet comparisons tested were 2 vs. 4-high fine (1 vs. 3), 2-high vs. 4-high coarse (1 vs. 4), and 4-high fine vs. 4-high coarse (3 vs. 4). Feeders were rotated once daily within each pen for the 7-d study. There were 5 pigs per pen, and 6 pens per treatment. In Exp. 1, there were no differences in ADG, ADFI or F/G among roller mill configurations. Similarly, no differences were observed for caloric efficiency or economics among roller mill configurations. In Exp. 2, when given a choice, pigs consumed 67% of the diet containing corn ground through the 2-high roller mill compared to only 33% from the diet containing 4-high fine corn. There was no difference in feed consumption of 2-high roller mill corn and the diet manufactured with the 4-high roller mill in a coarse configuration (50.3 to 49.7%, respectively). However pigs consumed 63% of the diet manufactured using the 4-high roller mill in a coarse configuration and only 37% from the diet using the 4-high mill in a fine grind configuration.

Bottom Line...In the study, roller mill configuration had a significant impact on feed preference in nursery pigs, most likely as a result of differences in particle size. However, when nursery pigs did not have the choice between diets, there were no differences in gain, feed consumption, feed efficiency, or economics. Therefore, the study did not indicate a benefit in nursery pig performance or economic return when particle size was reduced below 650 µm. More information is available on this experiment and others in the KSU Swine Day Report at www.KSUswine.org. (This study conducted by J. T. Gebhardt, J. A. De Jong, M. D. Tokach, J. C. Woodworth, J. M. DeRouchey, R. D. Goodband, K. F. Coble, C. R. Stark, C. K. Jones, and S. S. Dritz)



Evaluation of Bovine Plasma Source and a Dried Milk Product on Nursery Pig Growth in a Commercial Environment

A total of 360 barrows and gilts (PIC 359 × C29; initially 13.7 ± 3.1 lb and 19 d of age) were used in a 24-d experiment evaluating the effect of different specialty ingredients on nursery pig growth performance. This experiment was conducted in a commercial research nursery (Cooperative Research Farm Nursery; Sycamore, OH). At weaning, pigs were allotted to pens by initial BW and to one of four dietary treatments in a completely randomized design. There were 9 pens per treatment with 10 pigs per pen. Experimental diets were fed from d 0 to 10, with a common diet fed from d 10 to 24. Experimental diets were: 1) Negative control (NC); 2) NC + 5% bovine Plasma A (AP920, APC Inc.; Ankeny, IA); 3) NC + 5% bovine Plasma B (Promax; Protena S.A., Nicaragua); and 4) NC + 5% dried milk (Nutrigo; International Ingredients Corporation Inc., St. Louis, MO). All diets contained 5% fishmeal and were balanced for SID lysine, lactose, and salt. Diets were fed in pellet form. From d 0 to 10, pigs fed either Plasma A or B had greater ADG and ADFI than pigs fed the NC or Nutrigo diets. Pigs fed Nutrigo had increased ADG compared to pigs fed the NC diet. Also, F/G was improved for pigs fed either Plasma A or B and Nutrigo diets compared to those fed the NC. During the common period (d 10 to 24), there were no differences for ADG or ADFI, although the pigs previously fed NC had improved (1.24 vs. 1.31) F/G compared to those previously fed Plasma A. Overall (d 0 to 24), pigs fed Plasma A and B had greater ADG and ADFI than NC pigs. Pigs fed Plasma B had increased ADG relative to pigs fed Nutrigo.

Bottom Line...In summary, both plasma sources increased feed intake and growth with no differences among sources. Nutrigo also improved performance compared to the NC. More information is available on this experiment and others in the KSU Swine Day Report at www.KSUswine.org (This study conducted by C. D. Evans, H. L. Frobose, D. W. Dean, M. D. Tokach, R. D. Goodband, S. S. Dritz, J. C. Woodworth, and J. M. DeRouchey)

AS&I Faculty Spotlight



A.J. Tarpoff (tarpoff@k-state.edu; 785-532-1255)
Assistant Professor/Extension Beef Veterinarian

I grew up in Edwardsville, Illinois where my family ran both a beef processing facility and a steak house. I received my Bachelor in Animal Science, Doctorate of Veterinary Medicine, and Masters in Biomedical Science from Kansas State University. My Masters work was focused on production animal medicine, experimental field trial design and interpretation of findings. Since graduation from KSU, I have been in a feedlot exclusive practice in Southern Alberta, Canada. My focus in practice has been herd based cattle production medicine, research field trials, hands on feedlot employee training, disease surveillance and mitigation, and Federal Import/Export duties. I am now starting my new position of Beef Extension Veterinarian. I am very excited to work within the Extension team at Kansas State to help serve the producers within the state.



Angie Denton (angiedenton@k-state.edu; 785-532-3440)
Communications Coordinator

This year's Livestock Publications Council (LPC) President Angie Stump Denton has three passions — her kids, Hereford cattle and Kansas State University. Her personal and career path has allowed her to balance the three while also serving as a leader in the livestock publications industry.

A third-generation Hereford breeder from Blue Rapids, Kan., Denton attended Kansas State University where she studied Ag Journalism and Animal Science. While at K-State, she attended her first LPC convention in 1994 and was named the 1995 LPC Forrest Bassford Student Award winner.

After interning with the Angus Journal, Denton joined the staff, working for 10 years from 1995 to 2004. She accepted the position of Hereford World Editor in 2004. Soon after, she added Director of Communications to her job description. Late in 2014 her job title changed once again, when editorial duties and Communications Director were made stand-alone jobs. Dynamic times in the expanding breed prompted rearranging of job duties within the organization.

She said the opportunity to move to the Hereford World in 2004 was “going home,” both figuratively and physically. Moving back to her family ranch, Springhill Herefords, Denton worked out of her home office. She happily returned to her own breed, and has a balanced life with her husband of 20 years, John, and sons Dustin, 9, and Wesley, 14.

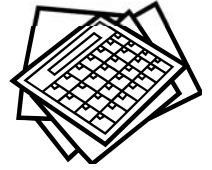
A faithful K-State graduate, Denton joined the animal science department as Communications Coordinator in April. At K-State she will lead the marketing and communications efforts for the Department of Animal Sciences and Industry.

The transition to work for her alma mater allows her to travel less and spend more time with her family as Wesley enters high school this fall and Dustin will be a fourth grader. She says she is excited to promote the department and continue to balance the loves of her life — her boys, Hereford cattle and Kansas State University.

Denton has served on the LPC board since 2005 and is a past recipient of the LPC Ed Bible Distinguished Service Award and the National Cattlemen's Beef Association (NCBA) Excellence in Communications and Public Relations award in 2012. She serves on her local United Methodist Church advisory board and is a 4-H leader. Her favorite time is spent in the barn with her sons, fourth generation Hereford breeders.

What Producers Should Be Thinking About.....

WHAT PRODUCERS SHOULD BE THINKING ABOUT IN AUGUST.....



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

August is when forages are maturing, weaning time is approaching, and weather dictates several key management decisions.

Breeding Season

- Given high feed price inputs, ruthlessly cull all unsound cows from the herd. Cull cows that do not conceive after three services by a fertile bull.
- Limit the breeding season. Remove bulls after 60 days with cows, 45 days with heifers.

These methods contribute to a more uniform calf crop, makes winter feed management easier, and increases the success rate of next year's breeding season.

Cowherd Nutrition

- Provide ample amounts of clean, fresh drinking water.
- Conduct an inventory of forage needs for the winter feeding period
- Plan ahead and price availability of byproducts, such as wheat-middlings, dried distillers grains, etc. prior to typical seasonal price increases.

Herd Health

- If pinkeye is likely to be a problem, consider the following preventive and therapeutic measures.

Preventive:

- ◆ Make sure the herd is receiving adequate vitamins and trace mineral in their diet.
- ◆ Consider using a medicated trace mineral package.
- ◆ Consider vaccination for pinkeye and IBR (consult your local veterinarian).
- ◆ Control face flies.
- ◆ Clip pastures with tall, coarse grasses that may irritate eyes.

Therapy:

- ◆ Administer an intramuscular injection of long-acting oxytetracycline when symptoms are first noticed.
- ◆ Shut out irritating sunlight by patching eyes, shade, etc.
- ◆ Control flies.
- ◆ Consult your veterinarian.

- Consider revaccinating for the respiratory diseases any animals that will be taken to livestock shows.
- Vaccinate suckling calves for IBR, BVD, PI3, BRSV, and possibly pasteurella at least 3 weeks prior to weaning.
- Revaccinate all calves for blackleg.
- Vaccinate replacement heifers for brucellosis (4 to 10 months of age).
- Monitor and treat footrot.

Forage/Pasture Management

- Enhance grazing distribution with mineral mixture placement away from water sources.
- Observe pasture weed problems to aid in planning control methods needed next spring.
- Monitor grazing conditions and rotate pastures if possible and(or) practical.
- If pastures will run out in late summer, get ready to provide emergency feeds. Start supplemental feeding before pastures are gone to extend grazing.
- Harvest and store forages properly. Minimize waste by reducing spoilage.
- Sample harvested forages and have them analyzed for nitrate and nutrient composition.
- Plan for sufficient standing pasture for winter grazing needs.
- For stocker cattle and replacement heifers, supplement maturing grasses with an acceptable degradable intake protein/ionophore (feed additive) type supplement.

General Management

- Avoid unnecessary heat stress - Don't handle and/or truck cattle during the heat of the day.
- Repair, replace and improve facilities needed for fall processing.
- Order supplies, vaccines, tags, and other products needed at weaning time.
- Consider earlier than normal weaning, but have a marketing plan in place.

*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, or phone 785-532-1267.*