



# News from KSU Animal Sciences

## UPCOMING EVENTS...

- ↪ The Agricultural Research Center in Hays, Kansas, will host the **2018 Hays Roundup** program on Thursday, April 19, 2018, in the center's auditorium. Registration and a trade show will begin at 9 a.m. Lunch will be provided and there is no cost to attend. The following presentations will begin at 10 a.m.:
- A Historical Look at Climate Variability in the Great Plains – Impacts on Agriculture – Jeffrey Basara, School of Meteorology, University of Oklahoma
  - Using Intensive Early Stocking in Cow/Calf Production Systems – Keith Harmoney, Range Scientist, KSU ARCH
  - Pasture Land Values and Rental Rates – Mykel Taylor, Agricultural Economist, KSU Dept. of Agricultural Economics
  - What's a Bud Box and How Do You Use It? – Justin Waggoner, Extension Beef Cattle Specialist, KSU SWREC
  - Split-Time Artificial Insemination Programs for Beef Cows - John Jaeger, Beef Cattle Scientist, KSU ARCH
- Registration information is available at <http://www.hays.k-state.edu/events/> or by contacting Milissa at 785-625-3425 ext. 200 or [milissa@ksu.edu](mailto:milissa@ksu.edu). For more information, contact John Jaeger, [jrjaeger@ksu.edu](mailto:jrjaeger@ksu.edu), 785-625-3425 ext.211
- ↪ The **4-H Wildlife Habitat Education Program Contest** will be Wednesday, April 25, 2018, at the Claythorne Lodge, Columbus, Kansas. For the past 28 years, Kansas has held state wildlife habitat evaluation contests in which the winning team was eligible to advance to the national contest. The contest is about teaching young people about wildlife, the needs of wildlife, and their habitat. If you are interested in participating as a member of a team or as an individual in the 2018 contest, please contact Charles Lee, Extension Specialist, Wildlife, Room 131 Call Hall, 1530 Mid-Campus Drive North, Kansas State University, Manhattan, KS 66506, or call 785-532-5734 by March 20, 2018. A \$5 donation/fee is requested from each person to help defray lunch expenses.
- ↪ **State Market Beef Nominations Due May 1** - The 2018 state livestock nomination season has arrived! All market beef nominations are due by May 1, 2018. This includes market steers and market heifers. The deadline is a postmark deadline, but families are encouraged to submit their nominations as early as possible. Nomination information for all species may be found on the KSU youth livestock program website ([www.youthlivestock.ksu.edu](http://www.youthlivestock.ksu.edu)). In order to make sure nominations are complete upon initial submission, double check that all fields of the declaration form and nomination form(s) are complete, as well as the forms and DNA envelopes being signed by all parties. Please also cross-reference the tag numbers between the DNA envelopes and the specie nomination forms. All checks should be made payable to KJLS. There is a checklist for each species attached as a second page to the 2018 forms; the checklist does not need to be submitted as it is only a reference tool for families. For more information, contact Lexie Hayes (785-532-1264; [adhayes@ksu.edu](mailto:adhayes@ksu.edu)).

### Department of Animal Sciences and Industry

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- ↪ **Developing and Implementing a HACCP Plan for Meat and Poultry Workshop** will be June 5-7, 2018, in Weber Hall, Kansas State University, Manhattan, Kansas. This three-day workshop uses curriculum recognized by the International HACCP Alliance for meat and poultry processors and is led by an International HACCP Alliance Lead Instructor. For more information, contact Dr. Liz Boyle ([lboyle@ksu.edu](mailto:lboyle@ksu.edu); 785-532-1247). The workshop fee is \$450 per person, and participants will be presented with a certificate with an International HACCP Alliance seal upon completion of the course. Registration is limited to 25 participants. For more information, contact Dr. Liz Boyle ([lboyle@ksu.edu](mailto:lboyle@ksu.edu); 785-532-1247). Registration is online at <http://haccp.unl.edu>.
- ↪ The **KSU Youth Horse Judging Camp – Beginning Section** will be June 6, 2018, and the **KSU Youth Horse Judging Camp – Advanced Section** will be June 4-5, 2018. Both camps will be hosted in Weber Arena on the KSU Campus. Registration for both camps must be paid by May 11, 2018. For more information, visit the website <http://www.asi.k-state.edu/research-and-extension/youth-programs/judging-camps.html>. You can also contact James Lattimer, (785-532-2840; [jlattimer@ksu.edu](mailto:jlattimer@ksu.edu)).
- ↪ **K-State Livestock Judging Camps scheduled** – The camp is a three-day, intense judging camp designed for 4-H and FFA members (ages 14-18) who are seriously interested in enhancing their livestock judging and oral communication skills. Prior livestock judging experience is necessary for this camp. Workouts will be conducted similar to those at a collegiate level. Chris Mullinix, KSU Livestock Judging Team Coach, will conduct the training for each camp. The camp will focus primarily on the proper format, terminology and presentation of oral reasons. Camp participants will also be exposed to livestock evaluation skills and incorporating performance records in the decision making process. The 2018 camps will be: June 6-8 (Wednesday-Friday); June 11-13 (Monday-Wednesday); or June 15-17 (Friday-Sunday). For a complete schedule and registration information, visit <http://www.asi.k-state.edu/research-and-extension/youth-programs/judging-camps.html>. The registration deadline is May 21. For more information, contact Chris Mullinix (785-532-1917; [cmullinix@k-state.edu](mailto:cmullinix@k-state.edu)).
- ↪ The **2018 Dr. Bob Hines Kansas Swine Classic** is scheduled for July 6-7, 2018, at CiCo Park in Manhattan. This two-day event includes educational workshops, showmanship contest, and a prospect and market hog show. It is open to all Kansas youths ages 7 through 18 as of January 1, 2018.  
This year's Classic will feature a swine photography contest along with a swine skillathon. For the swine photography contest, youth may submit up to two 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.  
Entries must be postmarked by June 25, 2018. More information and registration will be coming soon to [www.KSUswine.org](http://www.KSUswine.org). For more information, contact Joel DeRouchey (785-532-2280; [jderouch@ksu.edu](mailto:jderouch@ksu.edu)) or Lexie Hayes (785-532-1264; [adhayes@ksu.edu](mailto:adhayes@ksu.edu)).
- ↪ Mark August 15, 2018, on your calendar for the **K-State Ranching Summit** to be held at the KSU Alumni Center. Watch for more details coming soon to [www.KSUbeef.org](http://www.KSUbeef.org).
- ↪ **Kansas 4-H Livestock Sweepstakes Date** - The 2018 Kansas 4-H Livestock Sweepstakes will be August 18-19 in Manhattan! Watch for more details.
- ↪ October 12, 2018, is the date set for the **4<sup>th</sup> Annual ASI Family and Friends Reunion**. This year we will be honoring CattleFax with the Don L. Good Impact Award. Watch for more details coming soon.

<b>CALENDAR OF UPCOMING EVENTS</b>		
<b>Date</b>	<b>Event</b>	<b>Location</b>
April 19, 2018	Hays Roundup	Hays
April 25, 2018	Wildlife Habitat Education Program Contest	Columbus
May 1, 2018	Market Beef Nominations due	
June 4-5, 2018	KSU Youth Horse Judging Camp – Advanced Section	Manhattan
June 5-7, 2018	Introduction to HACCP Workshop	Manhattan
June 6, 2018	KSU Youth Horse Judging Camp – Beginning Section	Manhattan
June 6-8, 2018	K-State Livestock Judging Camps	Manhattan
June 11-13, 2018	K-State Livestock Judging Camps	Manhattan
June 15, 2018	All Other Species Nominations due	
June 15-17, 2018	K-State Livestock Judging Camps	Manhattan
July 6-7, 2018	Dr. Bob Hines Swine Classic	Manhattan
August 15, 2018	K-State Ranching Summit	Manhattan
August 18-19, 2018	Kansas 4-H Livestock Sweepstakes	Manhattan
October 12, 2018	4 <sup>th</sup> Annual ASI Family and Friends Reunion	Manhattan

# WHAT'S NEW.....

↪ **Management Minute** – Chris Reinhardt and Justin Waggoner, Ph.D., Beef Systems Specialist

## *“It’s not Always About the Money”*

If you have an employee who seems to continually be bothering you about not being paid enough, there are usually two possibilities: 1) You’re a tightwad and you’re not paying them enough; or 2) the person is disgruntled about their role in the organization. To find out if the answer is No. 1, make a few phone calls to managers you trust in your general geography and find out what your neighbors are paying for similar jobs in your industry. If you’re within 50¢ or so per hour, then move on to answer No. 2. Some people are just better employees than others are. If this person is worth more than the ‘scale’, you had better pay more to keep them.

But “pay” can come in many forms. You can “buy” an employee’s loyalty and general job satisfaction with many perks other than another few cents or bucks per hour. Make sure your insurance, savings investment, and/or profit sharing plans are at least in line with the industry. This is especially important if this person has a family to look after. Non-monetary benefits include things like flexible time off. Those early mornings and long days are a lot easier to take if a person knows they can take Thursday afternoons off for a child’s ball game or whatever.

What about goals? Have you asked your employee what they want out of this position? They may want to move up in the organization or have opportunities for a management role elsewhere. You can be selfish about this or you can take on the role of mentor and teacher. By taking care of your employee and training them for a leadership role they will most certainly be a better employee, and will have a harder time leaving for a different job. And even if they do leave for a different opportunity, they will give such a glowing report on your leadership and team approach, you can be certain to find a good, young person to replace them.

The question you need to ask yourself is “Do you really want this person around for the long haul?” If you DO, take some time to privately evaluate your plans, and then take some more time one-on-one with this employee to find out their long-term needs and goals. If you DON’T want this person to remain in the organization, you still need to get your plans in order because after you inform this person they are not what your organization needs, you’d better have a pretty good plan set up to attract a quality person to replace them.

For more information, contact Justin Waggoner at [jwaggon@ksu.edu](mailto:jwaggon@ksu.edu).

↪ **Feedlot Facts** – Chris Reinhardt and Justin Waggoner, Ph.D., Beef Systems Specialist

## *“What’s in Today’s Feedlot Diet?”*

The commercial cattle feeding industry is incredibly diverse in many ways. A recent survey of consulting nutritionists conducted by Samuelson et al., (2016) gives us some insight into the feeding and management practices of the cattle feeding industry. This survey summarized responses from 24 consulting nutritionists that service in excess of 14,000,000 cattle annually. As expected, the primary grain used in both receiving and finishing diets was corn. However, the most commonly reported secondary grain used was wheat. The most common processing methods were steam-flaking and dry-rolling. The typical grain inclusion was 60% or less for receiving diets and 34.8% of the respondents reported an inclusion of 60-70% grain in finishing diets with a range of 50-90%. The reported range in grain inclusion of finishing rations is likely attributed to the use of by-product feedstuffs. The most commonly used by-product in both receiving and finishing rations was wet distiller’s grain. Alfalfa was the most common roughage source used in receiving diets (58.5% of responses). In finishing diets corn silage was the primary roughage source used (37.5% of responses), followed by corn stalks (29.2% of responses) and alfalfa (20.8% of respondents). The majority of nutritionists in the survey recommend an energy content 0.68-0.70 Mcal/lb of Net Energy for gain and 13.4% crude protein in the finishing ration.

For more information, contact Justin Waggoner at [jwaggon@ksu.edu](mailto:jwaggon@ksu.edu).

↪ **2018 Nomination Materials** - The updated 2018 state livestock nomination materials have been released. Information, updates, and forms may be found on the youth livestock website ([www.youthlivestock.ksu.edu](http://www.youthlivestock.ksu.edu)) under "Nomination Information". This information was also emailed directly to counties and extension units via the KSRE listserv in late March. All state livestock nominations MUST be submitted using the updated 2018 forms in order to be accepted. There are a handful of changes and updates to the process for 2018, including updated verbiage on both forms and removing the requirement for commercial heifers to be tattooed. The "Extra" Nomination Forms have also been reinstated for sheep and swine. Please keep in mind that these forms are ONLY to be used in addition to the regular specie nomination form for those who are nominating more animals than will fit on the regular form. If families only turn in the "Extra" form, their nominations will be returned, they will be required to re-submit their nominations along with the \$20 incomplete fee, and they will be directed to their local extension office to rectify their nominations. Families should continue to submit the full scrapie tag number, including Flock/Premise ID and individual animal number for sheep and goats. Also, swine nominations will continue to require ear notch submission, including the number and drawing the notches on the diagram provided on the form. The "Rookie Guide" has been updated to include example completed forms. First-time nominating families are encouraged to use this resource to understand the process and make it go as smoothly as possible. Market Beef nominations must be postmarked by May 1, 2018, to be accepted. All other specie nominations will be due on June 15, 2018. Official DNA envelopes may be ordered through the KSRE bookstore. If you have questions about youth livestock nominations, please contact Lexie Hayes ([adhayes@ksu.edu](mailto:adhayes@ksu.edu); 785-532-1264).

↪ **Awards presented at the 2018 Midwest American Society of Animal Science (ASAS) meetings** - Dr. Luis Mendonca was named an American Society of Animal Science (ASAS) Outstanding Young Extension Specialist at the recent 2018 Midwest ASAS meetings. He has developed an extension and research program addressing issues facing the Kansas and U.S. dairy industry.

Dr. Jon Bergstrom, KSU ASI master's and PhD graduate in swine nutrition, was also recognized during the meetings with the Outstanding Early Career Agribusiness Award. Dr. Brad Kim, KSU ASI Food Science masters alumnus, won the Outstanding Young Researcher Award.

Department of Animal Sciences and Industry faculty and students presented 67 abstracts at Midwest Region ASAS Meeting. Roger Cochrane, Ph.D. student in feed safety, was named a Midwest Young Scholar. Graduate and undergraduate students were very successful in the competition. Winners included:

- Ph.D. Oral Competition — 1st place Mariana Menegat, mentored by the Applied Swine Nutrition Team
- Ph.D. Poster Competition — 1st place Henrique Cemin, mentored by the Applied Swine Nutrition Team
- M.S. Poster Competition — 3rd place Ashton Yoder, mentored by Dr. Cassie Jones
- B.S. Oral Competition — 1st place Katelyn Thomson, mentored by the Applied Swine Nutrition Team
- B.S. Poster Competition — 1st place Abbie Smith, mentored by Dr. Cassie Jones; 3rd place Mikayla Goering, mentored by Dr. Lindsey Hulbert
- B.S. Poster Competition II — 1st place Ethan Sylvester, mentored by Dr. Cassie Jones
- B.S. Poster Competition III — 1st place Haley Wecker, mentored by Dr. Chad Paulk; 3rd place Michaela Braun, mentored by Dr. Chad Paulk

↪ **Youth Spring Livestock Shows, Events, and Local Activities** - Counties that have spring shows or other educational opportunities, such as camps, clinics, or skillathons, are invited to share that information with the youth livestock program by emailing Lexie at [adhayes@ksu.edu](mailto:adhayes@ksu.edu).

↪ **Youth PQA Plus Program Discontinuing** - The National Pork Board will be discontinuing the Youth PQA Plus program on May 31, 2018. After this date, youth will no longer be able to certify or re-certify using the Youth PQA Plus program. However, the National Pork Board will honor Youth PQA certifications until they expire, including youth who earn multi-year certification by "testing out". So, youth who plan to nominate swine for the Kansas State Fair or KJLS are HIGHLY encouraged to complete their Youth PQA training by the end of May. Youth who need quality assurance certification after the end of May will need to use the Youth for the Quality Care of Animals (YQCA) program. This is the program the National Pork Board will be transitioning their participants to in the future. Face-to-face sessions may be taken for \$3/child, or the online version is available for \$12/child. Please contact the local extension office for options available in your local area.

- ↪ **Late Summer Prescribed Fire and Fall Herbicide Application Show Strong Suppressive Effects on Sericea Lespedeza Frequency and Vigor** - The objective of this study was to evaluate the efficacy of a one-time application of late summer prescribed fire followed by fall herbicide application for substantially reducing sericea lespedeza (*Lespedeza cuneata*) frequency and vigor. A single 80-acre native tallgrass pasture was divided into 16 units. Each of these units was either burned in early September (burn only), sprayed with Escort XP (DuPont, Wilmington, DE) in late September (spray only), burned in early September and subsequently sprayed in late September (burn + spray), or neither burned nor sprayed (control). Sericea lespedeza frequency and vigor was measured shortly before treatment application and again one year following treatment application.
- Bottom Line...** Applying late summer prescribed fire alone is an effective and low-cost means of sericea lespedeza control in areas of light infestation, while burning plus spraying holds promise as a useful strategy to achieve more rapid control of heavy infestations. View the complete research report at [www.asi.ksu.edu/cattlemensday](http://www.asi.ksu.edu/cattlemensday). For more information contact, KC Olson (785-532-1254; [kcolson@ksu.edu](mailto:kcolson@ksu.edu)) or Bob Weaver (785-532-1460; [bweaver@ksu.edu](mailto:bweaver@ksu.edu)).
- ↪ **Evaluation of Salt and Trace Mineral Sources and Growth Implants on Performance of Stocker Cattle Grazing Native Flint Hills Pasture** - The objective of this study was to determine the efficacy of providing salt alone or with injectable trace minerals compared to a complete mineral supplement and growth implants for improving the growth of stocker calves grazing native grass pastures in the Flint Hills region of Kansas. Information describing factors about a total of 248 steers originating from Texas and New Mexico were used to determine the effects on performance when provided with salt blocks with or without an injectable trace mineral, compared to performance when provided with a complete mineral supplement. Moreover, the response of two commonly-used growth implants were evaluated.
- Bottom Line...** While there was no growth response to salt block and injectable trace mineral supplementation when compared to a complete mineral supplementation, there was a significant growth response with growth implants. View the complete research report at [www.asi.ksu.edu/cattlemensday](http://www.asi.ksu.edu/cattlemensday). For more information contact, Dale Blasi (785-532-5427; [dblasi@ksu.edu](mailto:dblasi@ksu.edu)).
- ↪ **Marbling Texture Has No Effect on Collagen Characteristics** - The objective of this study was to determine the effects of marbling texture on collagen traits and adipocyte cross-sectional area. Beef strip loins (n = 117) from three U.S. Department of Agriculture quality grades (Top Choice, Low Choice, and Select) with three marbling textures (fine, medium, and coarse) were selected using visual appraisal. Strip loins were taken to the Kansas State University Meat Laboratory, Manhattan, KS, fabricated into 1-in steaks, vacuum packaged, and aged for 21 days at 40°F. Following aging, steaks were analyzed for collagen and adipocyte staining, imaging, and peak thermal transition temperature.
- Bottom Line...** These results indicate that marbling texture has no effect on collagen traits and any potential tenderness differences among beef varying in marbling texture is not related to these traits. 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)) or Terry Houser (785-532-1253; [houser@ksu.edu](mailto:houser@ksu.edu)).
- ↪ **Effects of Crystalline Amino Acid Concentrations with or without Formaldehyde Treatment of Diets on Nursery Pig Growth Performance and Fecal Bacterial Concentration** - A total of 1,235 nursery pigs were used in a 28-day study evaluating the effects of crystalline amino acid concentrations with or without formaldehyde treatment of diets on nursery pig growth performance, feed bacteria concentration, lysine content, and fecal microbial diversity. Sal CURB is a commercial formaldehyde product that is commonly utilized in the poultry industry for Salmonella control in feed, but has also been shown to reduce PEDV infectivity in swine diets.

Pigs were weaned at approximately 21 day, fed a common starter diet for 10 day, and allotted to pens based on BW in a completely randomized design. Experimental diets were fed in two phases (phase 1, d 0 to 12; and phase 2, 12 to 28 post-weaning) in meal form. Experimental treatments were arranged as a 2 × 2 + 1 factorial with main effects of formaldehyde (none vs. 0.30% in all phases) and crystalline AA concentration (low vs. high) plus a positive control. The positive control represented this current production system's formulated Lys requirement needed to maximize performance, whereas treatment diets were formulated at 80% of the positive control's lysine concentration. Feed bacterial concentration was determined by performing aerobic plate, Enterobacteriaceae, and total coliform counts on composited feed samples collected from each batch of feed manufactured at the feed mill and directly from feeders at the farm. Total, available, and free Lys analyses were conducted on composited feed samples collected from each phase of the study to determine Lys content. A composite fecal sample was collected from three randomly selected pigs per pen on day 28 for each treatment, DNA isolated, and each sample assessed for bacterial community analysis.

**Bottom Line...** Overall, a significant crystalline AA × formaldehyde interaction was observed for ADFI and F/G. The interaction for ADFI was because added formaldehyde in high crystalline AA diets decreased feed intake; however, in low crystalline AA diets, ADFI was unchanged. For F/G, pigs had improved F/G in low crystalline AA diets without formaldehyde, but no difference was observed in high crystalline AA diets. Despite the interaction for ADFI and F/G, formaldehyde-treated diets reduced ADG, ADFI, and resulted in poorer F/G. Crystalline AA concentration did not impact performance. Added formaldehyde reduced or eliminated bacterial concentration of complete feed in phase 1 of the study. Formaldehyde reduced total and available Lys in both low and high crystalline AA diets, with a greater reduction occurring in low crystalline AA diets, but had no effect on free Lys. Added formaldehyde reduced Lactobacillaceae bacterial species, but increased Clostridiaceae bacterial species in fecal microbial samples.

As expected, formaldehyde treatment reduced bacterial microflora of complete feeds. Overall, the level of crystalline AA did not impact performance while the nursery diet formaldehyde addition negatively influenced growth performance, AA utilization, and fecal microbial diversity. 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 H.E. Williams, J.C. Woodworth, J.M. DeRouchey, S.S. Dritz, M.D. Tokach, R.D. Goodband, T.E. Burkey, and S. Li)

↳ **Effects of Monosodium Glutamate and AminoGut on Nursery Pig Performance** - 1,134 nursery pigs were used in a 42-day growth study to determine the effects of monosodium glutamate (MSG), AminoGut, and glutamine (Ajinomoto Heartland, LLC, Chicago, IL) on growth performance. Pigs were fed one of six dietary treatments. Treatments were fed in 2 phases from day 0 to 7 and 7 to 21. The dietary treatments contained 0, 0.5, 1.0, or 1.5% MSG fed in both phases, 0.8 and 0.6% AminoGut fed in phase 1 and 2, respectively, or a combination of 1.0% MSG and 0.4% glutamine fed in both phases. A common post-treatment diet was fed from d 21 to 42. Phase 1 was in pellet form and the subsequent phases were in meal form. Pigs were randomly allotted to pens at weaning and pens were then allotted to treatment according to BW in a randomized complete block design with seven replications per treatment. During phase 1 (day 0 to 7), there was no evidence for difference for ADG, ADFI, or F/G with the addition of MSG, AminoGut, or MSG+Gln. In phase 2 (day 7 to 21), the addition of MSG did not impact ADG or ADFI, but resulted in a marginal improvement in F/G. Pigs fed AminoGut demonstrated improved ADG compared to all other treatments and increased ADFI compared to pigs fed 0.5, 1.0, or 1.5% MSG. There was no evidence for difference during the common post-treatment period, overall period, or in final BW.

**Bottom Line...** Results from this study indicate that feeding MSG alone or with Gln does not result in improved post-weaning growth performance. AminoGut provided a growth and intake response from day 7 to 21 post-weaning. While the increase in BW for pigs fed AminoGut was maintained through the common phase, the response was no longer significant. Further investigation is required to determine the appropriate timing and feeding duration of AminoGut in the nursery. 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, J.C. Woodworth, R.D. Goodband, and K.J. Touchette)

# AS&I Faculty Spotlight



**Cassie Jones** ([jonesc@ksu.edu](mailto:jonesc@ksu.edu); 785-532-5289)

**Associate Professor/Undergrad Research Coordinator**

Dr. Cassie Jones is the Undergraduate Research Coordinator in the Department of Animal Sciences & Industry at Kansas State University. She coordinates undergraduate students interested in research projects across disciplines and species. Cassie teaches ASI 561: Undergraduate Research in Animal Sciences & Industry and ASI 318: Fundamentals of Nutrition. Her research efforts include evaluating the effects of ingredients or feed processing technologies on feed safety and animal nutrition. Dr. Jones is originally from Beulah, N.D., where her family raised Rambouillet sheep. She is formally trained as an applied swine nutritionist. She and her husband, Spencer, have three children, Ty, Hayden, and Hadley, and raise Angus cattle near Wamego.



**James Lattimer** ([jlattimer@k-state.edu](mailto:jlattimer@k-state.edu); 785-532-2840)

**Assistant Professor/Equine Nutrition**

Dr. James Lattimer is a native of Newton, KS. He graduated with his bachelor's in Animal Science from Kansas State University in 2002. He began his graduate career in equine nutrition at Oklahoma State University in the fall of 2002. While at OSU, he was the assistant horse judging team coach and directly involved in the undergraduate teaching program. After completing his M.S. in the summer of 2004, he moved to Ocala, FL, and taught equine science courses at the College of Central Florida and in the fall of 2005 accepted a horse science instructor position at Black Hawk College in Kewanee, IL. In the fall of 2009, Dr. Lattimer came back to Kansas State University to work on his Ph.D. in comparative nutrition. Following graduation in May 2012, he joined Nestle Purina in St. Louis, MO, as a Technical Nutritionist.

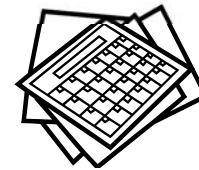
He returned home to Kansas State University in the spring of 2015 as an Assistant Professor with an 80% teaching and 20% research appointment. His current responsibilities include teaching undergraduate nutrition courses, coaching the Intercollegiate Horse Judging Team, conducting equine and comparative nutrition research and mentoring graduate students who are pursuing advanced degrees with an equine or comparative nutrition emphasis. Additionally, Dr. Lattimer serves as the faculty supervisor for the Horse Teaching and Research Unit.

Dr. Lattimer's research program focuses on digestive physiology of the horse with specific areas in the gut microbiome, post prandial glycemia, and digestibility of feedstuffs. Also, he collaborates across species with his fellow nutritionists to provide his students with a comparative look into animal nutrition.

Dr. Lattimer and his wife, Nichole, have three children, Paige, Payton and Owen. The Lattimer family own a small livestock operation outside of Wamego, KS, where they raise and show club lambs.

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

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



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

June is a month to let Mother Nature take her course. **Assuming timely precipitation**, native grasses are usually at peak production; therefore, little supplementation is needed, with the exception of some minerals.

#### *Cow-Herd Nutrition*

- Provide plenty of clean, fresh water.
- Provide free-choice minerals to correct any mineral deficiencies or imbalances.
- Monitor grazing conditions and rotate pastures if possible and practical.
- Consider creep-feeding if it's cost-effective.

#### *Herd Health*

- Monitor and treat pinkeye cases.
- Provide fly control. Consider all options; price and efficiency will dictate the best options to use.
- Monitor and treat for foot rot.
- To reduce heat stress, avoid handling and transporting cattle during the hottest times of the day.

#### *Forage and Pasture Management*

- Check and maintain summer water supplies.
- Place mineral feeders strategically to enhance grazing distribution.
- Check water gaps after possible washouts.
- Harvest hay in a timely manner; think quality and quantity.

#### *Reproductive Management*

- If using AI, do not expect all females to conceive. A common practice is to breed once or twice with AI, then turn out cleanup bulls for the balance of a 65-day breeding season. A 42-day AI season with estrus synchronization at the front end gives most females three chances to conceive by AI.
- Watch bulls for libido, mounting and breeding function.
- Record breeding dates to determine calving dates.
- By imposing reproductive pressure (45-day breeding season) on yearling heifers, no late-calving 2-year-olds will result. This will increase lifetime productivity and profits.

#### *Genetic Management*

- Monitor herd performance. Then identify candidates to cull because of poor performance.

#### *General Management*

- Check equipment (sprayers, dust bags, oilers, haying equipment, etc.), and repair or replace as needed. Have spare parts on hand because downtime can make a big 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.*