Register Now for K-State Cattlemen's Day

Register now for the 112th Cattlemen's Day to be hosted on Friday, March 7, 2025, at The National Guard Armory located at 721 Levee Dr. Manhattan, KS. The schedule includes:

| TNISAS STATE UNIVERSITY | 8:00 a.m. | Tradeshow and Educational Exhibits Morning refreshments sponsored by Lallemand Animal Nutrition |
|--|------------|---|
| Friday, March 7, 2025 National Guard Armory 721 Levee Dr., Manbattan, KS | 9:00 a.m. | Program Begins - Welcome- Dr. Mike Day, K-State |
| | 9:15 a.m. | Genetic Modifications in Livestock - Dr. Alison Van Enennaam, |
| A lineup you'll want front-row seats for! Register by February 21 – \$25 After February 22 - \$35 | | UC Davis |
| | 10:15 a.m. | Beef Industry Economic Outlook - Dr. Glynn Tonsor, K-State |
| | 11:15 a.m. | Unwrapping Meat Labels: FSIS Updates and Consumer Trends - Dr. Erin Beyer, K-State |
| | Noon | Lunch |
| | | Smoked brisket compliments of U.S. Premium Beef. |
| | | Following lunch, enjoy Call Hall Ice Cream sponsored by Huvepharma in the Trade Show. |
| | 1:30 p.m. | Yield Grade Technology - Dr. Dale Woerner, Texas Tech University |
| | 2:30 p.m. | ASI Research Update - K-State ASI Graduate Students |
| | 4:00 p.m. | Legacy Sale - Stanley Stout Center |

Registration is \$25 if registered by February 21, or \$35 if registered on/after February 22 or at the door. Morning refreshments and lunch are included with registration. To register or view the complete schedule visit <u>asi.ksu.edu/cattlemensday</u>. If you are interested in exhibiting at Cattlemen's Day or have any questions, please contact Katie Smith (katiesmith@ksu.edu or 785-532-1267).

K-State Junior Meat Goat Producer Day Registration Closes Soon

The 2025 K-State Junior Meat Goat Producer Day will be hosted on Saturday, March 22, 2025, at the Stanley Stout Center, which is north of campus in Manhattan. This one-day educational event is devoted to the selection and management of youth meat goat projects. All ages and knowledge levels are invited! K-State faculty members, graduate students, undergraduate students, former exhibitors, and guest speakers will cover topics including selection, nutrition, reproduction, the health and wellness, facilities and equipment, clipping and grooming, and showmanship. An optional instructor-led YQCA session will be offered at the conclusion of the program. A session over the state livestock nomination process will also be provided at the end of the day, concurrently with the youth YQCA training. The cost for junior meat goat producer day is \$20 per person, if registration is concurrently with the youth YQCA training. The cost for junior meat goat producer day is \$20 per person, if registration is concurrently with the youth YQCA training.

submitted by February 26, 2025. All attendees, including youth and adults, must register. The program is limited to 400 participants and may close early, if the available spots are filled before the deadline. Only those who register by the deadline will receive a t-shirt. Families may register online at <u>http://bit.ly/ksuasiregister</u>. For more information, contact Lexie Hayes (<u>adhayes@ksu.edu</u> or 785-532-1264).

YQCA Scholarship Application Deadline Approaching

The national youth livestock quality assurance program, Youth for the Quality Care of Animals (YQCA), has launched a scholarship program. Applications are now open and close on February 17. High school seniors through college students who are 21 years of age are encouraged to apply. For more information, visit the YQCA program website.

Department of Animal Sciences and Industry Kansas State University 218 Weber Hall, 1424 Claflin Road Manhattan, KS 66506 785-532-6533 | asi@ksu.edu



<u>Upcoming Events</u>

March 1, 2025 K-State Junior Swine Producer Day

March 6, 2025 Stockmen's Dinner

March 7, 2025 Cattlemen's Day

March 7, 2025 Legacy Bull Sale

March 22, 2025 K-State Junior Meat Goat Producer Day

March 24-25. 2025 HACCP Workshop- Columbia, MO

April 12, 2025 K-State Open House & LAR

April 12, 2025 K-State ASI Judging Team Reunion

ASI.KSU.EDU

FACEBOOK.COM/KSUASI

Local Youth Livestock Opportunities

Any county that has a youth livestock educational opportunity open to kids outside of the county is invited to share that information with Lexie Hayes (adhayes@ksu.edu). This includes spring shows, showmanship clinics, skillathons, field days, other related events, etc. These opportunities will be included on the youth livestock website, under the events tab. Information on the site will be updated as approved 2025 opportunities are received directly from extension units. Events, activities, and shows must be submitted by local KSRE professionals to be included on the website.

HACCP Workshop Hosted in March

Implementing Your Company's HACCP Plan will be March 24-25, 2025, in Columbia, Missouri. This workshop uses curriculum recognized by the International HACCP Alliance for meat and poultry processors. The registration fee is \$450 per person and is available online at http://bit.ly/HACCPCourse. For more information, contact Dr. Liz Boyle (Iboyle@ksu.edu or 785-532-1247).

IRM Redbooks for Sale

A limited supply of the 2025 IRM Redbooks are still available. These are sold on a first-come, first-serve basis. The price is \$7.50 per book for orders of 10 or more and \$8.00 per book for orders of less than 10, which includes postage. To order your supply of Redbooks, please contact Katie Smith (katiesmith@ksu.edu or 785-532-1267).

SowBridge Educational Series for Swine Producers

If you work in or with breeding and gestation units, gilt development systems, or farrowing barns, the SowBridge program is for you. This program helps improve your understanding of important topics and increase productivity in your breeding herds and farrowing systems. Since 2007, the series has reached producers and industry professionals across the U.S. and around the world. Sessions are recorded and the audio is provided to subscribers as it becomes available.

SowBridge 2025-2026 runs from February 2025 through January 2026. Registrations are accepted anytime during the year. SowBridge is provided via 12 monthly electronic presentation sessions by swine industry experts. Session recordings ensure subscribers don't miss a thing.

The SowBridge Series' \$200 fee includes all 12 sessions and supporting materials. Additional subscriptions from the same operation are half that cost. The registration deadline is Jan. 20, 2025, to ensure participants will receive materials for the first session on Feb. 5. For a complete schedule and registration form, visit *KSUswine.org*. For more information, contact Joel DeRouchey (785-532-2280; jderouch@ksu.edu).

54th Annual Stockmen's Dinner

The 54th annual Stockmen's Dinner is scheduled for March 6, 2025, at the Stanley Stout Center in Manhattan, KS. Plan now to join us as we honor Richard Porter as the 2025 Stockman of the Year. Registration is \$50 per person and the deadline to register is February 20. To register, visit <u>asi.ksu.edu/stockmensdinner</u>. For questions, contact Katie Smith (katiesmith@ksu.edu or 785-532-1267).





What's New

Management Minute "Communication in the Workplace"

Justin Waggoner, KSU Extension Beef Cattle Specialist, Garden City, KS

Effective communication is essential in the workplace. Communication is an important aspect of workplace satisfaction, organizational productivity and customer service. In today's world there are many different methods of communication, which adds to the complexity and challenge of communicating in the workplace. There are countless examples of poor communication that led to unfortunate, unintended outcomes. So, what is effective communication and how can we become better communicators? Effective communication in the workplace accurately conveys information in a clear and concise manner while maintaining or enhancing personal relationships. Communication is a two-way process and requires an intentional effort from both the sender and the receiver. A recent article from Penn State Extension (<u>https://extension.psu.edu/effective-communication-in-the-workplace</u>) suggests that senders should clearly define the idea of the message and identify the purpose of the message (gain information, behavior change etc.) before sending. Senders also have to be increasingly aware of the physical and emotional environment the message is communicated in. Receivers are encouraged to focus on the message, and not let emotions determine the meaning of the words. It also best to assume positive intent and ask clarify questions if necessary. Effective organizational communication is essential and should strengthen the workplace by building trust and commitment within the organization.

Feedlot Facts

"MUD"

There are very few issues, outside of health, that can wreck cattle performance and decrease cattle comfort more than muddy pen conditions. Some regions of Kansas have seen record snowfall amounts this winter and although we are getting closer to spring, we still have a lot of winter left. The impact of mud on cattle performance is profound, 4-8 inches of mud reduces gain by approximately 14% and 12-24 inches of mud reduces gain by approximately 25%. Thus, for every four days cattle have to slog through hock-deep mud, add another day and 20 lbs of dry matter feed to reach finish and add 1 additional day for every seven days of slogging through mud over their pasterns.

It is also not uncommon for cattle to make fewer trips to the bunk when pens are exceptionally muddy, leading to reduces feed intake. Reduced feed intake coupled with increased maintenance energy requirements due to cold and the additional energy expenditure associated with getting to the bunk and the water tank further reduces cattle performance.

We cannot prevent winter storms, but we can prepare for them. Use the good days to improve pen conditions. Make sure all pens have good drainage to prevent water from standing and creating permanently muddy pens. Also, have a plan for snow removal. A wet snow has about 1 inch of moisture in each 8-10 inches of snow. If snow is removed from the pen immediately after the storm and before it can melt, that can prevent additional moisture from further degrading the pen surface.

Finally, if muddy conditions do occur, have a plan in place to remove at least a portion of the mud. After several days of severely muddy pens, you can watch cattle follow the box scraper and lay down in the firm, dry area the scraper leaves behind.

For more information, contact Justin Waggoner at jwaggon@ksu.edu

Management Considerations for April 2025

By Jason M. Warner, Ph.D., Extension Cow-Calf Specialist

Cow Herd Management

- Evaluate BCS and adjust nutrition for spring-calving females going into breeding.
 - Ensure thin (BCS \leq 4.0) females are on an increasing plane of nutrition.
 - BCS 5.0+ females should be maintaining weight and condition.
 - Record cow BCS and use it as a guide for future management.
 - Start lactation rations/supplementation by end of first calving cycle.
- Pregnancy check fall calving cows and make culling decisions.
 - How were pregnancy rates relative to last year?
- Do we need to re-think our fall/winter nutrition program?
- Plan your mineral supplementation for this coming spring and summer.
 - Make effort to measure intake regularly and adjust it as needed.
 - If using fly control products, start them at recommended area times.
 - Properly store bagged mineral and avoid damaging bags and pallets.
- Risk of grass tetany is greatest for lactating cows and older cows. Consider magnesium levels in mineral supplements, particularly for cows grazing the following:
 - wheat, rye, triticale, oats, bromegrass, and other cool-season forages
- Use the estrus synchronization planner to help plan synchronization protocols.
 <u>https://www.iowabeefcenter.org/estrussynch.html</u>
- Schedule breeding soundness examinations on bulls well prior to turnout.
 Allow plenty of time to re-test or find a replacement bull if needed

Calf Management

- Review health protocols for spring-born calves and schedule processing activities.
- If not already completed, wean and market fall-born calves.
- Consider the economic return by implanting nursing calves and grass cattle.
- If not already done, schedule your breeding protocols for replacement heifers in advance of the breeding season.
- If synchronizing with MGA, make sure intake is consistent at 0.5 mg of melengestrol acetate per hd per day for 14 days, and remove for 19 days prior to administering prostaglandin.

General Management

- Use the Management Minder tool on KSUBeef.org to plan key management activities for your cowherd for the rest of the year.
 - <u>https://cowweb.exnet.iastate.edu/CowWeb/faces/Index.jsp</u>
- Adjust turn-out dates as needed for drought stressed pastures.
- Consider your storage method for any leftover hay and feed and look for opportunities to minimize shrink during extended storage.
- Good sanitation around winter feeding and bedding areas helps reduce stable fly populations.
- Take a balanced, multi-tool approach to fly/insect control.
- Wrap up any last minute pasture management projects before spring turn-out:
 - Finish repairing fences.
 - Conduct burns, work to control trees and brush.
 - Ensure sufficient water is available when cattle are turned out.



What's New for Swine Producers

Effect of Precision Feeding SID Lysine and Amino Acids to Lactating Sows Compared to a Conventional Feeding Strategy on Sow and Litter Performance and Feed Cost in a Commercial Farm-A total of 728 gilts and parity 1 sows (Camborough, PIC, Hendersonville, TN) and litters (Camborough × PIC 800) were used in a 19-day lactation study to evaluate the effects of precision feeding Lys and other amino acids compared to providing a single lactation diet at a commercial sow farm. Sows were blocked by parity and allotted to one of two treatments at entry into the farrowing rooms. Treatments consisted of a single 1.07% SID Lys lactation diet or a blend of a high and low SID Lys diet to provide a specific targeted SID Lys intake for each day of lactation. Two diets were used to create the blended dietary treatment, a low Lys diet (0.60% SID Lys) or a high Lys diet (1.07% SID Lys). Sows fed the control diet treatment were fed only the high Lys diet. Sows on the blended diet treatment were fed a blend of the low and high Lys diet to target a specific Lys intake for each day of lactation using the Gestal Quattro Opti feeder (Jyga Technologies, St-Lambert-de-Lauzon, Quebec, Canada). Lysine intake targets were based on the NRC (2012) model estimates for gilts and sows with 17 piglets, with the exception that levels were increased by 20% to reach a targeted average Lys intake of approximately 63 g/d. Average Lys intake was 87% of target because sow feed intake during lactation was lower than predicted. As expected, sows fed the control diet treatment had greater (P < 0.001; 72.0 vs. 54.8 g/d) Lys intake compared to sows fed the blended diet treatment because they were fed only the high Lys diet. No differences (P > 0.05) in entry-to-wean change in sow BW, backfat or loin depth, caliper score, or ADFI were observed between treatments. There were no differences (P > 0.05) in litter size at d 2 after equalization or weaning between treatments; however, litters and piglets from sows fed the control treatment tended to have a greater weaning weight (P = 0.075) and ADG (P = 0.090) compared to litters and piglets from sows fed the blended diet treatment. This is likely due to low Lys intake for sows fed the blend diet treatment to maximize litter growth performance. Feed cost per sow was lower (P < 0.05) for sows fed the blend curve in both a low and high ingredient price scenario. No differences (P > 0.05) in feed cost per Ib of litter weight gain were observed; however, feed cost per weaned pig was lower (P < 0.05) for sows fed the blended diet treatment. Sows fed the control diet treatment had a higher (P < 0.05) serum urea nitrogen concentration on d 10 and at weaning compared to sows fed the blended diet treatment. Differences were also observed for milk crude protein content on d 10 and at weaning, with sows fed the control diet treatment having greater crude protein (P = 0.05) compared to sows fed the blended diet, also likely contributing to the differences observed in piglet weaning weight. Precision feeding sows using diet blending during lactation can be used to reduce feed cost, but future research should focus on using technology to automatically adjust diet blends for low or high feed intake sows to avoid the under or overfeeding of nutrients. More information is available on this experiment and others in the KSU Swine Day report at KSUSwine.org. (This study conducted by Mikayla S. Spinler, Jordan T. Gebhardt, Joel M. DeRouchey, Mike D. Tokach, Robert D. Goodband, Hyatt L. Frobose, and Jason C. Woodworth).

Effects of Dietary Acidifiers and Low Acid-Binding Capacity-4 (ABC-4) Formulation Strategies on Nursery Pig

Performance and Fecal Dry Matter-A total of 725 pigs (DNA 241 × 600, initially 13.0 lb) were used to determine the effect of dietary acidifiers and other low acid-binding capacity at a pH of 4 (ABC-4) formulation strategies on nursery pig performance and fecal dry matter (DM). At weaning, pigs were randomly allotted to one of five dietary treatments. There were five pigs per pen and 29 replications per treatment across two facilities. Pigs were fed experimental diets in two phases with phase 1 provided with a feed budget of 5 lb/pig followed by phase 2 diets fed until d 24 post-weaning. The first three diets were formulated to approximately 200 and 250 meq/kg in phases 1 and 2, respectively, by using three different formulation strategies. The three formulation strategies included: 1) lowering the Ca:P ratio by 0.20, 2) addition of 0.6% formic acid (Amasil NA; BASF; Florham Park, NJ), and 3) replacing whey permeate (Dairylac 80; International Ingredients Corporation; St. Charles, MO) with crystalline lactose. Fumaric acid (Primary Products Ingredients Americas LLC, Decatur, IL) was included at 0.46% for all low ABC-4 diets across both phases. Diet 4 was a high ABC-4 diet formulated to be 100 meq/kg greater than the low ABC-4 diets. The first four dietary treatments contained 110 ppm of Zn provided by the trace mineral premix. Diet 5 was diet 4 with the addition of 3,000 and 2,000 ppm of Zn from ZnO in phases 1 and 2, respectively. Following phase 2, all pigs were fed a common corn-soybean meal-based diet until the completion of the study on d 38 post-weaning. In the experimental period (d 0 to 24) and overall (d 0 to 38), pigs fed the lactose replacement strategy had decreased (P < 0.05) ADFI compared to pigs fed the other low ABC-4 formulation strategies. In the experimental period (d 0 to 24) and overall (d 0 to 38), pigs fed the low ABC-4 diets had improved ($P \le 0.022$) F/G compared to pigs fed the high ABC-4 diet. In the experimental period (d 0 to 24), pigs fed the diet containing ZnO had increased (P ≤ 0.001) ADG and ADFI compared to pigs fed the high ABC-4 diet without ZnO. On all fecal collection periods (d 8, 17, and 24), pigs fed the low ABC-4 diets had increased (P ≤ 0.024) fecal DM compared to pigs fed the high ABC-4 diet. In summary, low ABC-4 diets improved feed efficiency and fecal dry matter regardless of the formulation strategy. However, replacing whey permeate with crystalline lactose decreased feed intake. In addition, pigs fed diets containing fumaric and formic acid had the same ending BW and ADG as those fed the high ABC-4 diet with ZnO. More information is available on this experiment and others in the KSU Swine Day report at KSUSwine.org. (This study conducted by Ethan B. Stas, Mike D. Tokach, Joel M. DeRouchey, Jason C. Woodworth, Robert D. Goodband, and Jordan T. Gebhardt).

ASI Faculty Highlight



Mindy King (mindy24@ksu.edu or 785-532-5734) Assistant Professor of Animal Nutrition

Dr. Mindy King is originally from Rock Island, Tennessee, where she grew up actively involved in youth agriculture programs. She earned her bachelor's degree in Animal and Veterinary Science at the University of Tennessee - Martin, where her participation in summer undergraduate research programs sparked a strong interest in research. Mindy continued her education at the University of Kentucky, earning a Master's degree specializing in ruminant nutritional physiology while also managing the on-campus animal research facilities.

She later obtained her Ph.D. at Oklahoma State University, where she was recognized as a USDA National Needs Fellow in Omics. Her graduate research across both programs focused on understanding factors influencing feed intake regulation and the mechanisms underlying feed efficiency. While at Oklahoma State, Mindy had the unique opportunity to train and mentor both graduate and undergraduate students in their ongoing projects.

Currently, Mindy holds a 60% teaching and 40% research appointment. Her research aims to further explore the mechanisms governing feed intake regulation and feed efficiency in feedlot and stocker cattle. Outside of her role at Kansas State, Mindy enjoys traveling and spending time with her golden retriever, Bentley.



Tim Carson (tcarson@ksu.edu or 785-532-1191) Instructor

Tim Carson was born in Bartlesville, Oklahoma and grew up in rural Coffeyville on his parent's small farm. He attended Coffeyville Community College on a journalism scholarship and served as the Sports Editor of the CCC Collegian before moving on and earning his B.S. in Agriculture with a major in Animal Sciences and Industry from Kansas State University in 1999. In 2019, Tim completed his Masters in Academic Advising from Kansas State University.

Tim worked at Sprint in Kansas City after graduation before coming back to Manhattan and joining the ASI department as a Computer Information Specialist in August of 1999. Tim started teaching ASI 490 (now ASI 290), Microcomputer Applications, in August, 2002 and is also responsible for maintenance of the computers and wireless system at the farm units north of campus.

Tim and his wife, Melissa, have three children — Brett, Cade and Callie.

We need your input! If you have any suggestions or comments on **News from KSU Animal Sciences**, please let us know by email to katiesmith@ksu.edu

Animal Technician II - Agricultural Research Center Hays (Job #518567) - This

position is responsible for the management and care of up to 200 replacement heifers, 350 cows and their calves, and 200 stocker cattle both locally and at distant sites. The incumbent also provides leadership to a research program in cow/calf production. For more information or to apply go to <u>https://careers.k-</u> <u>state.edu/jobs/animal-technician-ii-other-kansas-united-states</u>

Be sure to check out the new Voices of #KSUASI podcast <u>asi.ksu.edu/voices</u>