News From KSU Animal Sciences

APRIL 2026

K-State Judging Team Reunion - April 18

This year's Judging Teams Reunion will be hosted on Saturday, April 18 at the Stanley Stout Center in Manhattan, KS. Teams that end in 6 will be recognized, along with our current teams attending K-State. The event begins with a social at 6:00 p.m., dinner at 6:30 p.m. followed by a program honoring current and former teams. For more information visit https://www.asi.k-state.edu/events/judging-reunion/. For questions contact Payton Dahmer (dahmerp@ksu.edu or 417-448-4934) or Katie Smith (katiesmith@ksu.edu or 785-532-1267).

Dr. Bob Hines Kansas Swine Classic

The 2026 Dr. Bob Hines Kansas Swine Classic is scheduled for July 10-11 at the Riley County Fairgrounds in CiCo Park in Manhattan. This two-day event includes an educational swine skillathon, photography contest, showmanship, and a prospect and market hog show. It is open to Kansas youth ages 7-18 as of January 1, 2026. Entries must be submitted online by 5 pm on June 22, with payment postmarked the same day. The flyer is available www.asi.ksu.edu/swineclassic. For more information, contact Joel DeRouchey (785-532-2280 or jderouch@ksu.edu) or Lexie Hayes (785-532-1264 or adhayes@ksu.edu).

Little American Royal

The Little American Royal happening April 18 at the Bilbrey Family Events Center in Manhattan, KS. The Little American Royal is the premier on-campus livestock show. See students compete in showmanship contests with a variety of species raised at our very own animal science research and teaching units. Presented by K-State Block and Bridle, Collegiate Cattle Women's, and the Dairy Science Club, the event begins at 10:00 a.m., and all are welcome to attend. For more information or questions contact Ashley Hartman (arhartma@ksu.edu or 785-532-1272) or Rachael Stadel (rmkstadel@ksu.edu or 785-532-2996).

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

HACCP Workshop Hosted in May

Implementing Your Company's HACCP Plan will be May 27-29, in Manhattan, KS. 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 (lboyle@ksu.edu or 785-532-1247).

Upcoming Events

April 18, 2026
K-State Open House & LAR

April 18, 2026
Judging Team Reunion

May 10, 2026
Wildcat Showdown

May 27-29, 2026
HACCP Course - Manhattan, KS

June 1-3, 2026
Champions Livestock Judging Camp 1

June 8-10, 2026
Champions Livestock Judging Camp 2

June 10-13, 2026
KASLA

July 10 - 11, 2026
Dr. Bob Hines Kansas Swine Classic

Upcoming Events

State Market Beef Nomination Deadline Approaching

The 2026 state livestock nomination season is upon us! Market beef nominations are due by May 1, 2026. This includes market steers and market heifers, of any breed. The deadline is a postmark and online submission deadline, but families need to plan ahead and get them submitted as soon as possible. Official DNA envelopes must be ordered in advance and families must complete their YQCA certification and the Declaration Form before submitting their nominations. The deadline to order official DNA envelopes is April 20. Families must mail their completed and signed DNA samples, as well as a copy of the receipt from their online nomination entry submissions (list of animals/tag numbers) by May 1. Late nominations are not accepted. Certified mail is highly encouraged. Extension agents and FFA advisors will approve nominations online. Nomination information for all species may be found on the KSU Youth Livestock Program website, including the link to the online system: https://www.asi.k-state.edu/extension/youth-programs/nominated-livestock/. The website includes an overview of the process, as well as the resources available. No paper forms or old DNA envelopes will be accepted. Families should use the checklist, make sure the DNA envelopes are signed by all exhibitors within the family, as well as a parent, and cross reference the information submitted online with the DNA envelopes (most importantly the Tag ID). For more information, contact Lexie Hayes via email at adhayes@ksu.edu or 785-532-1264.

Champions Livestock Judging Camps

Registration is now open for this year's Champion Livestock Judging Camps hosted on June 1-3 and June 8-10 in Manhattan, KS. This camp is designed for 4-H and FFA members (ages 14-18), who are seriously interested in enhancing their livestock judging and oral communication skills. Both sessions will include one-on-one coaching with the current coaches and students on the K-State Livestock Judging Team with a heavy focus on reasons! Registration is $350 and opened March 12. This is filled on a first-come, first-serve basis. For more information, visit asi.k-state.edu/judgingcamps or contact Payton Dahmer (dahmerp@ksu.edu or 417-448-4934) or Rachael Stadel (rmkstadel@ksu.edu or 785-532-2996).

K-State Animal Science Leadership Academy (KASLA)

The K-State Department of Animal Sciences and Industry is currently accepting applications for the K-State Animal Sciences Leadership Academy (KASLA). The program will be hosted June 10-13 on the K-State campus. Students will participate in tours and workshops, have mentor time with faculty, and evaluate current events within the industry. Participation is limited to 20 high school students. The program is sponsored by the Livestock and Meat Industry Council (LMIC) Inc., with the goal to develop young leaders within the livestock industry and prepare them for a successful future in this field. Applications are due April 30. For more information or to apply, visit http://www.asi.ksu.edu/KASLA or contact Ashley Hartman (ahartma@ksu.edu or 785-532-1272.)

What's New

Management Minute

"Organizational Culture"

Justin Waggoner
KSU Extension Beef Cattle Specialist
Garden City, KS

The term "organizational culture" continues to be a popular topic among management and leaders in the business world. Michael Watkins, in an article for the "Harvard Business Review" (https://hbr.org/2013/05/what-is-organizational-culture) suggests that organizational culture is often debated because we know it's important, but there is little consensus on what it actually is. The classical definition of organizational culture is the shared attitudes, values, goals, and practices that characterize an institution or organization. Others define organizational culture more simply as "who we are and how we do things". Most employees in non-remote positions spend more time in the workplace than their homes. Thus, the culture of an organization becomes an important component of a healthy workplace environment. A Gallup poll reported that employees who "strongly agree" with the statement "I feel connected to my organizations culture" are 3.7 times as likely to be engaged in their work and 68% less likely to feel "burned out". Culture is important. So, what is the culture of your organization? Independently and anonymously asking your staff or employees to "Define the culture of your organization in one or two words" can be great way to capture and define the culture of your organization.

Feedlot Facts

"Selecting a Mineral Supplement"

Justin Waggoner
KSU Extension Beef Cattle Specialist
Garden City, KS

One of the challenges cattle producers face is determining which mineral supplement they will use during the upcoming grazing season. Often this decision is based on the information provided on the mineral tag and price sheet. Although, price is an important consideration, other factors such as the concentrations of the minerals in the mix relative to the animals' requirements and sources of minerals used should be considered.

The first step in selecting a mineral supplement is to know what you are shopping for. Mineral mixes are often categorized based on the concentration of phosphorous in the mineral mix. Phosphorous is often deficient in cattle consuming forage-based diets and is our first priority in developing mineral supplements for grazing cattle. The amount of phosphorous required in a mineral mix to meet the requirements of a cowherd is a function of forage phosphorous content (determined via forage mineral analysis) and animal requirements, which are driven by mature body weight and production stage. A mineral mix that contains 6 to 10% Phosphorous would be adequate in many situations.

The next step is to spend some time reading the mineral tag. The guaranteed analysis section of the tag guarantees the concentration of the minerals listed. In general, the more guarantees the better, and if a mineral is not listed then it is not guaranteed to be in the mineral. The sources of the minerals used in the mix also warrant consideration as mineral sources differ in bio-availability (Table 1). For example copper sulfate is 100% available to the animal, whereas copper oxide is unavailable.

Relative bioavailability of trace mineral sources (adapted from Green et al., 1998)

Mineral	Sulfate	Oxide	Carbonate	Chloride
Cobalt	100	31	110	---
Copper	100	0	60	105
Iron	100	0	0-75	---
Manganese	100	58	28	---
Zinc	100	60-80	60	40

For more information about mineral supplementation, see "Questions and Answers on Beef Cattle Nutrition (http://www.oznet.ksu.edu/library/lvstk2/c733.pdf).

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

KSU Cow-Calf Checklist - April 2026

"What We Should be Thinking About This Coming Summer… in June"

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

Cow Herd Management

- For spring-calving cowherds:
  - Monitor BCS relative to feed/forage availability.
  - Formulate your plan if you anticipate early-weaning this season or supplementing on grass to stretch dry pastures.
  - Schedule early pregnancy checking activities with your vet if not already done.
- For late-summer and early-fall calving cowherds:
  - Ensure mature cows are ≥ 5.0 and 2-4 year old females are ≥ 6.0 in BCS at calving.
  - Review your calving health protocols and adjust them as needed.
- For free-choice salt and mineral programs:
  - Record date and amount of product offered, calculate herd or pasture consumption.
  - Adjust how you are offering product to cattle if they over- or under-consume.
  - If consumption is 2 or 3X the target intake, then your cost will be too!
  - Properly store bags and pallets to avoid damage and product loss.
- For bulls at the start of the breeding season:
  - Closely watch for injury so you can intervene and treat bulls promptly if needed.
  - Ensure they are aggressively covering cows, note it if you find they are not.
  - Monitor BCS and muscle stores, particularly on yearling and 2-3 year old bulls.
  - If pulling bulls from cows to manage the length of the breeding season, schedule those dates and have them your calendar in advance so you don't forget.

Calf Management

- If considering creep feeding calves, make sure you understand what your objective is by doing so and calculate the value of gain relative to cost of gain.
- Closely monitor calves for summer respiratory illness.
- Schedule any pre-weaning vaccination or processing activities, get the dates on your calendars.

General Management

- Visit KSUBeef.org (https://www.asi.k-state.edu/extension/beef/) for info and events!
- Evaluate early-summer grass growth and adjust your grazing plan as needed.
- Make concerted efforts to control invasive species in pastures.
- Take inventory of remaining forages and feedstuffs carried over to this fall.
- Use the Management Minder tool on KSUBeef.org to plan key management activities for your cowherd for the rest of the year https://cowweb.exnet.iastate.edu/CowWeb/faces/Index.jsp.
- Employ multiple strategies and chemistries for controlling flies and insects.
- With high feeder calf prices, consider all price risk management tools.
- Make and evaluate important production calculations (always a good time for this):
  - 1) Calving distribution (% 1st cycle, % 2nd cycle, % 3rd cycle)
  - 2) Calving interval
  - 3) % calf crop (# calves weaned/# cows exposed for breeding).

What's New for Swine Producers

Effect of Increasing Arginine:Lysine Ratio During Transition and Lactation on Farrowing Kinetics, Milk Composition, and Sow and Litter Performance- A total of 90 sows (Line 241, DNA Genetics, Columbus, NE) were used to determine the effect on farrowing kinetics, milk composition, and sow and litter performance of increasing the SID Arginine:Lysine ratio in transition and lactation diets fed to mixed-parity sows. Sows were blocked by parity and body weight (BW) on approximately d 108 of gestation and allotted to 1 of 3 dietary treatments of increasing SID Arg:Lys (90, 105, or 120%). Sows received approximately 6 lb/d of their treatment diet from d 109 of gestation until farrowing after which they were allowed *ad libitum* access to their treatment diet. Litters were cross fostered within 48 h after farrowing to equalize litter size. SID Arg:Lys did not impact ($P > 0.10$) sow BW or backfat change during lactation, nor influence sow ADFI either pre farrow or during lactation. Average SID Arg intake increased (linear, $P < 0.001$) with increasing SID Arg:Lys ratio as expected. Wean to estrus interval decreased then increased (quadratic, $P = 0.044$) with increasing SID Arg:Lys ratio. No differences were observed ($P > 0.10$) for the number of total pigs born or for the percentage of total born alive, stillborn and mummified nor did treatment influence the litter size, litter weight, or prewean mortality at any time point. At d10 the average BW of piglets tended to be lower in the 120% SID Arg:Lys ratio treatment compared to the 90% SID Arg:Lys ratio treatment ($P = 0.061$). Piglet ADG from d 0 to d 10 tended to be greater in the 90% SID Arg:Lys ratio group compared to the 120% SID Arg:Lys ratio group ($P = 0.084$), while no differences in piglet performance were observed from d 10 to wean or birth to wean. The SID Arg:Lys ratio did not affect ($P > 0.10$) farrowing duration, colostrum yield, or colostrum intake. Increasing SID Arg:Lys ratio did not affect ($P > 0.10$) the concentration of IgG in either colostrum and milk and did not impact milk composition or BUN measured in the sow or piglet. This data suggests that increasing SID Arg:Lys ratio from 90 to 120% will not impact farrowing kinetics or sow and litter performance. More information is available on this experiment and others at KSUSwine.org. *(This study conducted by Sara Virdis, Abigail K. Jenkins, Jason C. Woodworth, Jordan T. Gebhardt, Robert D. Goodband, Mike D. Tokach, and Joel M. DeRouchey).*

Effects of Standardized Ileal Digestible Lysine:Crude Protein Ratio in Diets with or without Distillers Dried Grains with Solubles on Growth Performance of 25 to 45 lb Pigs- A total of 5,059 pigs (PIC 800 × Camborough and DNA 600 × 241; initially 24.3 ± 1.99 lb) were used in an 18-d trial to evaluate SID Lys:CP ratios for 25 to 45 lb pigs in diets with and without DDGS, resulting in diets that contained high or low levels of SBM on growth performance. Pigs were weaned at approximately 21 d of age and housed in mixed-sex pens with approximately 35 pigs per pen. A pelleted early nursery diet was fed to all pigs from weaning until the beginning of the experiment. When pigs reached approximately 24 lb, pens were assigned to one of 12 treatments in a completely randomized design with pen serving as the experimental unit. A total of 143 pens were used, resulting in 11 or 12 replications per dietary treatment. Experimental treatments were arranged in a 2 × 6 factorial with main effects of DDGS (0 or 15%) and SID Lys:CP ratio (6.01, 6.22, 6.45, 6.70, 6.97, or 7.26). Pigs were weighed at the beginning and at the end of the study on d 18. Overall (d 0 to 18), a SID Lys:CP × DDGS interaction was observed (linear, $P < 0.001$) for feed efficiency where increasing SID Lys:CP ratio in diets without DDGS improved ($P < 0.001$) F/G quadratically, with the poorest F/G on the lowest and highest SID Lys:CP ratios; whereas in the diets with DDGS, F/G worsened (quadratic, $P < 0.002$) as the SID Lys:CP ratio increased above 6.45. For the main effects, ADG increased quadratically ($P = 0.021$) as the SID Lys:CP ratio increased, with the greatest ADG with ratios of 6.45 to 6.97. Conversely, ADFI increased linearly ($P = 0.018$) as SID Lys:CP increased up to the highest level tested. A tendency was observed for pigs fed no DDGS resulting in increased ($P = 0.071$) ADG and improved ($P = 0.010$) F/G. In conclusion, formulating diets to the SID Lys:CP ratio of 6.70 without DDGS and 6.45 in diets with DDGS improves feed efficiency. Further increasing the ratio leads to a reduction in feed efficiency, possibly due to nitrogen becoming the limiting factor as crude protein is decreased. Additionally, feeding diets without DDGS can lead to an improvement in ADG and F/G. More information is available on this experiment and others at KSUSwine.org. *(This study conducted by Jessica L. Smallfield, Mike D. Tokach, Katelyn N. Gaffield, Robert D. Goodband, Joel M. DeRouchey, Jason C. Woodworth, Jordan T. Gebhardt, Henrique S. Cemin, Melissa R. Pietig, Zach A. Schumacher, and Jose A. Soto).*

Effects of Increasing Standardized Ileal Digestible Valine:Lysine Ratios on the Growth Performance of 50 to 80 lb Pigs- A total of 351 pigs (DNA 600 × 241; initially 47.1 ± 0.77 lb) were used in a 21-d experiment to determine the effects of increasing standardized ileal digestible (SID) Val:Lys ratio in 50 to 80 lb pigs. There were 12 replications per treatment with five pigs per pen. Pens of pigs were randomly assigned to one of six corn-soybean meal-based dietary treatments with SID Val:Lys ratios of 60, 63, 66, 69, 72, and 75%. A basal diet was formulated with the lowest SID Val:Lys ratio and L-valine was added to create the diet with the highest Val:Lys ratio. The high and low diets were then blended to create the intermediate diets. On d 0, 10, and 21, pigs were weighed to determine ADG, ADFI, and F/G. Blood was drawn on d 10 for plasma urea nitrogen (PUN) analysis. From d 0 to 10, BW, ADG and F/G improved (linear, $P < 0.05$) as SID Val:Lys ratio increased, but with little improvement past a 72% Val:Lys ratio. No differences were observed from d 10 to 20 ($P > 0.10$). Similar to d 0 to 10, the overall F/G improved (linear, $P = 0.012$) as Val:Lys ratio increased but with little improvement past 72% Val:Lys ratio. As Val:Lys ratio increased, there was an increase in PUN concentration (linear, $P = 0.029$). Valine intake grams per day and Val intake per kg of gain increased (linear, $P < 0.001$) as Val:Lys ratio increased. Lysine intake per kg of gain decreased (linear $P = 0.029$) as the Val:Lys ratio increased. Broken-line analysis indicated overall feed efficiency improved with increasing Val:Lys ratio with the breakpoint at a 69% SID Val:Lys ratio. The results of this study suggest that a 69 to 72% SID Val:Lys ratio may be ideal for 50 to 80 lb pigs. More information is available on this experiment and others at KSUSwine.org. *(This study conducted by Samantha A. Swanson, Jason C. Woodworth, Mike D. Tokach, Robert D. Goodband, Joel M. DeRouchey, Katelyn N. Gaffield, and Jordan T. Gebhardt).*

What's New for Cattle Producers

The Effect of Arrival Vaccine Combination on Performance and Efficiency During the Receiving and Backgrounding Phase- Given the array of options for vaccination protocol combinations, the objective of this study was to evaluate a direct comparison of various product lines on their effects on feed intake early in the feeding period.

Study Description: A total of 393 heifers were used in a 56-day backgrounding trial to assess the effects of three different arrival vaccine combinations on growth performance, feed efficiency, health, and water use during the receiving and back-grounding period. Treatments were: Pyramid [Pyramid 5 + Presponse SQ (Boehringer Ingelheim, Ridgefield, CT) and Bovilis Vision 7 Somnus with Spur (Merck Animal Health, Rahway, NJ)]; Stimulator [Stimulator 5 (Bimeda, Schaumburg, IL), Pro-Bac 4 (Bimeda, Schaumburg, IL), and Bovilis Vision 7 with Spur (Merck Animal Health, Rahway, NJ)]; and Bovi-Shield Gold [Bovi-Shield Gold One Shot (Zoetis Inc., Parsippany, NJ) and Bovilis Vision 7 Somnus with Spur].

The Bottom Line: These data suggest that the combination of vaccine treatments used upon arrival in this study had no negative effects on the growth performance, feed efficiency, or health outcome of heifers. It is important to consider the health status of the cattle being vaccinated as well as the number of injections given during a processing event. More information is available on this study and others like it at KSUBeef.org. This study conducted by Macie C. Weigand, Dale A. Blasi, and A. J. Tarpoff).

A Preliminary Study: The Effects of Vaginal Flushing in Cattle on Mitigating Vaginitis Induced by a Controlled Internal Drug Release (CIDR)- The objective was to characterize CIDR-induced vaginitis in beef heifers by quantifying inflammatory cells and evaluating if flushing the vagina with a saline solution after CIDR removal reduces polymorphonuclear leukocyte (PMN) cells on day 10 compared to unflushed heifers.

Study Description: Beef heifers (n = 19) from the Kansas State University Heifer Development Unit were stratified by weight and randomly assigned to CIDR+Flush (n = 7), CIDR (n = 7), or control (n = 5). Vaginitis scores were given visually. Vaginal cytology samples were collected with sterile swabs and analyzed on days 0, 7, and 10. On day 7, the CIDRs were removed, vaginitis scores assessed, and a sterile saline solution was used in the CIDR+Flush group to lavage the vagina at CIDR removal in conjunction with using a Metricheck device to remove the flush from the vagina.

The Bottom Line: CIDR-induced vaginal inflammation is an issue in yearling heifers. Using strategies to indicate when PMN levels are greatest could optimize interventions and improve reproductive outcomes. More information is available on this study and others like it at KSUBeef.org. *This study conducted by Sydney B. Noel, Danielle M. Ellinghuysen, Allen G. Schwartz, Lucilene B. Rangel, Sydney H. Flax, Ronni Adams, Ty Miller, and Nicholas W. Dias).*

Effects of Short Duration Omega-3 Based Fatty Acid Supplementation to Developing Heifers on Growth, Intake, and Reproduction- The objective of this study was to assess the effect of omega-3 fatty acid supplementation on body weight gain, feed intake, and reproductive efficiency in replacement heifers.

Study Description: This two-year study (2024: 56 days, 2025: 68 days) at Kansas State University evaluated omega-3 supplementation on spring-born heifers. Heifers were assigned based on body weight and age to one of two treatments: non-supplemented control (NOSUPP, n = 39) or supplemented (SUPP, n = 46) with 0.48 - 0.72 lb/day dry matter basis of an extruded flaxseed and algae-based supplement designed to provide omega-3 fatty acids (Better Fed Foods/NBO3, Manhattan, KS). In 2024, NOSUPP had one diet, while in 2025, more than one base diet was fed due to ingredient availability and logistical constraints. Estrus was synchronized (Select Synch + controlled internal drug release + artificial insemination), and then heifers were exposed to Angus sires for ≥ 45 days. Body weight, intake, and pregnancy status were measured and analyzed in SAS.

The Bottom Line: Omega-3 supplementation improved heifer growth, which increased total body weight gain and average daily gain. Reproduction was not statistically different, though pregnancy rates rose slightly, suggesting a possible added benefit. More information is available on this study and others like it at KSUBeef.org. *This study conducted by Megan C. Sollors, Allen G. Schwartz, Brandon J. Fraser, and Jason M. Warner).*

The Effects of Aging Period and Freezing Sequence on Desmin Degradation of Longissimus lumborum, Semitendinosus, and Biceps femoris Steaks The objective of this study was to examine the impact of freezing and aging sequence on the degradation of desmin, an indicator of tenderness during post-mortem proteolysis, within three beef muscles across two aging periods.

Study Description: Longissimus dorsi, semitendinosus, and biceps femoris steaks were fabricated into 1-in. steaks and assigned to one of four treatment combinations: age- then-freeze (AF) for 21 or 28 days or freeze-then-age (FA) for 21 or 28 days. Samples were ground and frozen and then prepared for Western blotting to evaluate desmin degradation. Desmin bands were visualized, and images were captured to quantify intact and degraded desmin.

The Bottom Line: Reversing the freezing order increased desmin degradation for steaks aged for 28 days indicating an increase in proteolytic activity. Previous research indicates there were no differences in instrumental tenderness for this project. Thus, even with increased protein degradation, the change was not enough to affect tenderness. More information is available on this study and others like it at KSUBeef.org. *This study conducted by Taylor M. Dieball, Greta E. Huber, Samuel F. Stickley, Kiersten M. Gundersen, Kasey R. Maddock Carlin, Morgan D. Zumbaugh, Jessie L. Vipham, Travis G. O'Quinn, and Erin S. Beyer).*

ASI Faculty Highlight

Joel DeRouchey (jderouch@ksu.edu or 785-532-2280)
Professor / State Extension Leader

Dr. Joel DeRouchey grew up on a diversified purebred swine, cattle and sheep operation in Pukwana, S.D. He graduated with his Animal Science degree from South Dakota State University in 1997 and his M.S. (1999) and Ph.D. (2001) in Swine Nutrition from Kansas State University. He was hired in 2001 as the Northeast Livestock Extension Specialist for Kansas State University. In 2004, Joel moved to the Department of Animal Sciences and Industry and is currently full professor and State Animal Science Extension Program Leader and has a 50% Extension and 50% Research appointment.

A brief listing of Joel's Extension and Research interests involve:

- Provide farmers, allied industry and Extension agents with livestock related assistance and information.
- Mentor and train swine nutrition graduate students in applied swine nutrition and management.
- Help provide youth with swine experiences to increase industry knowledge and awareness of career opportunities in swine production.

Joel is the faculty coordinator for ASI 890 and ASI 990 Graduate Student Monogastric Seminar and formerly taught ASI 320 Principles of Feeding. Joel works with a productive applied swine nutrition team that maintains approximately 12 MS and PhD students. He has co-authored 332 refereed journal papers, 862 extension publications and field day reports and a co-advisor or committee member for 105 MS and PhD graduate students. Joel has been named the National ASAS Outstanding Extension Specialist, AFIA Nonruminant Nutrition Research Award, North Central Region Excellence in 4-H Volunteerism Award, and the 2010 by South Dakota State University as a Distinguished Young Alumni. Joel and his wife, Julene, have three children James, Jenna and Jacob and currently lives on a small farm near Wamego, KS.

Kelsey Bentley (kbentley@ksu.edu or 785-532-6537)
Assistant Professor/Extension Specialist

Dr. Kelsey Bentley, originally from Micro, North Carolina, grew up in a family deeply involved in youth livestock programs. She completed her bachelor's degree in Animal Science at North Carolina State University, where she was actively involved in the livestock judging team and served as a flock technician for the NC State Small Ruminant Unit.

Kelsey pursued a master's in Animal Physiology at West Virginia University and coached the livestock judging team. Although the Covid-19 pandemic interrupted her ability to coach, she continued her research efforts by utilizing the Katahdin flock at the Southwest Agricultural Research and Extension Center in collaboration with Virginia Tech. Her master's work focused on Katahdin lambs' response to CD&T vaccination and remains a cornerstone of her research. She was the recipient of the Distinguished Ruby Doctoral Fellowship and earned her Ph.D. from West Virginia University in 2024. Her doctoral research examined the multifaceted immune outcomes influenced by selection for parasite resistance in Katahdin sheep, encompassing the exploration of antibodies in ewe colostrum and milk, and the evaluation of differential lipopolysaccharide-induced behavioral, immune, and plasma metabolome responses.

Kelsey is currently the Small Ruminant Extension Specialist, with responsibilities divided into 60% extension, 25% research, and 15% teaching. She is dedicated to improving the sheep industry and supporting youth involvement in this sector. Her research now centers on animal health and well-being, shifting focus from Katahdin hair sheep to the Polypay flock at Kansas State University.

Outside of work, Kelsey enjoys gardening and cooking with her husband, Cooper. They have a beloved dog named Sage and manage a small flock of club lambs marketed to local youth back in North Carolina.

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