

KSU Beef Stocker Field Day to be hosted September 28



Come and help us celebrate the 24th KSU Beef Stocker Field Day, which will be hosted Thursday, September 28, 2023, at the KSU Beef Stocker Unit in Manhattan. The day will start at 9:30 a.m. with registration/coffee and concludes with a good old-fashioned Prairie Oyster Fry and Call Hall ice cream at 5:30 p.m.

The schedule is as follows:

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| 9:30 a.m. | Registration/Coffee |
| 10:15 a.m. | Introductions |
| 10:30 a.m. | Dr. Glynn Tonsor – <i>K-State Beef Cattle Outlook</i> |
| 11:15 a.m. | Producer Panel – Labor: Recruiting and Retention <ul style="list-style-type: none"> • J.D. Powell – Sandhills Hay Co. Ltd • Dr. Karol Fike – K-State • Chad Cargill – Cargill Ranch • Keith Bryant – Cobalt Cattle Company Moderator: Wes Ishmael – <i>Hereford World</i> , Executive Editor |
| 12:15 p.m. | Barbeque Brisket Lunch – View posters |
| 1:15 p.m. | Dr. Lee-Anne Walter and Dr. Tim Parks, Merck Animal Health
<i>Latest research into the top pharmaceutical technologies yielding the highest economic return in stocker cattle</i> |
| 2:15 p.m. | Dr. Logan Thompson – K-State
<i>Accounting for the environmental impact of grazing cattle: appreciating our ecological niche</i> |
| 3:00 p.m. | Break |
| 3:30 p.m. | Alfredo DiCostanzo – University of Nebraska- Lincoln
<i>Fine-tuning bunk calls in the grow yard</i> |
| 4:15 p.m. | Dr. Zach Smith – South Dakota State University
<i>Appropriate use of steroidal implants during the backgrounding and stocker chase: impacts on growth performance and carcass out comes upon harvest</i> |
| 5:30 p.m. | Cutting Bull's Lament- Old fashioned Prairie Oyster Fry and Call Hall ice cream. |

Pre-registration is \$25 and due by September 14. For complete details and registration, visit asi.ksu.edu/stockerfieldday. For more information contact Dr. Dale Blasi (dblasi@ksu.edu or 785-532-5427) or Katie Smith (katiesmith@ksu.edu or 785-532-1267.)

Department of Animal Sciences and Industry

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Register Now for K-State ASI Family & Friends Reunion



Register now for the 9th annual Family and Friends Reunion to be hosted on Saturday, October 7, 2023 at the Stanley Stout Center. The event will begin at 4:00 p.m. with dinner served at 5:30 p.m. To register go to www.asi.ksu.edu/familyandfriends. The registration deadline is September 22, 2023. This year we will be honoring Dr. Larry Corah with the Don L. Good Impact Award.

Implementing Your Company's HACCP Plan Scheduled for Sept. 27-29

Ä Implementing Your Company's HACCP Plan will be hosted September 27-29, 2023, in Olathe, 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

September 27-29, 2023

HACCP Workshop- Olathe KS

September 28, 2023

**K-State Beef Stocker Field Day-
Manhattan, KS**

October 7, 2023

**K-State ASI Family & Friends
Reunion- Manhattan, KS**

November 2-3, 2023

**Better Process School for
Acidified Foods- Online**

November 16, 2023

**K-State Swine Day-
Manhattan, KS**

Upcoming Events



**KANSAS STATE UNIVERSITY
SWINE DAY**

**THURSDAY,
NOVEMBER 16, 2023**

K-STATE ALUMNI CENTER
1720 Anderson Ave, Manhattan, KS



KSU Swine Day Planned for November 16

Make plans to attend the 2023 KSU Swine Day. The event will be hosted Thursday, November 16 at the KSU Alumni Center.

The schedule for the day is as follows:

- 8:00 a.m. Trade Show
- 9:15 a.m. Welcome
Dr. Mike Day, Department Head, Animal Sciences and Industry
- 9:30 a.m. Latest Update on K-State Applied Swine Nutrition Research-
15-minute rotations including topics on Swine Nutrition,
Management, Feed Processing, and Feed Safety
K-State Swine Faculty
- 11:30 a.m. Lunch with Technology Trade Show
- 1:30 p.m. Latest Update on K-State Applied Swine Nutrition Research
- 2:15 p.m. Lessons from a Legacy in the Swine Industry
Wayne Cast
- 3:15 p.m. Question-and-Answer Session
- 3:30 p.m. Reception with K-State Call Hall Ice Cream

Pre-registration is \$25 per participant and due by November 8. On-site registration is \$50 per participant. There is no charge for any students if they are pre-registered. The complete schedule and online registration information can be found at [KSUswine.org](https://ksuswine.org). For more information, contact Katie Smith (katiesmith@ksu.edu or 785-532-1267.)

Youth for the Quality Care of Animals (YQCA) Certification Requests Due for Sept. 20



The Youth for the Quality Care of Animals (YQCA) is a national, multi-species youth livestock quality assurance program that was launched in 2017. Youth may participate in the program online or through a face-to-face class with a certified instructor. This is a fee-based program, which is \$12/child for the online course or \$3 for a face-to-face session. Kansas has renewed its partnership with the program for 2023-2024, which allows extension agents and ag teachers to have the opportunity to obtain their certification and teach youth the curriculum through face-to-face sessions. The current program year is coming to a close and the new curriculum will launch in early October. Agents who were certified last year will receive information on re-certifying as the new program year approaches. Any new or additional agents who would like to become certified need to email Lexie Hayes at adhayes@ksu.edu by September 20 to be added to the approved list for Kansas. Once agents complete the certification process, the YQCA staff will distribute the new materials and their certification will be valid until September 1, 2024. Any instructor or family who did not create an account on the new platform when the program transitioned in March of 2022, will need to do so soon. Everyone is encouraged to use the help documents and videos available to make the process go smoothly and make sure accounts are set up correctly from the beginning. This will minimize complications later. Although a final decision will be confirmed by each respective board later this fall, we do anticipate exhibitors will continue to be required to complete YQCA certification annually to participate in the Kansas State Fair Grand Drive and the Kansas Junior Livestock Show.

Online Better Process School for Acidified Foods Planned for Nov. 2-3

Online Better Process School for Acidified Foods will be offered in an online format November 2 and 3 from 8 a.m. to 12 p.m. each day. Registration is \$400 and the deadline to register is October 20. The training is for food processors that process and sell acidified foods and/or acid foods. Participants will receive a certificate of completion upon passing two tests. The training meets FDA requirements. To register for the course, please go to the following link <https://foodsci.k-state.edu/extension/extension-events.html>. The course is being offered by Kansas State University and University of Missouri. For questions, please contact Kelly Getty, Co-Director of the Kansas Value Added Foods Lab (kgetty@ksu.edu or 785-532-2203.)

Check out the monthly ASI
headlines at
<https://bit.ly/KSUASIHeadlines>

Jobs Available– Now Hiring

Dairy Teaching and Research Center Manager (Job #515771)

– This is a full-time, unclassified professional staff, Term Contract. The DTRC Manager is responsible for the day-to-day management of personnel, animals, and unit facilities at the DTRC. The incumbent will also work closely with faculty and students to facilitate research trials at the DTRC. Animal care – The DTRC Manager oversees the routine care (feeding, milking, reproductive management, herd health, waste management, etc.) of the mature cows and young stock. The incumbent will work with herd veterinarians and faculty supervisors to establish, execute, and evaluate standard operating protocols for maintaining optimum animal care, herd production, and research study outcomes. Operational management – The DTRC Manager will oversee and conduct routine daily operational management of the facility. Supervision – The DTRC Manager will lead a talented team of employees to ensure adequate care of livestock and daily operations of the DTRC. To read more details and to apply, go to <https://careers.k-state.edu/cw/en-us/job/515771/dairy-teaching-and-research-center-manager>.

Animal Technician Supervisor—Dairy Teaching and Research Center (Job # 515576)

-This is a full-time, unclassified professional staff, term contract position. This position is critical to the overall operation of the KSU Dairy Teaching and Research Center. It involves supervision of other employees and the care and comfort of the animals housed at the DTRC at Kansas State University. Incumbent functions as the assistant manager of the Dairy Teaching and Research Center and is responsible for ensuring the safety of the cows and other dairy unit employees. Assumes responsibility for operation of the dairy unit in the manager's absence. Incumbent is responsible for milking cows at least two days each week and for making vital animal observations during the milking process. Incumbent is responsible for collecting sterile samples of milk to be tested for antibiotics or bacteria. To apply, go to <https://careers.k-state.edu/cw/en-us/job/515576/animal-technician-supervisor>.

Animal Technician I- Swine Unit (Job #515792)

— This is a full-time, University Support Staff (USS.) This position provides essential workload and responsibility for the KSU swine unit associated with animal care, health, and well-being as well as supporting research efforts. Review of applications begins: Immediately and continues until position is filled. For more information, contact Dr. Jason Woodworth at 785-532-1157 or jwoodworth@ksu.edu; Mark Nelson at 785-539-9351 or mnelson@ksu.edu. To apply, go to <https://careers.k-state.edu/cw/en-us/job/515771/dairy-teaching-and-research-center-manager>.

Animal Technician II - Dairy Unit- 2 Positions

Available(Job # 512403 & #510744)- This is a full-time, University Support Staff (USS) position. This position exists to operate and maintain the feed mill facility and feed the milk herd at the Dairy Teaching and Research Center. Review of applicants begins immediately and continues until the position is filled. For more information, contact Mike Brouk, Search Committee Chair (mbrouk@ksu.edu or 785-532-1207.) To apply, go to <https://careers.pageuppeople.com/742/cw/en-us/job/512403/animal-technician-ii>.

Animal Technician II – Dairy Unit (Job # 513849)

– This is a part-time, University Support Staff (USS) position. This position exists to milk, feed, and provide care of Dairy Teaching and Research Center (DTRC) dairy herd, which is used for teaching and research purposes. This is an AS NEEDED position. The incumbent could be called to fill in for Emergency situations, 24 hours a day 7 days a week. Review of applications begins immediately and continues until the position is filled. For more information, contact Mike Brouk, Search Committee Chair (mbrouk@ksu.edu or 785-532-1207.) To apply, go to <https://careers.k-state.edu/cw/en-us/job/513849/animal-technician-ii>.

**WE'RE
HIRING**

Kansas State University
K
Animal Sciences and Industry

What's New for Beef Cattle Producers

Management Minute

“Building Successful Teams in the Workplace”

Most of us have had some experience with being part of a team or different groups of individuals. Some teams of individuals are highly successful and some are not. What makes some teams more successful than others? The tech giant “Google” has invested a great deal of time and resources into studying teams and reported their most successful teams have the following traits.

The most successful teams at “Google”

- Establish psychological safety within the team. The team creates an environment where all members of the team feel free to bring new ideas forward to the group.
- Are dependable. The team holds its members accountable, getting things done on time and up to the standards of the group.
- Have structure and clarity. The members of the team know their role in the team and have a clear vision of the team’s structure and the expectations associated with their role on the team.
- Have a purpose. The team members believe that what they are doing matters.

A wealth of information on building teams and characteristics of highly successful teams can be found with a simple internet search.

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

Feedlot Facts

“Let’s Talk About Calf Revenue”

Many producers are weaning and will be marketing calves in the coming weeks and months. Margins in the cattle industry are often narrow and maximizing calf revenue is important for cow calf producers every year. Calf revenue from my academic perspective is driven by three factors, 1.) the number of calves sold, 2.) sale weight of calves and 3.) price received.

Cow calf producers to some extent have control over the number of calves sold and sale weight. The number of calves sold is essentially a function of stocking rate, cow fertility and/or reproduction on an operation. The sale weight of calves is more complex but is a multi-factorial combination of genetics, calving distribution, calf age, nutrition, management and technology use (implants). Price received is likely the most influential of the three factors that drive calf revenue and is the factor that cow calf producers often believe they have the least ability to control. Once a set of calves, enters the sale ring, or appears on the video screen their value is determined by what two prospective buyers are willing to pay. Although it is impossible for producers to directly influence what buyers are willing to pay, I would argue that they are not completely helpless. Cow calf producers directly control what they will sell (weaned calves, value-added calves or feeders), and when they sell. These are difficult, complex decisions, that shouldn’t necessarily be made based upon weekly cattle sale reports or the thoughts of your favorite livestock market commentator. I am not saying that keeping informed about current market conditions isn’t important. However, that information when used with resources like Beef Basis (www.beefbasis.com) that use data to evaluate different market scenarios, from selling 6 weight calves the first week of December, to seven weights in February helps producers make an informed data-driven decision for their operations.

Producers also control what information or data they pass along to the new owner. Data has value in today’s world. I compare marketing calves to selling a beautifully restored pickup. If you were selling a classic pickup, you would share with a prospective buyer every bit of information you had, parts invoices, repairs etc. Why should selling a set of calves be any different? Value added programs and certified sales offer potential buyers some degree of assurance that cattle were managed within the guidelines of a specific program. If you don’t participate in a defined program, providing the auctioneer or sales representative with as much information as possible about your cattle only helps them do their job better.

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

KSU Cow-Calf Checklist – September 2023

Management Considerations for November 2023

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

Cow Herd Management

- For spring-calving cow herds:
 - If not already done, make plans for weaning calves.
 - Test your forages and have feedstuffs on hand prior to weaning.
 - Check and clean waterers and prepare weaning/receiving pens.
 - Evaluate cow BCS at weaning.
 - Record scores with the BCS Record Book (<https://bookstore.ksre.ksu.edu/Item.aspx?catId=562&pubId=19320>) from KSRE!
 - Use BCS to strategically supplement cows during fall, if needed.
 - Female requirements are lowest at weaning so weight and BCS can be added more easily in early fall rather than waiting until closer to calving.
 - Schedule pregnancy checking and fall health work if not already done.
 - How were pregnancy rates relative to last year?
 - Do we need to re-think our fall/winter nutrition program?
 - Evaluate the cost of gain relative to the value of gain when making feeding and marketing decisions for cull cows.
- For fall-calving cow herds:
 - If not already done, review your calving health protocols as needed.
 - Have calving equipment cleaned and available to use as needed.
 - Plan to adjust your nutrition program to match needs of lactating cows.
 - Use the estrus synchronization planner (<https://www.iowabeefcenter.org/estrussynch.html>) to help plan fall synchronization protocols.
- Plan your mineral supplementation for this coming fall and winter.
 - Record date and amount offered and calculate herd consumption.
 - If consumption is 2X the target intake, then cost will be too!
 - Risk of grass tetany is greatest for lactating cows. Consider magnesium levels in mineral supplements for cows grazing cool-season forages and winter annuals this fall.
- Schedule breeding soundness exams for bulls used for fall and winter service.
 - Monitor BCS, particularly on young bulls.
 - If bulls are BCS \leq 5.0, consider supplementing to regain BCS going into winter.

Calf Management

- Consider the economic value by implanting nursing fall-born calves and weaned spring-born calves.
- If not already done, schedule your breeding protocols for fall 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

- Take inventory of and begin sampling harvested forages for fall feed needs.
 - Be aware of possible presence of molds and other anti-nutritional compounds in hay harvested at higher than typical moisture levels.
 - Test for nitrates and prussic acid when appropriate.
- Use the forage inventory calculator (<https://www.agmanager.info/hay-inventory-calculator>) to balance forage inventories with fall/winter grazing acres.
- If grazing crop residues following harvest, keep the following in mind:
 - The bottom 1/3 of the stalk is where nitrates accumulate.
 - Be aware of prussic acid in new regrowth of sorghum plants, and the time around frost is the greatest risk.
 - High amounts of down grain will require a change in management.
- Use the Management Minder tool on KSUBeef.org (<https://www.asi.k-state.edu/extension/beef/tools.html>) to plan key management activities for your cowherd for the rest of the year.
- With high feeder calf prices, consider price risk management tools.
- Begin preparing for cold weather (i.e. tank heaters, windbreaks, bedding.)

What's New for Beef Cattle Producers

Consumer Sensory Evaluation of Ground Beef and Plant-Based Ground Beef Alternatives Used in a Hamburger Application

The objective of this study was to evaluate the palatability traits and consumer acceptance of three plant-based ground beef alternatives in comparison to ground beef in a foodservice-like hamburger application. Three popular plant-based ground beef alternatives (GBA) and 80% lean, 20% fat composition ground beef chubs (n = 20) were selected for consumer analysis. Samples were cooked to an internal temperature of 160°F, plated on a bun and served to consumers with the opportunity to apply ketchup, mustard, cheese, lettuce, and pickles. Consumers evaluated the differences in palatability traits and purchase intent for the samples identified as: Ground Beef, Foodservice GBA, Retail GBA, and Traditional GBA.

The Bottom Line: This research indicates the use of ground beef and ground beef alternatives provide different eating experiences when consumed as a complete hamburger and should be marketed as such by the foodservice and retail sectors. More information is available on this experiment and others in the KSU Cattlemen's Day report at KSUbeef.org. For more information, contact Travis O'Quinn (785-532-3469 or travisquinn@ksu.edu) or A.J. Tarpoff (785-532-1255 or tarpoff@ksu.edu).

Consumer Sensory Evaluation of Ground Beef and Plant-Based Ground Beef Alternatives Used in a Taco Application

The objective of this study was to evaluate consumer preferences for palatability traits and consumer acceptability of three plant-based protein alternatives and ground beef in a taco application. Three commercially available plant-based ground beef alternative (GBA) treatments (n = 20) were selected based upon industry prevalence. The GBAs' were identified as the most popular in the marketing sectors of foodservice (FGBA), retail (RGBA), and traditional (TGBA). One ground beef (80% lean; 20% fat) treatment (n = 20) was selected. Samples were crumbled into a skillet and cooked to a surface temperature of 180°F. Following cooking, a generic taco seasoning was added following manufacturer's instruction. Samples were served on a flour tortilla with the opportunity to add cheese, lettuce, and tomatoes.

The Bottom Line: This research indicates consumers preferred ground beef to ground beef alternatives when used as a crumbled protein ingredient in tacos. Ground beef should be marketed as a distinct eating experience to consumers at foodservice and retail when plant-based ground beef alternatives are available in similar crumbled products. More information is available on this experiment and others in the KSU Cattlemen's Day report at KSUbeef.org. For more information, contact Travis O'Quinn (785-532-3469 or travisquinn@ksu.edu) or A.J. Tarpoff (785-532-1255 or tarpoff@ksu.edu).

Change in Myoglobin Denaturation Among Three Degrees of Doneness of Three Muscles

The objective of this study was to determine the changes in myoglobin denaturation through cooking three different muscles to medium rare, medium, or well-done degrees of doneness. Strip loins (n = 12) and top butts (n = 12) were used to evaluate the physiochemical properties of the longissimus dorsi, biceps femoris, and gluteus medius for three degrees of doneness (DOD; medium rare, medium, and well-done).

The Bottom Line: As expected, the myoglobin denaturation percentage increased with increasing DOD and behaved similarly to changes in the a* values. This research gives more insight into the impacts of cooking and the changes that proteins, especially myoglobin, undergo between different DOD. More information is available on this experiment and others in the KSU Cattlemen's Day report at KSUbeef.org. For more information, contact Travis O'Quinn (785-532-3469 or travisquinn@ksu.edu) or Liz Boyle (785-532-1247 or lboyle@ksu.edu).



What's New for Swine Producers

Evaluation of Clay-Based Binders and In-Feed Antimicrobials on Growth Performance and Biological Measurements in Nursery Pigs

A total of 360 barrows (DNA 200 × 400; initially 14.2 ± 0.08 lb) were used in a 42-d growth study to evaluate clay-based binders or an in-feed antimicrobial on growth performance and biological measurements including fecal and blood analysis in nursery pigs. Pigs were weaned at approximately 21 d of age and randomly allotted to 1 of 4 dietary treatments in a completely randomized design. There were 5 pigs per pen and 18 replications per treatment. Dietary treatments were corn-soybean meal-based and fed in two phases from d 0 to 9 (phase 1) and 9 to 21 (phase 2) after weaning. Either Protek (0.40% of the diet; Nutriquest, Mason City, IA); Protect-8 Plus (0.10% of the diet; Essential Ag Solutions, Sioux Falls, SD); or Kavault (0.04% of the diet; Avilamycin; Elanco, Greenfield, IN) were added to the control diet to create the experimental treatments. A common phase 3 diet was fed to all pigs from d 21 to 42. Overall (d 0 to 42), pigs fed Kavault had increased ($P < 0.05$) final BW, ADG, and ADFI compared to all other treatments. There was evidence that frequency of fecal scores with softer feces increased over time ($P < 0.001$), with d 21 having the greatest frequency of diarrhea and soft feces. Fecal Escherichia coli colony count was lower ($P < 0.001$) on d 21 compared to d 9. For fecal myeloperoxidase (MPO), concentrations were lower ($P < 0.05$) on d 21 compared to d 6 and 9. For fecal DM, pigs fed Kavault had decreased ($P < 0.05$) DM percentage compared to all other treatments. Fecal DM percentage was higher ($P < 0.05$) on d 6 and 9 compared to d 21. No differences ($P > 0.10$) were observed across treatments for fecal scores, fecal E. coli colony count, fecal MPO or virulence genes associated with E. coli. Similarly, no differences ($P > 0.10$) were observed across treatments for TNF-alpha and IL-6 blood assays. For IL-6, concentrations were greater ($P < 0.05$) on d 9 compared to d 21. In summary, pigs fed Kavault had increased BW, ADG, and ADFI, compared to those fed the 2 clay-based additives or the control diet. There were no treatment effects on fecal score, fecal MPO, or blood measurements. However, we observed a day effect indicating that feces were softer and had less DM on d 21 compared to d 6 and 9. Additionally, fecal E. coli colony count and MPO had lower concentrations of d 21 compared to d 9. There was a strong negative correlation between fecal DM and score ($P < 0.001$) on d 6, 9, and 21 indicating that as fecal DM increased, the score became closer to 0, representing a firmer fecal sample. Fecal DM on d 6 and fecal DM on d 9 were negatively correlated with ADG from d 0 to 9 meaning that as growth rate increased, fecal DM decreased. More information is available on this experiment and others in the KSU Swine Day report at KSUSwine.org. (This study conducted by Larissa L. Becker, Jordan T. Gebhardt, Mike D. Tokach, Robert D. Goodband, Joel M. DeRouchey, Jason C. Woodworth, Raghavendra G. Amachawadi, Ramya Kalam, Xiaorong Shi, and Z.T. Nagaraja.)

Measurement of the Acid-Binding Capacity of Common Ingredients and Complete Diets Intended for Weaning

Pigs- Some ingredients bind more acid in the stomach than others which can increase gastric pH in weaned pigs, causing decreased protein digestion and allowing pathogenic microorganisms to proliferate. The objective of this experiment was to measure acid-binding capacity at a pH of 4 (ABC-4) of common nursery ingredients and determine additivity in diets. Ingredient categories included: cereal grains, vegetable proteins, animal proteins and milk, vitamin premixes and minerals, amino acids, and fiber sources. A 0.5 g sample of each ingredient was suspended in 50 mL of distilled deionized water and titrated with 0.1 N hydrochloric acid. Sample ABC-4 was calculated as the amount of acid in milliequivalents (meq) required to lower 1 kg of a sample to a pH of 4. Cereal grains were found to have lower ABC-4 compared to other ingredients. Vegetable proteins had higher ABC-4 with more variation than cereal grains. Soy protein concentrate and enzymatically treated soybean meal (ESBM) had higher ABC-4 compared to SBM while fermented soybean meal (FSBM) was lower. Zinc oxide (ZnO) and calcium carbonate (CaCO₃) had the highest ABC-4 among all ingredients. Following ingredient analysis, a series of complete diets were analyzed to determine ingredient additivity by comparing the differences between calculated and analyzed ABC-4. Perfect ABC-4 additivity was not found, with all diets having lower analyzed ABC-4 than calculated values; however, the analyzed ABC-4 followed dietary calculated values for higher or lower ABC-4 diet values. These data suggest that ABC-4 diet can be adjusted through selection of ingredients, but feeding trials are needed to determine the impact on pig performance. 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



Maci Mueller (muellermaci@ksu.edu)

Assistant Professor- Animal Breeding & Genetics

Dr. Maci Mueller is an assistant professor of Animal Breeding and Genetics in the Animal Sciences and Industry Department. Mueller is originally from Princeton, Nebraska, where she was actively involved in her family's first-generation seedstock operation, Lienetics Angus Ranch. This experience was instrumental in developing her career goal of becoming an animal geneticist.

She earned her B.S. in animal science with a political science minor from the University of Nebraska-Lincoln and then her M.S. and Ph.D. in animal biology from the University of California, Davis (UC Davis). During her graduate career, Mueller was recognized for her academic achievements, research accomplishments, and outreach efforts. She was honored with the prestigious American Society of Animal Science (ASAS) Agri-King Outstanding Animal Science Graduate Student Award in 2022 and received the W.D. Farr – National Cattlemen's Foundation Scholarship in 2021.

Mueller's appointment is 70% teaching and 30% research. She will be teaching Genetics (ASI 500) and her research will focus on the application of genetic-based biotechnology, such as gene editing, to improve livestock production. Gene editing is a molecular tool that allows livestock breeders to precisely add, delete, or replace letters in the genetic code to influence a specific trait of interest in as little as one generation. Her goal is to enhance animal health and welfare while improving production efficiency, by leveraging the potential of genetic-based biotechnologies. Additionally, Mueller is passionate about effective science communication and is driven to provide research and education to expand the availability and application of genetic-based biotechnologies in livestock production systems.

Maci, her husband, Kale, and their son, Titus, live in Manhattan.



Dale Blasi (dblasi@ksu.edu or 785-532-5427)

Professor & Extension Specialist- Beef Cattle Nutrition & Management

Dale A. Blasi was born and reared on his family's farm and ranch in southeast Colorado, near Trinidad. He received his B.S. in Animal Sciences at Colorado State University in 1984. In 1986, he received his M.S. in Beef Systems Management at Colorado State University. He continued his education at the University of Nebraska where his dissertation addressed protein supplementation strategies for beef cows and growing cattle.

After earning his Ph.D. degree in 1989, he accepted an appointment as a Livestock Specialist in South Central Kansas at Hutchinson for Kansas State University. While there, he focused on cow calf and stocker nutrition and management strategies, forage quality and harvest efficiency, forage utilization systems and utilization of food industry byproducts. In 1997, he transitioned to the Department of Animal Sciences and Industry at Kansas State University as a State Beef Specialist where he currently has a 10% teaching, 20% research and 70% extension appointment. His responsibilities include providing statewide Extension educational leadership in stocker cattle nutrition and management and utilization of grazed and harvested forages by beef cattle and other livestock, conducting research and interpreting results and serving as a resource person for other state and area specialists, county Extension agents, producers and allied industry personnel. In recent years Blasi has developed and teaches the class, ASI 650, Identification and Data Management of Food Animals, to both undergraduate and graduate students.

Since 1998, he has developed and evaluated information and management applications using handheld computers and individual animal electronic identification technologies for the beef industry. He is manager and director of the KSU Beef Stocker Unit and Animal Identification Knowledge Laboratory, a unique facility designed to evaluate the performance of existing and emerging animal identification technologies in a laboratory and animal management setting.

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