

## Make Plans to Attend the 2024 KSU Swine Day



### KANSAS STATE UNIVERSITY SWINE DAY

THURSDAY,  
NOVEMBER 21, 2024

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



Register now for the 57th Annual KSU Swine Day, to be hosted at the K-State Alumni Center in Manhattan, Kansas, on Thursday, November 21. The trade show, with more than 30 exhibitors, will begin at 8 a.m., followed by a great program with updates on K-State Applied Swine Nutrition Research, and featuring a presentation from PJ Corns and Kyle Coble with JBS Live Pork LLC on "Creating Opportunities in a Large Production System."

The schedule is as follows:

- 8:00 am Technology Trade Show  
*The trade show will conclude at 4 p.m.*
- 9:15 am Welcome - Dr. Mike Day, K-State ASI Department Head
- 9:30 am Innovation Update - Dr. Marshall Stewart, K-State Senior VP Executive Affairs and Chief of Staff
- 9:45 am Latest Update on K-State Applied Swine Nutrition Research
- 11:30 am Lunch with Technology Trade Show
- 1:30 pm Latest Update on K-State Applied Swine Nutrition Research
- 2:30 pm Creating Opportunities in a Large Production System  
*Dr. Kyle Coble and PJ Corns, JBS Live Pork LLC*
- 3:15 pm Question-and-Answer Session
- 3:30 pm Reception with K-State Call Hall Ice Cream

Pre-registration is \$25 per participant and due by November 13. 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](http://KSUswine.org). For more information, contact Katie Smith ([katiesmith@ksu.edu](mailto:katiesmith@ksu.edu) or 785-532-1267).

## IRM Redbooks for Sale

The 2025 IRM Redbooks are now for sale and will be 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](mailto:katiesmith@ksu.edu) or 785-532-1267).

## Save the Date - Swine Profitability Conference

The K-State Swine Profitability Conference is scheduled for Tuesday, February 4, 2025 at the Stanley Stout Center. More details about the program and schedule will be available soon at [KSUswine.org](http://KSUswine.org).

## Save the Date - Cattlemen's Day

The 2025 Cattlemen's Day date has been set for March 7 and will be hosted in Manhattan at the Kansas Farm Bureau building. More information about next year's event will be available soon at [KSUBeef.org](http://KSUBeef.org).



03.07.25

KANSAS STATE UNIVERSITY  
CATTLEMEN'S DAY

### 2025 LOCATION

Kansas Farm Bureau Building • 2627 KFB Plaza • Manhattan, KS  
[asi.k-state.edu/cattlemensday](http://asi.k-state.edu/cattlemensday)

### Department of Animal Sciences and Industry

Kansas State University  
218 Weber Hall, 1424 Claflin Road  
Manhattan, KS 66506  
785-532-6533 | [asi@ksu.edu](mailto:asi@ksu.edu)



## Upcoming Events

November 21, 2024  
Swine Day

February 4, 2025  
Swine Profitability Conference

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

# Upcoming Events

## Save the Date for 2025 K-State Junior Producer Days

Save the Date! The 2025 K-State Junior Producer Day dates have been set for next spring. Since it is an odd year, it will be swine and meat goat. These are one-day educational events during which families learn about the selection and management of youth livestock projects. The junior day programs will be on a Saturday at the Stanley Stout Center, north of campus in Manhattan. Junior Swine Producer Day will be March 1, with Junior Meat Goat Producer Day scheduled for March 22. Stay tuned for more information, including the tentative schedule and registration details, later this month.



## Youth for the Quality Care of Animals (YQCA) Began New Program Year October 1



The national, multi-species youth livestock quality assurance program, Youth for the Quality Care of Animals (YQCA), launched the new program year on October 1. Therefore, a new set of educational modules are now available for youth to complete. Extension Agents and Ag Teachers who requested to become certified instructors to teach face-to-face classes should have received an email the first week of October. The training is completed entirely online, through an instructor's account. Once the certification process is complete, the teaching materials will appear in the instructor's online account and they may begin scheduling and hosting classes. Members who would like to participate in an online training should complete the web-based course. Youth interested in an instructor-led course can find the in-person courses available by registering through the platform. Youth may complete the online training for \$12/child or participate in an instructor-led session for \$3/child. The test-out option is only available for youth who are 12 or 15 as of January 1. All participants must register and pay through the YQCA site, regardless of the type of training. A young person's YQCA certification is valid for one year, so youth need to re-certify annually. The Kansas State Fair Grand Drive and KJLS are expected to continue requiring all exhibitors to complete YQCA to be eligible to exhibit in the 2025 shows. Youth will need to re-certify prior to ordering state nomination envelopes in the early spring (for market animals and commercial females) or entry (those only showing registered breeding females). Since certification is valid for one year, exhibitors who take the course this fall, or in early winter, will be set for the 2025 year. The YQCA staff has also developed Help Documents and videos to guide families through the process, from registration through downloading and printing the completion certificate. Many families found these resources incredibly helpful last year. For more information, contact your local extension office or Lexie Hayes ([adhayes@ksu.edu](mailto:adhayes@ksu.edu); 785-532-1264).

## 54th Annual Stockmen's Dinner

The 54th Stockmen's Dinner is scheduled for March 6, 2025, at the Stanley Stout Center. Plan now to join us as we honor Rich Porter as the 2025 Stockman of the Year. When registration and more information becomes available details will be posted at [asi.ksu.edu/stockmensdinner](http://asi.ksu.edu/stockmensdinner).

# What's New

## Management Minute

### *“Leadership... What’s your style?”*

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

The most commonly recognized leadership styles are authoritarian, democratic and laissez-faire. However, there may be seven to 12 different leadership styles that include styles such as transformational, transactional, servant, charismatic, and situational. Although some of these leadership styles are unique, there is also some degree of similarities or overlap as well and in some situations, a leader may change their leadership styles to fit the situation (situational). The concept of situational leadership was first recognized by Paul Hersey and Ken Blanchard (author of the “One Minute Manager”). They recognized that successful leaders often adapted their leadership style or styles to the individual or group they were leading. Collectively these different leadership styles remind us that not all leaders lead the same way and some leaders even change leadership styles. There is no one way to lead, motivate and inspire individuals or groups to succeed. Leadership is complex and we still have a lot to learn about leadership.

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

## Feedlot Facts

### *“Body Condition Scoring; A Herd Management Tool”*

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

Body Condition Scoring is one of the most valuable management tools at the disposal of the cattle manager. The number associated with a condition score gives us a direct indication of a cow's previous plane of nutrition and future reproductive capability. Although the individual body condition scores are important. We don't manage individual cows, we manage groups of cows. Thus, it is important for us to look beyond the individual scores and look at the distribution of body condition scores within the herd. If we have a herd (Herd 1) with an average body condition score of 5 that is essentially characterized by the classic bell curve, with a few thin cows (3s), the bulk of cows in the middle (4s and 5s) and few over-conditioned cows (7s) everything is good. Alternatively we could have a herd (Herd 2) with an average body condition score of 5 that is essentially the result of a few thin cows (3s) and some over conditioned cows (6s and 7s). Body Conditioning Scoring also has more value when it is done on the same group of cows at multiple times during the production year. If Herd 2 was scored at calving and had been previously scored at weaning and had an essentially normal distribution (similar to Herd 1). We need to ask ourselves what happened. Did we change anything? Although these examples are somewhat extreme they illustrate that we have to look beyond the individual body condition scores of cows at one point during the production year to get the most of body condition scoring.

We have several resources on body condition scoring available at [ksubeef.org/feedandwater.html#main management](http://ksubeef.org/feedandwater.html#main%20management) including the quick reference guide to body condition scoring shown below.

**Body Condition Scorecard for Cattle**

	Physical Attribute						
	BCS	Spine	Ribs	Hooks/ Pins	Tailhead	Brisket	Muscling
Thin	1	Visible	Visible	Visible	No fat	No fat	None/atrophy
	2	Visible	Visible	Visible	No fat	No fat	None/atrophy
Borderline	3	Visible	Visible	Visible	No fat	No fat	None
	4	Slightly visible	Foreribs visible	Visible	No fat	No fat	Full
Optimum Condition	5	Not visible	1 or 2 may be visible	Visible	No fat	No fat	Full
	6	Not visible	Not visible	Visible	Some fat	Some fat	Full
Over-Conditioned	7	Not visible	Not visible	Slightly visible	Some fat	Fat	Full
	8	Not visible	Not visible	Not visible	Abundant Fat	Abundant Fat	Full
	9	Not visible	Not visible	Not visible	Extremely Fat	Extremely Fat	Full

Adapted from Herd & Sprott, 1986; BCS = body condition score

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

# KSU Cow-Calf Checklist - October 2024

## Management Considerations for December 2024

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

### Cow Herd Management

- If not already done, take inventory of and test harvested forages for the following:
  - Moisture/dry matter
  - Crude protein
  - Energy (NEm, NEg, and/or TDN)
  - Fiber components (ADF, NDF)
  - Macro-minerals (calcium, phosphorus, magnesium, potassium, salt)
  - Nitrates and/or prussic acid when appropriate
  - Starch for silage crops
- Calculate forage needs based on herd inventory, cattle weight, and days, and develop a plan to ensure that adequate harvested forage is available if grazing is limited ([agmanager.info/hay-inventory-calculator](http://agmanager.info/hay-inventory-calculator)).
- Body condition score cows to develop informed supplementation strategies (both spring and fall-calving herds).
  - Targeted BCS at calving: 5 for mature cows, 6 for young females (2, 3 & 4 year olds)
  - Record scores with the BCS Record Book ([bookstore.ksre.ksu.edu/Item.aspx?catId=562&pubId=19320](http://bookstore.ksre.ksu.edu/Item.aspx?catId=562&pubId=19320)) from KSRE!
- Consider utilizing crop residues for late-fall and winter grazing needs. Assess down grain in the field and be aware of nitrates and prussic acid (around the time of frost for sorghums).
- For spring-calving cowherds:
  - Schedule pregnancy checking if not already done.
    - How were pregnancy rates relative to last year?
    - Do we need to re-think our fall/winter nutrition program?
- For fall-calving cow herds:
  - Plan to adjust your nutrition program to match needs of lactating cows.
  - Use the estrus synchronization planner ([iowabeefcenter.org/estrussynch.html](http://iowabeefcenter.org/estrussynch.html)) to help plan synchronization protocols.
- Review your marketing strategy for cull cows.
  - Cows with a BCS  $\geq 6.0$  will likely sell well with current market prices.
  - Look for opportunities to increase value by adding weight prior to market.
- Ensure bulls undergo breeding soundness exams prior to fall/winter service.
- Manage young and mature bulls during the offseason to ensure bulls are BCS  $\geq 5.0$  prior to the next season of use.

### Calf Management

- If not already done, make arrangements to wean spring-born calves.
  - Finalize plans to either market calves or retain and add weight post-weaning.
  - If marketing calves, communicate your strategy to prospective buyers in advance.
- 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.
- If retaining calves post-weaning:
  - Review your nutrition plan.
  - Ensure you have sufficient forages available to match cowherd needs.
  - Closely observe feed and water intake the first few weeks.
  - Make sure all cattle have sufficient access to feed and water.
- Review/update your health protocols as needed for either weaned or new-born calves.
- Consider either supplementing fall-calving pairs or creep feeding fall-born calves to maintain calf performance on low-quality winter forages.
- For replacement heifers, manage your program to properly develop them prior to your given breeding time.

### Forage/Pasture Management

- Make plans for controlling invasive species for the next growing season.
- Winterize water sources if applicable.
- Work on fencing/facility projects as time/weather allows.

### General Management

- Develop and/or review your risk management plans for the coming year.
- Evaluate your short and long-term herd inventory goals with current conditions.
- Update lease arrangements as necessary.
- Schedule an annual meeting with your lender, insurance agent, and extension professional.
- Consider opportunities to lock prices in, if possible, for co-products and commodity feeds.
- Understand what nutrients you are targeting to purchase and price feeds on a cost per unit of nutrient basis.



# What's New for Swine Producers

**Evaluation of Anchovy Fish Meal with or without Added Fish Solubles on Nursery Pig Performance**-A total of 1,134 pigs (L337 × 1050 PIC; initially 10.4 lb) were used to evaluate anchovy fish meal with or without added fish solubles on nursery pig performance in a commercial environment. At weaning, pigs were allotted to 1 of 3 dietary treatments containing three different specialty protein sources added on an SID Lys basis. Dietary treatments consisted of a control diet containing enzymatically treated soybean meal at 7.0% of the diet, a diet containing 5.1% anchovy fish meal, and a diet containing 5.33% anchovy fish meal with added anchovy fish solubles. Pigs were fed experimental diets in phases 1 and 2 based on feed budget with phase 1 fed at 5 lb/pig and phase 2 fed at 12 lb/pig. Experimental diets were fed for approximately 21 d after weaning. Following experimental diets, all pigs were fed a common corn-soybean meal-based diet until the completion of the study. There were no differences in growth performance throughout the experimental period (d 0 to 21). During the common period (d 21 to 42), pigs previously fed anchovy fish meal with added fish solubles had improved ( $P < 0.05$ ) feed efficiency compared to pigs fed the control diet, with those fed anchovy fish meal alone intermediate. Overall (d 0 to 42), there was a tendency was observed ( $P = 0.070$ ) where pigs fed anchovy fish meal with added fish solubles had numerically better feed efficiency compared to the other treatments. In conclusion, feeding pigs anchovy fish meal alone resulted in no differences in growth compared to pigs fed diets with enzymatically treated soybean meal, but utilizing anchovy fish meal with added anchovy fish solubles in early nursery diets improved feed efficiency late in the nursery period. More information is available on this experiment and others in the KSU Swine Day report at [KSUSwine.org](http://KSUSwine.org). (This study conducted by Ethan B. Stas, Joel M. DeRouchey, Mike D. Tokach, Jason C. Woodworth, Robert D. Goodband, and Jordan T. Gebhardt.)

**Evaluation of Lactose Level Intake and Whey Permeate Form on Nursery Pig Performance**- A total of 1,512 pigs (Line 337 × 1050 PIC; initially 10.4 lb) were used to evaluate lactose level and whey permeate form on nursery pig performance in a commercial environment. Pigs were weaned at approximately 19 d of age and were allotted to 1 of 4 dietary treatments arranged in a 2 × 2 factorial utilizing low or high lactose levels with either granular whey permeate (Dairylac 80, International Ingredients Corporation, Fenton, MO) or spray-dried whey permeate. There were 27 pigs per pen and 14 replications per treatment. Pigs were fed experimental diets in two phases with phase 1 having a 5 lb/pig feed budget and phase 2 having a 12 lb/pig feed budget. The low lactose diets consisted of 10.0 and 4.13% whey permeate for phases 1 and 2, respectively, and targeted a total lactose intake of 0.80 lb/pig. The high lactose diets consisted of 20.0 and 8.25% whey permeate for phases 1 and 2, respectively, and targeted a total lactose intake of 1.60 lb/pig. Following experimental diets, all pigs were fed a common corn-soybean meal-based diet until the completion of the study. There were no lactose level × whey permeate form interactions for the duration of the study ( $P > 0.10$ ). For main effects of lactose level, pigs fed high lactose levels had increased ( $P \leq 0.024$ ) ADFI compared to pigs fed low lactose levels from d 7 to 21 and the experimental period (d 0 to 21). For main effects of whey permeate form, overall (d 0 to 42) pigs fed spray-dried whey permeate had improved ( $P = 0.041$ ) feed efficiency compared to pigs fed granular whey permeate. There were no differences in mortality or removals between treatments ( $P > 0.10$ ). In conclusion, this study suggests a lactose intake of 1.60 lb/pig increases feed intake compared to a lactose intake of 0.80 lb/pig during the experimental period regardless of whey permeate form. Additionally, spray-dried whey permeate improved feed efficiency regardless of the lactose level fed. More information is available on this experiment and others in the KSU Swine Day report at [KSUSwine.org](http://KSUSwine.org). (This study conducted Ethan B. Stas, Jason W. Frank, Tingting Wang, Joel M. DeRouchey, Mike D. Tokach, Jason C. Woodworth, Robert D. Goodband, and Jordan T. Gebhardt.)

**Exploring the Use of Probicon L28 and BIOPLUS 2B as Direct-Fed Microbials to Reduce Salmonella and Shiga Toxin-Producing Escherichia coli in Market Pigs**

-Pigs are hosts for Salmonella and Shiga toxin-producing Escherichia coli (STEC) and these pathogens can commonly be isolated from the pig farm environment. Pigs can carry pathogens to the abattoir and contaminate pork products, posing a risk to public health. Identifying an intervention that effectively reduces pathogens in commercial pigs before harvest is imperative. Due to the need for effective pre-harvest interventions in the pig industry, the objective of this study was to investigate BIOPLUS 2B (Bacillus licheniformis and Bacillus subtilis) and Probicon L28 (Lactobacillus salivarius L28) as pre-harvest interventions to reduce Salmonella and STEC in commercial growing-finishing pigs. Two groups of pigs (group 1, N = 294; group 2, N = 356, initial body weight = 106.6 lb) were fed a standard corn-soybean meal (SBM) finishing diet according to the following treatments: Probicon L28 supplementation through water lines at  $1.0 \times 10^6$  CFU/head/day (Probicon); BIOPLUS 2B supplemented at  $3.0 \times 10^9$  CFU/head/day (BIOPLUS 2B); and a control with no added probiotic (Control). With each group of pigs, 12 pens were used per treatment (N = 24 total), for a total of 36 pens per group (N = 72 pens total). Each group was sampled upon arrival/baseline, midway through the grow-finish phase/6 weeks post-placement, and prior to loadout/13 weeks post-placement to collect fecal samples (4 pigs/pen), boot covers (2/pen), and ropes (1/pen). Market pigs were followed to the abattoir and superficial inguinal lymph nodes (SILNs) were collected. All samples were analyzed for STEC (stx, eae genes, and O157:H7, and O26, O111, O121 O45, O103, and O145 serogroups) and Salmonella using the BAX System (real-time polymerase chain reaction). Overall, Salmonella and O111 prevalence was very low for all sample types, and Escherichia coli O157:H7 was not detected in any samples throughout the study. When compared to the control, there was no evidence ( $P > 0.05$ ) that BIOPLUS 2B and Probicon L28 impacted the prevalence of STEC (stx and eae genes) or serogroups O26, O121, O45, O103, and O145 in feces, boot covers, ropes, and SILNs of market pigs. More information is available on this experiment and others in the KSU Swine Day report at [KSUSwine.org](http://KSUSwine.org). (This study conducted Jimeng Bai, Macie E. Reeb, Mike D. Tokach, Jordan T. Gebhardt, Jason C. Woodworth, Robert D. Goodband, Joel M. DeRouchey, Jessie L. Vipham, Qing Kang, John W. Schmidt, Dayna M. Brichta-Harhay, Joseph M. Bosilevac, Morgan Miller, and Sara E. Gragg.)

# ASI Faculty Highlight

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**Jason Warner (jasonwarner@k-state.edu or 785-532-1460)**  
**Assistant Professor & Extension Cow-Calf Specialist**

Jason M. Warner grew up assisting with his family's farming and cow-calf operations in Nebraska. He was active in 4-H and FFA programs as a youth and attended the University of Nebraska-Lincoln earning bachelor of science degrees in Animal Science and Grazing Livestock Systems. While at UNL, Jason was a member of the livestock judging and meat animal evaluation teams. Having a strong interest in conducting cow-calf systems research, Jason continued training at UNL and subsequently earned both master's and doctorate degrees in Animal Science. Following completion of his doctorate degree, Jason served beef cattle producers throughout different segments of the cattle industry as part of a private consulting company that focused on providing nutrition and management service to clients.

Jason joined the Animal Sciences and Industry faculty at Kansas State University in 2022 as an Assistant Professor and Extension Cow-Calf Specialist. His objective is to help support the mission of the land-grant system by serving people through extension and research as part of the K-State beef extension team. Jason's specific focus is to help provide leadership for state extension beef programming efforts, disseminate information to the industry, collaborate with allied industry

personnel and stakeholders, conduct applied cow-calf systems research, and serve as a point of resource for area specialists and county extension agents. Jason enjoys spending time with and taking care of his family. He and his wife, Danielle, have two boys — Beau and Woodrow.



**Emma Briggs (eabriggs@ksu.edu or 785-625-3425)**  
**Assistant Professor & Beef Systems Extension Specialist**

Emma grew up on her family's commercial cow-calf operation in Northern California. She was actively involved in 4-H and FFA programs during her youth. She earned a bachelor's in Animal Science from California State University, Fresno, followed by a master's in Animal Science from Colorado State University, where her research focused on animal breeding and genetics. Emma went on to earn a doctorate in Animal Science from Oklahoma State University, specializing in ruminant nutrition.

Emma joined Kansas State University as an Assistant Professor and Beef Production Systems Specialist at the Agricultural Research Center in Hays, Kansas. Here, she utilizes a cow herd and feedlot to conduct practical research that supports Kansas cattle producers. Her research focuses on enhancing beef cattle efficiency and adaptability to tackle key challenges in the livestock industry.

*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](mailto:katiesmith@ksu.edu)*

# Jobs Available - Now Hiring

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**Research Assistant - KSU Commercial Cow-Calf Unit (Job #517949)**- This is a Full-Time, Unclassified, Term position. This position will support the operations of the KSU Commercial Cow-Calf Unit under the direct supervision of the Farm Manager. The incumbent must be willing to be called to work to collect animals who have escaped in the evenings, weekends and/or on Holidays, and be willing to work outdoors in extreme heat or cold temperatures. The incumbent will be deemed "Essential" during periods of Inclement Weather directed by the University Administration and will be expected to report to work as usual. For more information or to apply, go to: <https://careers.k-state.edu/jobs/research-assistant-manhattan-kansas-kansas-united-states-9c8748bf-777a-46c7-959a-fcd19a67dfe4>

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**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>.

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**Animal Technician I - Swine Unit (Job # 518114)**- This is a part-time, USS staff position. 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. This position assists and supports the research efforts at the KSU Swine Teaching and Research Center, especially that conducted within the farrowing and nursery phases of production. It also supports the activities of graduate student-led research efforts to ensure that equipment and facilities are ready to accomplish the protocol objectives. For more information or to apply, go to <https://careers.k-state.edu/jobs/animal-technician-i-manhattan-kansas-united-states>

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[\*asi.ksu.edu/voices\*](https://asi.ksu.edu/voices)**