KSU Swine Day to be Hosted November 21

It's not to late to attend the 57th Annual K-State Swine Day on Thursday, November 21 at the K-State Alumni Center. On-site registration is available for $50 per person, or complimentary for K-State students. 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 complete schedule can be found at KSUswine.org. For more information, contact Katie Smith (katiesmith@ksu.edu or 785-532-1267).

Kansas 4-H EID Livestock Tag Orders

Tag orders are now open and can be submitted to the KSU Youth Livestock Program. All market animals or commercial females that will be nominated for the 2025 Kansas State Fair Grand Drive and/or Kansas Junior Livestock Show (KJLS) must be tagged with an official Kansas 4-H EID tag. Market beef tag orders are due by December 15, 2024, with small livestock tag orders being due January 15, 2025. We will be returning to the one-page form fillable PDF order forms this year. The links, along with additional tagging information, was distributed to extension units earlier this month and are posted on the EID Tags tab of the website. Before mailing the order form(s) and payment, offices will need to email a copy of the completed form to Lexie Hayes.

Tagging resources and details about the order process may be found on the KSU Youth Livestock Program, under the EID Tags tab, or in the informational email distributed. All of the sheep and meat goat tags ordered this year will be the new, small square small ruminant lightweight EID tags launched by Allflex last year. If you still have some round or ribbon tags left, you may still use them, as long as they were issued in the last 5 years. Tags from any specie issued in 2019 and before have expired and can no longer be used in state nominated animals.

Payment is required for a tag order to be accepted. Extension Units must designate an agent to be responsible for their tags, as well as keep records of the families and animals in which each tag is applied. For those units who would like to order all of their tags at once, one check reflecting the total amount can be issued. However, completed and signed forms for both the beef and small livestock must be included with the check, prior to December 15, 2024. For more information, contact Lexie Hayes at adhayes@ksu.edu or 785-532-1264.

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 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*.

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

K-State Junior Producer Days Registration is Open

Registration is now open for the 2025 K-State Junior Producer Days! Junior Swine Producer Day will be Saturday, March 1, with Junior Meat Goat Producer Day scheduled for Saturday, March 22. Both events will be hosted at the Stanley Stout Center, north of the K-State campus in Manhattan. These events are one-day educational events for families to learn more about the selection and management of a specific specie. Youth, adults, extension agents, project leaders, and volunteers of all ages and skill levels are invited to attend! Presentations will be provided by K-State faculty, staff, students, extension agents, former exhibitors, and guest speakers. Topics range from selection, to nutrition, reproduction, health, clipping and grooming, and showmanship. This is a family learning event! Everyone who plans to attend must register, including both youth and adults. The cost is $20/person by the deadline, or $25 after the deadline for both events. Only those who register by the appropriate deadline will receive a t-shirt. Both events will also be capped at 400 participants. Junior Swine Producer Day registrations are due February 5, with Junior Meat Goat being due February 26. Registration is open now and can be completed online using this link: http://bit.ly/ksuasiregister. Junior Producer Day event registrations are non-refundable.

An optional YQCA instructor-led training and state livestock nomination session will be offered at the end of each program. Specific details about the YQCA certification will be shared with those who indicate on their registration that they plan to stay for the additional class. The K-State Sheep & Meat Goat Center is also offering an opportunity to tour their facility the night before the program, or following the event on Saturday. More information about the junior day events, including each of the flyers, are available on the @ksuylp Facebook page and the KSU YLP website: https://www.asi.k-state.edu/extension/youth-programs/events/ks-jr-producer/. For more information, contact Lexie Hayes at adhayes@ksu.edu or 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 Richard Porter as the 2025 Stockman of the Year. When registration and more information becomes available, details will be posted at *asi.ksu.edu/stockmensdinner*.

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*.

What's New

Management Minute

"Traits of Successful Teams in The Workplace"

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

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 (http://www.businessinsider.com/google-explains-top-traits-of-its-best-teams-2015-11) that their most successful teams have the following traits.

Successful teams

- 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.

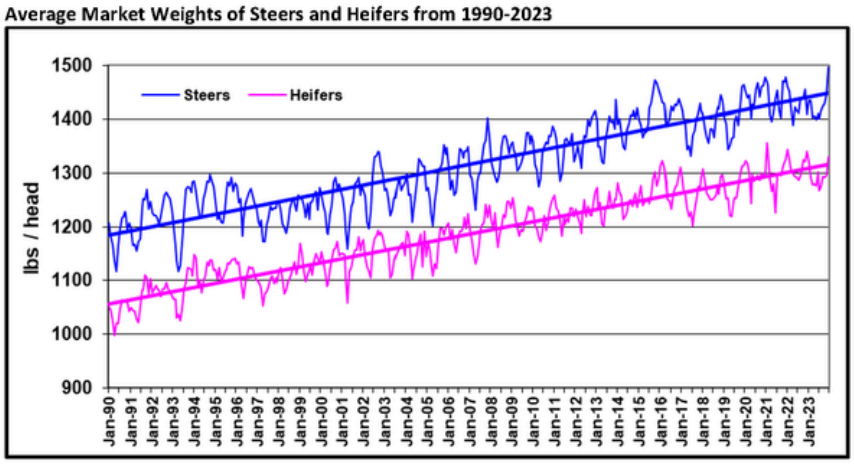
A wealth of information on building teams and characteristics can be found with a simple internet search.

Feedlot Facts

"Historical Perspective on Feedlot Exit/Market Weights"

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

Currently, one of the common discussion items in the feedlot industry is cattle exit weights. Feedyard managers have to continue to market both steers and heifers at greater exit weights in recent months. Data from the October 2024, K-State Focus on Feedlots reported an average final weight 1497 lbs. for steers and 1342 lbs. for heifers. The recent increase in marketing cattle at greater exits weights has been attributed to feedlot managers retaining cattle on feed longer as a means of managing cattle inventories. This is likely accurate, but historical data from the K-State Focus on Feedlot would suggest that the trend of marketing cattle at greater exit weights has been on-going for a number of years. The figure below illustrates cattle exit/market weights from 1990-2023. Feedlot exit weights have steadily increased over the last 33 years at rate of 0.6 lbs./head/month or approximately 7.2 lbs./year. Average exit weights in 1990 were 1187 lbs. and 1041, for steers and heifers respectively. Whereas, the average exit weights in 2023 were 1425 lbs. for steers and 1292 lbs. for heifers.



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

KSU Cow-Calf Checklist - November 2024

Management Considerations for January 2025

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

Cow Herd Management

- Body condition score both spring- and fall-calving cows.
  - Target BCS for spring calvers at calving: 5 for mature cows, 6 for young females
  - Adjust nutrition program prior to calving as needed for spring-calvers
  - Ensure fall-calvers maintain BCS through winter if still nursing calves
- Continue grazing crop residues and dormant pastures as they are available but be prepared to move cattle or provide supplemental feed as conditions dictate.
- Be ready to react to severe winter weather effects on cow nutrient requirements by providing additional feed.
- Review your nutrition program 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 when appropriate
  - Starch for silage crops
- Manage young and mature bulls during the offseason to ensure bulls are BCS ≥ 5.0 prior to the next season of use and have adequate winter protection.

Calf Management

- Consider your plans for weaning and marketing fall-born calves.
  - Watch the feeder calf market
  - Evaluate your feed resources and cost of gain
  - Talk to prospective buyers in advance of selling
- Review/update your health protocols as needed for newborn calves.
- Consider either supplementing fall-calving pairs or creep feeding fall-born calves to maintain calf performance on low-quality winter forages.
- Monitor replacement heifers to ensure they are adequately growing and developing, take check weights and adjust your plane of nutrition accordingly.

General Management

- Update herd records and use them to assess performance.
- Review your genetic selection strategy to ensure your goals are met.
- Develop and/or revise your risk management plans for the coming year.
- Discuss herd health protocols with your veterinarian.
- Take inventory of supplies and clean equipment prior to spring calving.
- Ensure plans are in place to provide bedding, wind protection, and snow removal.
- Make arrangements to ensure sufficient water is available in freezing conditions.
- Evaluate your short and long-term herd inventory goals with current conditions.
- Renew lease arrangements as necessary.
- Schedule an annual meeting with your lender, insurance agent, and extension professional.

What's New for Swine Producers

Effects of Increasing Levels of Soybean Meal in Nursery Diets on Growth Performance and Fecal Characteristics of 22- to 60-lb Pigs-Two experiments were conducted to determine the effects of increasing soybean meal (SBM) on late nursery pig performance. In Exp. 1, a total of 266 pigs (241 × 600 DNA; initially 22.2 ± 0.37 lb) were used in a 21-d trial with 14 replicate pens per treatment and 4 to 5 pigs per pen. Pens of pigs were randomly assigned to 1 of 4 dietary treatments which were corn-based with SBM levels of 25.0, 28.9, 32.5, or 36.2%. In Exp. 2, a total of 340 pigs (241 × 600 DNA; initially 29.8 ± 0.40 lb) were used in a 21-d trial with 14 replicate pens per treatment and 4 to 5 pigs per pen. Pens of pigs were randomly assigned to 1 of 5 dietary treatments which were corn-based with SBM levels of 25.0, 28.9, 32.5, or 36.2, or 40.0%. In both experiments, at weaning, pigs were distributed into pens based on body weight, gender, sow parity, and age. Before the start of the experimental period, pigs were fed a phase 1 followed by a phase 2 control diet. After 21 and 26 d for Exp. 1 and 2, respectively, pens of pigs were randomly allotted to treatments in a randomized complete block design with BW as the blocking factor. An addition of SBM replaced feed-grade amino acids (AAs) to form experimental diets and all diets were formulated to be nearly isocaloric with SBM NE considered to be 100% of corn NE. Dietary additions of feed-grade AA were adjusted to meet or exceed AA requirements in relation to Lys for Ile, Met, Cys, Thr, Trp, and Val. Diets were fed in meal form. In Exp. 1, increasing SBM from 25.0 to 36.2%, decreased ADG (linear,P= 0.012), ADFI (linear,P<0.001), and final BW (linear,P= 0.021) with the greatest change occurring when SBM increased from 28.9 to 32.5%. No evidence for difference was observed for F/G (P= 0.729). In Exp. 2, starting with a heavier initial weight, increasing SBM from 25.0 to 40.0%, decreased ADFI (linear,P= 0.017) with the greatest change occurring when SBM increased from 32.5 to 36.2%. However, no evidence for difference (P≥ 0.198) was observed for ADG, final BW, and F/G. This study showed that when pigs were fed high levels of SBM starting from 22 lb in the nursery period, pig performance was negatively affected. However, delaying the use of elevated SBM levels until pigs reach 30 lb resulted in reduced feed intake without impacting growth or feed efficiency. Thus, feeding up to 28.9% SBM for nursery pigs starting at 22 lb does not compromise performance, and starting pigs on higher SBM diets when pigs are closer to 30 lb did not affect ADG or F/G. More information is available on this experiment and others in the KSU Swine Day report at KSUSwine.org. *(This study conducted by Jamil E. G. Faccin, Robert D. Goodband, Mike D. Tokach, Joel M. DeRouchey, Jordan T. Gebhardt, and Jason C. Woodworth).*

Effects of Feeding Finishing Pig Diets Differing in Ca:P Ratio, Added Phytase and Vitamin D Sources on Growth Performance, Weight Variation, Serum 25(OH)D3, Carcass Characteristics, Bone Characteristics, and Economics- A total of 2,160 grow-finish pigs (PIC 337 × 1050; initially 71.8 ± 1.4 lb) were used in a 114-d trial to determine the effects of feeding diets differing in Ca:P ratio and added phytase or phytase and 25(OH)D3(Hy-D, DSM Nutritional Products, Parsippany, NJ) on growth performance, weight variation, serum 25(OH)D3, bone characteristics, and economics. Pigs were housed in mixed gender pens with 27 pigs per pen and 20 pens per treatment. The four treatments were structured as a randomized complete block design and consisted of: 1) a high phosphorus (HP) diet formulated to a 1.25:1 Ca to P ratio with STTD P at 115% of NRC requirement estimate without inclusion of phytase; 2) low phosphorus (LP) diet initially formulated to a 1.25:1 Ca to P ratio with STTD P at 80% of NRC requirement without the addition of phytase; 3) HP with phytase (HP+phytase) diet with a 1.1:1 Ca to P ratio with STTD P at 115% of NRC requirement using 0.125% STTD P release from 600 FYT/kg HiPhorius; and 4) Same as diet 3 except 25(OH)D3replacing most of the vitamin D3in the diet (HP+25(OH)D3). Diets were fed in meal form with phase 1 fed from 71 to 110 lb, phase 2 from 110 to 165 lb, phase 3 from 165 to 220 lb, and phase 4 from 220 to 293 lb. Overall, source of vitamin D had no impact on performance, but pigs fed HP diets had improved (P<0.05) ADG, ADFI, and F/G compared to those fed LP diets, and ADFI was greater compared to those fed the HP+phytase diet with 1.1:1 Ca to P ratio. For serum 25(OH)D3measured on d 50, pigs fed the HP diets had increased (P<0.05) levels of 25(OH)D3compared to pigs fed the LP diets, and pigs fed the HP+25(OH)D3diets had increased (P<0.05) serum levels of 25(OH)D3compared to pigs fed the HP+phytase diets. Pigs fed the HP diets had greater (P<0.05) HCW and percentage lean than those fed LP diets. For economics results, pigs fed HP diets had increased (P<0.05) feed cost, revenue, and income over feed cost (IOFC) compared to those fed LP diets in both a low and high price scenario. For bone analysis, pigs fed HP diets, had greater (P<0.05) bone ash (g) and breaking strength than pigs fed LP or HP+phytase with a reduced Ca to P ratio. In conclusion, when pigs were fed 115% of NRC STTD P requirements, growth performance, HCW, and economics were improved compared to those fed at 80% of the P requirements. More information is available on this experiment and others in the KSU Swine Day report at KSUSwine.org. *(This study conducted by Hilario M. Cordoba, Jason C. Woodworth, Robert D. Goodband, Joel M. DeRouchey, Mike D. Tokach, Jordan T. Gebhardt, and Jon R. Bergstrom).*

Kansas State University | applied swine nutrition

ASI Faculty Highlight

Logan Thompson (thom94@ksu.edu or 785-532-2840)
Assistant Professor & Extension Specialist
Sustainable Livestock Feeding

Logan grew up on a registered horned Hereford ranch in central Texas, which instilled a passion to improve the sustainability of beef production by developing practical solutions for producers. Logan started his bachelor's degree at Sam Houston State University in Huntsville, Texas, prior to completing his degree at Texas Tech University in 2015. Following this he earned a master's in beef sustainability at Oklahoma State University in 2017 and a PhD in ruminant nutrition at Michigan State University in 2021. Prior to joining Kansas State University in August of 2022, he served as a post-doctoral fellow at Colorado State University.

Logan's predominate research interest is in measuring greenhouse gas emissions in grazing systems and how grazing management impacts ecosystem function. Of particular interest in how the soil-plant-animal interrelationships are manipulated by management decisions. Additionally, his research examines how management decisions influence nutrient utilization within and across production systems. Logan's wife, Rachel, is also a science nerd and is a senior scientist in ingredient solutions R&D at MGP Ingredients in Atchison, Kansas.

Megan Rolf (megrolf@ksu.edu or 785-532-1450)
Associate Professor - Genetics and Livestock Genomics

Dr. Megan Rolf was raised on a cow-calf operation in east central Kansas and has been involved with livestock her entire life. She received a bachelor's degree in animal science at Kansas State University and a master's degree in animal science at the University of Missouri-Columbia. She also earned her Ph.D. in Genetics at the University of Missouri, where her research focused on the use of genomics in beef cattle.

After graduation, Megan was on faculty at Oklahoma State University for four years where she was an assistant professor and state extension beef specialist. She joined the faculty at Kansas State University in 2016 as an assistant professor of animal breeding. Today she has a 70% research and 30% teaching appointment. She teaches Genetics courses and maintains an active research program in the use of genomics for genetic improvement in livestock.

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*

Jobs Available - Now Hiring

Research Technician- Kansas Artificial Breeding Services Unit (KABSU) (Job #518278) - The Kansas Artificial Breeding Services Unit (KABSU) is recruiting a full-time, benefits-eligible, unclassified, term, Research Technician position. The Kansas Artificial Breeding Services Unit (KABSU) is a unit within the Department of Animal Sciences and Industry at Kansas State University that provides reproductive resources to livestock, equine and canine customers throughout Kansas and neighboring states. It is a self-funded fee-for-service business unit. This position will perform duties relevant to the daily activities of the Kansas Artificial Breeding Service Unit's Collection Laboratory and Housing facilities. https://careers.k-state.edu/jobs/research-technician-manhattan-kansas-united-states-4600d43f-6c43-44c2-9512-3efc3c86ace7

Be sure to check out the new Voices of #KSUASI podcast

asi.ksu.edu/voices