



# News from KSU Animal Sciences

☞ The **2020 Dr. Bob Hines Kansas Swine Classic** will be hosted virtually. Currently K-State has a policy that on-campus personnel cannot host large in-person events until July 31, thus we are not able to host the 2020 event at the Riley County Fairgrounds. However, we feel strongly the show must go on and have decided to host the 2020 Dr. Bob Hines Swine Classic as a virtual event. We are finalizing all details for the show, but we do plan to proceed with the show, showmanship, skillathon and photo contest. We have ordered all awards (buckles, banners, clipboards, breed champion and reserve awards, others) that we normally present to youth participants. The schedule includes:

- June 15      Deadline for online registration and payment to be postmarked for entries
- July 2-8     Video submission of entries; submission of photos for photo contest
- July 9       Skillathon Competition
- July 15      Announcement of Winners via Facebook Live

Online entries are required at <https://bit.ly/SwineClassicEntry>. Upon online entry and receipt of payment, exhibitors will be provided information via email for video requirements (regular show and showmanship division), uploading process and all details to successfully be entered in the show. For our Future K-Staters, this year we have created a coloring contest.

For more information, contact Joel DeRouchey (785-532-2280; [jderouch@ksu.edu](mailto:jderouch@ksu.edu)) or Lexie Hayes (785-532-1264; [adhayes@ksu.edu](mailto:adhayes@ksu.edu)).

☞ **Livestock Nominations** - All small livestock and commercial heifer state nominations (non-market beef) are due June 15, which is a postmark deadline. This includes commercial heifers, market swine, commercial gilts, market lambs, commercial ewes and ALL meat goats. Market livestock projects and commercial females must be formally nominated to be eligible for the Kansas State Fair Grand Drive and/or KJLS.

This year's current nomination information may be found on the KSU Youth Livestock Program website ([www.asi.k-state.edu/research-and-extension/youth-programs](http://www.asi.k-state.edu/research-and-extension/youth-programs)). The 2020 Declaration and Specie Nomination Forms MUST be used for nominations to be accepted. All families are encouraged to use the specie checklist as a guide to ensure their nominations are complete upon submission. This resource may be found on the Youth Livestock Program website as well. As part of the family nomination process, all eligible exhibitors within a family should submit one set of paperwork and DNA envelopes, with the signatures of ALL children within the family, in addition to the parent/legal guardian and county agent or FFA advisor. Please double check that there are not any blank fields or questions on the Declaration and Nomination Forms before placing them in the mail. There is a \$20 incomplete fee penalty for families who have incomplete materials that must be returned for completion. The YQCA requirement initiated in 2019 will continue, so all exhibitors must be YQCA certified to participate in either state show. A copy of each child's YQCA certificate needs to be attached to the Declaration Form. Youth who only have registered breeding females will submit this information at the time of entry.

Both state shows now have a breeding doe show. However, there is not a separate division for registered breeding does at either show, so all meat goats must be nominated in order to be eligible to show.

Continuing this year, ear notches are required for swine nominations and full scrapie tag numbers are required for sheep and goats. Ear notches must be written and drawn, and both the Flock/Premise ID and individual animal number need to be submitted on scrapie tags (ex: KSS0035 16121). Nominations received without this information will be considered incomplete and returned to the family for completion. Confirmation letters will be sent to families once their nominations have been processed, and reports will be updated on the Youth Livestock Program website on Tuesdays and Fridays until we reach the deadline, then more frequently after that. Families are encouraged to use one of these options to verify their nominations.

REMINDER - A complete nomination does NOT constitute show entry. The Kansas State Fair entries are already available on their Grand Drive website, and KJLS will release entry information to agents and through its website soon. State Fair Grand Drive entries will be due July 15, and KJLS entries will be due August 15. Animals who are nominated, but do not follow the appropriate entry processes set forth by each show, will not be permitted to show. For nomination questions, please contact Lexie Hayes at [adhayes@ksu.edu](mailto:adhayes@ksu.edu). Questions regarding show rules or entries should be directed to each show - KSF Grand Drive (620-669-3623); KJLS (316-706-9750).

<p><b>Department of Animal Sciences and Industry</b>          Kansas State University          218 Weber Hall, 1424 Claflin Road          Manhattan, KS 66506          785-532-6533  <a href="http://www.asi.ksu.edu">www.asi.ksu.edu</a></p>	<p><b>June 2020 issue</b></p>  
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↪ **Youth for the Quality Care of Animals Requirement** - All exhibitors are required to have quality assurance certification for the 2020 state shows. Youth who state nominate livestock projects MUST have a current and valid Youth PQA+ certification number or Youth for the Quality Care of Animals (YQCA) number at the time of nomination. A copy of each child's YQCA certificate or Youth PQA+ card must be attached to the Declaration Form. Certification(s) must be valid through October 4, 2020, to be accepted. YQCA is an annual certification program. Any nominations received without the appropriate YQCA or Youth PQA+ number will be considered incomplete. The Youth PQA+ program was discontinued on May 31, 2018. Youth who need quality assurance certification will need to complete YQCA training. The National Pork Board and the two Kansas state shows will honor Youth PQA+ numbers until they expire. Youth only exhibiting purebred, registered females will submit their certification information at the time of entry.

Due to the COVID-19 situation, the most viable option for youth who did not complete the class before mid-March is the online course for \$12/child. Youth may also take advantage of the test out option if they were 12 or 15 years old by 1/1/2020 (\$36 or \$48). The test-out option is only available to these two age groups (12-year-olds and 15-year-olds), but if they pass the test, their certification will be valid until they advance to the next age division (3 or 4 years, depending on their age). If their number is still valid, exhibitors may use their Youth PQA+ number as well.

This national program is only for youth 8 and older. It was announced earlier this spring that there was an option for 7-year-old certification. However, it requires they participate in a junior-only, in-person class with a parent or guardian. Since face-to-face activities are suspended in Kansas through July 4, youth in this age group can no longer complete the certification requirement. A 7-year-old may NOT take the YQCA online course. This is a transition year for 7-year-old KJLS exhibitors. It is not required for this age group until 2021, so technically, they are exempt this year.

All participants must sign up through the YQCA website prior to training in order to receive their certificate and official number. Visit [www.yqca.org](http://www.yqca.org) to sign up, or contact your local extension office for information. After completing the training, families will need to sign in to their YQCA user account, using the same method they did to register for a class, in order to view and print their YQCA certificate. While families will use their 4HOnline credentials to sign in and create an account, they must go through the YQCA website in order to successfully complete the certification process. There are resources on the program, signing up and printing certificates on the Quality Assurance tab of the KSU Youth Livestock Program website (<https://www.asi.k-state.edu/research-and-extension/youth-programs/YQCA.html>). For more information, please contact your local extension office or Lexie Hayes at [adhayes@ksu.edu](mailto:adhayes@ksu.edu) or 785-532-1264.

↪ **Developing and Implementing a HACCP Plan for Meat and Poultry Workshop** will be hosted July 14-16, 2020, via Zoom. This two-day 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://haccp.unl.edu>. For more information, contact Dr. Liz Boyle ([lboyle@ksu.edu](mailto:lboyle@ksu.edu); 785-532-1247).

↪ **State Show Entry Deadlines** - The entry deadlines for the state youth livestock shows are approaching. Exhibitors need to remember that a complete nomination does NOT constitute entry; it is only the first step in animals being eligible for the state fair and KJLS. Youth who only nominate, but do not officially enter the show in which they would like to participate, will not be permitted to show.

Entries for the Kansas State Fair Grand Drive (4-H/FFA youth livestock show) are due July 15. Entries are being accepted now through their website. All animals must be entered directly through the state fair using the online system — ShoWorks. Only online entries will be accepted. Families who state nominated livestock (market animals or commercial females) this year should have their KSU Nomination # ready when they begin the entry process. All exhibitors will also need to be prepared to submit their YQCA number. Late entry forms will be accepted until July 25, with a late fee. No entries will be accepted after July 25. For more information, visit <https://www.kansasstatefair.com/p/participate/grand-drive>. Continuing this year, county agents and ag teachers will receive instructions from the state fair regarding how to log in to the ShoWorks system and approve the entries for exhibitors from their county/school.

Entries for KJLS will be due by August 15, also using ShoWorks. However, they are separate shows, so families will need to create a new account when entering KJLS. All exhibitors must register online, using the link found on the KJLS website: <https://kjls.org/>. Families who state nominated livestock this year will need their KSU Nomination #. All youth need to be prepared to submit their YQCA number as well. Late entries will be accepted until August 25, but will cost double the listed original entry fee.

Families are encouraged to enter early in order to avoid missing the deadline and experiencing technical difficulties. Exhibitors also need to read the rules for each show before submitting their entries.

Questions regarding entries need to be directed to each show, as they manage their own entry processes. Grand Drive – 620-669-3623; KJLS – 316-706-9750.

↪ **Livestock Sweepstakes** - The 2020 Kansas 4-H Livestock Sweepstakes is scheduled for August 22-23 on the K-State campus in Manhattan, KS. The 4-H Livestock Sweepstakes event includes the state 4-H livestock judging contest, meat judging contest, livestock skillathon, and livestock quiz bowl. We are charging forward with plans for the traditional event, while also discussing alternative options. We will announce updates as more information from the University regarding events becomes available. Regardless of the format, we do plan to host an opportunity for youth to display their knowledge of the livestock industry. We will make every effort not to cancel to event entirely. The deadline to enter will be August 1. All entries must be made by your local Extension Unit using Cvent. Entry information will be released by July 1. For more information, contact Lexie Hayes at [adhayes@ksu.edu](mailto:adhayes@ksu.edu) or 785-532-1264.

↪ **KSU Beef Stocker Field Day to be hosted October 1** – Come and help us celebrate the 21<sup>st</sup> KSU Beef Stocker Field Day which will be hosted Thursday, October 1, at the KSU Beef Stocker Unit in Manhattan. The day will start at 9:30 a.m. with registration/coffee and conclude with a good old-fashioned Prairie Oyster Fry and Call Hall ice cream at 5:30 p.m. Watch for more details coming to [www.KSUbeef.org](http://www.KSUbeef.org). For more information, contact Dale Blasi ([dblasi@ksu.edu](mailto:dblasi@ksu.edu); 785-532-5427).

↪ Join us for the **6<sup>th</sup> annual ASI Family and Friends Reunion** on Friday, October 9, 2020, from 5:30 – 9:30 p.m. at the Stanley Stout Center, 2200 Denison Avenue, Manhattan, Kansas. Last year’s event was truly amazing with more than 1,000 family and friends reuniting at the event. This year the Don L. Good Impact Award will be presented to the Kelly Lechtenberg family. Other activities will include great food, live music, Junior Wildcat Barnyard and more surprises. Registration information will be coming soon to [www.asi.ksu.edu/familyandfriends](http://www.asi.ksu.edu/familyandfriends).

<b>CALENDAR OF UPCOMING EVENTS</b>		
<b>Date</b>	<b>Event</b>	<b>Location</b>
June 15, 2020	Dr. Bob Hines Kansas Swine Classic registration due	
June 15, 2020	State Livestock Nominations due	
July 2-8, 2020	Dr. Bob Hines Kansas Swine Classic Online	
July 14-16, 2020	HACCP Workshop Online	
August 22-23, 2020	Kansas 4-H Livestock Sweepstakes	Manhattan
October 1, 2020	KSU Beef Stocker Field Day	Manhattan
October 9, 2020	ASI Family and Friends Reunion	Manhattan

# What's New.....

## ↪ **Management Minute** – Justin Waggoner, Ph.D., Beef Systems Specialist

### ***“Do’s and Don’ts Upon Returning to Work”***

Many businesses and organizations are now beginning to reopen after several weeks of modified operations or closures. A recent article – <https://agrifliferoday.tamu.edu/2020/05/01/returning-to-work-post-covid-19/> – highlighted several items that both employees and managers should consider when returning to work.

- Wash your hands often with soap and water for at least 20 seconds. Use hand sanitizer with at least 60% alcohol if soap and water are not available.
- Avoid touching your eyes, nose and mouth with unwashed hands.
- Follow the policies and procedures of your employer related to illness, cleaning and disinfecting, work meetings, and travel. Continue to follow guidelines from state and local authorities for using face coverings in public spaces.
- **Clean and disinfect** frequently touched objects and surfaces in your work area, including keyboards, phones, handrails and doorknobs.
- Stay home if you are sick, except to get medical care.
- Inform your supervisor if you have a sick family member at home with COVID-19.
- Avoid using other employees' phones, desks, offices, or other work tools and equipment, when possible. If necessary, clean and disinfect them before and after use.
- Know what to expect of yourself. You may experience a variety of emotions after returning to work, which is normal. Talking about your feelings with someone you trust is a healthy way to process this evolving situation.
- Continue to take care of yourself. Eat well, get plenty of rest and exercise, spend time with those closest to you.
- Take care of your children and your family. Parents could be concerned about their children's well-being when they must return to work. Make sure your children know proper hygiene practices and let them talk about what is going on to help reassure them.
- Seek help if you need to. If your feelings are too much to bear, seeking help is a sign of strength, not weakness. Mental health problems—in general and in response to a major event such as the pandemic—are real, diagnosable and treatable.
- Know your rights and the COVID-19-related guidance that has been given for your specific industry by visiting the CDC website and the [Occupational Safety and Health Administration](#) website.

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

## ↪ **Feedlot Facts** – Justin Waggoner, Ph.D., Beef Systems Specialist

### ***“Heat Stress Resources for Cattle Producers”***

The first weeks of June often bring summer-like temperatures to the southern Great Plains and with those first hot, humid days comes heat stress. Recent market conditions have created a scenario when there are greater inventories of heavier cattle on feed in many feedyards. The convergence of these two factors prompted our KSU Beef Extension Team to host a webinar highlighting the current weather outlook and how to prepare for heat stress events. The webinar was recorded and may be accessed [www.KSUBeef.org](http://www.KSUBeef.org). One of the best strategies for dealing with heat stress is preparation and monitoring.

The U.S. Meat Animal Research Center has developed a heat stress forecasting tool that provides cattle managers with a seven-day heat stress outlook by region. The heat stress forecast may be accessed at <https://www.ars.usda.gov/plains-area/clay-center-ne/marc/docs/heat-stress/main/>.

The Kansas mesonet also has an animal comfort page that allows users to select a specific location within the state. This site allows the user to view hourly updates, as well as previous 7-day animal comfort index chart to monitor overnight cooling. The Kansas mesonet animal comfort page may be accessed at <https://mesonet.k-state.edu/agriculture/animal/>.

If you were not aware of these resources, I highly encourage you to check them out and make checking these sites part of your summer routine.

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

↵ **Smartamine M Supplementation Reduces Inflammation but Does Not Affect Performance in Receiving Beef Heifers**

- This study was conducted to evaluate the ability of supplemental methionine to improve health, inflammation status, and performance of receiving cattle. A group of 384 crossbred heifers of Tennessee origin were used in a 45-day receiving trial with limit-feeding to evaluate the effects of supplemental methionine (Smartamine M; Adisseo, Alpharetta, GA) on health, inflammation, and performance. Cattle received either 0 (control) or 10 grams/day Smartamine M, a ruminally protected methionine product. Plasma haptoglobin levels measured on days 0, 14, and 45 were used as a biomarker of inflammation. No differences in average daily gain or gain-to-feed ratio were observed for this trial. For plasma haptoglobin, interaction between dietary treatment and linear effect of day was observed.

**Bottom Line...** Supplemental methionine supplied by Smartamine M does not improve performance but reduces inflammation and possibly improves immune function in receiving heifers. View the complete research report at [www.asi.ksu.edu/cattlemensday](http://www.asi.ksu.edu/cattlemensday). For more information, contact Evan Titgemeyer ([etitgeme@ksu.edu](mailto:etitgeme@ksu.edu); 785-532-1220) or Dale Blasi ([dblasi@ksu.edu](mailto:dblasi@ksu.edu); 785-532-5327).

↵ **Sensory Evaluation from Asian Consumers of Six Different Beef Shank Cuts** - The objective of this study was to evaluate factors affecting Asian consumers' purchasing decisions and eating preferences of six different beef shank cuts. Six different beef shank cuts, three from the forequarter [*biceps brachii* (shank A); a combination of *deep digital flexor* and *flexor digitorum superficialis* (shank B); *extensor carpi radialis* (shank C)], and three from the hindquarter [*flexor digitorum superficialis* (shank D); *deep digital flexor* (shank E); and a combination of *long digital extensor*, *medial digital extensor* and *peroneus tertius* (shank F)] were collected from 12 U.S. Department of Agriculture Low Choice beef carcasses. Shanks from the left side of the carcasses were used for consumer taste panels, and consumers visually evaluated size and surface color of samples from the right side of the carcasses.

**Bottom Line...** There were differences among consumer preferences for different shank cuts. Consumers preferred shanks A, D, and F in the sensory taste panel, while shanks A and C were the most preferable in visual evaluation. Shanks A, D, and F should be priced with a premium, while shank C should be discounted in domestic Asian and international markets. View the complete research report at [www.asi.ksu.edu/cattlemensday](http://www.asi.ksu.edu/cattlemensday). For more information, contact Michael Chao ([mdchao@ksu.edu](mailto:mdchao@ksu.edu); 785-532-1230) or Elizabeth Boyle ([lboyle@ksu.edu](mailto:lboyle@ksu.edu); 785-532-1247).

↵ **The Effect of Phase-Feeding Strategies on Growth Performance and Carcass Characteristics of Growing/Finishing Pigs: Strategies to Reduce Dietary Phases Using a Field Approach on Lysine Levels**

- The objective of this study was to evaluate whether simplification of phase-feeding strategies using a field approach with lysine specifications slightly below the estimated requirement for maximum growth rate is possible without compromising overall performance and carcass characteristics of grow-finish pigs. A total of 1,188 pigs were used in a randomized complete block design with 27 pigs per pen and 11 pens per treatment under commercial research conditions. Treatments consisted of four feeding programs with lysine specifications set at 98.5% of estimated requirements for maximum growth rate and 97.5% of maximum feed efficiency (F/G) for the weight range in each phase, except for the last phase of one of the 2-phase feeding programs which the lysine specifications were set for 100% of estimated requirements of maximum growth rate. Treatments were: a 2-phase feeding program with 0.91 and 0.72% standardized ileal digestible (SID) lysine (Lys) from 60 to 220 and 220 to 280 lb BW, respectively (2-phase Lys 98%); a 2-phase feeding program with 0.91 and 0.77% SID lysine from 60 to 220 and 220 to 280 lb BW, respectively (2-phase Lys 98%/100%); a 3-phase feeding program with 0.99, 0.79, and 0.72% SID lysine from 60 to 160, 160 to 220, and 220 to 280 lb BW, respectively (3-phase Lys 98%); and a 4-phase feeding program with 1.07, 0.91, 0.79, and 0.72% SID lysine from 60 to 110, 110 to 160, 160 to 220, and 220 to 280 lb, respectively (4-phase Lys 98%). The experimental diets were based on corn, distillers dried grains with solubles (DDGS), and soybean meal. Overall, from d 0 to 114, no evidence for difference was observed in growth performance across feeding programs. There was no evidence for difference for hot carcass weight and carcass yield, backfat thickness, loin depth, or percentage lean. Consequently, no evidence for difference was observed in economics, with all phase-feeding programs resulting in similar income over feed cost (IOFC).

**Bottom Line...** In conclusion, simplification of phase-feeding strategies to fewer dietary phases in the grow-finish period with lysine set slightly below the requirements seems to be feasible. However, along with findings from our previous study in feeding programs with fewer dietary phases and lysine set slightly below the requirements, growth performance can be compromised if initial BW and feed intake in the grow-finish period are lower than expected. More information is available on this experiment and others in the KSU Swine Day Report at [www.KSUswine.org](http://www.KSUswine.org). (This study conducted by M.B. Menegat, S.S. Dritz, M.D. Tokach, J.C. Woodworth, J.M. DeRouchey, and R.D. Goodband)

**Determining the Effects of High Phytase Levels and Feeding Duration on Growth Performance and Carcass Characteristics of Growing-Finishing Pigs** - A total of 1,215 barrows and gilts were used in a 126-d growth trial to determine the effects of high phytase levels and feeding duration on growth performance and carcass characteristics of growing finishing pigs. Pens of pigs were randomly assigned to one of three dietary treatments with 15 pens per treatment and 27 pigs per pen. The experimental diets were fed in four phases and based on corn, distillers dried grains with solubles (DDGS), and soybean meal. The 3 dietary treatments consisted of: 1) Control (diets formulated with no added phytase); 2) Grower phytase (diets formulated with 1,500 phytase units (FYT)/kg added phytase fed from d 0 to 57, then no phytase from d 57 to market); and 3) Growfinish phytase (diets formulated with 1,500 FYT/kg added phytase fed throughout the entire study). The phytase-containing diets had the addition of 1,500 FYT/kg of Ronozyme HiPhos 2500 with assumed release values of 0.146% standardized total tract digestible (STTD) P, 0.166% available P, 0.102% STTD calcium, 24 kcal/lb of metabolizable energy, 19 kcal/lb of net energy, and 0.0217, 0.0003, 0.00886, 0.0224, 0.0056, 0.0122, and 0.0163% digestible Lys, Met, Met + Cys, Thr, Trp, Ile, and Val, respectively. Beef tallow and feed grade amino acids were added to the diets without phytase to balance the net energy and standardized ileal digestible (SID) amino acid concentrations across treatments. During the grower period (d 0 to 57) pigs fed the control diets with no added phytase had increased average daily gain (ADG) compared to pigs fed phytase in the grower period, with pigs fed phytase in the grower and finishing stages intermediate. Pigs fed the phytase-containing diets had poorer feed efficiency (F/G) compared to pigs fed the control diets with no phytase. During the finisher period, ADG and F/G were similar between pigs fed the control and grower phytase treatments, and both were better than for pigs fed the phytase in grower and finisher. Overall, pigs fed diets with no phytase and pigs that were only fed phytase in the grower period had improved ADG and F/G than pigs fed the phytase-containing diets fed until market. There was a marginally significant treatment effect on hot carcass weight (HCW), with pigs fed the control and grower phytase treatments having greater HCW than the pigs fed phytase throughout treatment. No evidence of differences were observed for other carcass characteristics.

**Bottom Line...** In summary, adding 1,500 FYT/kg of phytase and using full matrix values for minerals, amino acids (AA), and energy had detrimental effects on ADG, F/G, and HCW in this study. We speculate that the negative effects on performance of pigs fed added phytase may be due to overestimating the matrix values for energy and AA and further research is warranted. More information is available on this experiment and others in the KSU Swine Day Report at [www.KSUswine.org](http://www.KSUswine.org). (This study conducted by C.M. Vier, S.S. Dritz, M.D. Tokach, J.R. Bergstrom, J.C. Woodworth, R.D. Goodband, and J.M. DeRouchey)

**Effect of Steam Pressure and Conditioning Temperature During the Pelleting Process on Phytase Stability** - This experiment was designed to evaluate the effects of steam pressure and conditioning temperature on the stability of microbial phytase. Treatments were arranged as a 2 × 3 factorial of steam pressure (24 and 44 psi) and conditioning temperature (170, 180, and 190°F). Phytase was added to a corn-soybean meal-based diet and mash samples were collected for phytase analysis. The diet was pelleted via steam conditioning and using a pellet mill with a 3/16 × 1 1/4 in pellet die (L:D 6.7). Conditioner retention time was set at 30 sec and production rate was set at 33 lb/min, approximately 100% of the rated throughput for the pellet mill. All treatments were replicated on three separate days. For each treatment, pellet and conditioned mash samples were composited such that 2 samples of each were analyzed for phytase activity and pellet durability index (PDI). Moisture analysis was conducted on initial mash, conditioned mash, hot pellet, and cooled pellet samples. Conditioning temperature, hot pellet temperature (HPT), and production rate were recorded throughout each processing run. Data were analyzed using the GLIMMIX procedure in SAS 9.4, with pelleting run as the experimental unit and day as the blocking factor. There was no evidence for a steam pressure × conditioning temperature interaction for HPT, phytase stability, moisture, or PDI. Increasing conditioning temperature from 170 to 190°F increased HPT. There was no evidence for difference in HPT between steam pressures. Phytase stability of conditioned mash decreased with increasing conditioning temperature. In cooled pellets, phytase stability decreased with increasing conditioning temperature. Cooled pellets tended to have greater phytase stability when steam pressure was set at 44 psi compared to 24 psi. Moisture of conditioned mash and pellets increased with increasing conditioning temperature, and PDI tended to increase with increasing conditioning temperature. There was no evidence that steam pressure affected feed moisture or PDI.

**Bottom Line...** Results of this experiment show that phytase stability in conditioned mash and pellets decreases linearly when the conditioning temperature rises above 170°F and HPT above 179°F. As expected, HPT increased and feed moisture tended to increase with increasing conditioning temperature. Increasing steam pressure from 24 to 44 psi resulted in tendencies for greater phytase stability in pellets and had no effect on HPT or feed moisture. More information is available on this experiment and others in the KSU Swine Day Report at [www.KSUswine.org](http://www.KSUswine.org). (This study conducted by C.N. Truelock, N.E. Ward, J.W. Wilson, C.R. Stark, and C.B. Paulk)

# ASI Faculty Spotlight



**Travis O'Quinn ([travisquinn@k-state.edu](mailto:travisquinn@k-state.edu); 785-532-3469)**  
**Associate Professor/Meat Quality and Palatability**

Dr. Travis O'Quinn was born in League City, Texas. Through his youth, Dr. O'Quinn was actively involved in 4-H and FFA, participating on numerous judging teams including meats, livestock and land. He graduated with his B.S. (2008) and M.S. (2010) degrees from Texas Tech University and earned a Ph.D. in Meat Science from Colorado State University (2012). Upon graduation, he returned to Texas Tech to conduct a post-doctoral research project working to develop a palatability-based beef grading system for the largest beef producer in New Zealand. Travis joined the Department of Animal Sciences and Industry at Kansas State University in July of 2014 and currently holds a 60% research and 40% teaching appointment.

Dr. O'Quinn's research interests center on beef palatability and the factors affecting the traits of tenderness, juiciness and flavor. He has conducted research involving more than 13,000 beef consumers from across the country. He has worked extensively to evaluate the factors affecting beef flavor and to identify the production and management practices that can modify the flavor profile of beef. He has also worked to develop a technique to quantify and predict beef juiciness. He oversees the state 4-H and FFA meat judging programs and works to help increase student involvement in the meat industry through the growth of these programs.

Travis enjoys training and mentoring students, both undergraduate and graduate. He currently serves as the faculty advisor and coach of the K-State Meat Judging Team, as well as the K-State Meat Animal Evaluation Team. He is also the faculty advisor to the Meat Science Academic Quiz Bowl team.

In his free time, Travis enjoys spending time with his wife, Megan. The two live in Wamego, Kansas, and are avid sports fans, keeping up with all things college football, MLB and NFL.



**Randy Phebus ([phebus@k-state.edu](mailto:phebus@k-state.edu); 785-532-1215)**  
**Professor/Food Microbiology**

Dr. Randy Phebus is from Waverly, Tennessee, a small town 70 miles west of Nashville. He attended the University of Tennessee in Knoxville from 1981-1992, earning B.S. (Animal Science), M.S. and Ph.D. degrees (Food Science). Dr. Phebus joined the K-State ASI department in 1992 and has a 30% teaching and 70% research appointment within the Food Science discipline group. He teaches both undergraduate and graduate level courses in Food Science and is active in the distance learning Global Campus Food Science program and student recruitment. He specializes in food microbiology, food safety, food biosecurity and defense, and public health.

Dr. Phebus coordinates an active applied food safety research program spanning most food categories. He is a member of the K-State Food Science Institute, and holds graduate faculty status in Food Science, Animal Sciences, and Pathobiology. He works closely with food processors, regulators, and technology providers across the country to improve food quality and safety through laboratory-based and processing-based research and troubleshooting activities. Recently, the U.S. Secretary of Agriculture appointed him to the National Advisory Committee on Meat and Poultry Inspection. He is a research fellow at the K-State Biosecurity Research Institute, where his team conducts large-scale pathogen-inoculated studies under biocontainment to support food industry food safety needs.

Personally, Dr. Phebus cheers on his Tennessee Volunteers and K-State Wildcats. All of Dr. Phebus' spare time is spent on home improvement and gardening projects that never seem to be completed, and on riding his motorcycle around the beautiful Kansas Flint Hills.

# What Producers Should Be Thinking About.....

## WHAT PRODUCERS SHOULD BE THINKING ABOUT IN AUGUST.....



**BEEF** -- *Tips by Dale Blasi, Extension Beef Specialist*

August is when forages are maturing, weaning time is approaching, and weather dictates several key management decisions.

### *Breeding Season*

- Given high feed price inputs, ruthlessly cull all unsound cows from the herd. Cull cows that do not conceive after three services by a fertile bull.
- Limit the breeding season. Remove bulls after 60 days with cows, 45 days with heifers.

These methods contribute to a more uniform calf crop, makes winter feed management easier and increases the success rate of next year's breeding season.

### *Cow Herd Nutrition*

- Provide ample amounts of clean, fresh drinking water.
- Conduct an inventory of forage needs for the winter feeding period.
- Plan ahead and price availability of byproducts, such as wheat-middlings, dried distillers grains, etc. prior to typical seasonal price increases.

### *Herd Health*

- If pinkeye is likely to be a problem, consider the following preventive and therapeutic measures.

#### Preventive:

- ◆ Make sure the herd is receiving adequate vitamins and trace minerals in their diet.
- ◆ Consider vaccination for pinkeye and IBR (consult your local veterinarian).
- ◆ Control face flies.
- ◆ Clip pastures with tall, coarse grasses that may irritate eyes.

#### Therapy:

- ◆ Administer an intramuscular injection of long-acting oxytetracycline when symptoms are first noticed.
  - ◆ Shut out irritating sunlight by patching eyes, shade, etc.
  - ◆ Control flies.
  - ◆ Consult your veterinarian.
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- Consider revaccinating for the respiratory diseases in any animals that will be taken to livestock shows.
  - Vaccinate suckling calves for IBR, BVD, PI3, BRSV, and possibly pasteurella at least three weeks prior to weaning.
  - Revaccinate all calves for blackleg.
  - Vaccinate replacement heifers for brucellosis (4 to 10 months of age).
  - Monitor and treat footrot.

### *Forage/Pasture Management*

- ☑ Enhance grazing distribution with mineral mixture placement away from water sources.
- ☑ Observe pasture weed problems to aid in planning control methods needed next spring.
- ☑ Monitor grazing conditions and rotate pastures if possible and(or) practical.
- ☑ If pastures will run out in late summer, get ready to provide emergency feeds. Start supplemental feeding before pastures are gone to extend grazing.
- ☑ Harvest and store forages properly. Minimize waste by reducing spoilage.
- ☑ Sample harvested forages and have them analyzed for nitrate and nutrient composition.
- ☑ Plan for sufficient standing pasture for winter grazing needs.
- ☑ For stocker cattle and replacement heifers, supplement maturing grasses with an acceptable degradable intake protein/ionophore (feed additive) type supplement.

### *General Management*

- ☑ Avoid unnecessary heat stress - Don't handle and/or truck cattle during the heat of the day.
- ☑ Repair, replace and improve facilities needed for fall processing.
- ☑ Order supplies, vaccines, tags and other products needed at weaning time.
- ☑ Consider earlier than normal weaning, but have a marketing plan in place.

*We need your input! If you have any suggestions or comments on **News from KSU Animal Sciences**, please let us know by e-mail to [lschrein@ksu.edu](mailto:lschrein@ksu.edu) or phone 785-532-1267.*