



# News from KSU Animal Sciences

## UPCOMING EVENTS...

- ✦ **K-State Livestock Judging Camps scheduled** – The camp is a three-day, intense judging camp designed for 4-H and FFA members (ages 14-18) who are seriously interested in enhancing their livestock judging and oral communication skills. Prior livestock judging experience is necessary for this camp. Workouts will be conducted similar to those at a collegiate level. Chris Mullinix, KSU Livestock Judging Team Coach, will conduct the training for each camp. The camp will focus primarily on the proper format, terminology and presentation of oral reasons. Camp participants will also be exposed to livestock evaluation skills and incorporating performance records in the decision making process. The 2019 camps will be: June 3-5 (Monday-Wednesday); June 11-13 (Tuesday-Thursday); or June 14-16 (Friday-Sunday). For a complete schedule and registration information, visit <http://www.asi.k-state.edu/research-and-extension/youth-programs/judging-camps.html>. The registration deadline is May 20. For more information, contact Chris Mullinix (785-532-1917; [cmullinix@k-state.edu](mailto:cmullinix@k-state.edu)).
- ✦ **K-State Animal Sciences Leadership Academy** – Kansas State University will host the K-State Animal Sciences Leadership Academy June 5-8, 2019, for young livestock industry leaders. This four-day event will focus on increasing young leaders' knowledge of Kansas' diverse livestock industry, as well as building participant's leadership skills. Students will stay in university housing with event staff for the duration of the event. For more information, visit <https://www.asi.k-state.edu/research-and-extension/youth-programs/k-state-animal-science-leadership-academy/> or contact academy director, Sharon Breiner at [sbreiner@ksu.edu](mailto:sbreiner@ksu.edu).
- ✦ The **KSU Youth Horse Judging Camp – Beginning Section** will be June 10, 2019, and the **Advanced Section** will be June 11-12, 2019. The camps will be hosted in Weber Arena on the KSU Campus. For more information, visit the website <http://www.asi.k-state.edu/research-and-extension/youth-programs/judging-camps.html>. You can also contact James Lattimer, (785-532-2840; [jlattimer@ksu.edu](mailto:jlattimer@ksu.edu)).
- ✦ **Developing and Implementing a HACCP Plan for Meat and Poultry Workshop** will be June 11-13, 2019, in Weber Hall, Kansas State University, Manhattan, KS. This three-day workshop uses curriculum recognized by the International HACCP Alliance for meat and poultry processors and is led by an International HACCP Alliance Lead Instructor. The workshop fee is \$450 per person, and participants will be presented with a certificate with an International HACCP Alliance seal upon completion of the course. Registration is limited to 25 participants. For more information, contact Dr. Liz Boyle ([lboyle@ksu.edu](mailto:lboyle@ksu.edu); 785-532-1247). Registration is online at <http://haccp.unl.edu>.

### Department of Animal Sciences and Industry

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↪ **State Livestock Nominations due June 15th** – All small livestock and commercial heifer state nominations (non-market beef) are due June 15. This includes commercial heifers, market swine, commercial gilts, market lambs, commercial ewes, and ALL meat goats. The Kansas State Fair Grand Drive has added a breeding doe show. However, there is not a separate division for registered breeding does at either state show, so all meat goats must be nominated in order to be eligible to show.

The 2019 nomination information has been distributed to county offices and may be found on the Youth Livestock Program website. The 2019 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 ([www.asi.k-state.edu/research-and-extension/youth-programs](http://www.asi.k-state.edu/research-and-extension/youth-programs)), or through the local county office. 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. This year all exhibitors are required to be YQCA certified to participate in either state show. 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.

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 needs to be submitted on scrapie tags (example: 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).

↪ The **2019 Dr. Bob Hines Kansas Swine Classic** is scheduled for June 28-29, 2019, at CiCo Park in Manhattan. This two-day event includes educational workshops, a showmanship contest and a prospect and market pig show. It is open to all Kansas youth ages 7 through 18 as of January 1, 2019. Again this year, all market pigs will be shown together and divided into classes based on weight. This year's Classic will feature a swine photography contest along with a swine skillathon. A new event has also been added - a family pork cook-off!

For the Swine Photography Contest, youth may submit up to two swine photos. Photos should be 8x10" size and should not be framed or matted. Photos will be placed in plastic sleeves and displayed throughout the weekend. The skillathon will include several topics related to the swine industry and will be come-and-go during the allotted time. It will take youth approximately 30 minutes to complete the stations. In the Pork Cook-off, families may enter one item in each of the three categories: appetizer, main dish, and novelty. Pork must be the primary ingredient. Entries will be judged on presentation, taste, and creativity. Outlined below is a schedule of this year's program.

Friday, June 28

8:30 a.m.	Barn open for arrival
Noon	All hogs in place
1 p.m.	Swine photo check-in by the show ring
1 – 3 p.m.	Swine Skillathon in the show ring
4 p.m.	Check-in Pork Cook-off entries
	Ice cream party by the show ring
5:30 p.m.	Showmanship contests

Saturday, June 29

8 a.m.	Prospect Pig Show followed by Barrow and Gilt Market Pig Show
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Entries must be postmarked by June 15, 2019. More information and registration is available at [www.KSUswine.org](http://www.KSUswine.org). 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)).

- ↪ The **first Poultry Day and Pullet Sale** will be June 29, 2019. The events will be located at Stanley Stout Center, 2200 Denison Avenue, Manhattan, KS. The Poultry Day events will include a presentation on “How to Manage Your New Pullets” at 11:30 am, followed by an omelet lunch at noon. After lunch, there will be a presentation on “Health Care for Small Flocks” at 1:30 pm. Dr. Scott Beyer, KSU Extension Poultry Specialist, will be there to help with all your questions about keeping small poultry flocks. The events are open to all poultry-keeping enthusiasts. No purchase of pullets is required to attend the workshop. There are no charges for the Poultry Days presentations or lunch; however, reservations are required by using the online form at: <https://www.asi.ksu.edu/pulletsale>. Forms may be emailed to [poultry@ksu.edu](mailto:poultry@ksu.edu). Reservations may also be made by contacting Kevin Snell at 785-532-1281.
- ↪ During Poultry Day, KSU students will also be holding their **Annual Pullet Sale**. Egg-type pullets raised by the students may be picked up from 9 a.m. to 3 p.m. on June 29 at the Stanley Stout Center, 2200 Denison Avenue, Manhattan. KSU students have raised these pullets for spring class projects and they will be ready-to-lay (16-17 weeks old) and fully vaccinated. We will have a limited supply on a first-come, first-sold basis. A description of the bird types and prices can be found at <https://www.asi.ksu.edu/pulletsale>. All pullets must be pre-ordered. For questions about the pullet sale, email [poultry@ksu.edu](mailto:poultry@ksu.edu) or call the farm at 785-539-5041.
- ↪ **Quality Assurance Certification Requirement for State Shows** – All exhibitors 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 1, 2019, to be accepted. Any nominations received without the appropriate YQCA or Youth PQA+ number will be considered incomplete. The Youth PQA Plus program was discontinued on May 31, 2018. So, youth who need quality assurance certification will need to complete YQCA training. The National Pork Board and the two state shows in Kansas will honor Youth PQA Plus numbers until they expire.  
 There are several methods through which youth may obtain their certification. They may take a \$3 instructor-led class, complete the \$12 online course, take advantage of the test out option if they were 12 or 15 years old by 1/1/2019 (\$36 or \$48), or use their valid Youth PQA+ number. This program is only for youth 8 and older, so 7 year olds participating in KJLS will be exempt for 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 the local extension office for information on local opportunities available. 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. There are also resources on the program, signing up, and printing certificates on the Quality Assurance tab of the KSU Youth Livestock Program website. For more information, please contact the local extension office or Lexie Hayes at [adhayes@ksu.edu](mailto:adhayes@ksu.edu) or 785-532-1264.
- ↪ October 4, 2019, is the date set for the **5<sup>th</sup> Annual ASI Family and Friends Reunion**. This year we will be honoring the Kansas Livestock Association with the Don L. Good Impact Award. Watch for more details coming soon.

CALENDAR OF UPCOMING EVENTS		
Date	Event	Location
June 3-5, 2019	K-State Livestock Judging Camp	Manhattan
June 5-8, 2019	K-State Animal Sciences Leadership Academy	Manhattan
June 10, 2019	KSU Youth Horse Judging Camp – Beginning Section	Manhattan
June 11-12, 2019	KSU Youth Horse Judging Camp – Advanced Section	Manhattan
June 11-13, 2019	HACCP Plan for Meat and Poultry Workshop	Manhattan
June 11-13, 2019	K-State Livestock Judging Camp	Manhattan
June 14-16, 2019	K-State Livestock Judging Camp	Manhattan
June 15, 2019	Small livestock nominations due (includes commercial heifers, market swine, commercial gilts, market lambs, commercial ewes, and meat goats)	
June 28-29, 2019	Dr. Bob Hines Kansas Swine Classic	Manhattan
June 29, 2019	KSU Poultry Day and Pullet Sale	Manhattan
August 24-25, 2019	Kansas 4-H Livestock Sweepstakes	Manhattan
October 4, 2019	ASI Family and Friends Reunion	Manhattan

# WHAT'S NEW.....

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

### **“Hiring the Best Person”**

Whether you are a small business with just a few employees or a larger enterprise with several employees, hiring the right person for a position is essential. Making a good hiring decision can inspire others and improve the operations productivity. The unfortunate truth is that the number of qualified applicants for most skilled position isn't large. “Good people are truly hard to find.” So what can you as a potential employer do to attract and hire the best person for a position? There are many thoughts on this topic. However, most experts agree that knowing what you are looking for and clearly stating the roles and responsibilities of the position is a great place to start. Applicants want/need to know the expectations of the position. Another point of consensus on the topic is to involve others in the hiring process. Allowing the candidates to interact with others in the organization through tours, or an informal dinner, can be a great way to know whether a person is a good fit. An informal setting often allows an employer to gather more information about the applicant than the traditional interview questions can allow. People spend a great deal of time at work, thus co-workers, colleagues and the culture of the organization is important to both parties. Additionally, different people have different perspectives on the applicants, and usually there is some degree of consensus. Lastly, be prepared to move quickly with a competitive offer. The best people will usually have multiple opportunities.

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

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

### **“Early Weaning: A Tool to Improve Cow Condition”**

Early weaning may be one of the management tools that beef cattle producers should consider using this fall. The recent winter weather conditions have resulted in cows and replacement females that may be lacking body condition coming into the grazing season.

Yes, cows will likely pick up some body condition over the upcoming grazing season. However, it can be difficult to put condition on lactating cows, especially higher producing females, even under ideal grazing conditions. Therefore, some cows may still be lacking condition during the later months of the grazing season. One of the easiest ways to manage cow nutrient demands is by weaning the calf. This reduces the energy requirements of the cow by 25-30%. This effectively means that the nutrients consumed by the cow that were being used to sustain lactation may now be used to improve cow condition. A study designed to evaluate preconditioning duration conducted at K-State documented that cow body condition scores improved as calf age at weaning decreased. The cows on this study remained on native grass pastures following weaning and the observed increase in body condition score in this study occurred over a 60 day period. The results of this study suggest that early weaning calves may improve body condition of cows grazing native pastures late in the grazing season.

Early weaning is a management tool, most often associated with drought. However, it may be an even more valuable management strategy to manage the nutrient demands associated with lactation and improve cow condition, especially on young cows. Additionally, early weaned calves may be managed to target a number of different value-added programs or sales.

**Table 1:** Effect of calf age at weaning on cow body condition score (Bolte et al., 2007)

Item	Calf Age, days					SEM	P-value
	160	145	130	115	100		
BCS <sup>a</sup>							
Initial <sup>b</sup>	5.46	5.41	5.48	5.50	5.46	0.091	0.87
Final <sup>c</sup>	5.46	5.67	5.85	5.99	5.90	0.091	0.01
Change	0.02	0.25	0.37	0.50	0.43	0.118	0.01

<sup>a</sup> Body condition score (scale = 1 to 9; 1 = emaciated, 9 = obese)

<sup>b</sup> Initial BCS was measured 60 d before calves were shipped to feedlot (d -60 weaning)

<sup>c</sup> Final BCS was measured 60 d after calves were shipped to feedlot

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

↪ **Youth Swine Exhibitor Resources Available** – As Kansas youth livestock families enter the show season, the National Pork Board has distributed some resources through KDA. The materials provide some great tips and reminders for swine exhibitors, as well as others associated with the project. Most of the documents focus on educating youth about good biosecurity practices. There is also a page with information about African Swine Fever. The resources may be found under the "Health Resources" tab of the KSU Youth Livestock Program website (<https://www.asi.k-state.edu/research-and-extension/youth-programs/health.html>). For more information, contact Lexie Hayes at [adhayes@ksu.edu](mailto:adhayes@ksu.edu) or 785-532-1264.

↪ **Poultry Testing Requirements are Temporarily Suspended** – The Division of Animal Health at the Kansas Department of Agriculture (KDA) has announced a time-limited waiver for the pullorum-typhoid testing requirements for poultry in Kansas. The sunset date set for this temporary suspension is October 1, 2019. It has NOT been discontinued, but temporarily waived. Because this date is after the 2019 county and state fair season, this means that pullorum testing will be waived for poultry shows in Kansas. This has been caused by a nationwide shortage of the testing antigen.

The issue of antigen cost, availability and shipping methods have long been a sore spot for all of us working with poultry events in Kansas. The shortage has been caused by many things, but certainly having just a sole supplier due to the pharmaceutical industry consolidation has been problematic. Anyone working with poultry that would normally require testing should remain alert to the issue, however, as the program has NOT been discontinued. Hopefully, this emergency change will result in better access and lower cost in the long run. I have always pointed out that reduced participation in youth poultry shows is partially tied to the difficulty with dealing with the national testing program. When all things are considered, there is a low risk of pullorum disease when birds are displayed in individual show cages. The Kansas pullorum testing program is maintained within the KDA and they may be reached at 785-564-6601 for further questions. For more information, contact Dr. Scott Beyer, Kansas Extension Poultry Specialist.

↪ **Trends in "Natural" Value-Added Calf Programs at Superior Livestock Video Auction** – This study utilized data from Superior Livestock Video Auction to investigate trends in the use of "natural" value-added calf programs. Nine years of data (2010-2018) were evaluated for enrollment trends in all natural programs and non-hormone treated cattle. Multiple regression was used to determine the relative value of calves enrolled in the non-hormone treated cattle program. The percentage of lots enrolled in natural value-added calf programs increased from 2010-2018. The percentage of lots in the non-hormone treated cattle program increased markedly (5.2 - 23.8%) over the nine-year period. Non-hormone treated cattle brought significantly higher prices in seven of the nine years evaluated.

**Bottom Line...** Price advantages for non-hormone treated calves may not be sufficient to justify not using growth-promoting implants on calves. View the complete research report at [www.asi.ksu.edu/cattlemensday](http://www.asi.ksu.edu/cattlemensday). For more information, contact Ken Odde ([kenodde@ksu.edu](mailto:kenodde@ksu.edu); 785-532-1227) or Bob Weaver ([bweaver@ksu.edu](mailto:bweaver@ksu.edu); 785-532-1460).

↪ **Effects of a Bacillus-Based Probiotic on Sow Performance and on Progeny Growth Performance, Fecal Consistency, and Fecal Microflora** – The objective of this study was to evaluate the effects of supplementation of *Bacillus subtilis* C-3102 on sow performance and fecal microflora and on progeny growth performance, fecal consistency, and fecal microflora. For the sow portion of this study, a total of 29 sows and litters were used from d 30 of gestation until weaning. Treatments consisted of providing a control diet or a probiotic diet supplemented with *Bacillus subtilis* C-3102 at 500,000 CFU/g of complete feed in gestation and 1,000,000 CFU/g of complete feed in lactation. For the nursery portion of the study, a total of 358 weaned pigs, progeny of the sows on study, were used in a 42-d nursery trial. There were four or five pigs per pen and 18 or 19 replications per treatment. Treatments were arranged in a 2 × 2 factorial with main effects of sow treatment and nursery treatment (control diet vs. probiotic diet). In the nursery probiotic diet, a combination of the probiotic *Bacillus subtilis* C-3102 and prebiotics based on beta glucans and mannan oligosaccharides was included at 0.05% of complete feed. Fecal scoring was used to categorize fecal consistency of nursing litters and nursery pens. The results demonstrate that sows fed the probiotic diet had a marginally significant increase in lactation average daily feed intake, consuming on average 0.6 lb more feed per day than sows fed the control diet, but it did not result in improvement in sow or piglet body weight at weaning. Sows fed the probiotic diet had marginally significant larger litter size after equalization on day two after birth, with on average 0.5 more piglets per litter than sows fed the control diet, but it did not result in larger litter size at weaning. In the nursery, there was no evidence for effect of sow treatment, nursery treatment, or interactions on overall growth performance. However, growth performance from d 21 to 42 and final nursery BW were greater in pigs from sows fed the control diet compared to the probiotic diet. The evaluation of fecal score in nursing and nursery pigs indicated that fecal consistency was not influenced by sow or pig diet. Microbial analysis revealed an increase in number of *Bacillus subtilis* C-3102 and, consequently, total *Bacillus* sp. in fecal microflora of sows and nursery pigs fed the probiotic diet. Also, piglets that were born and nursed by sows fed a probiotic diet also displayed this change in fecal microbial population before weaning.

**Bottom Line...** In conclusion, the findings of this study demonstrate a potential benefit of providing *Bacillus subtilis* C-3102 to sows during gestation and lactation on lactation feed intake. However, the probiotic inclusion to sow diets impaired growth performance and BW of the progeny in late nursery. The probiotic diet provided to sows or nursery pigs did not influence fecal consistency or number of potentially harmful bacteria in fecal microflora of sows and pigs. However, the probiotic diet was able to induce a change in fecal microbial population in sows, nursing piglets, and nursery pigs by increasing the number of total *Bacillus* sp. The effects of *Bacillus subtilis* C-3102 on litter size after equalization require further elucidation in studies with larger numbers of sows and litters. 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, K.M. Gourley, M.B. Braun, J.M. DeRouchey, J.C. Woodworth, J. Bryte, M.D. Tokach, S.S. Dritz, and R.D. Goodband)

#### **Effects of the Age of Newborn Pigs Receiving an Iron Injection on Suckling and Subsequent Nursery Performance and Blood Criteria**

– A total of 324 newborn pigs were used in a 80-d study evaluating the effects of Fe injection timing after birth on suckling and subsequent nursery pig performance and blood criteria. GleptoForte contains gleptoferron, which is an Fe macromolecule complex that is used as an injectable Fe source for suckling piglets. A total of 27 litters were used with the number of pigs per sow equalized on each day of farrowing. Two days after birth, all piglets were weighed, and six barrows and six gilts were allotted to one of six treatments within litter in a randomized complete block design. Treatments consisted of a negative control receiving no Fe injection or 200 mg of injectable Fe from GleptoForte provided in a single injection on d 2, 4, 6, 8, or 10 after birth. Piglets were weighed on day 2, 12, and weaning (d 21) to calculate average daily gain during farrowing. Piglets were bled on day 2, 12, and 21 to determine blood Fe status. The blood criteria evaluated to determine Fe status were: hemoglobin (Hgb), hematocrit (Hct), serum Fe, and total Fe binding capacity. Pigs were weaned at approximately 21 days of age and allotted to pens based on previous Fe treatment with BW balanced across all pens within a treatment with five or six pigs per pen and 10 pens per treatment. Pigs and feeders were weighed on d 28, 35, 42, 48, 55, 62, and 80 after birth to determine ADG, average daily feed intake and feed efficiency. In farrowing, increasing the age that piglets received a 200 mg Fe injection until four or six days after birth provided marginal evidence for an improvement in ADG. Not providing an Fe injection resulted in marginal evidence for a decrease in overall ADG and decreased day 21 BW compared to all other treatments. For the nursery period, increasing the age of piglets receiving a 200 mg Fe injection from two to four or six days after birth improved day 80 ending BW with a decrease in BW when Fe was provided after day six. Significant treatment × day interactions were observed for hemoglobin and hematocrit. The interactions occurred because pigs injected with 200 mg Fe on d 2, 4, 6, or 8 after birth had increasing values until d 12 after birth, while pigs not receiving an Fe injection or pigs receiving a 200 mg Fe injection on d 10 after birth had decreasing values to d 12 after birth. All pigs receiving a 200 mg Fe injection after birth had increased values from d 12 to 21 and then slightly decreased to d 35 after birth, while pigs not receiving an Fe injection had decreased values from d 12 to 21 and then increasing values to d 35 after birth.

**Bottom Line...** In summary, providing a 200 mg Fe injection on day four or six after birth provided the greatest preweaning growth performance and body weight at the end of the nursery phase. Providing a 200 mg Fe injection on day six after birth provided the greatest blood Fe status up to weaning, but there was no evidence of difference in blood Fe status in the nursery when administering a 200 mg Fe injection within 10 days after birth. 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 H.E. Williams, C.D. Roubicek, J.M. DeRouchey, J.C. Woodworth, S.S. Dritz, M.D. Tokach, R.D. Goodband, and A. Holtcamp)

**Effects of Cordyceps Mushroom Powder on Nursery Pig Performance** – One hundred sixty crossbred pigs weaned at 18.8 days of age and weighing an average of 13.1 lb were used in a 35-day growth trial to evaluate Cordyceps mushroom powder as potential alternative to carbadox in nursery pig diets. Pigs were divided by weight, sex, litter, and assigned to body weight (BW) blocks. Each pen within a BW block was randomly assigned a dietary treatment. Growth performance was analyzed using BW, average daily gain, average daily feed intake, and feed conversion as feed-to-gain. Pigs were blocked by weight with five or six pigs per pen with six pens per treatment. There were five diets used in the study: a negative diet or a positive control (carbadox, 50 g/ton); 300 or 600 ppm mushroom powder, and a step-down treatment (900, 900, 450, 300, and 150 ppm mushroom powder during weeks 1, 2, 3, 4, and 5, respectively). At various points of the study, pigs fed the 300 ppm and the step-down mushroom powder treatments tended to have improved growth performance compared with those fed the negative control diet. During Phase 4 of the study, pigs fed carbadox had greater ADG and improved feed efficiency over pigs fed the negative control diet. However, overall data showed that there were no statistical differences among treatments.

**Bottom Line...** In summary, pigs fed 300 ppm mushroom powder or the step-down treatment showed comparable results to pigs fed carbadox. However, future research is needed under a greater disease pressure to show mushroom powder's full potential as an alternative to antibiotics. 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 J. Richert, J.Y.P. Palencia, M.T. Thayer, C. Chastain, B. Richert, and J.L. Nelssen)

# ASI Faculty Spotlight



**Dale Blasi (dblasi@k-state.edu; 785-532-5427)**

**Professor/Extension Specialist, Beef Cattle Nutrition and Management**

Dale A. Blasi was born and raised on his family's farm and ranch in southeast Colorado, near Trinidad. He received his bachelor's in Animal Sciences at Colorado State University in 1984. In 1986, he received his master'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, Dr. 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.



**Bob Weaber (bweaber@k-state.edu; 785-532-1460)**

**Professor/Extension Specialist, Beef Breeding and Genetics**

Bob Weaber's nationally recognized extension programming has resulted in more than 145 publications and more than \$13 million from 42 awards of grants and gifts for research and extension programming. Weaber's extension program leadership has been recognized with MU Provost's Innovative Extension Programming by New Faculty, the MU CAFNR J.W. Burch State Extension Specialist Award, and the Beef Improvement Federation's Continuing Service Award.

Weaber grew up on a cow-calf operation in southern Colorado and went on to earn a bachelor's degree in animal science followed by a master of agriculture degree in the Beef Industry Leadership Program at Colorado State University. He completed his doctoral studies in the animal breeding and genetics group at Cornell University. While there, he served as the Interim Director of Performance Programs for the American Simmental Association for three and a half years. Previously, Weaber was Director of Education and Research at the American Gelbvieh Association. Bob, his wife, Tami, and their children, Maddie, Cooper and Wyatt, reside near Wamego, KS.

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

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



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

### *Cow Herd Nutrition*

- Provide plenty of clean, fresh water.
- Provide free-choice mineral to correct any mineral deficiencies or imbalances.
  - ✓ Monitor intake to insure levels are consistent with label specifications.
- Monitor grazing conditions and rotate pastures if possible and/or practical.
- If ammoniated wheat straw is planned for winter needs, follow these rules:
  - ✓ Best time is immediately after harvest, prior to weather deterioration.
  - ✓ Ammoniation process is temperature sensitive, fastest during hot days.
  - ✓ Apply 3% Anhydrous Ammonia (60 pounds/ton of straw).
  - ✓ Do **not** ammoniate wheat hay or any other intermediate or high-quality forage; production of imidazole can cause cattle hyperactivity and death.
  - ✓ Will double crude protein content, enhances intake, and be cost effective.
- Consider early weaning if drought conditions develop and persist.
- Consider creep feeding only if cost effective.

### *Herd Health*

- Monitor and treat pink eye cases.
- Provide fly control. Consider all options, price and efficiency will dictate the best option(s) to use.
- Monitor and treat foot rot cases.
- Avoid handling and transporting cattle during the hottest part of the day-reduce heat stress.
- Vaccinate replacement heifers for Brucellosis if within proper age range (4 - 10 months).
- Continue anaplasmosis control program (consult local veterinarian).

### *Forage/Pasture Management*

- Check and maintain summer water supplies.
- Place mineral feeders strategically to enhance grazing distribution.
- Check water gaps after possible washouts.
- Harvest hay in a timely manner, think quality and quantity.
- Harvest sudan and sudan hybrids for hay in the boot stage (normally three to four feet in height). It is a good idea to run a routine nitrate test on a field before harvesting hay.
- Plan hay storage placement wisely. Putting hay conveniently near feeding sites reduces labor, time demands, and equipment repair cost.

### *General Management*

- Good fences and good brands make good neighbors.
- Check equipment (sprayers, dust bags, oilers, haying equipment) and repair or replace as needed. Have spare parts on hand, down time can make a big difference in hay quality.

*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.*