



*Newsletter from the Department of Animal Sciences and Industry*  
*213 Weber Hall, Kansas State University, Manhattan, KS 66506*  
*785-532-6131 - [www.asi.ksu.edu](http://www.asi.ksu.edu)*

## UPCOMING EVENTS...

- ✦ Mark your calendars for Saturday, March 26, 2011 for the **Kansas Junior Meat Goat Day**. The event will be held in Weber Arena on the KSU Campus. This event is dedicated to meat goat production and management practices. This interactive workshop is designed for all ages and skill levels. Featured speaker is Glen Martin from Mason, TX. Participants will learn the basics of meat goat production including selection, nutrition, health, and show ring practice. The schedule includes:
- |                                   |   |
|-----------------------------------|---|
| 8:45 Registration                 | 12:30 Break Out Session – Beginner: General Care and Handling; Advanced: Feeding, Fitting and Showing |
| 9:15 Welcome and Opening Remarks  |   |
| 9:30 Selecting Your Youth Project | 2:30 Break  |
| 10:30 Break                       | 2:45 Health and Wellness  |
| 10:45 Nutrition 101               | 3:30 Closing and Awards   |
| 11:45 Lunch                       |   |
- Registration cost is \$20/person and includes lunch and a T-shirt. For more details and registration, visit [www.YouthLivestock.KSU.edu](http://www.YouthLivestock.KSU.edu). For more information, contact Brian Faris ([brfaris@ksu.edu](mailto:brfaris@ksu.edu); 785-532-1255) or Chelsea Tomascik ([tomascik@ksu.edu](mailto:tomascik@ksu.edu); 785-532-1264)
- ✦ The Department of Animal Sciences at KSU will be hosting the **7<sup>th</sup> Equine Reproductive Management Short Course** on March 26-27, 2011. This two-day interactive course is targeted towards the horse owner that is interested in starting a breeding program or the novice breeder who would like to improve or expand their existing program. For more information on the course, visit <http://www.asi.ksu.edu/DesktopDefault.aspx?tabid=1053>, or contact Dr. Joann Kouba at 785-532-1240.
- ✦ A **FAMACHA training** will be held on April 7, 2011 in Emporia, Kansas. The training will be held from 5:30 to 9:00 p.m. at the Lyon County Fairgrounds. K-State Research and Extension in Lyon County will be hosting Dr. Brian Faris, Sheep and Meat Goat Specialist at Kansas State University, as he works with attendees as they learn the workings of FAMACHA.
- The training session is absolutely free although there is a \$15 charge for the FAMACHA packet. Pre-registration is required to guarantee a packet, and is also helpful for those preparing food for the attendees. Pre-register before April 5 by contacting K-State Research and Extension, Lyon County at 620-341-3220. When you pre-register, please indicate the number of FAMACHA packets you wish to receive (at \$15 each). Food will be sold on site. For more information, contact Brian Faris ([brfaris@ksu.edu](mailto:brfaris@ksu.edu); 785-532-1255).
- ✦ The **High Plains Horseman's Day** will be April 16, 2011 at the Logan County Fairgrounds in Oakley, KS. The program will feature Jay and Gena Henson from the National Versatility Ranch Horse Association. For more information contact the Thomas County Extension office 785-460-4582 or [www.thomas.ksu.edu](http://www.thomas.ksu.edu).
- ✦ **Developing and Implementing Your Company's HACCP Plan** for meat, poultry, and food processors will be held May 24-26, 2011 in Weber Hall, Kansas State University, Manhattan. Registration for the 2.5 day International HACCP Alliance accredited workshop is online at <http://animalscience.unl.edu/web/anisci/ANSCEExtensionMeatScienceHACCPInformationandCoursesRegistration>. The workshop fee is \$325, and meets USDA training requirements to become a HACCP trained individual. For more information, contact Dr. Liz Boyle at [lboyle@ksu.edu](mailto:lboyle@ksu.edu) or 785.532.1247.

- ↪ The **KSU Youth Horse Judging Camp – Beginning Section** will be held Monday, June 6, 2011, in Weber Arena on the KSU Campus. This camp is designed for youth that have had very little experience judging horses and would like to learn more about note taking and oral reasons. Camp registration fee is \$30/per student and due by May 1. For a brochure, go to <http://www.asi.ksu.edu/DesktopDefault.aspx?tabid=1141>. For more information, contact Teresa Slough (785-532-1268; [tslough@ksu.edu](mailto:tslough@ksu.edu)).
  
- ↪ The **KSU Youth Horse Judging Camp – Advanced Section** will be held June 9-10, 2011 on the KSU Campus. This camp is designed for youth that have had some experience judging horses and would like to learn more about note taking and oral reasons. Camp registration fee is \$115/per student and must be paid by May 1. For a brochure and registration, go to <http://www.asi.ksu.edu/DesktopDefault.aspx?tabid=1141>. For more information, contact Teresa Slough (785-532-1268; [tslough@ksu.edu](mailto:tslough@ksu.edu)).
  
- ↪ The 2011 **K-State Animal Sciences Leadership Academy** will be held June 8-11 at KSU. Applications are due by March 15, 2011. Visit [www.YouthLivestockKSU.edu](http://www.YouthLivestockKSU.edu) for application and more information. For more details, contact Chelsea Tomascik (785-532-1264; [tomascik@k-state.edu](mailto:tomascik@k-state.edu)).
  
- ↪ Plan now to attend the **2011 “Champion” Livestock Judging Camp**. This 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.  
 Dr. Scott Schaake, coach of five consecutive National Collegiate Championships 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 following dates are set for the 2011 camps: June 14-16 (Tuesday-Thursday); June 17-19 (Friday-Sunday); and June 24-26 (Friday-Sunday).  
 Registration for the camp is \$190 and must be returned no later than May 12. For additional information, contact Scott Schaake (785-532-1242; [simmi@ksu.edu](mailto:simmi@ksu.edu)) or Kristi Hageman (785-532-2996; [KLSmith@ksu.edu](mailto:KLSmith@ksu.edu)).
  
- ↪ The **2011 KSU Beef Conference** has been scheduled for Tuesday, August 16. Mark your calendars and watch for more details.
  
- ↪ Mark the dates on your calendar for the **K-State Sheep and Meat Goat Conference** that has been scheduled for November 4-6, 2011. Watch for more details.

<b>CALENDAR OF UPCOMING EVENTS</b>		
<b>Date</b>	<b>Event</b>	<b>Location</b>
March 26, 2011	Kansas Junior Meat Goat Day	Manhattan
March 26-27, 2011	Equine Reproductive Management Short Course	Manhattan
April 7, 2011	FAMACHA training	Emporia, KS
April 16, 2011	High Plains Horseman’s Day	Oakley, KS
May 24-26, 2011	HACCP Plan Workshop	Manhattan
June 6, 2011	Horse Judging Camp – Beginner Section	Manhattan
June 9-10, 2011	Horse Judging Camp – Advanced Section	Manhattan
June 8-11, 2011	K-State Animal Sciences Leadership Academy	Manhattan
June 14-16, 2011	Champion Livestock Judging Camp	Manhattan
June 17-19, 2011	Champion Livestock Judging Camp	Manhattan
June 24-26, 2011	Champion Livestock Judging Camp	Manhattan
August 16, 2011	KSU Beef Conference	Manhattan
November 4-6, 2011	KSU Sheep and Meat Goat Conference	Manhattan

# WHAT'S NEW....

↪ **Research Assistant Professor, Food Safety and Defense** - The Department of Animal Sciences and Industry is looking for a Research Assistant Professor for Food Safety and Defense. This position is a full time, 12 month, non-tenure track term position with funding available for 2 years. Ph.D. or equivalent at time of hire in food microbiology or related discipline with experience in food processing is required. Experience with meat/beef processing and understanding of statistical sampling plans is preferred. View complete position announcement at: <http://www.asi.ksu.edu/positions>. Review of applications begins March 15, 2011, and continues until position is filled.

↪ **Management Minute** – Chris Reinhardt, Ph.D., Extension Feedlot Specialist  
*“Do You Interview Well?”*

In any large firm, there are full-time HR people who interview prospective employees for a living, have specialized training, and know which boxes to check. Day in, day out, they deal with personnel issues. But in your organization you are that person. Unfortunately, you don't get to focus on personnel issues, but have to deal with ALL the issues. Make a good hire and you may never have to think about it again. But a bad hire is the gift that keeps on giving---you'll need to deal with unintended consequences for months or years, up until the day you are forced to make a change.

So let's keep this simple: when it comes to hiring a new person, *more* is better. That is, *more* individual contact, *more* information flowing both ways, *more* reference checks, both parties asking *more* questions, etc.

The eternal question is this: (A) Do you absolutely need to get a warm body into the vacant position, or (B) could it actually be better to limp by until the right person is available? If the answer to that question is (B), then you need to ask 4 more questions:

1. *Does this person have the appropriate, necessary skills?*
2. *Does this person have glowing support from former employers and co-workers?*
3. *Where is this person in their career and does your organization fulfill the needs/wants of this person at this career stage and into the future?*
4. *Will this person fit into your corporate culture and the team they'll be joining?*

The answers to 1) and 2) can be obtained simply enough, by reading through the resume, making phone inquiries, reading reference letters, and from an in-depth, one-on-one conversation with the prospect. The answer to 3) will require a little more digging on your part. Obviously, if I want or need this job, I'll tell you whatever I think you want to hear. But you'll need to be probing and insightful enough to know, or at least guess, what the real answer is.

Finally, the answer to 4) is perhaps the hardest and riskiest part of any hire, and maybe the most important for long-term hiring success. But it also directly relates to the original question: Do we just need any warm body or do we need the RIGHT warm body? The only way to get to a good answer is through multiple interviews: on the phone, in person, by you, by the team manager, by potential future co-workers, one-on-one, in a group setting, even with the prospect's spouse. With more chances for interaction, it becomes more likely that potentially beneficial or synergistic traits will become apparent. This dramatically increases your confidence in making the right hire. Increased interaction also gives more opportunity to uncover any potentially negative issues that could submarine team productivity. Everyone can pretend to be someone else for a short time, and some longer than others. But increasing the number of interactions over the course of time and with various members of your organization, who each bring a different agenda to the conversation, you can increase the likelihood that you really know who you're hiring.

Hiring the right person takes time and a great deal of energy on your part. But by committing, early on and throughout the hiring process, to making every effort to getting the right person that will not only fill a vacancy but actually make the team better, you are much more likely to be satisfied, long-term, with the outcome.

For more information, contact Chris at 785-532-1672 or [cdr3@ksu.edu](mailto:cdr3@ksu.edu).

↪ **Feedlot Facts** – Chris Reinhardt, Ph.D., Extension Feedlot Specialist  
**“Feed Efficiency Matters”**

If you’ve been feeding your calves since last fall, or all your life, you’ve probably gotten the routine of feeding and doctoring the cattle figured out fairly well. But one added consideration as you approach the end of the feeding period is maintaining feed efficiency. This is especially true in a year where grain costs have risen dramatically.

You may have administered a growth-promoting implant at the time of weaning or shortly after the calves were weaned, but most feedlot implants deliver effective growth promotion over about 120 days, with the daily amount of active compound which is delivered decreasing over time.

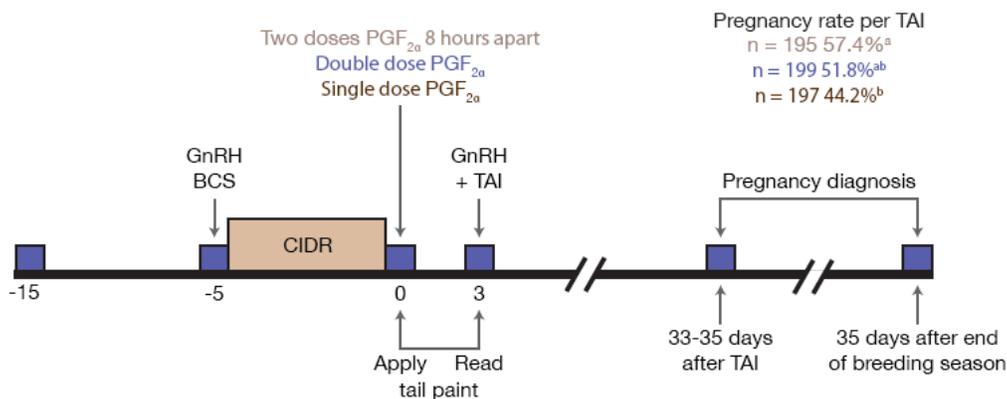
So as calves grow in size their metabolic demand for growth promoting hormone increases, while the amount being delivered each day decreases. For this reason, it is common to re-implant finishing cattle between 70-100 days prior to their anticipated marketing date.

If you are feeding for a high-quality program, you may wish to select an intermediate dosage implant. This will preserve quality grade, although it will also reduce the potential growth and efficiency of the animal. But even if quality is your target, it is important to continue to deliver the animal active growth promotion. This ensures that calves are gaining efficiently, and giving you the greatest return on your investment of grain, right up until they are sent to harvest.

For more information contact Chris at [cdr3@ksu.edu](mailto:cdr3@ksu.edu).

↪ **Optimizing a New 5-day CIDR-CO-Synch Timed Artificial Insemination Program** - Lactating beef cows at 3 locations (n = 591) in Kansas were treated with the protocol illustrated in the figure below.

Five-Day Timed Artificial Insemination (TAI) Program Testing the Appropriate Mode of Treatment of PGF<sub>2α</sub> to Induce Death of the Corpus Luteum Before TAI



Cows were assigned randomly to receive at CIDR insert removal: (1) two doses (2 x 5 mL Lutalyse) of PGF<sub>2α</sub> 8 hours apart with the first dose given at CIDR insert removal, (2) double dose (10 mL Lutalyse), or (3) single dose (5 mL Lutalyse). Although the two doses of PGF<sub>2α</sub> given 8 hours apart produced greater pregnancy rates to the timed AI, subsequent pregnancy loss and overall breeding season pregnancy rates did not differ among treatments.

**Bottom Line...** The 5-day CIDR-CO-Synch timed AI program is a viable alternative to the standard 7-day program, but it requires administration of two doses of PGF<sub>2α</sub> to maximize pregnancy rates. View the complete research report at [www.asi.ksu.edu/cattlemensday](http://www.asi.ksu.edu/cattlemensday). For more information, contact Jeffrey Stevenson (785-532-1243; [jss@ksu.edu](mailto:jss@ksu.edu)) or Larry Hollis (785-532-1246; [lhollis@ksu.edu](mailto:lhollis@ksu.edu)).

↪ **Effect of Replacing Fish Meal with Crystalline Amino Acids on Growth Performance of Nursery Pigs from 15 to 25 lb** – A total of 282 nursery pigs (PIC TR4 x 1050, initially 16.1 lb, 3 d postweaning) were used in a 28-d growth trial to evaluate the effects of replacing fish meal with crystalline amino acids on growth performance.

Pigs were allotted to 1 of 6 dietary treatments with 7 replications per treatment. There were 5 replications with 7 pigs per pen and 2 replications with 6 pigs per pen. Pigs and feeders were weighed on d 0, 7, 14, 21, and 28 to calculate ADG, ADFI, and F/G. A 2-phase diet series was used, with treatment diets fed from d 0 to 14 and a common diet fed from d 14 to 28. All diets were in meal form. For the 6 dietary treatments, the fish meal was included at: 4.50, 3.60, 2.70, 1.80, 0.90, and 0.00% respectively.

Crystalline lysine, methionine, threonine, tryptophan, isoleucine, and valine all increased as fish meal decreased to maintain minimum amino acid ratios. Also, increasing amounts of glutamine and glycine were used in diets containing 3.60% to 0.00% fish meal to maintain a lysine-to-CP ratio. From d 0 to 14, there was no difference in ADG, ADFI, or F/G as the level of fish meal decreased and crystalline amino acids increased. From d 14 to 28 (common diet period), no clear effects on growth performance were detected. Overall (d 0 to 28), there was no difference in ADG or ADFI. For F/G, a quadratic effect ( $P < 0.04$ ) was detected, which was the result of small improvements in F/G at the intermediate fish meal levels (2.70 and 1.80).

**Bottom Line**...In conclusion, these data suggest that crystalline amino acids, when balanced for minimum amino acid ratios, can be used to replace fish meal in diets for 15- to 25-lb pigs. More information is available on this experiment in the KSU Swine Day Report at [www.KSUswine.org](http://www.KSUswine.org). (This study conducted by J.E. Nemechek, M.D. Tokach, S.S. Dritz, R.D. Goodband, J.M. DeRouchey, J.L. Nelssen, and J. Usry.)

↳ **Effects of Increasing PEP-NS on Nursery Pig Performance** - A total of 180 nursery pigs (PIC 1050, initially 14.2 lb and 28 d of age) were used in a 24-d study to evaluate the effects of increasing PEP-NS on nursery pig performance. PEP-NS is a combination of porcine intestinal mucosa and by-products of corn wetmilling. There were 5 pigs per pen and 6 pens per treatment. There were 6 dietary treatments: a negative control containing no specialty proteins, the negative control diet with 3, 6, 9, or 12% PEP-NS, or the negative control with 6% select menhaden fish meal (SMFM). The diet with 6% SMFM contained the same amount of soybean meal as the diet with 6% PEP-NS. A common pretest diet was fed in pellet form for the first 7 d post weaning. Experimental diets were fed in meal form from d 0 to 14, and a common diet was fed from d 14 to 24. From d 0 to 14, increasing PEP-NS increased ADG, ADFI, and F/G, with the greatest response observed in pigs fed 9% PEP-NS. There were no differences between pigs fed 6% PEP-NS or 6% SMFM. When pigs were fed a common diet from d 14 to 24, there were no differences in performance between treatments. Overall, from d 0 to 24, pigs fed increasing PEP-NS had improved ADG and F/G, with the greatest improvement seen as PEP-NS increased from 3 to 6%.

**Bottom Line**...These results suggest that feeding 6% to 9% PEP-NS in Phase 2 nursery pig diets is suitable replacement for 6% SMFM. 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 A.J. Myers, M.D. Tokach, R.D. Goodband, S.S. Dritz, J.M. DeRouchey, J.L. Nelssen, B.W. Ratliff, D. McKilligan, G. Xu, and J. Moline.)

↳ **Effects of Dietary Astaxanthin, Ractopamine HCl, and Gender on the Growth, Carcass, and Pork Quality Characteristics of Finishing Pigs** - A total of 144 finishing pigs (initially 226 lb) were used to evaluate the effects of various levels and sources of added dietary astaxanthin (AX: 0, 2.5, 5, 7.5, and 10 ppm), as well as ractopamine HCl (Paylean), on growth, carcass, and pork quality characteristics of barrows and gilts. Pigs were blocked by gender and weight and randomly allotted to 1 of 9 dietary treatments fed for approximately 26 d pre-harvest. Dietary treatments consisted of a corn-soybean meal-based control, the control with 5, 7.5, or 10 ppm AX from *Phaffia rhodozyma* yeast, the control with 5 ppm synthetic AX, and the control with 9 g/ton Paylean and 0, 2.5, 5, and 7.5 ppm AX from *Phaffia rhodozyma* yeast. There were 2 pigs per pen and 8 pens per treatment (4 pens per treatment × gender combination). Overall, barrows had greater ADG and ADFI than gilts, while ADG and final BW increased and F/G improved for pigs fed Paylean. For carcass characteristics, barrows had greater backfat depth and less longissimus muscle area and fat-free lean than gilts. Pigs fed Paylean had greater HCW, yield, and longissimus muscle area than those that received non-Paylean treatments. Growth performance and carcass characteristics of pigs fed AX were not different than control pigs. Although there were no differences in the initial subjective color scores, the discoloration scores of longissimus chops increased daily during 7 d of retail display, and were greater for barrow chops on d 7 compared to gilt chops. Also, the overall average discoloration scores and change in d 0 to 3 objective total color were lower for gilts and pigs fed Paylean, although the difference between gilts and barrows was smaller when they were fed Paylean. Modest differences in measures of pork color during retail display were associated with added dietary AX, but these did not result in an increase in color shelf-life or reduction in the objective measure of total color change.

**Bottom Line**...Collectively, these observations indicated a greater color shelf-life for chops from gilts and pigs fed Paylean. 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.R. Bergstrom, J.L. Nelssen, T.A. Houser, M.D. Tokach, R.D. Goodband, J.M. DeRouchey, and S.S. Dritz.)

# AS&I FACULTY SPOTLIGHT



**KC Olson (kcolson@k-state.edu; 785-532-1254)  
Associate Professor/Cow Calf Nutrition and Management**

KC is an associate professor of cow-calf nutrition and management. He is actively involved in the undergraduate and graduate education programs at KSU and takes great pleasure in the privilege of helping to train the next generation of Great Plains ranchers and farmers. KC's research program is designed to address questions that directly affect beef industry profitability. Specific areas of research include: nutritional management of cattle grazing native range; effects of calthood nutritional management on carcass quality and value; and factors influencing grazing behavior.

KC holds advanced degrees from Kansas State University and North Dakota State University. Prior to coming to KSU, he was on the faculty at the University of Missouri - Columbia. KC is active in the American Society of Animal Science, the Society for Range Management, the American Registry of Professional Animal Scientists, and the American College of Animal Nutrition.

KC originally hails from northwestern North Dakota, where he grew up on a commercial cow-calf and ranch horse operation. KC, his wife Karli, and sons Charles and Theodore reside northwest of Allen, Kansas. In his off-time, KC enjoys spending time with his family, being active in his church, and practicing the martial arts.

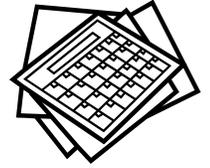


**Evan Titgemeyer (etitgeme@k-state.edu; 785-532-1220)  
Professor/Research Coordinator/Graduate Program Director**

Evan Titgemeyer grew up on a small family farm in northwest Ohio. Following completion of a B.S. degree at The Ohio State University, he completed both M.S. and Ph.D. degrees at the University of Illinois. Evan has been a faculty member at Kansas State University since 1992. His research program focuses on protein/amino acid utilization by beef and dairy cattle, and he teaches three different graduate nutrition courses. Currently, Evan serves as the departmental Research Coordinator and Graduate Program Director. Evan lives near Manhattan with his wife Lori and their two children Taylor and Jack.

# WHAT PRODUCERS SHOULD BE THINKING ABOUT...

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



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

Breeding season is beginning or continuing for many operations; therefore, both females and males must be reproductively fit.

- 1) Several estrus synchronization procedures have been developed. To determine the correct synchronization program to use, consider the following: age group of females (yearling replacement heifers vs. cows), commitment of time and efforts for heat detection, potential number of females that are anestrous (days post partum, body condition, calving difficulty), labor availability, and the return on investment for total commitment to the breeding program.
  - 2) Handle semen properly and use correct AI techniques to maximize fertility.
  - 3) Natural service bull should have body condition, eyes, feet, legs and reproductive parts closely monitored during the breeding season. Resolve any problems immediately.
  - 4) All bulls should have passed a breeding soundness examination prior to turnout.
- Begin your calf preconditioning program. Vaccination, castration and parasite control at a young age will decrease stress at weaning time. This is a time to add value to the calf crop.
  - Implanting calves older than 60 days of age will increase weaning weight.
  - Properly identify all cows and calves. Establish premises numbers for compliance with state and national programs.
  - Use best management practices (BMPs) to establish sustainable grazing systems.
  - Use good management practices when planting annual forage sources and harvesting perennial forages.
  - Maintain records that will verify calving season, health programs, and management practices.

*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.*