NEWS FROM KSU ANIMAL SCIENCES
January, 2010

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**

WHAT'S NEW....

- **Management Minute** – Chris Reinhardt, Ph.D., Extension Feedlot Specialist

"Safety Around Livestock"

I have a saying that you can borrow sometime: "The good ol' days never were."

What I mean is, when we start to get a little more salt than pepper in our hair we start to reminisce about how good things "used to be". The problem is, we almost always put on rose-colored glasses before we begin that process. I agree, some things may have been better in the "good ol' days", but when it comes to practices and equipment we use in modern agriculture, things have almost all gotten better, safer, more reliable, and easier to use.

One topic I think I would get little argument on is cattle handling facilities. Compare what is currently found on many cattle operations to what would have been common 30, 20, or even only 10 years ago. Hydraulics have made the squeeze chute not only easier to use but also safer for both the cattle and the people using them. And, if you've been reading along every month, that really should be our primary objective. Yes, the cattle need to be worked, and maybe you've got a ball game to get to tonight. But I cannot think of any ball game worth sacrificing human or animal safety for.

We've all heard and/or told plenty of stories about this ringy old cow that wouldn't let us tag her calf or that mean old bull that chased us over a 5-wire fence. Those make great stories, but I sincerely hope the next generation of ranchers has fewer stories to tell than we or our parents and grandparents have. Disposition is genetic. Ringy old cows and bulls need to go to town, and by all means don't keep replacements out of them. I don't care how big of calf she raised, is she worth a broken arm, leg, or worse? Forget the monetary cost of an emergency room visit; what if that is your child's or grandchild's arm, leg, or worse? You simply cannot put a price tag on safety.

When it comes to working with livestock, think safety first. Think of what is the ***safest*** way to get that cow in, not the fastest. What is the ***safest*** way to get the calves gathered and processed, not the fastest. Ironically, in the long run, the safest way is almost always the easiest and fastest anyway.

For more information, contact Chris at 785-532-1672 or cdr3@ksu.edu.

- **Wildcat Steer Futurity** – The 2009/2010 Wildcat Steer Futurity has began. In December, 57 steers were delivered to Tiffany Cattle Company located in Herington, KS. The steers had an average in-weight of 695 lbs and are expected remain on feed for approximately 180 days with an average predicted cost of gain of $73.59/cwt..

The Wildcat Steer Futurity is an educational program that allows cattle producers to place a minimum of 5 steers in a commercial cattle feeding facility. Participants are able to explore retained ownership without assuming the financial risk associated with owning an entire pen of cattle. For more information, contact Justin Waggoner (620-275-9164; jwaggon@ksu.edu) or Karl Harborth (620-431-1530; harborth@ksu.edu).

- **KSF and KJLS Nominations** - As many of you know the Kansas State Fair and Kansas Junior Livestock Show have been exploring ways to make our livestock nomination system more efficient and effective. Specifically, both shows have shown an interest in DNA-based nominations. At this time the shows have agreed they will not implement DNA-based nominations in 2010. This is in contrast to previous information printed in show materials and provided by email. They are however further researching the possibility for future years.

  In 2010 we will continue to use the same nomination process as in 2009, with minor paperwork adjustments to increase efficiency. These changes can be expected by January 31. All forms will be available at www.YouthLivestock.KSU.edu.

  Questions or concerns regarding the nomination process may be directed toward KJLS President, Mary Kane at mrkane@ksu.edu <mailto:mrkane@ksu.edu> or KSF Competitive Events Director, Debbie Anderson at debbie@kansasstatefair.com <mailto:debbie@kansasstatefair.com>. Your input is important to us as we move forward with this process. For more information, contact Sharon Breiner (sbreiner@ksu.edu; 785-532-1264).

- **Feedlot Facts** by Chris Reinhardt, Ph.D., Extension Feedlot Specialist

  "Deworming Feeder Cattle"

  The value of deworming pasture and feedlot cattle has been clearly demonstrated to the livestock community; the research is definitive and media surveys indicate that ranchers and cattle feeders have gotten the message loud and clear.

  But if you dig very deep into the science of deworming, into specific parasites, life cycles, and mode of action of dewormers it is very easy to become overwhelmed with the seeming complexity of the situation and potential solutions. The good news is you don't have to dig very deep to understand the issue.

  Parasites live most of their life inside the animal, but require green grass, moisture, and relatively warm temperatures to start the life cycle over. Eggs are laid by mature females living inside the animal and excreted in feces; warm temperatures stimulate the eggs to hatch and release larvae; larvae reside in dew drops on blades of grass and are consumed by the animal; the larvae then mature inside the host. In short, if there are eggs in the feces, the cattle have mature worms inside their digestive tract.

  If you receive cattle which have been grazing green grass, they are likely carrying some level of internal parasites. If you receive cattle which have been in drylot and were effectively dewormed upon arrival in that drylot they should have little to no parasite burden. There is a simple test that your veterinarian can conduct, using a small amount of fresh manure, to determine the level of internal parasites and the effectiveness of your deworming program.

  Parasites make it difficult for cattle to respond to vaccination and to fight off viral infection because the 2 different types of immune battles are competing for immune resources. If you are having unexpected health problems several weeks or months into the feeding program, you may wish to have the cattle examined for internal parasites.

  For more information, contact Chris Reinhardt at cdr3@ksu.edu or 785-532-1672.

- **Distillers Grains Do Not Change Carcass Composition but Change Some Fatty Acids When Added to Finishing Diets** - Crossbred yearling heifers (n = 689; 664 ± 143 lb) were fed steam-flaked corn finishing diets with 0 or 25% dried distillers grains and 0 or 25% dry-rolled corn. Cattle were blocked by weight into light and heavy weight groups and fed for 157 or 137 days, respectively. Meat samples were collected and evaluated for percentage lean, fat, and bone; fatty acid profiles; and amounts of heterocyclic amine released from cooked steaks. The objective of this experiment was to determine the effects of replacing a portion of steam-flaked corn in the diet with dry-rolled corn or dried distillers grains on carcass composition, fatty acids, and heterocyclic amine formation.

  Bottom Line…. Replacing a portion of steam-flaked corn with either dry-rolled corn or dried distillers grains resulted in similar carcass composition. View the complete research report at www.asi.ksu.edu/cattlemensday. For more information, contact Jim Drouillard (785-532-1204; jdrouill@ksu.edu) or Chris Reinhardt (785-532-1672; cdr3@ksu.edu).

- **Near-Infrared Tissue Oximetry of Beef Longissimus Muscle for the Improvement of Meat Color and Meat Color Stability** - Longissimus lumborum muscles from beef loins (USDA Select, A-maturity, n = 3) were fabricated at 10 days postmortem into twelve 2-in.-thick portions with the fibers either perpendicular or parallel to a designated muscle surface. The thicker portions were necessary to assure that near-infrared (NIR) light did not escape from the tissue. Muscle portions were placed in four packaging treatments: vacuum (VP), polyvinyl overwrap (PVC), 80% O_2/20% CO_2 (HiOx), and HiOx to PVC. These packages were used to create different partial pressures of gases, altering the muscle chemistry and resulting in different forms of myoglobin. Instrumental color was measured on days 0, 2, 4, 10, and 15 to express changes in meat color data. An NIR tissue oximeter was used on days 0, 2, 4, 10, and 15 to calculate concentrations of TMb, OMb, and DMb for following changes in redox dynamics of myoglobin with advancement of postmortem storage and display time. Values for L* (lightness), a* (redness), and b* (yellowness) were used to calculate hue angle and chroma for discoloration during display. The objectives of this experiment were to determine (1) the amounts of deoxymyoglobin (DMb), oxymyoglobin (OMb), and total myoglobin (TMb) in beef muscle stored in several packaging formats and (2) the tissue oximeter responses to post-rigor muscle fiber orientation and surface measures of color.

  Fiber orientation and storage day affected (P<0.05) TMb, OMb, and DMb in all packaging formats. Portions cut perpendicular to muscle fiber generally had more OMb and greater color stability than portions cut parallel, and as storage time increased, OMb decreased. Packaging format did not affect TMb, but OMb increased and DMb decreased as exposure to oxygen increased. Tissue oximeter measurements have potential for real-time monitoring of myoglobin redox forms and oxygen status of meat in a variety of packaging formats. To obtain repeatable NIR tissue oximetry measurements on post-rigor muscle, fiber orientation, tissue oxygen exposure, and storage time must be controlled.

  Bottom Line… If the scope of NIR tissue oximetry can be modified slightly for meat, this technology would offer the beef industry the first rapid, real-time, noninvasive instrument for assessing various meat color traits that could help classify product on the basis of color stability differences between muscles. View the complete research report at www.asi.ksu.edu/cattlemensday. For more information, contact Melvin Hunt (785-532-1232; hhunt@ksu.edu) or Liz Boyle (785-532-1247; lboyle@ksu.edu).

- **Effects of Porcine Circovirus Type 2 Vaccination on Nursery and Finishing Pig Performance under a PRRS Challenge** - A total of 2,571 barrows and gilts (PIC 337 × 1050) were used to determine the effects of porcine circovirus type 2 vaccine (PCV2) on nursery and finishing pigs that were challenged with porcine respiratory and reproductive syndrome (PRRS). Treatments were arranged in a 2 × 2 factorial design with main effects of gender (barrow or gilt) and vaccine (PCV2 vaccinates or non-vaccinates). Vaccinated pens received 2 doses of commercial PCV2 vaccine (Circumvent PCV, Intervet Inc., Millsboro, DE) according to label directions on d 1 and 22 in the nursery. All pigs were also inoculated on d 30 with serum containing PRRS virus as part of this production system's protocol. Barns were double stocked from d 0 to 51. On d 51, gilts were moved to an adjacent facility and barrows were split into 2 pens.

  In the period after the initial PCV2 vaccination (d 0 to 15), no difference in ADG, ADFI, or F/G was observed ($P > 0.13$) between genders or between vaccinates and non-vaccinates. However, in the period after the second PCV2 vaccination (d 15 to 29), vaccinated pigs had decreased ($P < 0.02$) ADG compared with non-vaccinates as a result of decreased ($P < 0.04$) ADFI. Gilts also had increased ($P < 0.04$) ADG and ADFI compared with barrows. In the period after all pigs were inoculated with PRRS virus (d 29 to 50), PCV2 vaccinates had improved ($P < 0.001$) F/G over non-vaccinates and a trend ($P < 0.08$) for improved ADG. Gilts had poorer ($P < 0.01$) F/G compared with barrows from d 29 to 50. Over the entire 50-d nursery portion of the study, no differences were observed ($P > 0.61$) for ADG, ADFI, or final weight among gender or PCV2 vaccinates and non-vaccinates. However, F/G was improved ($P < 0.001$) with PCV2 vaccination.

  Pig weights on d 71 and 99 were increased ($P < 0.001$) in vaccinates compared with non-vaccinates, and barrows had increased ($P < 0.001$) BW compared with gilts on d 99. At the conclusion of the study (d 132 for barrows and d 142 for gilts), the percentage of pigs remaining on test was decreased ($P < 0.001$) in non-vaccinated pens compared with vaccinated pens (70.2% vs. 94.7%, respectively). This study suggests that despite the decrease in performance related to the second vaccination of PCV2, the second vaccination improved final performance and decreased the number of removals due to the PRRS health challenge. More information is available on this experiment and others in the KSU Swine Day Report at www.KSUswine.org. (This study conducted by N.W. Shelton, M.D. Tokach, S.S. Dritz, R.D. Goodband, J.L. Nelssen, J.M. DeRouchey, and J.L. Usry.)

- **Economic Impact of Removing Pigs Before Marketing on the Remaining Pigs' Growth Performance** - The economic impact of removing the heaviest pigs (topping) before marketing a finishing group and the effect of topping on performance of the remaining pigs were determined in 2 studies. In Exp. 1, a total of 1,126 pigs (BW = 241 lb; 25 pigs/pen) were randomly assigned to 1 of 3 treatments: topping 0, 2, or 4 pigs/pen 15 d before marketing the remaining pigs in the group. After topping, floor space per pig was 7.2, 7.8, and 8.6 ft^2 for pens with 0, 2, and 4 pigs topped per pen, respectively. Overall (d 0 to 15), increasing the number of pigs topped per pen improved ADG ($P < 0.02$), ADFI (linear; $P < 0.03$), and F/G (quadratic; $P < 0.04$). Revenues were similar ($P > 0.76$) between treatments, but feed usage and cost was reduced (quadratic; $P < 0.01$) as more pigs were topped per pen. However, there was no impact on income over feed cost (IOFC). In Exp. 2, a total of 1,084 pigs (BW = 234 lb; 27 pigs/pen) were assigned to 1 of 5 treatments. On d 0 (20 d before closeout), 2 pigs were topped from each pen excluding the control pens (0 top). Pens that were topped at d 0 had an additional 0, 2, 4, or 6 pigs per pen topped on d 10. Floor space per pig was 6.7 ft^2 in control pens and 7.2 ft^2 for the remaining pens from d 0 to 10. After topping on d 10, floor space per pig was 7.8, 8.6, and 9.5 ft^2 for pens with 2, 4, or 6 more pigs topped, respectively. From d 10 to 20, the remaining pigs had increased (linear; $P < 0.01$) ADFI, which led to a linear increase ($P < 0.01$) in ADG. Overall, ADG and ADFI increased (linear; $P < 0.05$) with increasing number of pigs topped, and F/G improved ($P < 0.01$) in topped pens relative to intact pens. Weight discounts were highest in intact pens ($P < 0.02$) compared to topped pens. Revenue decreased ($P < 0.05$) as additional pigs were topped after d 10 in pens topped at d 0. Feed usage was highest ($P < 0.01$) in intact pens. As more pigs were topped on d 10, IOFC tended to decrease ($P = 0.07$). Topping, regardless of number of pigs, did not affect ($P > 0.23$) any of the carcass traits measured. Topping improves growth performance of the remaining pigs. Based on IOFC, topping 2 pigs once is the most optimal. Improvements in performance from topping more than 2 pigs were not great enough to overcome the reduction in total weight produced by the pen. More information is available on this experiment and others in the KSU Swine Day Report at www.KSUswine.org. (This study conducted by J.Y. Jacela, S.S. Dritz, M.D. Tokach, J.M. DeRouchey, R.D. Goodband, and J.L. Nelssen.)

- **Effects of Feeder Design, Gender, and Dietary Concentration of Dried Distillers Grains with Solubles on the Growth Performance and Carcass Characteristics of Growing-Finishing Pigs** - A 2 × 2 × 2 factorial experiment was conducted to evaluate the interactive effects of feeder design (conventional dry vs. wet-dry feeder), gender (barrow vs. gilt), and dietary concentration of dried distillers grains with solubles (DDGS; 20% vs. 60%) on finishing pig performance. A total of 1,080 pigs (PIC 337 × 1050) were used in the 99-d experiment. Pigs were sorted by gender (barrows and gilts) into groups of 27, weighed (77.4 lb initial BW), allotted to pens containing 1 of the 2 feeder types, and assigned to a corn-soybean meal-DDGS-based feeding program of either 20% or 60% DDGS. A completely randomized design was used to evaluate the 8 treatment combinations, with 5 pens per treatment. This provided 20 pens per treatment for each of the three main effects (feeder type, gender, and DDGS concentration). All pigs were fed their assigned level of DDGS in 3 dietary phases (d 0 to 28, 28 to 56, and 56 to 78). On d 78, 2 pigs per pen were weighed and harvested. Jowl fat samples were collected from these pigs for fatty acid analysis and iodine value (IV). All remaining pigs were fed a common diet from d 78 to 99 that contained 20% DDGS and 4.5 g/ton of ractopamine HCl (Paylean; Elanco Animal Health, Indianapolis, IN). On d 99, all remaining pigs were harvested and carcass data were obtained from 885 pigs. Jowl fat samples were collected from 2 pigs per pen for fatty acid analysis and IV. Overall (d 0 to 99), pigs using the wet-dry feeder had greater ($P < 0.001$) ADG, ADFI, F/G, final BW, feed cost per pig, HCW, and backfat depth but decreased ($P < 0.05$) fat-free lean, jowl fat IV, premium per pig, value per cwt live, and net income per pig. Feeding 60% DDGS from d 0 to 78 resulted in decreased ($P < 0.02$) ADG, final BW, feed cost per pig, HCW, and backfat depth but increased ($P < 0.05$) F/G, fat-free lean, jowl fat IV, and net income per pig. Barrows had greater ($P < 0.01$) ADG, ADFI, F/G, final BW, feed cost per pig, HCW, and backfat depth but reduced fat-free lean, jowl fat IV, premium per pig, value per cwt live, and net income per pig. In conclusion, the greatest net income per pig resulted from feeding gilts 60% DDGS from d 0 to 78 and 20% DDGS with Paylean from d 78 to 99 using a conventional dry feeder. However, using wet-dry feeders improved ADG and ADFI of growing-finishing pigs and may improve the performance of slower growing populations within a group (e.g., gilts). Wet-dry feeders may also restore the growth rates of pigs fed adverse levels of DDGS. More research with wet-dry feeders is needed to resolve concerns with F/G, carcass leanness, and economic returns. More information is available on this experiment and others in the KSU Swine Day Report at www.KSUswine.org. (This study conducted by J.R. Bergstrom, M.D. Tokach, S.S. Dritz, J.L. Nelssen, J.M. DeRouchey, and R.D. Goodband.)

UPCOMING EVENTS...

- An exciting and informative **Meat Processing Workshop** has been planned at Kansas State University in conjunction with the Kansas Meat Processors Association. The 33rd Annual Midwest Processed/Cured Meat Workshop will be held on Saturday, January 30, 2010 at Weber Hall on the KSU Campus. This is a great opportunity to see, hear and ask questions as state award winning meat processors demonstrate the manufacture of their products. Learn about the cornerstones of cooking, secrets of smoke color, the future of thermal processing, poultry sausage manufacture, and more.

  Registration is $95.00 per plant and includes lunch for two people if received by January 22, 2010. After that date, the fee will increase to $105.00 per plant. For a registration form or more information, contact Liz Boyle (lboyle@ksu.edu; 785-532-1247).

- The **2010 KSU Swine Profitability Conference** will be held Tuesday, February 2 in Forum Hall of the K-State Student Union. The program includes:
  - 9:30 a.m. Right Sizing the U.S. Swine Industry: What I've Done with My Clients During These Challenging Times - *Dr. Joe Connor, Carthage Veterinary Clinic*
  - 10:30 a.m. Risk Management – A Producer Perspective - *Rob Brenneman, Washington, IA*
  - 11:15 a.m. What Does the Future Hold for the U.S. Swine Industry - *Steve Meyer, Paragon Economics, Des Moines, IA*
  - 12:00 noon Lunch
  - 1:15 p.m. Recent Breakthroughs in Lowering Cost of Production and Improving Margin Over Feed - *K-State Swine Team*
  - 2:15 p.m. Restoring Confidence After A Stressful Period - *John Currie, Athletic Director, KSU*

  Registration fee of $25 per participant is due by January 25, 2010. For a schedule and registration form, visit www.KSUswine.org under "Upcoming Events." For more information, contact Jim Nelssen (785-532-1251; jnelssen@ksu.edu).

- The **KSU Dairy Days** will be held on February 4 and 5, 2010. These meeting will be held in conjunction with the Kansas Dairy Association and the DHIA Annual Meetings in Nemaha and Reno Counties. Look over the schedule below to find the location and day that best suits your schedule. For more information, contact John Smith (785-532-1203; jfsmith@ksu.edu)

February 4, 2010 9:30 a.m.
Whiteside Amish Community Building, Whiteside, KS
Please Pre-Register by calling: Reno County Extension Office, 620-662-2371 or rn@oznet.ksu.edu

Whiteside Site Agenda

9:00 a.m.	Trade Show Set-up
9:30 a.m.	Reno County DHIA Meeting and Awards
10:00 a.m.	Registration and Trade Show
10:30 a.m.	Christa Mahnken - "*Milk production and composition of cows fed wet brewers grains*"
10:45 a.m.	Justin Potts - *"Determining the water needs of dairy farms"*
11:00 a.m.	Tori Boomgaarden - *"Effect of acidulant addition on yogurt fermentation*"
11:15 a.m.	DJ Rezac - *"Effects of acidified fermentation by-products and prepartum DCAD on feed intake, performance and health of transition dairy cows"*
11:30 a.m.	Cynthia Martel - *"Dietary molasses increases ruminal pH and enhances ruminal biohydrogenation during milk fat depression"*
12:00 p.m.	Lunch (sponsored by KDC and KDA)
12:45 p.m.	KDC/KDA Update
1:00 p.m.	Karen Schmidt, PhD - *"Milk components and other processing issues"*
1:20 p.m.	Jeff Stevenson, PhD - *"Estrumate vs. Lutalyse?"*
1:40 p.m.	Mike Brouk, PhD - *"Relationships between feed costs and milk production"*
2:00 p.m.	Barry Bradford, PhD - *"Inflammation in transition cows"*
2:20 p.m.	John Smith – *"What's new at the K-State Dairy?"*
2:40 p.m.	Door Prizes
3:00 p.m.	Adjourn

February 5, 2010 11:30 a.m.
Valentino's Restaurant, Seneca, KS
Pre-Registration is not necessary. For more information contact Meadowlark Extension District Office at 785-336-2184 or 785-364-4125 or email: jholthau@ksu.edu

Seneca Site Agenda

11:30 a.m.	Welcome / Refreshments
11:45 a.m.	DHIA Business Meeting
12:00 p.m.	Lunch (sponsored by KDC and KDA)
12:30 p.m.	KDC / KDA Update
12:45 p.m.	Christa Mahnken - "*Milk production and composition of cows fed wet brewers grains*"
12:55 p.m.	Justin Potts - *"Determining the water needs of dairy farms*"
1:05 p.m.	Tori Boomgaarden - *"Effect of acidulant addition on yogurt fermentation*"
1:15 p.m.	DJ Rezac - *"Effects of acidified fermentation by-products and prepartum DCAD on feed intake, performance and health of transition dairy cows"*
1:25 p.m.	Cynthia Martel - *"Dietary molasses increases ruminal pH and enhances ruminal biohydrogenation during milk fat depression"*
1:35 p.m.	Karen Schmidt, PhD - *"Milk components and other processing issues"*
1:55 p.m.	Jeff Stevenson, PhD - *"Estrumate vs. Lutalyse?"*
2:15 p.m.	Mike Brouk, PhD - *"Relationships between feed costs and milk production"*
2:35 p.m.	Barry Bradford, PhD - *"Inflammation in transition cows*"
2:55 p.m.	John F. Smith, PhD - *"K-State Dairy Facility update"*
3:15 p.m.	Adjourn

- The **2010 Women Managing the Farm Conference** has been scheduled for February 5-6, 2010 at the Hyatt Regency in Wichita, Kansas. "Celebrating Ag Women" is the theme for this year's conference. Over the two days of the conference, presentations regarding business planning, health, managing employees and more will be interspersed with opportunities for networking and learning from others attending the conference. The WMF conference has been developed for all women involved in an operation from the fulltime manager to the absentee landowner needing a bit of insight about managing their investment. For more information, visit www.womenmanagingthefarm.info or call 1-866-FARMKSU.

- An informational **Southwest District Sheep School** will be held on Thursday, February 11, 2010, at the Hodgeman County 4-H Building in Jetmore, Kansas. The evening will include a complimentary supper beginning at 6:00 p.m. Speakers for the sheep school will include Justin Waggoner, SW Area Agriculture Livestock Specialist, and Brian Faris, KSU Sheep and Goat Specialist. There will be discussion on various topics including West Distillers Storage; Bottle Babies; Economics of Sheep; Sheep Cooperatives; Pros & Cons of Romanov's and/or Finns (Economically); Accelerated Lambing vs Spring and Fall (no summer) Economics; Kreig Leymaster's research on composites, and more. A question and answer session will follow the program. For more information, contact DeWayne Craghead at the Hodgeman County Extension Office (620-357-8321; dcraghea@ksu.edu).

- Mark your calendars for the 97th annual **KSU Cattlemen's Day** which will be held on Friday, March 5, 2010 at Weber Hall. This program is designed to provide producers, allied industry and individuals with information about new developments in the beef industry. Watch for more details on the program and registration information at www.asi.ksu.edu/cattlemensday.

  Exhibiting products and services at Cattlemen's Day is an excellent way to reach customers. If you are interested in exhibiting, there is still space available. For more information, contact Jim Drouillard (jdrouill@ksu.edu; 785-532-1204) or Dale Blasi (dblasi@ksu.edu; 785-532-5427).

- The KSU **Legacy Bull and Heifer Sale** will be held on March 5, 2010, at the conclusion of KSU Cattlemen's Day. The sale will begin at 3:30 p.m. at the Purebred Beef Unit. For more information or a sale catalog, contact Ryan Breiner (rbreiner@ksu.edu; 785-532-6127).

- The **2010 High Plains Dairy Conference** has been scheduled for March 11 & 12, 2010 in Amarillo, Texas. New for this year will be a Dairy and Feedlot Facilities Tour held on March 10, 2010, prior to the conference. The seminar schedule is 8:00 a.m. – 5:00 p.m. on March 11 and 8:00 a.m. to 12:00 noon on March 12. Seminar topics include: *UPS Solutions Manager; Achieving Optimal Cow Performance with the Aid of Information Systems; Designing the Management System for your Dairy; Food Economics and Consumer Choice; Global Dairy Market Outlook: Perspectives for the US, Busting Mastitis Treatment Myths; Needle Free Injections: Pros and Cons*, and much more.

  For a complete schedule and registration information, visit www.highplainsdairy.org or call 785-532-2370. For more information, contact John Smith (jfsmith@ksu.edu; 785-532-1203).

- Plans for Junior Livestock Days are underway for 2010. On March 13th, K-State Animal Sciences and Industry will host **K-State Junior Beef Day**. K-State faculty will provide hands-on education over topics such as feeding, reproduction, meat evaluation, and more. In the afternoon, clinician Bob May will teach exhibitors how to prepare their beef project for the showring. **K-State Youth Sheep Day** will be held on March 27 at Weber Arena on the K-State Campus. Zane Bone, sheep producer from Wimberly, Texas will be the featured presenter. The program will focus on topics such as nutrition, feeding, health, and breeding. For more information and registration forms for both events visit www.YouthLivestock.KSU.edu.

- The 2010 **K-State Sheep Day** will be held on Saturday, March 27, 2010 at Weber Hall. Watch for more details on the program and registration. For more information, contact Brian Faris (brfaris@ksu.edu; 785-532-1255).

- Two **Livestock Fair Management Clinics** are being planned for this spring. These events are designed for county fair boards, volunteers, and extension staff to share ideas about livestock fair management and leadership. A March 30 meeting will take place in Burlington at the 4-H Building, and an April 1 meeting is planned at the Research Center in Hays. More information and registration forms are available at www.YouthLivestock.KSU.edu.

- The **KSU Youth Horse Judging Camp – Beginning Section** will be held Friday, June 4, 2010 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. Emphasis will be on the placings of classes commonly seen in Kansas judging contests.

  Camp registration will begin at 8:30 a.m. on Friday, June 4, in Room 146, Weber Hall. Camp registration fee is $30/per student and must be paid by May 1. No entries will be accepted after this date. Camp will be limited to the first 30 participants. 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).

- The **KSU Youth Horse Judging Camp – Advanced Section** will be held June 7-8, 2010 in Weber Arena 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. Emphasis will be on the placings and reasons of classes commonly seen in Kansas judging contests.

  Camp registration will begin at 8:30 a.m. on Monday, June 7, in the dorm lobby. Camp registration fee is $115/per student and must be paid by May 1. No entries will be accepted after this date. Camp will be limited to the first 30 participants. Youth will be housed in KSU dorm rooms. All meals are included in the registration fee. 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).

- The **Second K-State Animal Sciences Leadership Academy** will be June 9-12, on the Kansas State University campus. This hands-on event is designed for current high school students to gain animal sciences industry knowledge and develop their leadership skills. Twenty students will be selected to participate in this year's event. You can find applications and more information at www.YouthLivestock.KSU.edu. Cost to participate is only $50. A special thank you to the Livestock and Meat Industry Council (LMIC) for continuing to support this program.

CALENDAR OF UPCOMING EVENTS

Date	Event	Location
January 30, 2010	Meat Processing Workshop	Manhattan
February 2, 2010	KSU Swine Profitability Conference	Manhattan
February 4, 2010	KSU Dairy Days	Whiteside, KS
February 5, 2010	KSU Dairy Days	Seneca, KS
February 5-6, 2010	Women Managing the Farm Conference	Wichita, KS
February 11, 2010	2010 Southwest District Sheep School	Jetmore, KS
March 5, 2010	KSU Cattlemen's Day	Manhattan
March 5, 2010	KSU Legacy Bull and Heifer Sale	Manhattan
March 11-12, 2010	High Plains Dairy Conference	Amarillo, TX
March 13, 2010	K-State Junior Beef Day	Manhattan
March 27, 2010	K-State Sheep Day and Youth Sheep Day	Manhattan
March 30, 2010	Livestock Fair Management Clinic	Burlington, KS
April 1, 2010	Livestock Fair Management Clinic	Hays, KS
June 4, 2010	KSU Youth Horse Judging Camp – Beginning Section	Manhattan
June 7-8, 2010	KSU Youth Horse Judging Camp – Advanced Section	Manhattan
June 9-12, 2010	K-State Animal Sciences Leadership Academy	Manhattan

AS&I FACULTY SPOTLIGHT

Ken Odde (kenodde@ksu.edu; 785-532-1227)
Department Head

Dr. Ken Odde received a bachelor's degree in animal science from South Dakota State University, a master's degree in reproductive physiology, a doctor of veterinary medicine and a doctorate in physiology from Kansas State University. Dr. Odde served as Assistant Professor, Associate Professor and Professor at Colorado State University from 1983 to 1994. He taught and conducted research in beef cattle reproduction and health. In 1994, Dr. Odde returned to his home area in South Dakota and joined the technical services team at SmithKline Beecham Animal Health. He was a member of the technical services team at Pfizer Animal Health following their acquisition of SmithKline Beecham Animal Health. In 2000, Dr. Odde left Pfizer to become Vice President of Veterinary Operations at AgSpan and then had his own consulting business. Dr. Odde joined North Dakota State University as Professor and Head, Department of Animal & Range Sciences in January of 2003. Starting in June, 2005, he served as Professor and Director, Beef Systems-Center of Excellence, a public-private partnership designed to grow cattle feeding and processing in ND, and the research and education support to the beef industry.

Currently, Dr. Odde is Professor and Head, Department of Animal Sciences and Industry, Kansas State University. Dr. Odde is a member of several associations, including American Society of Animal Science, American Veterinary Medical Association and American Association of Bovine Practitioners and is a frequent speaker at veterinary and cattle producer meetings.

Karen Blakeslee (kblakesl@k-state.edu; 785-532-1673)
Extension Associate/Rapid Response Center

Karen Blakeslee is coordinator of the Rapid Response Center, an Extension Agent resource for Food Science. The Rapid Response Center was formed in 1995 as a resource for Kansas State University Research & Extension Agents. Resource topics included Food Science, Human Nutrition, Food Service, Textiles, Home Care and other consumer topics. Since that time, the Center has grown to be of valuable assistance to Kansas State University Extension Specialists in those areas, primarily in food science. The proven success of the Center helped to start a similar position in the Kansas State University Horticulture Department.

Karen is the co-director of the KSU Master Food Volunteer program in which Extension Agents recruit volunteers in their counties/districts and have a strong interest in foods and nutrition. Karen is also the webmaster for several websites including: KSU Rapid Response Center; KSU Extension Food Safety; KSU Master Food Volunteer; Food Science Institute; Kansas Value Added Foods Lab; WalkKansas; KSU Extension Wildlife; and Extension Animal Science & Industry.

Karen's background includes working in ice cream manufacturing and in cereal and pasta manufacturing for almost 12 years. Karen is a native of Great Bend, Kansas.

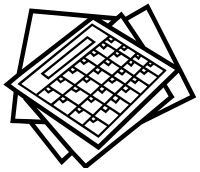
Sharon Breiner (sbreiner@k-state.edu; 785-532-1264)
Extension Assistant/Youth Livestock Coordinator

Sharon Breiner grew up on a diversified livestock farm in southern Illinois. She came to Kansas as an undergraduate to be part of K-State's Livestock Judging Team, and dual majored in agricultural communications and animal sciences with a minor in business. Upon completing her bachelor's degrees she began a master's program in animal science management at K-State. Her research focused on the perceptions of cow-calf producers in relation to the National Animal Identification System, as well as the dissemination of information and technology within the beef industry. She has held positions with the National Cattlemen's Beef Association Public Policy Office, K-State School of Leadership Studies, and Angus Publications Inc.

Sharon is currently the Youth Livestock Coordinator for the Department of Animal Sciences and Industry. She enjoys working with youth from across the state and coordinating educational events to help young people grow in their abilities. Sharon and her husband Ryan reside in Pottawatomie County where they enjoy raising Hereford and Angus cattle.

WHAT PRODUCERS SHOULD BE THINKING ABOUT...

WHAT PRODUCERS SHOULD BE THINKING ABOUT IN MARCH…….



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

☑ Manage calving pens and pastures to minimize human, cow and calf stress. Stay organized.

☑ An observation schedule should be implemented for calving first-calf heifers and cows. First-calf heifers should be checked every 2 to 3 hours.

☑ Sanitation is key to reduce and/or eliminate calf scours. An excellent calving pasture management plan by Dr. David Smith from the University of Nebraska - Lincoln, can be found at http://beef.unl.edu/beefreports/symp-2003-19-XVIII.pdf.

☑ Make sure every calf consumes adequate colostrum during the first 4-12 hours after birth.

☑ Keep accurate calving records, including cow identification (ID), calf ID, birth date, calving difficulty score and birth weight. Other traits to consider recording are teat and udder scores, calf vigor score, and other pertinent information. This information along with Angus sire information is vital for enrolling cattle into the AngusSource^{SM} program.

☑ Calving books are essential sources of information; make sure you have a backup copy.

☑ Body condition score (BCS) cows. Thin and young cows will need extra energy to maintain yearly calving interval.

☑ If cow diets are going to be shifted from low- (poor quality forage or dormant grass) to high-quality forage (lush green grass) programs, begin a grass tetany prevention program at least 3 weeks prior to the forage switch.

☑ Given the high price of mineral supplements, conduct a needs assessment of your cowherd. Moreover, closely monitor daily intake to insure that it is consistent with label directions.

☑ When making genetic selections, use the most recent National Cattle Evaluation (NCE) and herd records judiciously.

☑ If new bulls are purchased, now is the time to start preparing them for their first breeding season. Bulls need to be properly vaccinated and conditioned to be athletic. Moderate body condition with abundant exercise is ideal.

☑ After calving and before breeding, vaccinate cows as recommended by your veterinarian.

☑ Plan to attend beef production meetings.

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, or phone 785-532-1267.