



Newsletter from the Department of Animal Sciences and Industry
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WHAT'S NEW....

*On behalf of the Department of Animal Sciences and Industry,
Merry Christmas and best wishes for a successful and prosperous New Year in 2011.
As partners of the outreach component of Kansas State University, we are proud to
be working with you to meet the needs of our clientele in the livestock industries.*

Please let us know how we can better help you serve our joint clientele.

Thank you for all of your hard work that you continue to do.

Mike Tokach, Extension State Leader, Animal Sciences and Industry

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

“Winter Blues – and Opportunities”

Cold. Snow. Wind chill factor. Depending on where you are, Old Man Winter is currently either right in your lap or just around the corner. With all the difficulties and inconveniences that a good old fashioned winter throws at us, it may also provide a break from the normal hectic pace of production agriculture.

Does this break in the action provide you as manager a chance to dig into evaluating your team's productivity and your employees' attitudes, performance, and growth? If you've been putting off individual employee interviews and a more formal job review, now is the time. Here is a metaphor: If an individual decides independently to take a slightly divergent path along the same general direction as the team, the turn may be sufficiently subtle so as to not even be noticed by the team or the manager. But after an extended time the slight deviation from true North will lead them to a completely different destination---probably not a good thing.

Regular, one-on-one, two-way dialog with each employee on the direction of the organization and the individual's role in the team will likely bring to light any underlying issues. This can prevent or at least minimize potentially catastrophic workplace misunderstandings. Managing human resources isn't easy, it's rarely fun, and it may not even be what you signed up for. In reality, you don't need to actively, intentionally, manage your workplace; you can choose to let it manage itself. The problem is that I guarantee you won't like the outcome.

Now is the time to take some time---or, if necessary, **MAKE** some time---to get inside your employees' heads, let them know what they're doing right, what could use some attention, listen to their concerns, and make clear for them what their role is in the future success of the organization.

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

↪ **Research Assistant – Poultry and Game Bird Research Center** - The Department of Animal Sciences and Industry is looking for a Research Assistant responsible for managing a poultry farm and game bird facility. This position is a 12 month, non-tenure track, term position. A Bachelor of Science degree in Animal Science, Wildlife Biology, Zoology or related field is required with a Master of Science preferred. Experience with laboratory procedures relating to chemical and physical analysis of feeds as well as demonstrated capabilities of making routine repairs, updates, and remodeling of physical facilities are required. View complete position announcement at: <http://www.asi.ksu.edu/positions> Review of applications begins December 15, 2010, and continues until position is filled.

↪ **Feedlot Facts** – Chris Reinhardt, Ph.D., Extension Feedlot Specialist
“**Genetics for Growth**”

If you've decided to wean your calves and feed them at home, at least through the growing phase, and you've gotten the calves successfully through the stressful weaning and transition phase, you're well on your way to success. However, you've still got one big decision in front of you: How much should they gain?

If you haven't retained your calves for a few years (or decades), here's a shocker: Genetics Have Changed! And cattle genetics haven't changed coincidentally, they've changed because WE have changed them. We've selected for heavier weaning weights, which (usually) means we get higher gaining calves and heavier yearling and carcass weights. Dr. Justin Waggoner's research at Kansas State University suggests that finished weights of cattle have increased by over 100 lbs over the past 20 years. This agrees with data from other sources suggesting increases in weaning weights of calves and mature weights of brood cows over the same time period.

If you have the genetics for heavy weaning weights and large mature size, you may also have the genetics for accelerated growth post-weaning. If you have large, muscular cows and calves, the calves can probably handle a greater rate of gain post-weaning without depositing excess flesh. The lean growth potential of your calf crop is something that may take several seasons to fully capture. However, whereas in 1990 we would have suggested that 2.0 lbs per day was the upper limit to growth rate for calves to develop frame and muscle without depositing excess fat, there are many herds which can sustain a much higher growth rate (2.5 to 2.9 lbs per day) and still not deposit excessive flesh. This higher growth rate, depending on genetics and feed costs, may be a much more economically rewarding program.

Buyers still do not want to buy overly fleshy feeders and will discount them heavily. Always start your calves slowly and conservatively. But if you've invested in superior genetics for lean growth, you should be able to benefit from those genetics and enhance your bottom line.

For more information contact Chris at cdr3@ksu.edu.

↪ **Intestinal Mucus from Cattle Stimulates Growth of *Escherichia coli* O157:H7** – *E. coli* O157:H7 strains resistant to nalidixic acid were added to tubes containing buffer and mucus from the small or large intestine. Bovine feces were added to determine if bacterial competition affected *E. coli* O157:H7 growth. Cultures were incubated at 104°F, and samples were plated after 0, 6, 8 and 12 hours of incubation. Anaerobic fecal bacteria and *E. coli* O157:H7 counts (CFU/mL) were determined.

Growth of *E. coli* O157:H7 increased linearly in response to increasing concentrations of mucus, but total anaerobic counts remained unchanged. These results suggest mucus may provide a medium that favors growth of the pathogen.

Bottom Line.... Factors that influence mucus production in the gut may favor growth of *E. coli* O157:H7, providing a selective environment that may allow pathogens to outcompete other bacteria in the gut. View the complete research report at www.asi.ksu.edu/cattlemensday. For more information, contact Jim Drouillard (785-532-1204; jdrouill@ksu.edu) or Larry Hollis (785-532-1246; lhollis@ksu.edu).

↪ **FlaxLic Supplementation Improves Growth Performance of Angus Bulls** - Yearling Angus bulls (n = 120; initial body weight = 1,115 lb) were assigned randomly to three treatment groups: control (forage-based diet), FlaxLic (control diet with free access to FlaxLic), and corn steep block (control diet with free access to an alternative block formulation in which a portion of the molasses was replaced by corn steep liquor). Bulls were fed free choice for 70 days. Daily feed consumption was monitored using the GrowSafe electronic feed intake monitoring system. The 60-lb blocks for the FlaxLic and corn steep block treatments were placed in GrowSafe feeders for the designated pen. One pen of 40 bulls was used for each treatment. Rate of gain and feed intake were monitored, breeding soundness exams were performed, and blood and semen samples were analyzed for fatty acid composition.

Bottom Line.... Feeding FlaxLic or the corn steep block did not alter breeding soundness. However, FlaxLic increased growth performance and efficiency. Substituting 15% corn steep liquor for molasses had a negative effect on nutritional value of the corn steep block. View the complete research report at www.asi.ksu.edu/cattlemensday. For more information, contact Jim Drouillard (785-532-1204; jdrouill@ksu.edu) or Larry Hollis (785-532-1246; lhollis@ksu.edu).

↪ **Effects of Feeding Increased Amounts of Wet Corn Gluten Feed on Dairy Cow Metabolism and Milk Production** – An experiment was conducted to evaluate the effects of feeding increasing dietary amounts of wet corn gluten feed (WCGF). Eight lactating Holstein cows were housed in a tie-stall facility and fed 1 of 4 diets containing 0, 11, 23, or 34% WCGF on a dry matter basis. To maintain similar nutrient concentrations, alfalfa hay, corn silage, corn grain, soybean meal, expeller soybean meal, and mineral supplements varied across diets. Feed intake, milk production, body weight, and body condition score were monitored, and effects of WCGF inclusion rate were assessed. Increasing the level of WCGF in the diet led to increased feed intake, milk production, and body condition. Concentrations of milk components did not differ among treatments; therefore, yield of energy-corrected milk and solids-corrected milk increased as well. In contrast, increasing dietary WCGF decreased efficiency of production and also decreased ruminal pH, possibly because treatments with greater proportions of WCGF had a decreased mean particle size. As expected, the decreased ruminal pH coincided with changes in ruminal volatile fatty acid concentrations. Furthermore, the rate of fiber digestion after 24 hours decreased when more WCGF was incorporated into diets.

Bottom Line....Results indicate that adding WCGF to dairy rations can increase energy-corrected milk yield, and this increase seems to be driven, at least in part, by an increase in feed intake. View the complete research report at www.asi.ksu.edu/dairy under the *Dairy Publications and Presentations* link. (This study conducted by C.R. Mullins, K.N. Grigsby, D.E. Anderson, E.C. Titgemeyer, and B.J. Bradford.)

↪ **Luteolysis and Pregnancy Outcomes in Dairy Cows after Treatment with Estrumate or Lutalyse** - In Experiment 1, lactating dairy cows (n = 1,230) in 6 herds were treated with 2 injections of prostaglandin F_{2α} (PGF_{2α}) 14 days apart (Presynch), with the second injection administered 12 to 14 days before the onset of a timed AI protocol (Ovsynch). Cows were inseminated when detected in estrus after the Presynch PGF_{2α} injections. Cows not inseminated were enrolled in the Ovsynch protocol and were assigned randomly to be treated with either Estrumate or Lutalyse as part of a timed artificial insemination (AI) protocol. Blood samples were collected before treatment injection (0 hour) and 48 and 72 hours later. In cows having progesterone concentrations ≥1 ng/mL at 0 hour and potentially having a functional corpus luteum (CL) responsive to a luteolytic agent, Lutalyse increased luteal regression from 83.9 to 89.3%. Despite a significant increase in luteolysis, pregnancy rate per AI did not differ between treatments. Fertility was improved in both treatments in cows having reduced progesterone concentrations at 72 hours and in those showing signs of estrus. In Experiment 2, an ovulation resynchronization (Ovsynch-Resynch) program was initiated with gonadotropin-releasing hormone (GnRH) or saline in 427 previously inseminated lactating dairy cows of unknown pregnancy status in 1 herd. Seven days later, pregnancy was diagnosed and nonpregnant cows were blocked by number of CL and assigned randomly to receive Estrumate or Lutalyse. Diameter of each CL was recorded and blood samples were collected at 0 and 72 hours after treatment to assess serum progesterone. A fixed-time AI was given at 72 hours after treatment and approximately 16 hours after a GnRH injection to induce ovulation. Lutalyse increased luteal regression from 69.1 to 78.5% regardless of the number of CL present or the total luteal volume per cow exposed to treatment. Pregnancy rate per AI did not differ between treatments.

Bottom Line....Although Lutalyse was slightly more effective than Estrumate in inducing luteolysis in lactating dairy cows exposed to an Ovsynch or Ovsynch-Resynch protocol, resulting pregnancy outcomes did not differ between products. View the complete research report at www.asi.ksu.edu/dairy under the *Dairy Publications and Presentations* link. (This study conducted by J.S. Stevenson and A.P. Phatak.)

↪ **Does Lysine Level Fed in One Phase Influence Performance During Another Phase in Nursery Pigs?** -

A total of 320 weanling pigs (PIC 1050 barrows, initially 12.6 lb and 21 d of age) were used in a 35-d trial to determine whether the lysine level fed during 1 phase in the nursery influences the response to dietary lysine during another phase. Eight dietary treatments were allotted and arranged as a 2 × 2 × 2 factorial, with 5 pigs per pen and 8 pens per treatment. Diets were fed in 3 phases, with each treatment assigned as low or normal lysine level. Standardized ileal digestible lysine levels were 1.35 vs 1.55% during Phase 1 (d 0 to 7), 1.15 vs 1.35% in Phase 2 (d 7 to 21), and 1.05 vs 1.25% during Phase 3 (d 21 to 35). Pigs and feeders were weighed on d 0, 7, 14, 21, 28, and 35 after weaning to calculate ADG, ADFI, and F/G. There were no dietary interactions between phases. From d 0 to 7, increasing dietary lysine did not influence ADG (0.35 vs 0.35 lb/d) or ADFI (0.36 vs 0.33 lb/d), but improved F/G (1.06 vs 0.97). With results similar to those of Phase 1, increasing dietary lysine from d 7 to 21 did not influence ADG (0.78 vs 0.82 lb/d) or ADFI (1.15 vs 1.13 lb/d), but improved F/G (1.48 vs 1.39). From d 21 to 35, increasing dietary lysine improved ADG (1.23 vs 1.32 lb/d) and F/G (1.64 vs 1.54).

Bottom Line....These results indicate that lysine level fed in each phase did not influence the response to lysine in the subsequent phase. The lysine level fed during the late nursery phase had a greater effect on overall performance than the level fed in earlier phases. More information is available on this experiment and others in the KSU Swine Day Report at 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 Feeder Design and Feeder Adjustment on the Growth Performance of Growing-Finishing Pigs** - Two experiments were performed to evaluate the effects of feeder design (conventional dry feeder vs. wet-dry feeder) and adjustment on growing-finishing pig performance. In both experiments, all pigs (PIC 337 × 1050) were fed the same corn-soybean meal diets with 15% dried distillers grains with solubles (DDGS). In Exp. 1, 1,296 pigs (initially 43 lb) were used in a 69-d study. From d 0 to 27, 3 feeder settings were evaluated for each feeder type. Numbered settings (located in each feeder) were 6, 8, and 10 for the conventional dry feeder and 6, 10, and 14 for the wet-dry feeder. An increased setting number corresponded to a greater opening. From d 27 to 69, all feeders were adjusted to an opening of approximately 1 in. (conventional dry feeder setting 8; wet-dry feeder setting 14). From d 0 to 27, pigs using a wet-dry feeder had lower ADFI and better F/G than pigs using a conventional dry feeder. Increasing the feeder setting improved ADG, ADFI, and d-27 BW of pigs using a wet-dry feeder and increased ADFI of pigs using a conventional dry feeder. From d 27 to 69, ADG and ADFI of pigs using a wet-dry feeder were greater than those of pigs using a conventional dry feeder, and increasing the feeder setting from d 0 to 27 resulted in greater ADFI and poorer F/G for pigs using a wet-dry feeder. Overall (d 0 to 69), pigs using a wet-dry feeder had greater ADG, ADFI, final BW, and better F/G than pigs that used a conventional dry feeder. Increasing the feeder setting of a wet-dry feeder from d 0 to 27 resulted in greater ADG and ADFI, poorer F/G, and heavier final BW. Feeder setting of a conventional dry feeder from d 0 to 27 did not affect overall performance. In Exp. 2, 1,248 pigs (initially 73 lb) were used in a 93-d study. Three feeder settings were evaluated throughout the study for each feeder type (conventional dry feeder set at 6, 8, and 10; wet-dry feeder set at 10, 14, and 18). Overall, pigs using a wet-dry feeder had greater ADG, ADFI, final BW, HCW, backfat depth, and feed cost but reduced fat-free lean index (FFLI) compared with pigs using a conventional dry feeder. Increasing the feeder setting of a wet-dry feeder resulted in greater ADG, ADFI, final BW, HCW, backfat depth, and feed cost. When HCW was used as a covariate, FFLI of pigs using a wet-dry feeder decreased with increased feeder opening. Increasing the feeder setting of a conventional dry feeder had no effect on growth performance and carcass characteristics.

Bottom Line...In conclusion, the growth rate of pigs improved with a wet-dry feeder compared with a conventional dry feeder; however, the growth of pigs using a wet-dry feeder was more sensitive to differences in feeder adjustment. 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.)

↳ **Effects of Switching Diet Formulations on Finishing Pig Performance** - A total of 1,239 finishing pigs (initially 43 lb) were used in a 41-d trial to determine the effects on ADG, ADFI, and F/G of switching every 2 wk from a corn-soybean meal-based diet to a diet containing alternative ingredients. Pens of pigs were weighed and allotted randomly to 1 of 4 dietary treatments. Dietary treatments were: (1) feeding a corn-soybean meal-based diet; (2) feeding an alternative ingredient-based diet; (3) feeding both diets in succession by feeding 2 wk of the corn-soybean meal-based diet followed by 2 wk of the diet with alternative ingredients, then feeding the corn-soybean meal-based diet again for 2 wk (Switch 1); or (4) feeding both diets in succession by feeding 2 wk of the diet with alternative ingredients followed by 2 wk of the corn-soybean meal-based diet, then feeding the diet with alternative ingredients again for 2 wk (Switch 2). Nutrient specifications of the corn-soybean meal-based diet and alternative ingredient-based diet were similar within phase, and diets were fed in 2 phases (Phase 1: 4 wk, and Phase 2: 2 wk). Pigs were weighed and feed intake was recorded by pen on d 0, 13, 27, and 41 to determine ADG, ADFI, and F/G.

Although performance among pigs fed the different dietary treatments was variable throughout the testing periods, dietary treatment did not affect overall ADG or ADFI. This resulted in pigs being of similar off-test weight, regardless of the diet (corn-soybean meal-based or alternative ingredient-based diets) or diet sequence (Switch 1 or Switch 2).

Bottom Line....Therefore, in this study with diets formulated to similar nutrient specifications but having different ingredients, pigs had comparable performance regardless of whether a corn-soybean meal-based diet or an alternative ingredient-based diet was fed continuously or whether pigs were fed these same 2 diets alternated every 2 wk. More information is available on this experiment and others in the KSU Swine Day Report at www.KSUswine.org. (This study conducted by M.L. Potter, S.S. Dritz, M.D. Tokach, J.M. DeRouchey, R.D. Goodband, and J.L. Nelssen.)

UPCOMING EVENTS...

- ↪ Area cattlemen should mark the dates of January 11th and 12th on their calendars for the **4-State Beef Conference**. The morning session on January 12th will begin at 10:00 a.m. in Holton, KS at the Jackson County Fair Building. Speakers and their topics for the 2011 conference are as follows:
- Show-Me Select Multi-year Selection Impact – *Dr. Dave Patterson, University of Missouri*
 - Benefiting from Feeding on Pasture - *Dr. Dale Blasi, Kansas State University*
 - Understanding and Addressing Threats to the Industry – *Daren Williams, NCBA*
 - Low Input Heifer Development – *Dr. Rick Funston, University of Nebraska*
- The registration fee is \$25.00 per person and reservations are requested by, Friday, January 7th, 2011. More information is available at www.KSUbeef.org or www.extension.iastate.edu/feci/4StBeef/. To register for the conference, contact your local county extension office. For more information, contact, Joel DeRouchey (jderouch@ksu.edu; 785-532-2280), or Jody Holthaus, Meadowlark Extension District/Holton Office (jholthau@ksu.edu; 785-364-4125).
- ↪ The **K-State Winter Ranch Management Seminar** will be held on Tuesday, January 11, 2011, from 4:30 – 8:30 p.m. The schedule is as follows:
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| 4:00 p.m. | Registration begins |
| 4:30 p.m. | Winter Ration Development |
| 5:15 p.m. | Ranch Management Focus (<i>Dale Smith, Corsino Cattle Co</i>) |
| 6:00 p.m. | Dinner |
| 7:00 p.m. | CattleFax Update (<i>Kevin Good, CattleFax</i>) |
| 7:45 p.m. | Cow/Calf Health Management |
- Featured speakers are Dale Smith, Corsino Cattle Co., Amarillo, TX, and Kevin Good, CattleFax economist. These two speakers will be addressing the audiences at all four locations simultaneously by Webinar. Local speakers at each location will address winter ration development using a computerized ration balancing program and cow/calf health management focusing on vaccination programs.
- Registration fee is \$25 per person with additional participants from the same farm/business only \$15 per person and due by January 6, 2011. Locations for the seminar include Kansas State University in Manhattan; Butler Community College in El Dorado; Ashland Community Center in Ashland; and the Huck Boyd Community Center in Phillipsburg. Brochures for the event are available through your local county office and on-line at www.KSUbeef.org or <http://www.asi.ksu.edu/rms>. For additional information, contact Larry Hollis (lhollis@ksu.edu; 785-532-1246).
- ↪ Succeeding in a challenging beef industry is the focus for the **2011 Tri-State Cow/Calf Symposium** to be held on Wednesday, January 12, 2011 from 10:00 a.m. to 3:00 p.m. CST at the Riverside County Club in St. Francis, KS. The registration cost is \$20 and \$15 for the second person from the same operation, on or before January 5, 2011. Registration will be available at the door for \$30. For further details contact Marty Fear, Sunflower Extension District livestock agent at 785-332-3171 or Sandy Johnson, Northwest Area Livestock Specialist at 785-462-6281 or sandyj@ksu.edu.
- ↪ Dates for the **2010 KSU Dairy Days** have been scheduled as follows: Thursday, January 27th in Whiteside, Kansas (Reno County) and Friday, January 28th in Seneca, Kansas (Nemaha County). If you would like to attend one of the Dairy Day meetings you may RSVP by calling your LOCAL Extension office or you may call the offices in Reno or Nemaha County. Hope to see you at one of the Dairy Days in January. For more information, contact John Smith (785-532-1203; jfsmith@ksu.edu).
- ↪ The **2011 KSU Swine Profitability Conference** will be held Tuesday, February 1 in Forum Hall of the K-State Student Union. A great program has been lined up including presentations from Dr. Gene Nemecek, Tyson Foods; Kent Condray, Clifton, KS; Glynn Tonsor, KSU; and Cindy Cunningham, National Pork Board as well as a keynote address from Governor Sam Brownback. Registration fee of \$30 per participant is due by January 25, 2011. Watch for more details on the conference at www.KSUswine.org. For more information, contact Jim Nelssen (785-532-1251; jnelssen@ksu.edu).
- ↪ An exciting and informative **Meat Processing Workshop** has been planned at Kansas State University in conjunction with the Kansas Meat Processors Association. The 34th Annual Midwest Processed/Cured Meat Workshop will be held on Saturday, February 5, 2011, 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 flavored bacon production, pricing for your operation, new cuts from the round, and more.
- Registration is \$95.00 per plant and includes lunch for two people if received by January 21, 2011. 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 98th annual **KSU Cattlemen's Day** will be held on Friday, March 4, 2011. Mark your calendars and watch for more details. The program and registration information will be coming soon to www.asi.ksu.edu/cattlemensday. For more information, contact Jim Drouillard (jdrouill@ksu.edu; 785-532-1204) or Dale Blasi (dblasi@ksu.edu; 785-532-5427).

↪ The **2011 Western Dairy Management Conference** will be held March 9-11, 2011 in Reno, Nevada. This conference offers the latest up-to-date dairy information. The seminar schedule will be as follows: March 9 & 10 from 8:00 a.m. to 5:00 p.m. and March 11 from 8:00 a.m. to Noon. Seminar topics include:

- Where will dairies be located in the future? - *Normand St. Pierre, Ohio State University*
- Integrating farm data across enterprises – *Steven Stewart, Valley Ag Software*
- Making sense of genomics in dairy cattle – *Kent Weigel, University of Wisconsin*
- Financial perspectives – What's happening in the US? – *Jim Pisani, Wells Fargo Bank*
- Global perspectives – What's happening worldwide? – *Bill Cordingley, RaboBank*
- Managing stress and healthy family relations – *Robert Fetsch, Colorado State University*
- Managing air quality on the dairy – *Wendy Poers, Michigan State University*
- Feed center design – *Joe Harner, Kansas State University*
- Physiology, behavior & nutrition in transition cows – *Barry Bradford, Kansas State University*
- How lameness hurts in many ways – *Ricardo Bicalho, Cornell University*
- Making the most of the feed intake in the dairy cow – *Mike Allen, Michigan State University*
- The importance of starch and fiber digestibility – *Pat Hoffman, University of Wisconsin*
- Managing the environment of the transition cow – *Todd Duffield, University of Guelph*
- The new temperature humidity index (THI) – *Bob Collier, University of Arizona*
- Are you efficiently replacing your herd? – *Greg Bethard, Dairy Records Management System*
- How to maximize intake in pre-fresh cows – *Tom Overton, Cornell University*
- Accelerated growth of heifers: health and economics – *Mike Van Amburgh, Cornell University*

For a complete schedule and registration information, go to www.wdmc.org. For more information, contact John Smith (jfsmith@ksu.edu; 785-532-1203).

↪ Please join us on Saturday, March 12, 2011 for the **Kansas Junior Swine Producer Day** held in Weber Hall on the KSU campus. Presentations and demonstrations by featured speaker, Al Schminke, Van Horne, Iowa, as well as K-State faculty will cover topics such as selecting your project, nutrition, show ring skills, and individual topics tailored to age. The schedule for the day includes:

- 9:00 Registration
- 9:30 Welcome and Opening Remarks
- 9:45 Selecting Your Youth Project
- 10:15 Facilities and General Care
- 11:00 Breakout Sessions – Breeds and Swine Identification (Beg.); Meat and Carcass Evaluation (Int.); OR Two Weeks to Show Day (Sr.)
- 11:45 Educational Materials for your Swine Project
- 12:00 Lunch
- 12:30 Youth PQA+ Certification Session (*optional to attend, will last until 1:45*)
- 1:00 Nutrition Know How
- 1:45 Show Like a Pro
- 2:15 Final Questions and Wrap-up

For a complete schedule of events and registration, visit www.KSUswine.org or www.YouthLivestock.KSU.edu. For more information, contact Joel DeRouchey (jderouch@ksu.edu; 785-532-2280) or Chelsea Tomascik (tomascik@ksu.edu; 785-532-1264).

CALENDAR OF UPCOMING EVENTS		
Date	Event	Location
January 11, 2011	K-State Winter Ranch Management Seminar	Various locations
January 11 & 12, 2011	Four State Beef Conference	Holton, KS
January 12, 2011	Tri-State Cow/Calf Symposium	St. Francis, Kansas
January 27, 2011	KSU Dairy Day	Whiteside, Kansas
January 28, 2011	KSU Dairy Day	Seneca, KS
February 1, 2011	KSU Swine Profitability Conference	Manhattan
February 5, 2011	Annual Midwest Meat Processing Workshop	Manhattan
March 4, 2011	KSU Cattlemen's Day	Manhattan
March 9-11, 2011	Western Dairy Management Conference	Reno, Nevada
March 12, 2011	Junior Swine Producer Day	Manhattan

AS&I FACULTY SPOTLIGHT



Elizabeth Boyle (lboyle@k-state.edu; 785-532-1247)
Professor/Extension Specialist, Meat Safety and Quality

Originally from Richfield, Minnesota, Liz Boyle has been a member of the Animal Science faculty since 1992. She received her B.S. in Wildlife Biology from the University of Minnesota in 1980 followed by her M.S. in Food Science and Nutrition in 1987, and Ph.D. in Food Science with a Meat Science emphasis from Colorado State University in 1991. Following post-doctorate work at the University of Kentucky and the University of Minnesota, Dr. Boyle made the move to Kansas.

Dr. Boyle works primarily in Extension to enhance the quality and safety of meat products and to provide scientific and technical assistance to meat processors and trade associations. She teaches Hazard Analysis and Critical Control Point (HACCP) workshops nationally as a certified Lead HACCP instructor and teaches undergraduate and graduate courses in HACCP and Advanced HACCP, Processed Meat Operations, and Meat Technology. Her research focuses on meat safety, validation interventions, and quality.



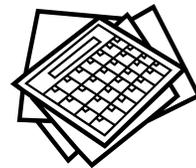
Fadi Aramouni (aramouni@k-state.edu; 785-532-1668)
Professor/Food Processing & Food Product Development

Dr. Fadi Aramouni was born and raised in Beirut, Lebanon. He received his B.S. in Biochemistry in 1977, and his M.S. in Food Technology in 1980 from the American University of Beirut. Dr. Aramouni earned his Ph.D. in Food Science in 1986 from Louisiana State University. He joined the Kansas State University Department of Foods and Nutrition in 1989, then the Department of Animal Science and Industry in 1995. Since July 1999, his responsibilities have been 0.85 Extension/0.15 Teaching. His teaching responsibilities include "Research and Development of Food Products", "Principles of HACCP", "Advanced HACCP Principles" and "Fundamentals of Food Processing". Since June 2002, Dr. Aramouni has been a Professor and Extension Specialist with the Department of Animal

Sciences and Industry and a member of the Food Science Institute.

WHAT PRODUCERS SHOULD BE THINKING ABOUT...

WHAT PRODUCERS SHOULD BE THINKING ABOUT IN FEBRUARY.....



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

- ☑ Historically, cull cow prices are beginning to rise. Finish culling cows in order of priority:
 1. Those that fall within the “Four-O Rule” (Open, Old, Onry, Oddball).
 2. Those with physical/structure problems (feet and legs, eyes, teeth, etc.)
 3. Poor producers.
- ☑ Continue feeding or grazing programs started in early winter. Fully utilize grain sorghum and cornstalk fields, severe winter weather may begin to limit crop residue utilization, be prepared to move to other grazing and feeding systems.
- ☑ Supplement to achieve ideal body condition scores (BCS) at calving.
- ☑ Control lice, external parasites will increase feed costs.
- ☑ Provide an adequate water supply. Depending on body size and stage of production, cattle need 5-11 gallons of water per head per day, even in the coldest weather.
- ☑ Sort cows into management groups. Body condition score and age can be used as sorting criteria. If you must mix age groups, put thin and young cows together, and feed separately from the mature, properly conditions cows.
- ☑ Use information from forage testing to divide forage supplies into quality lots. Higher-quality feedstuffs should be utilized for replacement females, younger cows, and thin cows that may lack condition and that may be more nutritionally stressed.
- ☑ Consult your veterinarian regarding pre- and postpartum vaccination schedules.
- ☑ Continue mineral supplementation. Vitamin A should be supplemented if cows are not grazing green forage.
- ☑ Plan to attend local, state and regional educational and industry meetings.
- ☑ Develop replacement heifers properly. Weigh them now to calculate necessary average daily gain (ADG) to achieve target breeding weights. Target the heifers to weigh about 60 to 65% of their mature weight by the start of the breeding season. Thin, light weight heifers may need extra feed for 60 to 80 days to “flush” before breeding.
- ☑ Bull calves to be fed out and sold in the spring as yearlings should be well onto feed. Ultrasound measurements should be taken around one year of age and provided to the association.
- ☑ Provide some protection, such as a windbreak, during severe winter weather to reduce energy requirements. The lower critical temperature (LCT) is the temperature (at which a cow requires additional energy to simply maintain her current body weight and condition. The LCT for cattle varies with hair coat and body condition (Dry, heavy winter coat = 18 degrees, wet coat = 59 degrees). Increase the amount of dietary energy provided 1% for each degree (including wind chill) below the LCT.

*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.*