



**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)**

## WHAT'S NEW....

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

#### *“Employee of the Month”*

Next time you go to check into a hotel or order at a restaurant look at the wall. Chances are there will be a plaque there with someone's face and name on it being recognized as “Employee of the Month”. That someone most likely changed your sheets, or cleaned your toilet, or changed out the busted tile or shower spigot, or took your order and smiled.

I've seen the plaques and asked myself, “For what special traits is this person being rewarded?” Did they change the most sheets in October? Did they clean toilets the fastest? Unfortunately, I don't think it's ever that simple. Is that the only trait you value in your workplace culture: time efficiency? I doubt it.

We know how grinding the ag workplace can be, especially during certain seasons: calving, spring planting, branding, fall harvest, weaning, repeat. If all that mattered to us or our employees was the ability to do a single task, do it well, and do it expediently, they would have left a long time ago. Certainly, we value time management and efficiency, but what about loyalty, work ethic, and team work? Most likely your personal employee of this month is the person who will stay a few minutes longer to make sure the widget is welded securely to the whatever; greases the zerks one more time; volunteers to walk the weaned calves for sick so somebody can go to Junior's ball game this weekend. I'm getting misty just thinking about it.

Each one of us has a different “appetite” or “tolerance” for personal or public recognition. But I'd have to guess that everybody likes to know that they are truly appreciated, in some way or other--- maybe publicly like the “Employee of the Month” plaque, or just one-on-one, when nobody's around for either of you to blush in front of.

All your people have something special to offer (I hope); your job as a manager is to determine the best way to regularly acknowledge their contributions. If not, your silence may speak volumes to the contrary.

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

- ↪ **Assistant Professor, Dairy Foods** - The Department of Animal Sciences and Industry is looking for an Assistant Professor of Dairy Foods. This position is a 12 month, tenure track, 60% teaching and 40% research appointment. Earned doctorate in Dairy Science, Food Science, Animal Science or related discipline at time of employment is required. Expertise related to processing, development and analysis of dairy foods is also required. View complete position announcement at: <http://www.asi.ksu.edu/positions> Review of applications begins November 30, 2010, and continues until position is filled.

- ↪ We have a few **IRM Redbooks** for sale. The price of the redbooks will be: For orders of less than 10 = \$5.25/book; Orders of 10 or more = \$5.00/book which includes postage. To order your supply of redbooks, please contact Lois ([lschrein@ksu.edu](mailto:lschrein@ksu.edu); 785-532-1267

↳ **Feedlot Facts** – Chris Reinhardt, Ph.D., Extension Feedlot Specialist

**“Weaning Decisions – part II”**

If you've decided to sell your calves immediately at weaning, read no further. However, if you've decided to retain your calves for some time prior to marketing, you've got some additional decisions to make.

Vaccination and deworming at least 2 weeks prior to weaning can be beneficial. And we discussed last month that retaining and feeding for at least 2 weeks prior to shipment can also help reduce disease upon arrival at the calves' next destination. But if you do intend on selling after some period of “preconditioning”, it is necessary to get paid for all your work, time, and risk. The first step to getting paid for the value you're adding is finding the market that is looking for and paying for the kind of feedlot-ready calves you're producing. But the next step is ensuring you're doing everything you need to in order to ensure the calves perform during your retained feeding period.

The first step is to decide how long you will retain the calves. K-State research indicates that if weather is favorable at weaning time, ADG may range from 1.5 to 2.0 lb/d post-weaning. Some would suggest that depending on your weaning system and weather stress immediately after weaning, calves may not gain a great deal of weight during the first 2 weeks after maternal separation. If this is the case, you'll want to be sure to retain the calves long enough to regain any lost weight caused by the stress of weaning transition, perhaps 45-60 days. In either case, longer post-weaning retention at the ranch of origin can reduce incidence of disease post-shipment, especially if the haul is long.

The final decision is diet. The primary reason to retain calves is that you can put on cheap gains with little health risk due to the minimal stress imposed on the calves without a long haul coupled with maternal separation. To that purpose, the goal should be to utilize inexpensive feeds with good nutrient composition for weaned calves. Normally it is recommended calves have access to good quality loose hay in the feedbunk the day of weaning, with 3-5 lb of a dry, mixed, starter ration (50% chopped hay, 50% concentrate) top-dressed. If most of the calves consume this feed rapidly, eliminate the loose hay and feed the starter ration for 3-7 days, depending on stress and sickness. The diet can then be transitioned to include a slightly higher concentrate level and wet feeds, including wet distiller's grains or silage.

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

↳ **Capacity of Bovine Intestinal Mucus and Its Components to Support *Escherichia coli* O157:H7 Growth** – *E. coli* O157:H7 was incubated for 0, 6, 8, or 12 hours in the presence or absence of feces

to evaluate the capacity of intestinal mucus and mucus components (galactose, galacturonic acid, gluconic acid, glucuronic acid, mannose, L-alpha-phosphatidylserine, N-acetyl-D-glucosamine, and sialic acid) to support growth of the pathogen. Enzymes and enzyme inhibitors known to degrade intestinal mucus into its components also were evaluated. After incubation at 104°F, samples were diluted and plated on agar selective for *E. coli* O157:H7. Growth was expressed in Log<sub>10</sub> of colony forming units.

**Bottom Line....** *E. coli* O157:H7 appears able to metabolize all fractions of mucus. However, whole mucus from the large and small intestines demonstrated a greater capacity to support growth compared with individual mucus components. View the complete research report at [www.asi.ksu.edu/cattlemensday](http://www.asi.ksu.edu/cattlemensday). For more information, contact Jim Drouillard (785-532-1204; [jdrouill@ksu.edu](mailto:jdrouill@ksu.edu)).

↳ **Effect of Nitrogen Supplementation and Zilpaterol-HCl on Urea Recycling in Steers Consuming Corn-Based Diets** - Two sets of six steers were used to measure the effects of Zilmax and nitrogen supplementation from either dried distillers grains with soluble or urea on urea recycling. Zilmax was fed to half of the steers. Steers were fed one of three corn-based diets: control, urea, or dried distillers grains with solubles. Doubly labeled urea was used to measure urea kinetics.

Unexpectedly, steers fed Zilmax had greater dry matter and nitrogen intakes. Interestingly, Zilmax had no effects on urea production or recycling of urea to the digestive tract despite the greater nitrogen intakes of steers fed Zilmax. Similar research demonstrated that increases in nitrogen intake lead to increases in urea production and urea recycling in cattle; however, Zilmax may repartition nitrogen such that more nitrogen is directed to lean tissue accretion (i.e., muscle growth). In light of the greater nitrogen intake of Zilmax-fed cattle and the lack of change in urea production and recycling, it is possible that the opposite effects of nitrogen intake and of Zilmax counteracted one another.

**Bottom Line...** Understanding the effects of  $\beta$ -adrenergic agonists, such as Zilmax, on nitrogen recycling will allow nutritionists to formulate diets that more closely match the nutrient needs of finishing cattle. View the complete research report at [www.asi.ksu.edu/cattlemensday](http://www.asi.ksu.edu/cattlemensday). For more information, contact Evan Titgemeyer (785-532-1220; [etitgeme@ksu.edu](mailto:etitgeme@ksu.edu)) or Chris Reinhardt (785-532-1672; [cdr3@ksu.edu](mailto:cdr3@ksu.edu)).

#### **Impact of Supplemental Phosphorus Source on Phosphorus Utilization in Lactating Dairy**

**Cattle** - Supplemental phosphorus (P) in various forms and sources (pellet, meal, liquid, and corn dried distillers grains with solubles; DDGS) were compared in 12 multiparous Holstein cows producing 94.8 lb of milk (115  $\pm$  55 days in milk) in a 4  $\times$  4 Latin square with 21-day periods. The pellet and meal diets contained monocalcium phosphate with a wheat middlings carrier, and the liquid diet contained ammonium polyphosphate in a cane molasses base. The DDGS supplied an organic P source. Cows were blocked by parity, days in milk, and milk production and randomly assigned to treatments. Phosphorus intakes were similar among all 4 diets (116, 116, 119 and 118 g/day for pellet, meal, liquid and DDGS diets, respectively). Cows consuming the liquid diet experienced greater ( $P < 0.001$ ) sugar intakes. Milk yield differed ( $P = 0.05$ ) among diets, with the DDGS diet yielding the most milk (76.3, 78.1, 75.2 and 80.5 lb/day for pellet, meal, liquid, and DDGS diets, respectively). There were no differences in milk fat and milk protein percentages or in daily lactose production. Excretion of P in feces tended ( $P = 0.07$ ) to differ among treatments (67.4, 66.3, 57.5, and 60.0 g/day for pellet, meal, liquid and DDGS diets, respectively), resulting in a trend ( $P = 0.10$ ) for greater P retention from diets, resulting in less P excretion. Secretion of P in milk did not differ among treatments.

**Bottom Line...** These data show that supplemental P source does not affect dry matter intake or P intake. Phosphorus source resulted in slight differences in P utilization, but it was not related to sorting of the diet. The DDGS diet showed responses similar to those of inorganic P mineral supplements and had favorable production yields, indicating that DDGS is an adequate substitute for mineral sources of P. View the complete research report at [www.asi.ksu.edu/dairy](http://www.asi.ksu.edu/dairy) under the *Dairy Publications and Presentations* link. (This study conducted by K.J. Lager, M.J. Brouk, B.J. Bradford, and J.P. Harner.)

#### **Effect of a Commercial Enzyme (NutraSe) on Growth Performance of Growing Pigs Fed Diets Containing Dried Distillers Grains with Solubles**

A total of 1,076 pigs (PIC 337  $\times$  C22, initially 87.4 lb) were used to determine the effect of a commercial enzyme product on the growth performance of pig fed diets containing dried distillers grains with solubles (DDGS). Pigs were randomly allotted to 1 of 3 treatments balanced by average initial BW within gender. There were 13 replicate pens (7 barrow and 6 gilt pens) per treatment. Treatments included: (1) diet with 3% added fat (control); (2) diet supplemented with enzyme with only 2% added fat but formulated to have an energy content equal to that of the control diet on the basis of calculated increased ME from the enzyme (NutraSe; Nutrex, Lille, Belgium); and (3) diet with 2% added fat without enzyme formulated using the same energy values for the control diet (low energy). Diets were corn-soybean meal-based, contained DDGS, and were fed in 3 phases (87 to 130 lb, 130 to 185 lb, and 185 to 210 lb BW for Phases 1, 2, and 3, respectively). Thirty percent DDGS was included in diets from 87 to 185 lb, and 15% DDGS was included in the last phase from 187 to 210 lb. The control and NutraSe dietary treatments were balanced to a constant lysine:calorie ratio at 2.69, 2.29, and 1.97 g/Mcal ME for Phases 1, 2, and 3, respectively, whereas the low energy dietary treatment had calculated lysine:calorie ratios of 2.73, 2.32, and 2.00 g/Mcal ME for Phases 1, 2, and 3, respectively. There were no treatment  $\times$  gender interactions ( $P > 0.25$ ) observed for any response criteria evaluated. The expected differences ( $P > 0.03$ ) in growth performance between barrows and gilts were observed in all periods and overall. Barrows had greater ADG, ADFI, and final weight but poorer F/G compared with gilts. Except for the poorer F/G ( $P < 0.01$ ) of pigs fed the enzyme treatment compared with pigs fed diets without enzyme from d 0 to 28, there were no differences among treatments for ADG ( $P > 0.70$ ), ADFI ( $P > 0.77$ ), and F/G ( $P > 0.66$ ) at any of the periods or for the overall study.

**Bottom Line...** In conclusion, under the conditions of the present experiment, the commercial enzyme used at the manufacturer's recommended level did not affect growth performance of growing pigs fed diets containing DDGS. 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.Y. Jacela, S.S. Dritz, J.M. DeRouche, M.D. Tokach, R.D. Goodband, and J.L. Nelssen.)

↳ **Effects of Sirrah-Bios PRRSV-RS Vaccine on Mortality Rate and Finisher Pig Performance** - A total of 1,561 pigs (initially 4 d of age) were used to determine the effects of a porcine reproductive and respiratory syndrome virus (PRRSv) subunit vaccine, PRRSV-RS (Sirrah-Bios, Ames, IA), on mortality rate and finisher pig growth performance in a PRRSV-positive commercial herd. Pigs were randomly assigned by litter to either the subunit PRRSV vaccine or non-vaccinated control group. Pigs in the vaccinated group received an intramuscular injection of 1 mL PRRSV-RS vaccine at processing (approximately 4 d after birth) and again at weaning (approximately 24 d of age). Vaccinated and control pigs were comingled in a single nursery during the nursery phase. In the finishing phase, pigs were housed in a standard commercial curtain-sided finisher barn by treatment and gender by pen, with treatments randomly distributed across pens. Mortality was tracked from processing (4 d of age) to market (d 187 to 193). There was no difference between the control and vaccinated pigs for cumulative mortality (21.5% vs. 20.6%,  $P = 0.67$ ) or for mortality during each production phase (processing to weaning: 9.5% vs. 7.1%,  $P = 0.08$ ; nursery: 9.3% vs. 9.2%,  $P = 0.95$ ; finishing: 4.4% vs. 5.9%,  $P = 0.20$ ). Pigs were initially weighed by single-sex pens (control or vaccinated) 2 wk after placement into the finisher (d 0), and at that time, control and vaccinated mean pig weights were not different (58.4 vs. 58.7 lb,  $P = 0.90$ ). Pens of pigs were subsequently weighed every 2 wk, and feed consumption was recorded to calculate ADG, ADFI, and F/G. Overall (d 0 to 112), control and vaccinated pig performance was similar (ADG: 1.96 vs. 1.93 lb,  $P = 0.45$ ; ADFI: 5.35 vs. 5.36 lb,  $P = 0.94$ ; F/G: 2.74 vs. 2.78,  $P = 0.15$ ) throughout the finishing period. This resulted in no difference ( $P = 0.79$ ) in off-test (d 112) weights between control (271.9 lb) and vaccinated (270.4 lb) pigs.

**Bottom Line...** These data indicate that this subunit PRRSV vaccine did not affect finisher pig performance or mortality in this commercial herd. More information is available on this experiment and others in the KSU Swine Day Report at [www.KSUswine.org](http://www.KSUswine.org). (This study conducted by M.L. Potter, S.S. Dritz, S.C. Henry, L.M. Tokach, J.M. DeRouchey, M.D. Tokach, R.D. Goodband, and J.L. Nelssen.)

↳ **Effects of Adding Enzymes to Diets Containing High Levels of Dried Distillers Grains with Solubles on Growth Performance of Finishing Pigs** - A total of 1,032 pigs (BW = 101.5 lb) were used in a 90-d experiment to determine the effects of adding enzymes to diets containing high levels of dried distillers grains with solubles (DDGS) on growth performance and carcass characteristics of finishing pigs. Pigs were blocked by BW and randomly allotted to 1 of 7 dietary treatments with 6 pens per treatment. The control diet contained 30% DDGS. The remaining treatments were arranged in a 2 × 3 factorial design based on DDGS (45 or 60%) and enzyme inclusion (none, product A, or product B). Enzyme products were commercially available and designed for use in swine diets containing DDGS. Pigs allotted to the 60% DDGS treatment were fed 45% DDGS during the first 2 wk of the experiment to acclimate the pigs to DDGS. The 4 heaviest pigs from each pen were sold at d 78, and DDGS levels for all treatments were decreased to 20% until the end of the trial. Overall (d 0 to 90), enzyme supplementation did not affect ADG ( $P > 0.24$ ), ADFI ( $P > 0.30$ ), or F/G ( $P > 0.52$ ). From d 0 to 78, regardless of enzyme treatment, ADG decreased (linear;  $P < 0.05$ ) as DDGS increased because of a reduction (quadratic;  $P < 0.04$ ) in ADFI. After topping and adding Paylean to the diets at d 78, ADFI tended to increase (linear;  $P < 0.06$ ) in pigs previously fed 45 and 60% DDGS. However, the decrease in ADFI from d 0 to 78 still resulted in an overall reduction (linear;  $P < 0.04$ ) with increasing DDGS. Increasing DDGS did not affect ( $P > 0.17$ ) overall ADG, F/G, or final weight. There were no differences in carcass weight and yield ( $P > 0.65$ ) or in backfat, loin depth, percentage lean, and fat-free lean index ( $P > 0.38$ ) after adjusting to a common carcass weight. Increasing dietary DDGS increased (linear;  $P < 0.01$ ) iodine value of belly fat (77.2, 83.7, and 87.3 g/100 g, respectively).

**Bottom Line...** This study indicates that up to 60% DDGS may be added to pig diets without negatively affecting growth performance or carcass traits compared to 30% DDGS when levels are reduced to 20% for 12 d before market; however, fat iodine values will be significantly increased. Neither commercially available enzyme product had any effect on pig growth performance. 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.Y. Jacela, J.M. Benz, S.S. Dritz, M.D. Tokach, J.M. DeRouchey, R.D. Goodband, J.L. Nelssen, and K.J. Prusa.)

# UPCOMING EVENTS...

- ↳ It's not too late to attend the **2010 KSU Swine Day** which will be held Thursday, November 18, at the KSU Alumni Center. Registration at the door is \$30.00. There is no charge for students if they are pre-registered. Visit [www.KSUswine.org](http://www.KSUswine.org) for complete schedule and registration information. For more information, contact Jim Nelssen ([jnelssen@ksu.edu](mailto:jnelssen@ksu.edu); 785-532-1251).
- ↳ A **FAMACHA training** will be held on December 8, 2010, from 6:00 – 9:00 p.m. at the Johnson County Fairgrounds, Gardner, KS. For more information, contact Mike Epler (913-294-4306), Rick Miller (913-715-7000) or Brian Faris ([brfaris@ksu.edu](mailto:brfaris@ksu.edu); 785-532-1255).
- ↳ **Genetic Selection of Beef Cattle in a DNA World** is the focus of a program to be held Dec. 15, 2010 at 10:00 a.m., at the Americalnn in Russell, Kan. This program is designed to help producers understand the issues and make better decisions about the expanding list of selection tools. Technology is changing many things in life, including how to select cattle.
- The program will begin with K-State Research and Extension's Jennifer Bormann, assistant professor of beef cattle breeding and genetics, covering basic concepts and terminology that will serve as the foundation for the day's discussion. Dan Moser, also a beef cattle geneticist with K-State, will look at genomic testing and understanding the contribution genomic information can make in selection.
- As feed costs rise, so does interest in selection for feed efficiency. Mike MacNeil, research geneticist with USDA Agricultural Research Service in Miles City, Montana, will look at the challenges and possible solutions to selection for feed efficiency. Also, a panel of commercial producers will share what they need from seedstock providers to reach their genetic goals.
- Registration cost is \$50 for the first person and \$40 for the second person from the same operation if received by Dec. 8th. Registration is available online at [www.KSUSBeef.org](http://www.KSUSBeef.org) or by contacting 785-462-6281. For more information, contact Sandy Johnson ([sandyj@ksu.edu](mailto:sandyj@ksu.edu); 785-462-6281).
- ↳ Area cattlemen should mark the dates of January 11th and 12th on their calendars and make plans to attend the **4-State Beef Conference**. The conference planning committee has designed an excellent program that should have something of interest to all beef producers. 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 conference is scheduled for Tuesday, January 11th and Wednesday, January 12th, 2011. The Tuesday morning session will begin at 9:30 a.m. in Tecumseh, NE, at the Community Building and the afternoon session will begin at 3:30 p.m. in Lewis, IA, at the ISU Armstrong Research Farm. The Wednesday morning session will also begin at 9:30 a.m. in Holton, KS at the Jackson County Fair Building, and the afternoon session will start at 3:30 p.m. in King City, MO at the Eiberger Building.
- The registration fee is \$25.00 per person and reservations are requested by, Friday, January 7th, 2011. The fee includes a beef meal and a copy of the conference proceedings. More information and a schedule are available at [www.KSUbeef.org](http://www.KSUbeef.org) or [www.extension.iastate.edu/feci/4StBeef/](http://www.extension.iastate.edu/feci/4StBeef/).
- To register for the conference, contact your local county extension office. For more information, contact your local county extension office, Joel DeRouchey ([jderouch@ksu.edu](mailto:jderouch@ksu.edu); 785-532-2280), or Jody Holthaus, Meadowlark Extension District/Holton Office ([jholthau@ksu.edu](mailto:jholthau@ksu.edu); 785-364-4125).

↳ Make plans now to attend the **K-State Winter Ranch Management Seminar** to be held on Tuesday, January 11, 2011, from 4:30 – 8:30 p.m. Locations for the event include Ashland, El Dorado, Manhattan and Phillipsburg, KS. The schedule is as follows:

4:00 p.m.	Registration
4:30 p.m.	BRANDS winter ration calculations
5:15 p.m.	Ranch Management Style (Dale Smith, Corsino Cattle Co., via webinar)
6:00 p.m.	Dinner
7:00 p.m.	Cattle Industry Status Report (Kevin Good, CattleFax, via webinar)
7:45 p.m.	Cow herd vaccinations (Gerry Stokka via webcast for 15 minutes; local veterinarians for 30 minutes)

Brochures for the event will be available through your local county office shortly and will be available at [www.KSUbeef.org](http://www.KSUbeef.org). For additional information, contact Larry Hollis ([lhollis@ksu.edu](mailto:lhollis@ksu.edu); 785-532-1246).

↳ 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 Nemechek, 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](http://www.KSUswine.org). For more information, contact Jim Nelssen (785-532-1251; [jnelssen@ksu.edu](mailto:jnelssen@ksu.edu)).

↳ The **Annual Midwest Meat Processing Workshop** will be held on February 5, 2011 in Manhattan. Mark your calendars and watch for more details. For information, contact Liz Boyle (785-532-1247; [lboyle@k-state.edu](mailto:lboyle@k-state.edu)).

↳ The 98<sup>th</sup> 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](http://www.asi.ksu.edu/cattlemensday).

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

↳ The **Junior Swine Producer Day** will be held on Saturday, March 12, 2011. Watch for more details at [www.KSUswine.org](http://www.KSUswine.org).

<b>CALENDAR OF UPCOMING EVENTS</b>		
<b>Date</b>	<b>Event</b>	<b>Location</b>
November 18, 2010	KSU Swine Day	Manhattan
December 8, 2010	FAMACHA Training	Gardner, KS
December 15, 2010	Genetic Selection of Beef Cattle in a DNA World	Russell, KS
January 11, 2011	K-State Winter Ranch Management Seminar	Various locations
January 11 & 12, 2011	Four State Beef Conference	Holton, 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 12, 2011	Junior Swine Producer Day	Manhattan

# AS&I FACULTY SPOTLIGHT



**Dale Blasi (dblasi@k-state.edu; 785-532-5427)**  
**Professor/Extension Beef Specialist**

Dale A. Blasi was born and reared on his family's farm and ranch in southeast Colorado, near Trinidad. He received his B.S. in Animal Sciences at Colorado State University in 1984. In 1986, he received his M.S. in Beef Systems Management at Colorado State University. He continued his education at the University of Nebraska where his dissertation addressed protein supplementation strategies for beef cows and growing cattle.

After earning his Ph.D. degree in 1989, he accepted an appointment as a Livestock Specialist in South Central Kansas at Hutchinson for Kansas State University. While there, he focused on cow/calf and stocker nutrition and management strategies, forage quality and harvest efficiency, forage utilization systems and utilization of food industry byproducts. In 1997, he transitioned to the Department of Animal Sciences and Industry at Kansas State University as a State Beef Specialist where he currently has a 10% teaching, 20% research and 70% extension appointment. His responsibilities include providing statewide Extension educational leadership in stocker cattle nutrition and management and utilization of grazed and harvested forages by beef cattle and other livestock, conducting research and interpreting results and serving as a resource person for other state and area specialists, county Extension agents, producers and allied industry personnel. In recent years Dr. Blasi has developed and teaches the class, *ASI 650, Identification and Data Management of Food Animals*, to both undergraduate and graduate students.

Since 1998, he has developed and evaluated information and management applications using handheld computers and individual animal electronic identification technologies for the beef industry. He is manager and director of the KSU Beef Stocker Unit and Animal Identification Knowledge Laboratory, a unique facility designed to evaluate the performance of existing and emerging animal identification technologies in a laboratory and animal management setting.



**Joel DeRouchey (jderouch@k-state.edu; 785-532-2280)**  
**Professor/Extension Specialist, Swine Nutrition and Environmental Management**

Dr. Joel DeRouchey was born in 1975 and grew up on a diversified purebred swine, cattle and sheep operation in Pukwana, SD. He graduated with his B.S Animal Science from South Dakota State University in 1997. He then obtained his M.S. (1999) and Ph.D. (2001) in Swine Nutrition at Kansas State University, and was hired as the Northeast Livestock Extension Specialist for Kansas State University as an Assistant Professor with an 80% Extension and 20% Research appointment. In 2004, Joel made a transition into the Department of Animal Sciences and Industry as an Environmental Management and Livestock Nutrition Specialist with a 40% Extension, 40% Research, and 20% Teaching appointment.

A brief listing of Joel's Extension and Research interests involve:

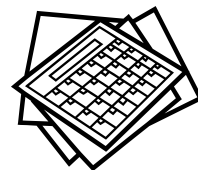
- 1) Develop and help implement on farm technologies to improve animal production and environmental quality.
- 2) Conducting applied swine nutrition research to increase the profitability of swine producers.
- 3) Provide environmental information to livestock producers for regulatory and manure management compliance.
- 4) Coordinate youth swine activities to increase swine industry knowledge, husbandry and awareness of careers in swine production

Joel currently teaches ASI 320 (Spring) Principles of Feeding. In addition Dr. DeRouchey is the faculty coordinator for ASI 890 and ASI 990 Graduate Student Seminar, and is a frequent guest lecturer in ASI 535 Swine Science.

Joel and his wife Julene have three young children, James, Jenna and Jacob. They are diehard tailgaters and K-State football fans, and currently live on a small farm near St. Mary's, KS.

# WHAT PRODUCERS SHOULD BE THINKING ABOUT...

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



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

#### Cow herd management

- ☑ Historically, cull cow prices have increased during the next 2 or 3 months. Contrary to tradition, feeding cull cows this year may not be a profitable venture due to higher input costs. Check your breakevens.
- ☑ Continue feeding or grazing programs started in early winter. Weather conditions may require wrapping up grain sorghum and cornstalk field grazing. Severe winter weather may begin to limit crop residue utilization, so be prepared to move to other grazing and feeding systems
- ☑ Supplement to achieve ideal BCS at calving.
  - ↳ Use this formula to compare the basis of cost per lb. of crude protein (CP):  
Cost of supplement, \$ per hundredweight (cwt.) ÷ (100 X % CP) = cost per lb. of CP.
  - ↳ Use this formula to compare energy sources on basis of cost per lb. of TDN:  
Cost, \$ per ton ÷ [2,000 X % dry matter (DM) X % TDN in DM] = cost per lb. of TDN.
- ☑ Control lice; external parasites could increase feed costs.
- ☑ Provide an adequate water supply. Depending on body size and stage of production, cattle need 5-11 gallons (gal.) of water per head per day, even in the coldest weather.
- ☑ Sort cows into management groups. BCS 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 conditioned 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 post-partum 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%-65% of their mature weight by the start of the breeding season. Thin, lightweight heifers may need extra feed for 60-80 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 your breed association.
- ☑ Provide some protection, such as a windbreak, during severe winter weather to reduce energy requirements. The 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. 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](mailto:lschrein@ksu.edu), or phone 785-532-1267.*