



Newsletter from the Department of Animal Sciences and Industry
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UPCOMING EVENTS...

September, 2014

News from KSU Animal Sciences

In This Issue

- Upcoming Events
- Management Minute
- Feedlot Facts
- 2014 KSU Cattlemen's Day Article Featured
- 2013 KSU Swine Day Articles Featured
- Faculty Spotlight
- What Producers Should Be Thinking About...

We Need Your Help!

Please send questions, comments or ideas for future newsletter topics to lschrein@ksu.edu or call (785) 532-1267.

☞ **KSU Beef Stocker Field Day to be held September 25** - The 2014 KSU Beef Stocker Field Day will be held on Thursday, September 25 at the KSU Beef Stocker Unit in Manhattan. The schedule is as follows:

- 9:30 a.m. Registration/Coffee
- 10:15 a.m. Introductions
- 10:30 a.m. Forward Planning on the Implication of the Herd Rebuilding Phase: Where Does the Stocker Segment Fit?
Dr. Glynn Tonsor, KSU
- 11:15 a.m. Producer Panel – Our Receiving and Growing Philosophies
Moderator: *Wes Ishmael, Contributing Editor, BEEF magazine*
Brian Barnhardt, Lebo, KS
Chad Cargill, Isabel, KS
Jaret Moyer, Emporia, KS
Jay Rezac, Onaga, KS
- 12:15 p.m. Barbeque Brisket Lunch – View posters/demonstrations
- 1:15 p.m. Stocker Parasite Control: A New Frontier
Dr. Joe Dedrickson, Merial Animal Health
- 2:15 p.m. Management Strategy Response to the FDA Phase Out of Antibiotics
Dr. Mike Apley, KSU
- 3:00 p.m. Break
- 3:30 p.m. Breakout Sessions (30 minutes/breakout)
Coccidiosis: The Robber Baron
Dr. Gregg Hanzlicek, KSU
Livestock Watering Options -
Evaluating Environmental Impact of Small Receiving/Growing Facilities – KSU Watershed Specialists
Ron Graber, Central KS; Herschel George, Southeast KS
Will Boyer, Northeast KS Jeff Davidson, Flint Hills
Stacie Minson, Big Creek, Middle Smoky Hill River
- 5:30 p.m. Cutting Bull's Lament 2014

The day will conclude with a good old-fashioned bbq and Call Hall ice cream. Pre-registration is \$25 by September 15. For complete details and on-line registration, visit www.KSUbeef.org. For more information, contact Dale Blasi (dblasi@ksu.edu; 785-532-5427).

☞ **OSU to host national beef reproduction conference** - Cow-calf producers and large-animal veterinarians should plan now to attend the 2014 Applied Reproductive Strategies in Beef Cattle Conference hosted by Oklahoma State University's Division of Agricultural Sciences and Natural Resources Oct. 8-9.

A schedule of events is available online at www.beefextension.com/genetics. The two-day conference will take place in the OSU Student Union, located on the university's Stillwater campus. Anyone seeking additional information about the Oct. 8-9 conference should contact Megan Rolf by email at mrolf@okstate.edu or Dan Stein by email at daniel.stein@okstate.edu.



✚ **Developing and Implementing Your Company's HACCP Plan for Meat, Poultry, and Food Processors** will be held October 15-17, 2014, at the Kansas State University Olathe Campus, 22201 West Innovation Drive, Olathe. Registration for the 2.5 day International HACCP Alliance accredited workshop is online at <http://HACCP.unl.edu>. The workshop fee is \$375, and meets USDA training requirements to become a HACCP trained individual. For more information, contact Fadi Aramouni (faramoun@ksu.edu; 785-532-1668)

✚ **Make plans now to attend the 2014 KSU Swine Day.** The 2014 KSU Swine Day will be held Thursday, November 20, at the KSU Alumni Center. The schedule for the day includes:

- 8:00 a.m. – 5:00 p.m. Trade Show
- 9:30 a.m. Welcome - *Dr. Ken Odde, Department Head, Animal Sciences and Industry*
- 9:45 a.m. Delta Corona Virus and PEDv: What Have We Learned in the Last Year?
Dr. Dick Hesse, Dr. Steve Dritz, and Dr. Jason Woodworth, KSU
- 11:00 a.m. What's Next after a Highly Profitable Period in the Swine Industry: Has the Landscape of Expansion Changed?
Dr. Dennis DiPietre, Economist, KnowledgeVentures, LLC
- 11:45 a.m. Lunch with Trade Show
- 1:30 p.m. Potential to Improve the Survivability of Low Birth Weight Pigs and Realize a Full Value Market Hog
Dr. Jim Nelssen, Dr. Duane Davis, and Dr. John Gonzalez, KSU
- 2:00 p.m. Keeping Up with Diet Formulation with Rapidly Changing Ingredient Prices
Dr. Mike Tokach, Dr. Joel DeRouchey, and Dr. Bob Goodband, KSU
- 3:00 p.m. The Australian Swine Industry – How Retailers are Changing our Swine Industry
Dr. John Pluske, Fulbright Distinguished Chair in Agriculture and Life Sciences, Director of the Animal Research Institute, Murdoch University, Australia
- 3:30 p.m. Reception with K-State Ice Cream

Pre-registration fee is \$25 per participant by November 9; with registration at the door \$35 per participant. There is no charge for any students if they are pre-registered. The complete schedule and on-line registration information can be found at www.KSUswine.org. For more information, contact Jim Nelssen (jnelssen@ksu.edu; 785-532-1251).

✚ The 2015 **KSU Swine Profitability Conference** will be held on February 3, 2015, in Forum Hall of the K-State Student Union. With the cancellation of the 2014 conference due to inclement weather, all those pre-registered for 2014 are already registered for the 2015 event. Featured speakers include Larry Coleman, Vet Care, Broken Cow, NE; Craig Christensen, Ogden, IA; Craig Good, Olsburg, KS; and Grady Bishop, Elanco Swine Operations. Watch for more details at www.KSUswine.org. For more information, contact Jim Nelssen (785-532-1251; jnelssen@ksu.edu).

CALENDAR OF UPCOMING EVENTS

Date	Event	Location
September 25, 2014	KSU Beef Stocker Field Day	Manhattan
October 8-9, 2014	Applied Reproductive Strategies in Beef Cattle	Stillwater, OK
October 15-17, 2014	Developing and Implementing Your Company's HACCP Plan for Meat, Poultry, and Food Processors Workshop	Olathe, KS
November 20, 2014	KSU Swine Day	Manhattan
February 3, 2015	KSU Swine Profitability Conference	Manhattan

WHAT'S NEW.....

Management Minute **“Permission to Fail”**

Feedlot Facts **“The Value of a Pound”**



Management Minute – Chris Reinhardt, Ph.D., Extension Feedlot Specialist **“Permission to Fail”**

Failure is not an option. Or is it?...

In business, and in life, most of us treat failure as something to be feared and avoided at all costs, to the point where failure is rarely even discussed. We plan the next plan for what we will do after our first plan succeeds. So why would we ever even consider the possibility that we might actually fail?

There are multiple reasons we may fail: lack of accurate planning, poor execution of the plan, unexpected changes in the operating climate, or overly-aggressive planning.

If your plans have never come up short, good for you. That means you're (a) an accurate planner; (b) execute your plans; and (c) anticipate any potential changes in your operating climate. However, if you have never failed, then you haven't, at least from time to time, pushed your plans sufficiently close to the bleeding edge of your resources (time, personnel, capital) to where failure is a distinct possibility. If you've never failed, your plans have always been conservative. Although always planning conservatively is certainly not wrong, it should also give one pause.

If we have assembled a team of creative, ambitious, intelligent people, we may also want to give them all the freedom necessary to utilize 100% of their abilities. If, out of a fear of failure, we are heavy-handed and have created an environment where failure is not tolerated, an oppressive cloud descends over the organization, squelching any outside-the-box thinking. In this environment, two things will happen: (1) those talented people we've brought on board will withhold much of their creativity and ambition in order to operate comfortably within the known boundaries of your organizational dogma---the boundaries drawn and defined by what always has worked and what always will work; and then (2) those talented people---effectively the future hopes of the organization---will leave.

Good people will have opportunities outside your four walls. They commonly reject those outside opportunities when they know that they are (a) competitively compensated and (b) professionally fulfilled. It won't matter, for very long anyway, that your salary and benefits package are equal to the industry standard if good, energetic, creative, ambitious people are routinely stifled. "Don't bother thinking, we've already done that for you." That might be the epitome of professional UN-fulfillment.

All businesses need some stability and predictability in costs and revenues. It is, however, possible to create an environment where creative problem solving and novel ideas are welcome, while at the same time ensuring the core business is maintained.

People are imbued with differing gifts, talents, and personalities, which are completely independent of intelligence or knowledge of subject matter. Some are more comfortable when they're pushing the envelope; others are just fine with leaving the envelope right where it is. Part of management is managing these opposing traits: to direct change when change is appropriate, needed, and beneficial, and to postpone or redirect the desire for change when change is untimely, inappropriate, or excessive.

Failures within the team present a tremendous teaching and learning opportunity. Provided the failure is not catastrophic, the team can assess the cause of the failure to better plan in the future. And the tension and intensity of the response of the team leader will speak loudly as to whether risk and creativity should be avoided at all costs or whether the potential benefits of harnessing the full potential of the team's collective talents to create new paradigms outweighs the potential risks.

Failure probably shouldn't ever be accepted as "normal", but if your team is never permitted---let alone encouraged---to push the envelope and risk failure, even on some small level, they simply will learn to never push, and you will never know what your organization might be truly capable of.

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



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

“The Value of a Pound”

What’s another pound of calf worth at sale time? Is it simply the same as the value per pound of the calf, or is it more complicated than that?

This is actually quite important in order to make good decisions going into weaning time regarding any value-added management programs we may want to implement. Preconditioning for at least 45 days can add substantial weight to calves. Implanting calves either during the suckling phase or during preconditioning and backgrounding also will make calves heavier and affect their sale price per pound.

The slide is there for a reason. Heavier calves are less efficient, on average, with all else being equal. So heavier calves bring a slightly lower price per pound than lighter calves.

If we assume that 500 lb calves will be worth \$2.50 per lb, and then apply a 15 cent per pound slide for each one hundred pounds heavier from the 500 lb base, we can easily calculate the value of added weight. Now let’s do some simple math.

The 500 lb calf is worth \$1,250 (500 lb × \$2.50/lb). If we add 100 lb during preconditioning and backgrounding, and there is a 15 cent per pound slide, then the 600 lb calf is worth \$1,410 (600 lb × \$2.35/lb). Subtract the new gross value from the original gross value (\$1,410 - \$1,250) = \$160 which is the value of the 100 pounds of added weight; or, \$160 ÷ 100 lbs = \$1.60 per pound of the added weight.

That’s still good money, but a fair bit less than simply looking at the price per pound at the auction market. More importantly, \$1.60 per added pound will likely make upcoming management decisions, which will give you more pounds to sell this fall, profitable decisions and profitable pounds.

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



IRM Redbooks for Sale – The 2015 IRM Redbooks will be arriving soon and will be sold on a first come first serve basis. The price 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; 785-532-1267).



Free BQA Certification Offer from Sept. 1 through Oct. 31 - Nearly 11,000 beef and dairy producers, educators, veterinarians, students and allied industry representatives became BQA-certified this past winter, and we’re happy to share the same offer this fall. As an agricultural leader in your state and community, you should know the details about an important opportunity for beef and dairy producers – FREE Beef Quality Assurance (BQA) certification from September 1 through October 31. Normally, the cost of certification is \$25 to \$50, but thanks to a partnership of the checkoff-funded Beef Quality Assurance (BQA) program, Boehringer Ingelheim Vetmedica, Inc. (BIVI) and the Beef Cattle Institute (BCI) housed at Kansas State University, online BQA certification is FREE. Visit www.bqa.org/team or www.BIVI-BQA.com to get started.

The beef industry has embraced BQA because it is the right thing to do. As you know and understand, BQA provides practical management tools that cattlemen need to produce safe, high-quality beef, and can also help improve efficiency and profitability for beef producers.

The BQA online programs are customized for cow/calf, stocker, feedlot and dairy operations. Developed and managed by the Beef Cattle Institute, these easy-to-use modules teach sound management techniques that can be applied to cattle operations and used as employee training tools, too.



Quality Classification Affects Firmness of Ground Beef Patties from the Chuck Roll – The objective of this study was to determine the effects of three quality classifications and their combinations on ground beef patty display color stability and sensory attributes evaluated by both a trained sensory panel and consumer panel. Ground-beef patty treatments of Choice, Select, older maturity, 50% Choice/50% older maturity, and 50% Select/50% older maturity were produced from chuck rolls. Patties were formed, packaged in polyvinyl chloride–overwrapped trays, and displayed in a coffin-type retail case at 36°F. Color was evaluated at 0, 24, and 48 hours of display by a trained color panel and HunterLab MiniScan. A trained sensory panel, consumer panel, and slice shear force test were conducted on ground beef patties cooked to 160°F.

No significant treatment differences were detected for percentage of fat, visual display color, or instrumental display color. Ground beef patties had the darkest, most discolored visual scores at 48 hours of display and the brightest red scores at 0 hours of display. Ground beef patties from the older maturity treatment were firmer and tougher than those from the Choice and Select treatments. Patties from the

older maturity treatment had greater firmness and less tenderness as evaluated by a trained sensory panel, greater firmness as evaluated by a consumer panel, and greater slice shear force than those from the Choice and Select treatments.

Bottom Line...With minimal differences in composition (fat percentage) and display color, patties from Choice and Select chuck rolls provided softer characteristics to the palate and instrumentally than those from older maturity chuck rolls. View the complete research report at www.asi.ksu.edu/cattlemensday. For more information, contact John Unruh (785-532-1245; junruh@ksu.edu) or Elizabeth Boyle (785-532-1247; lboyle@ksu.edu).

↳ **Consumption and Performance of Beef Heifers Provided Dried Distillers Grains in a Self-Fed Supplement Containing Either 10 or 16% Salt While Grazing Flint Hills Native Grass** – Evaluating the performance of grazing beef heifers fed dried distillers grains (DDGS) in a self-fed fashion with either 10% (LOW) or 16% (HIGH) stock salt in comparison to that of unsupplemented heifers (CONTROL) was the objective of this trial. Concern over the effects of drought in previous years focused our attention to ensuring that nutritional resources would be adequate to provide for a 78-day grazing period when grazing density was increased from 200 (CONTROL) to either 225 or 250 lbs of beef per acre. 279 heifers were randomly assigned to one of three experimental treatments in a 78-day grazing study that was initiated in May 2013. The HIGH and LOW treatments consisted of DDGS mixed with 16 or 10% salt, respectively, to limit daily intake of DDGS to 0.60 and 1.0% of body weight, respectively. Starting on June 17, the treatments were provided to the respective pastures for the remainder of the study. Calves were weighed at the beginning and end of the study, and dry matter intake of DDGS, average daily gains, and supplement efficiencies were determined for each paddock of calves.

Bottom Line...Providing DDGS with salt improves performance of heifers compared with those without supplemental DDGS, but no significant differences were detected in performance and efficiency between HIGH and LOW levels of DDGS supplementation. View the complete research report at www.asi.ksu.edu/cattlemensday. For more information, contact Dale Blasi (785-532-5427; dblasi@ksu.edu).

↳ **Combining Ruminally Protected Choline and Flaxseed in Cattle Diets to Increase the Assimilation of Omega-3 Fatty Acids from the Diet** – The objective of this study was to determine if feeding ruminally protected choline could improve the absorption efficiency of dietary omega-3 fatty acids in growing cattle. Crossbred heifers (108 heifers; 628 ± 30 lbs body weight) were stratified by initial body weight and allocated randomly to one of four dietary treatments: (1) no flaxseed/no choline; (2) with flaxseed/no choline; (3) with choline/no flaxseed; and (4) with flaxseed and choline. Heifers were fed their respective diets for 14 days. Blood samples were collected on day 14 and analyzed for concentrations of omega-3 fatty acids.

Bottom Line...Feeding flaxseed for 14 days resulted in large changes in blood concentrations of omega-3 fatty acids, but adding choline to heifer diets had no impact on utilization of dietary omega-3 fatty acids. 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).

↳ **Evaluation of Increasing Peptone Blend on Nursery Pig Performance from 15 to 40 lb** - A total of 270 pigs (PIC 327 × 1050, initially 15.7 lb BW) were used in a 28-d trial to evaluate the effects of increasing levels of a new peptone blend by-product on nursery pig growth performance. The product is the result of the pharmaceutical extraction of chondroitin sulfate from bovine cartilage and processing to form the peptone blend, which was mixed with soybean hulls and drum-dried. Pigs were weaned at 21 d of age and were fed a common pelleted diet for 5 d prior to the start of the experiment. Each treatment had 8 replicate pens and 6 or 7 pigs per pen. The 5 experimental treatments were: (1) a diet with 1% blood meal and 2% select menhaden fish meal (positive control), (2) a diet with no added specialty protein source (negative control), (3) a diet containing 4% peptone blend, (4) a diet containing 8% peptone blend, or (5) a diet containing 12% peptone blend. Experimental diets were fed for 14 d, then a common Phase 2 diet was fed for an additional 14 d to determine the residual treatment effects on growth performance.

From d 0 to 14, pigs fed increasing peptone blend had increased ADFI but poorer F/G. Pigs fed the positive control diet had increased ADFI compared with pigs fed the negative control diet. From d 14 to 28, when pigs were fed a common diet, pigs previously fed increasing peptone blend had increased ADFI and poorer F/G. Similar to d 0 to 14 data, pigs previously fed the positive control diet had increased ADFI compared with pigs previously fed the negative control diet from d 14 to 28. Overall (d 0 to 28), pigs fed diets

with increasing peptone blend for the first 14 d had increased ADFI and poorer F/G with no differences in ADG. Pigs fed the positive control diet had increased overall ADFI compared with pigs fed negative control diet, with no differences in ADG or F/G.

Bottom Line... The peptone blend is not a suitable replacement for blood meal and select menhaden fish meal in nursery pig diets from 15 to 24 lb. Up to 4% of the peptone blend was a suitable replacement for soybean meal in the negative control diet, which contained no specialty protein sources. More information is available on this experiment and others in the KSU Swine Day Report at www.KSUswine.org. (This study conducted by M.A.D. Goncalves, J.R. Flohr, S.S. Dritz, M.D. Tokach, J.M. DeRouchey, R.D. Goodband, and J.C. Woodworth)

Effects of Copper Source (Intellibond C or Copper Sulfate) on Growth Performance, Carcass Characteristics, Pen Cleanliness, and Economics in Finishing Pigs - A total of 1,143 pigs (PIC 337 × 1050, initially 55.3 lb) were used to determine the effects of tribasic copper chloride (TBCC; Intellibond C; Micronutrients Inc., Indianapolis, IN) or copper sulfate (CuSO₄) on growth performance, carcass characteristics, pen cleanliness, and economics in a 111-d study. Pens of pigs were randomly allotted to 1 of 6 dietary treatments and balanced based on average pen weight in a completely randomized design with 25 to 28 pigs per pen and 8 pens per treatment. Treatment diets included a corn-soybean meal positive control, a high by-product diet with 30% dried distillers grains with solubles (DDGS) and 15% bakery meal (negative control), or the negative control diet with 75 or 150 ppm copper from CuSO₄ or TBCC. All diets were formulated on a standardized ileal digestible (SID) amino acid basis and were 0.05% below the pig's estimated lysine requirement throughout the trial. Pigs fed the corn-soybean meal positive control diet had improved F/G and tended to have increased ADFI compared with those fed the negative control, high by-product diet. Pigs fed increasing copper had improved ADG and ADFI but tended to have slightly poorer F/G. Although no interactions were observed between copper source and level, pigs fed increasing CuSO₄ had increased ADFI, whereas pigs fed increasing TBCC had increased ADG, ADFI, and final BW.

Increasing added copper improved HCW and loin depth, with the greatest response in HCW for pigs fed TBCC. For pen characteristics, pigs fed the high by-product diet had greater manure buildup and longer wash time than those fed the corn-soybean meal control diet. Addition of copper to diets did not influence pen wash time and had no impact on manure buildup. Economics were calculated on both a constant days on feed and constant market weight basis. Pigs fed either source of copper to a constant days on feed had an increase in feed cost per pig as well as a higher revenue per pig. When economics were calculated on feeding pigs to a constant BW, facility costs decreased with feeding copper. Although no significant differences were detected in income over feed and facility cost for added copper, the greatest numerical advantage to individual copper sources occurred at 75 PPM for CuSO₄ (\$0.26) and at 150 ppm for TBCC (\$1.35 per pig).

Bottom Line... Feeding increased levels of copper sulfate or TBCC in diets formulated slightly below the estimated SID lysine requirement increased growth rate and feed intake, resulting in increased final BW and HCW. Pigs fed TBCC at 150 ppm had the highest final BW (+12.8 lb) and HCW (+7.7 lb). In addition, the use of added copper in the diets did not increase time required to wash pens. More research is needed to determine whether the amino acid concentration influences the response to copper source and level in diets for growing and finishing pigs. More information is available on this experiment and others in the KSU Swine Day Report at www.KSUswine.org. (This study conducted by K.F. Coble, S.S. Dritz, J. Usry, M.D. Tokach, J.M. DeRouchey, R.D. Goodband, and J.L. Nelssen)

AS&I Faculty Spotlight



Joel DeRouchey (jderouch@k-state.edu; 785-532-2280)

Professor/Extension Specialist, Swine Nutrition and Management

Dr. Joel DeRouchey 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 and his M.S. (1999) and Ph.D. (2001) in Swine Nutrition at Kansas State University. He was hired in 2001 as the Northeast Livestock Extension Specialist for Kansas State University. In 2004, Joel moved into Department of Animal Sciences and Industry as a Livestock Nutrition and Environmental Management Specialist and with a 40% Extension, 40% Research, and 20% Teaching appointment. Currently, he is a full professor and has a 50% Extension and 50% Research appointment.

Joel's Extension and Research interests involve: Mentoring and training swine nutrition graduate students; conducting applied swine nutrition and management research; providing environmental information to livestock producers for regulatory and manure management compliance; and coordinating youth swine activities to increase swine industry knowledge

and awareness of career opportunities in swine production.

Dr. DeRouchey is the faculty coordinator for ASI 890 and ASI 990 Graduate Student Monogastric Seminar, and is a frequent guest lecturer in ASI 535 Swine Science. He formally taught ASI 320 Principles of Feeding. Joel works with a productive applied swine nutrition team that maintains approximately 12 MS and PhD students. Joel has co-authored 81 refereed journal papers, 240 abstracts and 380 extension publications and field day reports and a co-advisor or active committee member for 48 MS and PhD graduate programs. Joel was named to the 2013 Vance Publishing Corporation's inaugural "40 Under 40 in Agriculture" award for leadership and commitment in advancing the cause to double food production by 2050. He was also recognized in 2010 by South Dakota State University as a Distinguished Young Alumni.

Joel and his wife Julene have three children, James, Jenna and Jacob. They enjoy K-State football tailgating, 4-H activities, youth livestock exhibitions and currently live on a small farm near St. Mary's, KS.



Mike Brouk (mbrouk@k-state.edu; 785-532-1207)

Associate Professor/Extension Specialist, Dairy Management and Nutrition

Micheal J. Brouk was born November 15, 1962, in Franklin County, Missouri. He attended Linn R-2 Schools graduating in May 1981. Following high school graduation, he attended the University of Missouri-Columbia majoring in agronomy and dairy science and received the Bachelor of Science degree in Agriculture in May 1985. From 1976 to 1984, he was also an active partner in the family grain farm located in Osage County, Missouri. The University of Missouri-Columbia employed Mike as a Research Specialist for two years after he completed his undergraduate program. The research projects involved the utilization of dairy processing plant waste as a fertilizer for forage crops and as a protein and mineral supplement for livestock. He then began a Master of Science degree program under Dr. Ron Belyea at the University of Missouri-Columbia. The title of his thesis was "Chewing Behavior and Digestion of Alfalfa Forage." Following completion of his M.S. degree, Mike accepted a position with Cenex/Land O'Lakes in southwestern Minnesota. He worked as a Livestock Production

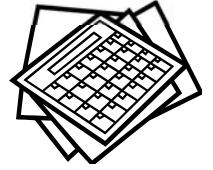
Specialist developing nutrition and management programs for dairy and beef producers. After two years with LOL, he entered a doctoral program under the direction of Dr. David Schingoethe at South Dakota State University. His dissertation topic was "Net Energy of Lactation and Ruminal Degradability of Wet Corn Distillers Grains." Following completion of the Ph.D. in Animal Sciences, he joined the teaching and research staff of South Dakota State University in January 1994. Mike was responsible for teaching undergraduate dairy management, nutrition, breeding and cattle evaluation courses as well as developing a dairy cattle nutrition research project.

Mike returned to the University of Missouri-Columbia in August of 1996 as an Extension Specialist with Commercial Agriculture Program. He was responsible for developing state wide extension programs in the areas of dairy cattle nutrition, forage systems, replacement heifer development, and dairy cattle management. He joined the faculty of Kansas State University in December of 1998 as a State Dairy Extension Specialist where he holds a 30% teaching and 70% extension appointment. His current responsibilities include development of programs in dairy cattle nutrition, management, cow comfort, replacement heifer development, dairy expansion, and heat stress abatement. He is currently involved in several research projects evaluating various heat stress abatement methods in commercial dairy herds.

Mike and his wife Michelle together with their five children, Megan, Morgan, Miranda, Matthias, and Marissa reside near Manhattan, KS.

What Producers Should Be Thinking About.....

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



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

Spring Calving Cows

Cowherd Management

- Pregnancy Check (if not already completed)
- If candidates for culling were not selected in September or October, it should be completed now.
- Consider feeding cull cows to increase body weight, value, and utilize cheap feedstuffs. Value of gain is equal to the difference between the ending value and beginning values divided by the gain. Compare this to cost of gain figures. When cost of gain is less than value of gain, profit will be realized.
- Body Condition Score
 - o Provide thin cows (body condition score 3's and 4's) extra feed now. Take advantage of weather, stage of pregnancy, lower nutrient requirements, and quality feedstuffs.
- In late fall and early winter, start feeding supplement to mature cows using these guidelines:
 - Dry grass 1½ - 2 lb supplement/day of a 40% CP supplement
 - Dry grass 3 - 4 lb supplement/day of a 20% supplement
 - Dry grass 10 lb good nonlegume hay, no supplement needed
 - o Compare supplements on a cost per pound of nutrient basis.
- Utilize crop residues.
 - o Average body condition cows can be grazed at 1 to 2 acres/cow for 30 days assuming normal weather. Available forage is directly related to the grain production levels.
 - o Limiting nutrients are usually protein, phosphorus, and vitamin A.
 - o Strip graze or rotate fields to improve grazing efficiency.
- Discontinue feeding tetracycline if used for anaplasmosis control

Calf Management

- Participate in National Level Breed Association Performance Programs CHAPS, and(or) other ranch record systems.
- Finalize plans to merchandise calves or to background through yearling or finishing programs

Forage/Pasture Management

- Plan winter nutritional program through pasture and forage management

General Management

- Document cost of production by participating in Standardized Performance Analysis (SPA) programs.
- Review management decisions, lower your costs on a per unit of production concept.
- Plan your marketing program, including private treaty, consignment sales, test stations, production sales, etc

*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.*