



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

↪ The Meat Science group and other faculty in the Department of Animal Sciences & Industry and Food Science Institute will host the **64th Reciprocal Meat Conference on June 19-22, 2011**. More than 600 professional American Meat Science Association members, student AMSA members, emeriti, and spouses are expected to attend. Topics include "Feeding the World", "Carbon Footprint of Livestock and Meat Production", "Food and Fiber Needs for the World", "Product Development", "Ensuring Food Safety", "Proteomics", "Meat Tenderness", "Regulatory and Policy Changes for the Future", "Meat color", "Consumer Views of Food Safety", "Consumer Confidence", "E. coli o17:H7 and Strategies for Intervention" plus nearly 30 "Reciprocation Session Topics". There will be tours for the spouses, a golf tournament, a softball tournament, a reception, a picnic, and a Meat Lab Open House. This will be the third time that K-State has hosted the RMC and the only university to do so.

↪ The **2011 Dr. Bob Hines Swine Classic** is scheduled for July 8-9, 2011, at CiCo Park in Manhattan. This two-day event includes educational workshops, showmanship contest, and a prospect and market hog show. It is open to all Kansas youths ages 7 through 18 as of January 1, 2011.

This year's Classic will feature a swine photography contest along with an educational program which includes a tour of the Animal Science Department, live pork meat demonstration and information on AS&I curriculum.

For the Swine Photography Contest, youth may submit up to 2 swine photos. Photos should be 8x10 size and should not be framed or matted. Photos will be placed in plastic sleeves and displayed throughout the weekend. Outlined below is a schedule of this year's program.

Friday, July 8

12:00 p.m.	All hogs in place
12:30 p.m.	Swine photo check-in by the show ring
1:00 p.m.	Vans leave for educational demonstrations at Weber Hall; ice cream party will be held during demonstrations
3:00 p.m.	Return to Cico Park from educational demonstrations
5:30 p.m.	Showmanship Contests

Saturday, July 10

8:30 a.m. Prospect Hog Show followed by Barrow and Gilt Market Hog Show

Visit www.KSUswine.org for a registration form. For more information, contact Joel DeRouchey (785-532-2280; jderouch@ksu.edu), Jim Nelssen (785-532-1251; jnelssen@ksu.edu), or Chelsea Tomascik (785-532-1264; tomascik@k-state.edu).

↪ The **2011 K-State Beef Conference** has been scheduled for Tuesday, August 16 in Weber Hall on the KSU Campus. The conference will also offer alternate live remote viewing sites at the Pratt County Fairgrounds, Butler Community College and the Wakeeney Public Library. The schedule includes:

8:00 a.m.	Registration
9:00 a.m.	Welcome – <i>Dr. Ken Odde, KSU</i>
9:05 a.m.	Volatility factors and the cattle cycle – <i>Dr. Glynn Tonsor, KSU</i>
9:45 a.m.	Ranch management in volatile times – <i>Dr. Justin Waggoner, KSU</i>
10:30 a.m.	Break
10:45 a.m.	Does high input always mean high output? – <i>Dr. Bob Weaber, KSU</i>
11:30 a.m.	Adapting to change at the ranch level – <i>Virgil Huseman, Huseman Ranch</i>
12:15 p.m.	Lunch

- 1:00 p.m. Anthelmintic resistance in beef cattle – *Dr. Joe Dedrickson, Merial*
- 1:30 p.m. Implant strategies for forage-based programs – *Dr. Chris Reinhardt, KSU*
- 2:15 p.m. Break
- 2:45 p.m. Sell cows, build herds, or get out? – *Dr. Kevin Dhuyvetter, KSU*
- 3:30 p.m. Social ethics for animals and the beef industry – *Dr. Bernie Rollins, CSU*
- 5:00 p.m. Adjourn

Registration with payment of \$60 per person or \$100 for 2 from the same family, ranch, or organization is due by July 29. Noon meal, morning and afternoon refreshments are provided. To pay by credit card go to: <http://www.asi.ksu.edu/beefconference>. For more information, contact Larry Hollis (785-532-1246; lhollis@ksu.edu) or Charlotte Bruna (785-532-1280; cbruna@ksu.edu)

- ↪ The **Kansas Livestock Sweepstakes** has been scheduled for August 20-21, 2011. This all-around event will feature contests in Livestock Judging, Meats Judging, Livestock Skillathon, and Livestock Quiz Bowl. A special prize will be awarded to the county that does the best in all four contests. Rules and past winners can be found at www.YouthLivestock.KSU.edu. Complete information for 2011 will be available soon on the Youth Livestock Web page.
- ↪ Dates for upcoming **Applied Reproductive Strategies in Beef Cattle Workshops** have been set for Aug. 31-Sept. 1, 2011 in Joplin, MO, and Sept. 30-Oct. 1, 2011 in Boise, Idaho. These meetings are for anyone interested in beef cattle reproduction, including producers, veterinarians, AI technicians and Extension specialists. For complete details and registration, visit www.beefrepro.info. For more details, contact Sandy Johnson, sandyj@ksu.edu.
- ↪ The **2011 KSU Beef Stocker Field Day** will be held on Thursday, September 22 at the KSU Beef Stocker Unit in Manhattan. Registration will begin at 9:30 a.m. and the day will conclude with a good old-fashioned Prairie Oyster Fry complete with Dutch Oven Cobbler. Watch for complete details on www.KSUbeef.org. For more information, contact Dale Blasi (dblasi@ksu.edu; 785-532-5427).
- ↪ Kansas State University will host a **Sheep & Goat Conference** on November 4-6, 2011 on the KSU campus. This conference is open to everyone and will begin Friday, November 4, at 1:00 pm and conclude at 12:00 noon on Sunday, November 6. This program is designed as an intensive learning opportunity for commercial and purebred sheep and goat producers. Subject areas will include alternative feed stuffs, use of small ruminants to control sercica lespedeza, live animal and carcass evaluation, health, predation, marketing, parasitism, crossbreeding/composite genetics, and more. Breakout sessions will also be available related to specific species, types, and/or breeds. Mark the date on your calendar and plan to attend this event. A conference agenda and registration information will be available soon. If you have any questions or would like to participate, please contact Dr. Brian Faris at 785-532-1255 or brfaris@ksu.edu.
- ↪ The **23rd Range Beef Cow Symposium** will be Nov. 29 - Dec. 1, 2011 in Mitchell, Nebraska. The educational event for cattle producers started in 1969 at Chadron, NE, and is conducted every other year. Recognized as one of the premier production beef cattle symposiums in the country, the RBCS regularly attracts 800 to 1,200 attendees and more than 80 agribusiness booth vendors for the three-day event. This is an excellent professional development opportunity for agents. We will plan to coordinate transportation for those interested in attending. For more information, contact Sandy Johnson, sandyj@ksu.edu.

CALENDAR OF UPCOMING EVENTS		
Date	Event	Location
June 19-22, 2011	Reciprocal Meats Conference	Manhattan
July 8-9, 2011	Dr. Bob Hines Swine Classic	Manhattan
August 16, 2011	K-State Beef Conference	Manhattan
August 20-21, 2011	Kansas Livestock Sweepstakes	Manhattan
Aug. 31 – Sept. 1, 2011	Applied Reproductive Strategies in Beef Cattle	Joplin, MO
September 22, 2011	KSU Beef Stocker Field Day	Manhattan
Sept. 30 – Oct. 1, 2011	Applied Reproductive Strategies in Beef Cattle	Boise, ID
November 4-6, 2011	KSU Sheep and Meat Goat Conference	Manhattan
Nov. 29 – Dec. 1, 2011	Range Beef Cow Symposium	Mitchell, NE

WHAT'S NEW....

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

“Training for the Future”

There's lots of good reasons to continue training your team: to learn new skills, to get better every day, to maintain safe practices. The list goes on and on. But I heard one today that goes a little deeper into our concept of training, and it goes deeper into our understanding of team psychology.

What do I think, as an employee, when my management team invests resources into making me a more valuable team member? I'm not talking about the (seemingly endless) compliance and “check-the-box” training we've all been exposed to, that never really adds anything to the individual, but instead takes care of some “higher-order” function in a clean, fluorescent-lit office somewhere, but doesn't really give me any tools to do my job. I'm talking about adding to a person's skills and abilities in order to do their current job better, or maybe even do a job that requires more refinement or carries with it greater responsibility. Maybe it means training in people skills for a person who doesn't yet have any direct reports. What does this type of “value-added” training say to me?

It says on the part of management, “We value what you do for the team and we value you as a person and a team member, to the extent that we want to invest resources in you to make you even more valuable.” It says, “We also value you for what you mean to this team going forward into the future. You are a valuable team-mate today, but we envision you being a leader and an even greater asset to the team tomorrow.” And finally, it says, “We are going to be here tomorrow, we are investing in our future, we want our team to grow and get better for where we're going tomorrow, and we want you to be a part of that future.”

This type of continual investment in people, and the messages it sends, both overt and subliminal or even unintentional, is what builds and earns long-term loyalty on the part of the people who do the work and make the whole team successful. The rewards of continual training are evident, no matter where you look for them.

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

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

“Heat Stress Abatement: Prevention IS the cure”

This summer has already given us July-like temperatures and heat conditions all across Kansas, and we're just coming into the time of greatest concern for heat stress. As beef producers and those of us who support the beef industry, it's our duty to prepare for all the possible contingencies that Kansas weather can bring. So, that being said, what are the tools we have in our toolbox to be better prepared to deal with the heat?

1. Pasture cattle fare better than confined cattle during heat events, provided that they can find adequate shade, elevated areas to catch more breeze, and water sources to alleviate heat stress during the hottest times of the day.
2. Black-hided cattle sustain the greatest challenge due to absorption of more solar radiation compared to light-hided cattle, and the problem is exacerbated in heavy, long-fed cattle.
3. Shade works. Keeping solar radiation to a minimum during extreme heat events may eliminate the need for emergency intervention. Even some kind of temporary or portable shade structures which can be placed in pens prior to extreme heat events will give cattle relief and get you through the worst heat episodes.
4. Wind breaks contribute to heat stress. Even if no extreme heat stress may be evident, reducing potentially cooling breezes can make cattle less likely to consume and perform up to their full potential. If wind breaks are needed for the winter, consider some form of temporary wind break which can be removed for the summer months.
5. Extra drinking water space may provide comfort and alleviate the demand on the water system during peak heat hours. Remember: cattle cool themselves through evaporative cooling from their lungs and this can move a tremendous volume of water which needs to be replaced. Extra water space can be in the form of steel tanks or even feed bunks with tarps and sand bags on the ends to convert part of the bunk to an extended water tank. Space is critical as dominant cattle may simply stand at the water trough to breathe the cooler air over the water, and prevent others from getting needed water.

6. Bedding the pen with straw or light-colored hay provides a lighter-colored, reflective surface to provide cattle a (relatively) cooler place to lie down and rest, thus reducing their activity and comfort during already stressful conditions.
7. Sprinkling cattle may be essential. Spraying cattle is costly, time-consuming, and can contribute to increased humidity within the pen, but it also may be the difference between life and death for extremely heat-stressed cattle. Be hyper-vigilant for signs of extreme heat distress: open mouthed, labored, unabated, panting. Both cattle surface temperature and soil surface temperature are reduced as a result of spraying water which then evaporates, taking heat out of the surface. Have a full water truck on hand when the forecast calls for elevated temps.

As a very challenging summer winds to a close, we all need to make sure we maximize the value of some very difficult and costly lessons.

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

↳ **Increasing Days on Feed for Heavy Short-Fed Stocker Cattle Improves Carcass Characteristics** -

Crossbred steers (n = 144; 955 ± 78.5 lb) were randomly assigned to one of three treatments consisting of 75, 100, and 125 days on feed. Cattle were fed a high-concentrate diet once daily and had access to clean, fresh water. Cattle were harvested at a commercial abattoir and carcass data collected 24 to 48 hours postmortem. Additionally, rib and plate sections were collected from each treatment day and evaluated for carcass composition, instrumental lean and fat color, tenderness, and sensory traits.

Bottom Line... Producers can place heavy yearling stocker cattle on a high-concentrate diet for 75 to 125 days with minimal effect on performance and sensory traits. However, cattle should be placed on feed for a minimum of 100 days to optimize USDA quality grade. View the complete research report at www.asi.ksu.edu/cattlemensday. For more information, contact Terry Houser (785-532-1253; houser@ksu.edu) or Chris Reinhardt (785-532-1672; cdr3@ksu.edu).

↳ **Reproduction of Heifers Sired by High or Low Residual Feed Intake Angus Bulls** - Angus-based commercial cows were bred to Angus sires that had low (feed-efficient) or high (feed-inefficient) estimated breeding values for RFI published by the Angus Society of Australia. Feed intake of heifer offspring (n = 92) was measured. RFI of the heifers was determined by regressing actual feed intake on mid-test metabolic body weight and average daily gain. Estrous cycles were synchronized and heifers bred once by artificial insemination (AI) followed by a 60-day natural mating period. Reproductive traits examined in the dams were age at first calving, breeding treatment, pregnancy results, calf birth weight, calf sire, calving days, whether the pregnancy was AI or natural, and first service conception rate. Sire RFI did not affect first service or overall conception rate of daughters. Heifers sired by low RFI (feed-efficient) bulls tended to calve earlier in the season than heifers sired by high RFI (feed-inefficient) bulls. RFI bulls with low (feed-efficient) phenotypic RFIs tended to have lower first service conception rates than heifers with high (feed-inefficient) RFIs. Overall pregnancy rates were similar between feed-efficient and feed-inefficient heifers. Calf birth weight and heifer phenotypic RFI were inversely related (-0.79), indicating a tendency for low RFI (feed-efficient) heifers to have heavier calves at birth. Heifer RFI and calving data, age at first calving, and calf birth weight were not related.

Bottom Line... No differences occurred in pregnancy rate, but a favorable relationship exists between RFI and calving date for calves sired by efficient RFI bulls. Further research should examine relationships between RFI and female fertility traits. View the complete research report at www.asi.ksu.edu/cattlemensday. For more information, contact Jennifer Bormann (785-532-1222; jbormann@ksu.edu) or Larry Hollis (785-532-1246; lhollis@ksu.edu).

↳ **The Effects of Feeder Adjustment on Growth Performance of Finishing Pigs** - A total of 234 growing pigs (PIC TR4 × 1050, initially 91.4 lb) were used in an 89-d trial to determine the effects of feeder adjustment on finishing pig performance. Pigs were randomly allotted to 1 of 3 treatments. The treatments consisted of a narrow feeder adjustment (minimum gap opening of 0.50 in.), medium feeder adjustment (minimum gap opening of 0.75 in.), and wide adjustment (minimum feeder gap opening of 1.00 in.). The feeders were adjusted to the minimum gap setting, but the agitation plate could be moved upward to a maximum gap opening of 0.75, 1.00, or 1.25 in., respectively. Treatments were arranged in a completely randomized design with 9 replications of 8 pigs per pen and 1 replicate with 6 pigs. To ensure equal floor space, pen gating was adjusted to provide 8 ft²/pig during the study. All pens had the same feeder with 2, 14-in.-wide by 4.5-in.-deep feeder holes. Pigs had ad libitum access to feed and water. All pigs were fed a corn-soybean meal-based diet containing 20% dried distillers grains with solubles (DDGS) in 4 phases. Pen weights and feed disappearance were measured every 2 wk. Also, pictures of feeders were taken and scored by a panel to determine percentage pan coverage. Results showed that narrow, medium, and wide feeder adjustments averaged approximately 28, 58, and 75% pan coverage, respectively. From d 0 to 28, pigs exposed to increasing feeder gap had improved ADFI, with the greatest ADFI observed at 1.00 in.

However, from d 28 to 56 and 56 to 89, ADG was not different among pigs fed from different feeder openings, and F/G was best for those fed from the 0.50-in. opening. Overall (d 0 to 89), there was a trend for increased ADG with increasing feeder opening. However, pigs fed with a 0.50-in. feeder gap had improved F/G compared to those with a 0.75- or 1.00-in. feeder opening.

Bottom Line...These results suggest that from 90 to 150 lb, maximum ADG was observed with a feeder setting of 0.75 in (approximately 58% pan coverage). However, pigs fed from 150 to 270 lb had greater ADG and the best F/G at a setting of 0.50 in (approximately 28% pan coverage). Thus, it appears that optimum feeder-gap setting may differ with growth phase. More information is available on this experiment and others in the KSU Swine Day Report at www.KSUswine.org. (This study conducted by A.J. Myers, R.D. Goodband, M.D. Tokach, S.S. Dritz, J.R. Bergstrom, J.M. DeRouchey, and J.L. Nelssen.)

↳ **Effects of Standardized Ileal Digestible Tryptophan:Lysine Ratio in Diets Containing 30% Dried Distiller Grains with Solubles on the Growth Performance and Carcass Characteristics of Finishing Pigs in a Commercial Environment** - Two experiments were performed to determine the effects of increasing standardized ileal digestible (SID) tryptophan to lysine (trp:lys) ratio in growing-finishing pig diets containing 30% dried distillers grains with solubles (DDGS). In both experiments, soybean meal replaced crystalline lysine and threonine to alter the dietary SID trp:lys concentrations while maintaining minimum ratios of other amino acids. In Exp. 1, a total of 638 pigs (PIC 1050 × 337, initially 80.0 lb) were used in a 105-d trial with 26 to 27 pigs per pen and 6 pens per treatment. Pens of pigs were randomly allotted to 1 of 4 dietary treatments with standardized ileal digestible trp:lys ratios of 14.0, 15.0, 16.5, and 18.0%. All diets were fed in meal form and treatments were fed in 4 phases. For the overall trial, ADG and ADFI increased as trp:lys increased through 18%; however, the response tended to be quadratic from d 0 to 42, with optimal ADG and ADFI at 16.5% SID trp:lys. Feed efficiency was not influenced by SID trp:lys ratio. Although feed cost per pig increased as SID trp:lys ratio increased, so did final live weight, HCW, income per pig, and income over feed cost (IOFC). The results of this experiment indicated the optimal SID trp:lys ratio was 16.5% from 80 to 160 lb, but at least 18% from 160 to 265 lb.

In Exp. 2, a total of 1,214 pigs (PIC 1050 × 337, initially 146.2 lb) were used in a 73-d finishing trial with 25 to 28 pigs per pen and 9 pens per treatment. Pens of pigs were randomly allotted to 1 of 5 treatment groups. Pigs were fed common diets before the start of the experiment. Dietary treatments included corn-soybean meal-based diets with SID trp:lys ratios of 15.0, 16.5, 18.0, and 19.5, and the 15.0% diet with L-tryptophan added to achieve 18.0% SID trp:lys ratio. Overall (d 0 to 73), ADG, ADFI, F/G, final weight, and HCW improved as dietary SID trp:lys increased through 19.5%. Increasing SID trp:lys increased feed cost per pig, but also increased total income per pig. While there were no differences on an IOFC basis, pigs fed the highest level of SID trp:lys had numerically the greatest IOFC. Overall, there were no significant differences between the diet with 18.0% SID trp:lys and the diet with 15.0% SID trp:lys with added L-tryptophan to 18.0%.

Bottom Line...These experiments demonstrate there is opportunity to improve growth performance in late-finishing pigs with increased SID trp:lys ratios in diets containing high amounts of DDGS. More information is available on this experiment and others in the KSU Swine Day Report at www.KSUswine.org. (This study conducted by J.A. Barnes, M.D. Tokach, S.S. Dritz, J.M. DeRouchey, R.D. Goodband, and J.L. Nelssen.)

↳ **Nutrient Analysis of Sorghum Dried Distillers Grains with Solubles from Ethanol Plants Located in the Western Plains Region** - Samples of sorghum dried distillers grains with solubles (DDGS) were collected and analyzed to establish a nutrient database and evaluate the quality and consistency between and within samples taken from 5 ethanol plants in the Western Plains region. Four plants were located in Kansas and 1 in Texas. A total of 21 samples were collected, with 4 plants contributing 4 samples each and 1 plant contributing 5 samples from different manufacturing lots of DDGS. Each sample was analyzed for amino acids, DM, CP, crude fiber, crude fat, ash, NDF, ADF, Ca, P, trace minerals, GE, and starch. In addition, DE, ME, and NE were calculated from the nutrient analysis. Of the 5 plants, 3 produced pure sorghum DDGS samples while 2 produced mixed sorghum and corn DDGS samples, with sorghum representing 60 or 70% of the DDGS. For the pure sorghum DDGS, the overall sample average means for each nutrient on a DM basis were: DM (89.5%), CP (34.2%), crude fat (10.5%), ash (4.4%), NFE (40.3%), crude fiber (10.6%), ADF (26.4%), NDF (35.1%), starch (4.3%), calculated DE (1,560 kcal/lb), calculated ME (1,454 kcal/lb), calculated NE (919 kcal/lb), Ile (1.37%), Leu (3.84%), Lys (0.88%), Met (0.55%), Thr (1.04%), Trp (0.26%), Val (1.67%), Ca (0.01%), and P (0.72%).

Bottom Line...The mixed DDGS samples' means were generally similar to the pure sorghum DDGS nutrient analysis values. Results of these analyses can be used by nutritionists to better utilize sorghum DDGS in swine diets. More information is available on this experiment and others in the KSU Swine Day Report at www.KSUswine.org. (This study conducted K. M. Sotak, R.D. Goodband, M.D. Tokach, J.M. DeRouchey, S.S. Dritz, and J.L. Nelssen.)

AS&I FACULTY SPOTLIGHT



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

Dr. Ken Odde received a bachelor's degree in animal science from South Dakota State University, a master's degree in reproductive physiology, a doctor of veterinary medicine and a doctorate in physiology from Kansas State University. Dr. Odde served as Assistant Professor, Associate Professor and Professor at Colorado State University from 1983 to 1994. He taught and conducted research in beef cattle reproduction and health. In 1994, Dr. Odde returned to his home area in South Dakota and joined the technical services team at SmithKline Beecham Animal Health. He was a member of the technical services team at Pfizer Animal Health following their acquisition of SmithKline Beecham Animal Health. In 2000, Dr. Odde left Pfizer to become Vice President of Veterinary Operations at AgSpan and then had his own consulting business. Dr. Odde joined North Dakota State University as Professor and Head, Department of Animal &

Range Sciences in January of 2003. Starting in June, 2005, he served as Professor and Director, Beef Systems-Center of Excellence, a public-private partnership designed to grow cattle feeding and processing in ND, and the research and education support to the beef industry.

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



Curtis Kastner (ckastner@k-state.edu; 785-532-1234)
Professor/Director of Food Science Institute

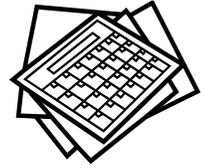
Curtis Kastner has been an ASI Faculty member since 1975. He has served as the Coordinator of the Food Science and Industry undergraduate program, Research Coordinator, and Associate Department Head. Currently he serves as the Director of the Food Science Institute, which was started in 2001. The Institute is charged with coordinating and facilitating food science teaching, research, and extension efforts across campus. He also coordinates the interdisciplinary Food Safety and Security program for the Institute and is the Education Theme Leader for the National Center for Food Protection and Defense a Center of Excellence for the Department of Homeland Security. His accomplishments have been recognized by being appointed to the National Advisory Committee for Meat and Poultry Inspection, awarded the Educator's Award of the National Meat Processors Association, designated as the

Advanced Degree Graduate of Distinction Award by his alma mater, Oklahoma State University, and the International Award for Distinguished Achievement in Agriculture by the Honor Society of Gamma Sigma Delta.

He enjoys hunting, fishing, coaching and visiting with his grandchildren.

WHAT PRODUCERS SHOULD BE THINKING ABOUT...

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



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

August is when forages are maturing, weaning time is approaching, and weather dictates several key management decisions.

Breeding Season

- Given high feed price inputs, ruthlessly cull all unsound cows from the herd. Cull cows that do not conceive after three services by a fertile bull.
- Limit the breeding season. Remove bulls after 60 days with cows, 45 days with heifers.

These methods contribute to a more uniform calf crop, makes winter feed management easier, and increases the success rate of next year's breeding season.

Cowherd Nutrition

- Provide ample amounts of clean, fresh drinking water.
- Conduct an inventory of forage needs for the winter feeding period
- Plan ahead and price availability of byproducts, such as wheat-middlings, dried distillers grains, etc. prior to typical seasonal price increases.

Herd Health

- If pinkeye is likely to be a problem, consider the following preventive and therapeutic measures.

Preventive:

- ◆ Make sure the herd is receiving adequate vitamins and trace mineral in their diet.
- ◆ Consider using a medicated trace mineral package.
- ◆ Consider vaccination for pinkeye and IBR (consult your local veterinarian).
- ◆ Control face flies.
- ◆ Clip pastures with tall, coarse grasses that may irritate eyes.

Therapy:

- ◆ Administer an intramuscular injection of long-acting oxytetracycline when symptoms are first noticed.
 - ◆ Shut out irritating sunlight by patching eyes, shade, etc.
 - ◆ Control flies.
 - ◆ Consult your veterinarian.
- Consider revaccinating for the respiratory diseases any animals that will be taken to livestock shows.
 - Vaccinate suckling calves for IBR, BVD, PI3, BRSV, and possibly pasteurella at least 3 weeks prior to weaning.
 - Revaccinate all calves for blackleg.
 - Vaccinate replacement heifers for brucellosis (4 to 10 months of age).
 - Monitor and treat footrot.

Forage/Pasture Management

- ☑ Enhance grazing distribution with mineral mixture placement away from water sources.
- ☑ Observe pasture weed problems to aid in planning control methods needed next spring.
- ☑ Monitor grazing conditions and rotate pastures if possible and(or) practical.
- ☑ If pastures will run out in late summer, get ready to provide emergency feeds. Start supplemental feeding before pastures are gone to extend grazing.
- ☑ Harvest and store forages properly. Minimize waste by reducing spoilage.
- ☑ Sample harvested forages and have them analyzed for nitrate and nutrient composition.
- ☑ Plan for sufficient standing pasture for winter grazing needs.
- ☑ For stocker cattle and replacement heifers, supplement maturing grasses with an acceptable degradable intake protein/ionophore(feed additive) type supplement.

General Management

- ☑ Avoid unnecessary heat stress - Don't handle and/or truck cattle during the heat of the day.
- ☑ Repair, replace and improve facilities needed for fall processing.
- ☑ Order supplies, vaccines, tags, and other products needed at weaning time.
- ☑ Consider earlier than normal weaning, but have a marketing plan in place.

*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.*