



News from KSU Animal Sciences

March, 2007

WHAT'S NEW >>>>>>

☞ **We would like to welcome Ken Odde to Kansas State University.** Dr. Odde assumed responsibilities as the new Head of the Department of Animal Sciences and Industry on Feb. 26, 2007. Odde has been a professor and director of North Dakota State University's Beef Systems Center of Excellence since June 2005. He earned a DVM degree from K-State's College of Veterinary Medicine in 1982 and a Ph.D. in Reproductive Physiology at K-State in 1983. He also earned master's degree in reproductive physiology from K-State in 1978 and a bachelor's degree in animal science from South Dakota State University in 1973. Please join us in welcoming Ken and his wife, Arlene, to KSU.

☞ **Kansas State Fair/Kansas Junior Livestock Show Update** – Some of the 2007 rule changes include:

- 1) ***Fitting Rule for 4-H/FFA (Beef, Sheep, Swine) at Kansas State Fair*** – Each exhibitor must groom his or her own animal and may use only the assistance of an immediate family member (mother, father, legal guardian, brother or sister) or of another 4-H or FFA member who is an exhibitor at the 2007 show. This rule will be strictly enforced and any exhibitor violating it will have their animal in question eliminated from competition.
- 2) ***Steer and Heifer Shows*** – The steer and heifer shows will be no fit shows, “Blow and Show”. “No Fit” at the Kansas State Fair is defined as using no adhesive, glue, paint or powder products.

For more information, contact Debbie Anderson, Kansas State Fair, at 620-669-3614.

☞ **All market animals, commercial gilts, and commercial heifers** must be nominated to be eligible for the Kansas State Fair and/or Kansas Junior Livestock Show.

- 1) Steers and Market Heifers nominated with noseprint by May 1
- 2) Lambs nominated with noseprint by June 15
- 3) Hogs (Market hogs and Commercial Gilts) nominated with ear notches by June 15
- 4) Meat Goats nominated with ear tag by June 15

Multiple noseprints for each animal are recommended. This makes finding a legible print much easier. Initial nominations will again require a postmark by May 1 for steers and market heifers and June 15 for lambs, pigs, wether dam ewes, commercial breeding heifers and meat goats. All nominations must be complete within one month of nomination due date. This means all reprints and other corrections must be complete by June 1 for steers and July 15 for lambs, pigs, commercial breeding heifers and meat goats.

The Extension Youth Web Site is available to double check your records. It can be accessed at www.asi.ksu.edu Then click on Students and Programs. For more information, contact Julie Voge (jvoge@ksu.edu or 785-532-1264).

☞ For questions on the **2007 Livestock Requirements for County Fairs and the Kansas State Fair**, visit www.asi.ksu.edu. Click on “Youth Programs” under the “Students and Program” tab.

☞ **Winter impact on bull fertility** - Bulls exposed to extreme cold and wind chills can suffer frostbite on the scrotum which can result in temporary to permanent loss of fertility. Chances for problems increase with rain followed by ice, snow and high winds and a lack of adequate amounts of dry bedding. Temperature regulation is important for maintaining sperm quality. Frostbite damage is due to the heat produced from the inflammatory response rather than the cold itself. The extent of sperm defects are related to the severity of damage. Minor frostbite damage may appear as a scab on the base of the scrotum. If the scab is dime sized or smaller, fertility problems are often only short term, however, semen quality can be reduced in bulls without any visible signs of damage. Moderate to severe frostbite involving 10 to 30% of the scrotum may require anywhere from 2 to 12 months for recovery. Older bulls are more likely to be impacted as they can lose the ability to draw the testicles up close to the body. Bulls should undergo a breeding soundness exam annually to identify unsatisfactory breeders prior to turnout.

☞ The **2007 KSU Cattlemen's Day** was a huge success!! We had over 1,200 beef producers, allied industry representatives, K-State staff and students registered this year. We appreciate your attendance and support of this educational event and would also appreciate any comments or suggestions you might have for next year. Following are some of the 2007 Beef Research Highlights. For more information on these trials, as well as many others, visit www.asi.ksu.edu/cattlemensday.

☞ **Optimizing Use of Distiller's Grains in Finishing Cattle Diets Study** – Two hundred and ninety-nine crossbred-yearling steers (800 lbs) were used in a 114-day finishing study. Steers were housed in 49 concrete-surfaced pens with overhead shade covering the bunk and half of the pen. Steers were implanted on day 7 and day 67 with Revalor IS. Finishing diets contained 0 or 25% distiller's grains (dry basis) in the wet or dried form. Distiller's grains were derived from corn or grain sorghum. Additionally, diets included either 0 or 6% ground alfalfa hay. The objectives of this study were to 1) compare performance and carcass traits of cattle fed finishing diets containing sorghum- and corn-based distiller's grains; 2) compare wet and dried distiller's grains in cattle finishing diets; and 3) determine if distiller's grains can substitute for roughages in finishing diets.

Bottom Line... Adding distiller's grains to flaked-corn finishing diets reduces overall diet digestibility. Sorghum-based and corn-based distiller's grains have comparable nutritional value for feedlot cattle when added to finishing diets at 25% of the diet dry matter. Wet and dried distiller's grains also are comparable feed ingredients. For more information, contact Jim Drouillard (532-1204; jdrouill@ksu.edu) or Chris Reinhardt (532-1672; cdr3@ksu.edu).

☞ **Computer and Internet Usage of Cow-Calf Producers is Growing** – A national survey was conducted in the spring of 2006 as a joint project between Kansas State University and BEEF[®] Magazine. Participants were selected from a mailing list of cow-calf producers with more than 100 cattle. BEEF[®] Magazine provided the mailing list and a random sample of 1,000 producers were selected. The survey gathered the thoughts and opinions of 522 cow-calf producers from 41 states. The objective of this study was to observe and understand technology usage practices of cow-calf producers.

Bottom Line... More than half of cattle producers are using personal computers within their operations, while almost half possess internet capabilities. When compared to earlier research, this trend shows the growth of this technology in the industry. For more information, contact Dale Blasi (532-5427; dblasi@ksu.edu) or Larry Hollis (532-1246; lhollis@ksu.edu).

☞ **Optaflexx Increases Ruminal Digestion** – A laboratory test tube system was used to measure changes in digestion of feeds when Optaflexx was added to the diet. Corn was supplemented with equivalent levels of nitrogen from soybean meal, urea or a combination of soybean meal and urea to determine if degradable protein supply influences microbial responses to Optaflexx. Digestion of diet dry matter was measured as an indicator of microbial activity. The objective of this study was to determine if supplementation with degradable forms of nitrogen, such as soybean meal and urea, will increase response to Optaflexx.

Bottom Line... Replacing soybean meal with urea increased the response to Optaflexx, suggesting that degradable protein may be limiting when Optaflexx is added to finishing diets. For more information, contact Jim Drouillard (532-1204; jdrouill@ksu.edu) or Chris Reinhardt (532-1672; cdr3@ksu.edu).

☞ **Feed Efficiency Rankings of Heifers Fed Low- and High-Energy Dense Diets** – Production segments within the cattle industry utilize a variety of dietary ingredients. Depending on the performance levels needed to accomplish production goals, diets can easily range in energy concentration from maintenance to maximum daily gains. Because of this disparity, producers wanting to select cattle for optimum feed efficiency have traditionally used growth rate and feed-to-gain ratio. More recently, the concept of residual feed intake (the difference between the actual and predicted feed intake) has been developed to compare feed efficiency rankings of individual animals. However, the effects of dietary composition (energy levels) on residual feed intake have not been fully characterized. There, we individually fed 26 heifers both low- and high-energy diets to determine their residual feed intakes. From the data collected, correlation analyses were done to determine if heifer rankings for efficiency were similar for the two diets.

Bottom Line... Rankings of individual animals for residual feed intake depended on the diet that was fed. Consequently, cattle producers wanting to select cattle for residual feed intake will need to be concerned with type of diet that is fed. For more information, contact Twig Marston (532-5428; twig@ksu.edu) or Chris Reinhardt (532-1672; cdr3@ksu.edu).

UPCOMING EVENTS >>>>>>>>>>

- ☞ **CATTLE \$EN\$E Program to be held in WaKeeney** - The 2007 Cattle \$en\$e program will take place on March 22 at the Trego County Fairgrounds in WaKeeney, KS. Barry Dunn, Executive Director, King Ranch Institute for Ranch Management will start off the afternoon with his view on "A Balanced Approach to Successful Ranching." Other speakers include Kevin Dhuyvetter, Extension Ag Economist and Twig Marston, Extension Cow/Calf Specialist, both with K-State Research and Extension, covering marketing conditions and production costs. Watershed specialist, Stacie Minson, will also be on hand to demonstrate the damaging effects of waste run-off. A steak dinner will be served, featuring the humor and insight of Colorado's renowned chef Victor Matthews, Black Bear Restaurant. Registration is \$10.00 before March 16th, and \$15.00 at the door. Contact Amy Taylor, Trego County Extension Director, at 785-743-6361 or amtaylor@oznet.ksu.edu.
- ☞ A **Youth Meat Goat Day** will be held on Saturday, March 24 in Oswego, Kansas. This event is sponsored by Bartlett COOP Association and K-State Research and Extension. The program will begin with registration at 9:30 a.m. and include presentations on "Selecting Your Meat Goat," "Feeding your Meat Goat," "Keeping Your Meat Goat Healthy," and more. For more information on this event, contact Keith Martin at 620-784-5337 or rkmartin@ksu.edu.
- ☞ Don't miss the **Wildlife Habitat Evaluation Contest** which will be held March 31 in Manhattan, Kansas. For more information, contact Charles Lee (clee@ksu.edu; 785-532-5734).
- ☞ **Roundup in Hays to be held on April 5** - The Agricultural Research Center—Hays annual beef cattle research Roundup will be held on April 5th with registration from 11:30 a.m. to 12:00 noon. The program will begin at the ARCH arena at 12:00 with lunch being served, followed by a welcome from department head Bob Gillen, viewing of cattle with summaries of the research currently being conducted, and a walking tour of the feedlot. The projects highlighted during this portion of the program include odor mitigation, remote sensors for early identification of illness and effects of dietary vitamin A level on beef carcass quality. The program will then move to the auditorium for presentations beginning at 2:00 p.m. regarding health and management of early-weaned calves, survivability of cool-season grasses, and effect of finishing diet composition on generation of odor compounds in manure. The program will conclude with presentations focusing on use of distiller's byproducts for beef production by guest speakers Jim Mintert, KSU Extension State Leader, Department of Agricultural Economics; K.C. Olson, KSU Cow-Calf Nutrition and Management; and Sandy Johnson, KSU Livestock Specialist. For more information contact John Jaeger at 785-625-3425 or visit www.wkarc.org/news/ARCH_2007Roundup.htm.
- ☞ Plan to attend the **Southeast Nebraska Goat Clinic** on April 7, 2007, to learn more about raising and showing goats. The clinic will be held at the Ahlschwede Farm near Crete, Nebraska. The registration fee is \$3.00, which includes lunch, and will begin at 9:00 a.m. The morning program will include presentations on goat selection, nutrition, parasite control and showing. The afternoon session will include more question and answer sessions plus additional goat viewing. For more information, contact Eric Stehlik, Saline County Extension, Wilber, Nebraska (402-821-2151; estehlik@unlnotes.unl.edu).
- ☞ A **practice horse judging contest** will be held at the Kansas State Fair Fairgrounds on April 21, 2007. There will be no tabulation of scores or awards at this event, however, it is a great opportunity to evaluate horses in a contest situation, give reasons that will be scored, and hear the officials give their justification of placings. The contest starts at 9:30 a.m. with registration taking place at 9:00 a.m. There is no pre-registration for the practice contest. The cost is \$10 per person at the door. Coaches will take their students to lunch and bring them back for reasons. There will be eight classes to judge; four halter and four performance. Coaches will be handed the placing cards for their teams following the conclusion of oral reasons. If you have any questions, contact Julie Voge (jvoge@ksu.edu; 785-532-1264).
- ☞ A **Horse Industry Bus Tour**, visiting ranches and horse museums in Kansas, Oklahoma and Texas, will be held May 14-17, 2007. This tour will include stops at the Remington Park Race Track, National Cowboy Museum, Express Clydesdale Ranch and much more. Cost for the tour is \$300 per person which includes museum fees, tour fees, lodging, breakfast and transportation on a motor coach. Registrations are due by April 10th and will be on a first come basis. Maximum capacity for this tour is 50. To receive a brochure or more information, contact Julie Voge (jvoge@ksu.edu; 785-532-1264).

- ✈ **Developing and Implementing Your Company's HACCP Plan** workshop will be held in Manhattan on June 6-8. This 2-1/2 day workshop will introduce meat and food processors to the HACCP concept, plus participants will work on the development of a HACCP plan. This workshop meets USDA HACCP training requirements under federal and state meat inspection and is accredited by the International HACCP Alliance. For more information, contact Alicsa Mayer, HACCP Extension Assistant at amayer@ksu.edu or toll free at 877-205-8345.

- ✈ The **KSU Youth Horse Judging Camp – Beginning Section** will be held Monday, June 4, 2007 in Weber Arena on the KSU Campus. This camp is designed for youth that have had very little experience judging horses and would like to learn more about note taking and oral reasons. Emphasis will be on the placings of classes commonly seen in Kansas judging contests.
Camp registration will begin at 8:30 a.m. on Monday, June 4, in Room 146, Weber Hall. Camp registration fee is \$30/per student and must be paid by May 1. No entries will be accepted after this date. Camp will be limited to the first 30 participants. For a brochure or more information, contact Julie Voge (jvoge@ksu.edu; 785-532-1264).

- ✈ The **KSU Youth Horse Judging Camp – Advanced Section** will be held June 11-12, 2007 in Weber Arena on the KSU Campus. This camp is designed for youth that have had some experience judging horses and would like to learn more about note taking and oral reasons. Emphasis will be on the placings and reasons of classes commonly seen in Kansas judging contests.
Camp registration will begin at 9:00 a.m. on Monday, June 11, in Room 146, Weber Hall. Camp registration fee is \$115/per student and must be paid by May 1. No entries will be accepted after this date. Camp will be limited to the first 30 participants. Youth will be housed in KSU dorm rooms. All meals are included in the registration fee. For a brochure or more information, contact Julie Voge (jvoge@ksu.edu; 785-532-1264).

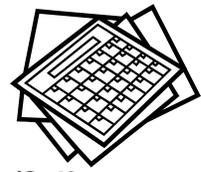
- ✈ The **2007 KSU Equestrian Western Boot Camp** will be held June 13-15 and the **English Boot Camp** will be held June 18-20 at Fox Creek Farm, Manhattan, Kansas. At the Boot Camp, campers will work with their horse to improve their overall riding ability with a special emphasis on equitation. Campers will get the chance to stay in the K-State dorms, eat in the dining halls, and have fun with other campers who also love horses. For more information, contact Teresa Slough at (785) 532-1268.

- ✈ An **Introduction to Collegiate Riding for Elite Equestrian Athletes** will be held at Kansas State University on June 22-23, 2007. This camp is for girls ages 16-18 who are interested in riding at the collegiate level. Contact Teresa Slough (785-532-1268) for a brochure and more information.

CALENDAR OF UPCOMING EVENTS

Date	Event	Location
March 22, 2007	Cattle \$en\$e Program	WaKeeney
March 24, 2007	KSU Junior Swine Producer Day	Manhattan
March 24, 2007	Youth Meat Goat Day	Oswego
March 25, 2007	Frozen Semen Lab for Equine	Manhattan
March 31, 2007	Wildlife Habitat Evaluation Contest	Manhattan
April 5, 2007	Round-Up	Hays
April 7, 2007	Southeast Nebraska Goat Clinic	Crete, NE
April 14, 2007	KSU Judging Team Reunion	Manhattan
April 19-22, 2007	NJSA National Youth Leadership Conference	Indianapolis, IN
April 21, 2007	Practice Horse Judging Contest	Hutchinson
May 14-17, 2007	Horse Industry Bus Tour	
June 6-8, 2007	HAACP Training	Manhattan
June 13-15, 2007	Western Equestrian Boot Camp	Manhattan
June 18-20, 2007	English Equestrian Boot Camp	Manhattan
June 22-23, 2007	Introduction to Collegiate Riding Camp	Manhattan

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



BEEF -- Cowherd Tips by *Twig Marston, K-State Beef Extension Specialist, Cow/Calf*

- Breeding season is beginning or continuing for many operations; therefore, both females and males must be reproductively fit.
 - 1) Several estrus synchronization procedures have been developed. To determine the correct synchronization program to use, consider the following: age group of females (yearling replacement heifers vs. cows), commitment of time and efforts for heat detection, potential number of females that are anestrus (days post partum, body condition, calving difficulty), labor availability, and the return on investment for total commitment to the breeding program.
 - 2) Handle semen properly and use correct AI techniques to maximize fertility.
 - 3) Natural service bull should have body condition, eyes, feet, legs and reproductive parts closely monitored during the breeding season. Resolve any problems immediately.
 - 4) All bulls should have passed a breeding soundness examination prior to turnout.
- Begin your calf preconditioning program. Vaccination, castration and parasite control at a young age will decrease stress at weaning time. This is a time to add value to the calf crop.
- Implanting calves older than 60 days of age will increase weaning weight.
- Properly identify all cows and calves. Establish premises numbers for compliance with state and national programs.
- Use best management practices (BMPs) to establish sustainable grazing systems.
- Use good management practices when planting annual forage sources and harvesting perennial forages.
- Maintain records that will verify calving season, health programs, and management practices.

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.