



# News from KSU Animal Sciences



**Kansas State University has suspended classes and meetings for groups over 100 people to mitigate the risk of spreading COVID-19. Out of an abundance of caution and concern for the health and safety of our participants, KSU Junior Sheep Producer Day and KSU Sheep Producer Day have been CANCELLED. We apologize for any inconvenience this may cause and wish you all health and safety. Please watch [www.asi.ksu.edu](http://www.asi.ksu.edu) for updates on other upcoming events.**



**Livestock County Fair Management Clinics** are scheduled for April 7 and 8. Every other year, K-State Research and Extension and the Department of Animal Sciences and Industry host a Livestock Fair Management Clinic for county fair board members, extension agents, and other adult volunteers involved in local livestock fair management and leadership. This professional development opportunity provides a forum for open communication for individuals with local livestock fairs across Kansas. There will be two different locations on two different days with the same general agenda. Tuesday, April 7, will be the first session at the Sedgwick County Extension Office in Wichita. The second session will be hosted on Wednesday, April 8, at the Logan County Fairgrounds in Oakley. Lunch and refreshments will be provided. The registration fee is \$15/person and is due by March 27. Checks can be made payable to "KSU-ASI" and mailed to Livestock Fair Management Clinic, Attn: Lexie Hayes, 214 Weber Hall, KSU, Manhattan, KS 66506. For a registration form and a detailed agenda, please visit the website, [www.YouthLivestock.KSU.edu](http://www.YouthLivestock.KSU.edu). Information is linked to the event on the calendar at the top of the page. If you have any questions, please contact Lexie Hayes at 785-532-1264 or [adhayes@ksu.edu](mailto:adhayes@ksu.edu) or Joel DeRouchey at 785-532-2280 or [jderouch@ksu.edu](mailto:jderouch@ksu.edu).



Plan to attend the **43rd Annual Midwest Meat Processing Workshop** on May 1 at K-State. Join us at the workshop and see, hear, taste and ask questions as state award winners share their expertise and demonstrate the manufacture and techniques used to make award winning products. Justin Stroot from Stroot Lockers in Mulvane, KS, will demonstrate making his award winning whole muscle jerky, and Erik Steeves from Timber Creek Meats in Parsons, KS, will demonstrate production of his award winning large diameter deli meat. Brandon Goehring from Visko Teepak will discuss casing basics, applications, and troubleshooting along with a discussion on meat fermentation. Jessie Vipham, KSU, will discuss ingredient safety, especially spices and seasonings, and strategies for their control. A discussion on the incorporation of antimicrobial agents in packaging film will be presented by Valentina Trinetta, KSU. John Wolf, KSU, and Kurt Carter, Walton's Inc., Wichita, KS, will give a demonstration of hot dog manufacture using the KSU meat lab bowl chopper and a smaller bowl chopper provided by Walton's Inc. Trends in the Mexican meat industry and their impact on the U.S. will be presented by Francisco Najjar, KSU. Michael Chao, KSU, will discuss strategies for processing goats for ethnic markets. Mark your calendar and come to this workshop to learn techniques to improve business strategies, product quality, and safety that could result in tastier product, longer shelf life, and greater sales and business opportunities. Registration is \$100 per plant and includes lunch for two people and a parking permit for one vehicle. For more information, contact Liz Boyle at [lboyle@ksu.edu](mailto:lboyle@ksu.edu) or 785-532-1247.

## Department of Animal Sciences and Industry

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## March 2020 issue



↪ **State Livestock Nomination Season Approaching** - The state livestock nomination season is rapidly approaching! The 2020 materials have been distributed to counties and are posted on the KSU Youth Livestock website, under the "Nomination Information" tab (<http://bit.ly/ksunominations>). Market Beef nominations will be due on May 1, 2020. All other species, which includes commercial heifers, market swine, commercial gilts, market lambs, commercial ewes, and ALL meat goats, will be due June 15, 2020. Please remember there is not a registered breeding doe show at either state show, so all meat goats must be nominated to be eligible. The nomination deadlines are firm postmark deadlines. Any nomination envelope or package received must have a visible postmark prior to the deadline, or it will not be accepted. Certified mail is highly encouraged. Families are also encouraged to use the checklist provided for each specie to make sure their nominations are complete. Incomplete or incorrect nominations will be returned to the family and cost \$20 to correct. For more information, please contact Lexie Hayes ([adhayes@ksu.edu](mailto:adhayes@ksu.edu) or 785-532-1264).

↪ The **KSU Youth Horse Judging Camp – Beginning Section** will be June 8, 2020, and the **KSU Youth Horse Judging Camp – Advanced Section** will be June 9-10, 2020. Registration for both camps must be paid by May 11, 2020. For more information, visit the website <http://www.asi.k-state.edu/research-and-extension/youth-programs/judging-camps.html>. You can also contact James Lattimer, (785-532-2840 or [jlattimer@ksu.edu](mailto:jlattimer@ksu.edu)).

↪ **K-State Animal Sciences Leadership Academy** - Kansas State University will host the K-State Animal Sciences Leadership Academy on June 24-27, 2020, for young livestock industry leaders. This four-day event will focus on increasing young leaders' knowledge of Kansas' diverse livestock industry, as well as building participants' leadership skills. Students will stay in university housing with event staff for the duration of the event.

The program's itinerary will feature interactive workshops, tours and faculty mentor time with animal sciences and industry professors. Industry leaders will also join the participants frequently to share their knowledge and expertise. Throughout the week, participants will work in teams to evaluate current events within the animal science industry and educate others. This experience will culminate with team presentations and a closing reception on Saturday morning.

Twenty high school students (current 9th-12th graders) will be selected to participate. The application deadline is April 15, 2020. Application forms are available at [www.asi.k-state.edu/research-and-extension/youth-programs/k-state-animal-science-leadership-academy/](http://www.asi.k-state.edu/research-and-extension/youth-programs/k-state-animal-science-leadership-academy/). For more information, please contact academy director, Sharon Breiner at [sbreiner@ksu.edu](mailto:sbreiner@ksu.edu).

<b>CALENDAR OF UPCOMING EVENTS</b>		
<b>Date</b>	<b>Event</b>	<b>Location</b>
April 7, 2020	Livestock County Fair Management Clinic	Wichita
April 8, 2020	Livestock County Fair Management Clinic	Oakley
April 15, 2020	Applications due for K-State Animal Sciences Leadership Academy	
April 18, 2020	K-State Open House	Manhattan
May 1, 2020	Midwest Meat Processing Workshop	Manhattan
May 1, 2020	Market Beef Nominations due	
June 8, 2020	KSU Youth Horse Judging Camp – Beginning Section	Manhattan
June 9-10, 2020	KSU Youth Hose Judging Camp – Advanced Section	Manhattan
June 24-27, 2020	K-State Animal Sciences Leadership Academy	Manhattan

# What's New.....

## ↳ **Management Minute** – Justin Waggoner, Ph.D., Beef Systems Specialist

### *“It's not Always about the Money”*

If you have an employee who seems to continually be bothering you about not being paid enough, there are usually two possibilities: 1) You are a tightwad and you're not paying them enough; or 2) the person is disgruntled about their role in the organization. To find out if the answer is No. 1, make a few phone calls to managers you trust in your general geography and find out what your neighbors are paying for similar jobs in your industry. If you're within 50¢ or so per hour, then move on to answer No. 2. Some people are just better employees than others. If this person is worth more than the 'scale', you had better pay more to keep them.

But “pay” can come in many forms. You can “buy” an employee's loyalty and general job satisfaction with many perks other than another few cents or bucks per hour. Make sure your insurance, savings investment, and/or profit sharing plans are at least in line with the industry. This is especially important if this person has a family to look after. Non-monetary benefits include things like flexible time off. Those early mornings and long days are a lot easier to take if a person knows they can take Thursday afternoons off for a child's ball game or whatever.

What about goals? Have you asked your employee what they want out of this position? They may want to move up in the organization or have opportunities for a management role elsewhere. You can be selfish about this or you can take on the role of mentor and teacher. By taking care of your employee and training them for a leadership role they will most certainly be a better employee, and will have a harder time leaving for a different job. And even if they do leave for a different opportunity, they will give such a glowing report on your leadership and team approach, you can be certain to find a good, young person to replace them.

The question you need to ask yourself is “Do you really want this person around for the long haul?” If you DO, take some time to privately evaluate your plans, and then take some more time one-on-one with this employee to find out their long-term needs and goals. If you DON'T want this person to remain in the organization, you still need to get your plans in order because after you inform this person they are not what your organization needs, you had better have a pretty good plan set up to attract a quality person to replace them.

For more information, contact Justin Waggoner at [jwaggon@ksu.edu](mailto:jwaggon@ksu.edu).

## ↳ **Feedlot Facts** – Justin Waggoner, Ph.D., Beef Systems Specialist

### *“Body Condition Scoring: It's About More than the Score”*

Body condition scoring is one of the most valuable management tools at the disposal of the cattle manager. This one number gives us a direct indication of an individual cow's previous plane of nutrition and future reproductive capability. Although the individual body condition scores are important, we do not necessarily manage individual cows, we manage groups of cows. Thus, it is important for us to look beyond the individual scores and look at the distribution of body condition scores within the herd.

If we have a herd (Herd 1) with an average body condition score of 5 that is essentially characterized by the classic bell curve, with a few thin cows (3.5's), the bulk of cows in the middle (4's and 5's) and few over-conditioned cows (7's) everything is good. Alternatively, we could have a herd (Herd 2) with an average body condition score of 5 that is essentially the result of a few thin cows (3's) and some over conditioned cows (6's and 7's). Body conditioning scoring also has more value when it is done on the same group of cows at multiple times during the production year. If Herd 2 was scored at calving and had been previously scored at weaning and had an essentially normal distribution (similar to Herd 1), we need to ask ourselves what happened. Did we change anything? Although these examples are somewhat extreme, they illustrate that we have to look beyond the individual body condition scores of cows at one point during the production year to get the most of body condition scoring.

A quick reference guide to body condition scoring may be accessed and downloaded at <https://www.bookstore.ksre.ksu.edu/pubs/MF3230.pdf>.

For more information, contact Justin Waggoner at [jwaggon@ksu.edu](mailto:jwaggon@ksu.edu).



**Assistant or Associate Professor, Dairy Cattle Nutrition position open** - The Department of Animal Sciences and Industry is the largest department (more than 1,200 undergraduates and approximately 100 graduate students) in Kansas State University's College of Agriculture. We are seeking applicants for a 12-month, tenure-track position (60% Research, 40% Teaching). The position (job #508940) will be at the rank of Assistant or Associate Professor and located in Manhattan, KS. The successful individual will be expected to develop a nationally recognized, externally-funded research program in dairy nutrition and contribute to the core missions of the department involving undergraduate and graduate teaching and research activities. Participation in interdisciplinary efforts to enhance the Department's research in focus areas including nutrition, breeding, genetics, reproductive physiology, and food science is strongly encouraged. Teaching and mentoring responsibilities will be consistent with the successful individual's expertise, interests, and needs of the Department. It is expected that the successful candidate will develop a dynamic graduate training program. Application deadline is April 1, 2020. To apply, go to <https://careers.k-state.edu/cw/en-us/job/508940/assistant-or-associate-professor-dairy-cattle-nutrition>. For more information, contact Dr. KC Olson, Search Committee Chair, at 785-532-1254 or [kcolson@ksu.edu](mailto:kcolson@ksu.edu)



**Assistant or Associate Professor, Dairy Extension Specialist position open** - The Department of Animal Sciences and Industry is the largest department (more than 1,200 undergraduates and approximately 100 graduate students) in Kansas State University's College of Agriculture. We are seeking applicants for a 12-month, tenure-track position (70% Extension, 30% Research). The position (job #508941) will be at the rank of Assistant or Associate Professor and located in Manhattan, KS. The successful individual is expected to develop an innovative extension and dairy research program addressing issues facing the Kansas and U.S. dairy industry in addition to contributing to the core missions of the Department. Participation in interdisciplinary efforts to enhance the Department's research in focus areas including nutrition, breeding, genetics, reproductive or lactation physiology, and food science is strongly encouraged. Research efforts will be consistent with the successful individual's expertise, interests, and needs of the Department. Application deadline is April 1, 2020. To apply, go to <https://careers.k-state.edu/cw/en-us/job/508941/assistant-or-associate-professor-dairy-extension-specialist>. For more information, contact Dr. Mike Tokach, Search Committee Chair, at 785-532-2032 or [mtokach@k-state.edu](mailto:mtokach@k-state.edu)



**Farm Manager (Poultry Unit) position open** - This Farm Manager/Poultry Unit Manager position is vital to the KSU Poultry Unit's success. This position collaborates with researchers in the Department of Animal Sciences and Industry along with others across campus. This position is responsible for managing the KSU Poultry Unit farm and game bird facility. Research focuses on basic and applied research projects with laying hens, broilers, turkeys, pheasant, and quail. Specific tasks include managing daily operations and maintenance of the facility, construction of indoor research pens and outdoor flight areas. Screening begins immediately and continues until a suitable candidate is identified. To apply, go to <https://careers.k-state.edu/cw/en-us/job/508826/farm-manager>. For more information, contact Dr. Scott Beyer, Search Committee Chair, at 785-532-1201 or [sbeyer@k-state.edu](mailto:sbeyer@k-state.edu)



**Effects of Prescribed Fire Timing on Stocker Cattle Performance, Native Plant Composition, and Forage Biomass in the Kansas Flint Hills: Year One of Six** - Our study took place at the Kansas State Beef Stocker Unit located northwest of Manhattan, KS. Pastures were assigned to one of three prescribed-burn treatments: early spring (April), mid-summer (August), or early fall (October). Treatments were applied and yearling heifers (n = 360) were subsequently grazed from May to August. Native plant composition and forage biomass were evaluated annually in late June and early July. The objective was to document the effects of prescribed fire timing on yearling beef cattle performance, native plant composition, and forage biomass accumulation in the Kansas Flint Hills.

**Bottom Line...**The first year of data from a six-year study indicated that prescribed fire timing affected stocker cattle performance and forage biomass availability, but not basal cover of forage grasses and forbs. View the complete research report at [www.asi.ksu.edu/cattlemensday](http://www.asi.ksu.edu/cattlemensday). For more information, contact KC Olson ([kcolson@ksu.edu](mailto:kcolson@ksu.edu); 785-532-1254) or Dale Blasi ([dblasi@ksu.edu](mailto:dblasi@ksu.edu); 785-532-5427).

↩ **Efficacy of Commercial Products on Growth Performance of Nursery Pigs Fed Diets with Fumonisin-Contaminated Corn** - Two experiments were conducted to determine the efficacy of various commercial products on growth performance of 20- to 50-lb nursery pigs fed diets high in fumonisin (FUM) concentration. In Exp. 1, a total of 350 pigs were used. There were five pigs per pen and 14 replicates per treatment. After weaning, pigs were fed common diets for 21 d before the experiment started. Five dietary treatments were utilized and consisted of a positive control (low FUM), a negative control (approximately 50 to 60 ppm of FUM), and three other treatments as negative control with one of three different commercial products. Diets were fed in mash form for 14 d and followed with a low FUM mash diet for 13 d as a post-treatment period. For the 14-d treatment period, pigs fed the high FUM negative control, or high FUM diets with Kallsil Dry or Feed Aid Wide Spectrum had decreased average daily gain (ADG), average daily feed intake (ADFI), and d 14 body weight (BW), and poorer feed efficiency (F/G) compared to the positive control and treatment with Biofix Select Pro. Pigs fed the high FUM diet with Biofix Select Pro had similar performance to pigs fed the low FUM diet. During the 13-day post-treatment period, pigs previously fed the high FUM negative control, or high FUM diets with Kallsil Dry or Feed Aid Wide Spectrum had improved F/G compared with pigs previously fed the low FUM diet or high FUM diet with Biofix Select Pro. Although the performance of the pigs previously fed the high FUM diets without additive or with Kallsil Dry or Feed Aid Wide Spectrum improved, their d 27 BW were still lower ( $P < 0.05$ ) compared to pigs previously fed the positive control and high FUM diet with Biofix Select Pro. In Exp. 2, a total of 300 pigs were used. Procedures were similar to Exp. 1 except there were 12 replicate pens per treatment and high FUM diets contained 30 ppm FUM, and experimental diets were fed for 28 d. Similar to Exp. 1, for the 28-d treatment period, pigs fed the high FUM negative control, or high FUM diets with Kallsil Dry or Feed Aid Wide Spectrum had decreased ADG, ADFI, and d 28 BW, and poorer F/G compared to the positive control and treatment with Biofix Select Pro. Pigs fed the high FUM diet with Biofix Select Pro had similar performance to pigs fed the low FUM diet.

**Bottom Line...** In summary, adding Biofix Select Pro to diets containing 30 to 50 ppm of FUM appeared to mitigate the negative effects of FUM, while Kallsil Dry and Feed Aid Wide Spectrum did not influence pig 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 Z.X. Rao, M.D. Tokach, S.S. Dritz, J.C. Woodworth, J.M. DeRouchey, R.D. Goodband, and H.C. Cartagena)

↩ **Determining the Effects of Tryptophan Biomass on Growth Performance of 25- to 50-lb Nursery Pigs** - A total of 315 barrows were used in a 21-d growth trial evaluating the effects of feeding TRP Pro as a source of Trp on nursery pig performance. Pigs were weaned at approximately 21 d of age, placed in pens based on initial body weight (BW), and fed common starter diets for 21 d. On d 21 after weaning, considered d 0 of the study, pigs were weighed and pens were allotted to 1 of 4 dietary treatments with 5 pigs per pen and 15 or 16 pens per treatment. Dietary treatments included a negative control (16% SID Trp:Lys ratio), positive control (21% SID Trp:Lys ratio from crystalline Trp), or diets containing Trp with biomass to provide 21 or 23.5% standardized ileal digestible (SID) Trp:Lys ratios (included at 0.104 or 0.156% of the diet, respectively). Diets were corn-soybean mealbased and contained 1.25% SID Lys with other amino acids set to meet or exceed NRC4 requirement estimates. The TRP Pro contained 60% Trp per the supplier's specifications. Growth data were analyzed as a randomized complete block design using the PROC GLIMMIX procedure of SAS with pen as the experimental unit. Overall (d 0 to 21), pigs fed the 21% Trp:Lys ratio from crystalline Trp or Trp with biomass had increased average daily gain (ADG) compared to pigs fed the negative control diet, with pigs fed the 23.5% Trp:Lys ratio with biomass intermediate. There was no evidence for difference in overall average daily feed intake (ADFI); however, pigs fed the 21% Trp:Lys ratio from Trp with biomass had improved feed efficiency (F/G) compared to the negative control diet, with others intermediate.

**Bottom Line...** In conclusion, TRP Pro appears to be a suitable alternative to crystalline Trp in nursery pig diets, but further evaluation at higher inclusion levels is needed. 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.R. Wensley, J.C. Woodworth, J.M. DeRouchey, S.S. Dritz, M.D. Tokach, R.D. Goodband, and K.D. Haydon)

↩ **Determining the Effects of Added Xylanase on Growth Performance, Carcass Characteristics, and Economics of Growing-Finishing Pigs** - A total of 1,944 mixed sex growing-finishing pigs were used in a 131-d growth trial to determine the effects of increasing added xylanase on grow-finish pig growth performance and carcass characteristics. Pens were assigned to one of six treatments in a randomized complete block design with BW as a blocking factor. There were 12 replicate pens per treatment and 27 pigs per pen. The experimental diets were corn-soybean meal-based and were fed in five phases. The six dietary treatments were formulated to: 0, 2.3, 4.5, 9.1, 18.1, and 34.0 of enzymatic activity for xylanase (SXU)/lb (0, 5, 10, 20, 40, and 75 SXU/kg) of added xylanase (Belfeed B 1100 MP; Jefo Nutrition, Inc., Saint-Hyacinthe, Quebec). From d 0 to 70, there was a tendency for average daily gain (ADG) to decrease and then increase with increasing added xylanase, but there was no evidence of differences for average daily feed intake (ADFI) and feed efficiency (F/G). From d 70 to 131 and overall, there was no evidence of difference observed for ADG, ADFI, and F/G. There was no evidence for difference between treatments for number of pigs receiving injectable treatments or mortalities. For carcass traits, increasing xylanase increased then decreased percentage carcass yield. Also, as xylanase increased, percentage lean decreased and backfat marginally increased. Economically, feed cost and feed cost/lb of gain increased and income over feed cost (IOFC) decreased as the concentration of xylanase increased in the diets.

**Bottom Line...** In conclusion, added xylanase in the diet did not impact growth performance or mortality, but did improve carcass yield at intermediate levels. 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 H.R. Kerkaert, J.M. DeRouchey, S.S. Dritz, R.D. Goodband, M.D. Tokach, J.C. Woodworth, H.C. Cartagena, and M. Gonçalves)

↩ **Determination of Efficacy of Smizyme TS G5 2,500 Phytase in Nursery Pigs** - A total of 320 nursery pigs were used in a 21-d growth trial to determine the available P (aP) release curve for Smizyme TS G5 2,500. Pigs were weaned at approximately 21 d of age, randomly allotted to pens based on initial body weight (BW), and fed common starter diets. On d 21 post-weaning, considered d 0 of the study, pens were blocked by BW and randomly allotted to one of eight dietary treatments with five pigs per pen and eight pens per treatment. Eight 1-ton batches of basal diet were manufactured and subsequently divided to be the major portion of experimental diets. Dietary treatments were formulated to include increasing aP derived from either an inorganic P source (0.12%, 0.18%, or 0.24% from monocalcium P) or increasing phytase (150, 250, 500, 750, or 1,000 FTU/kg). Diets were corn-soybean meal-based and contained 1.24% standardized ileal digestible (SID) lysine with other amino acids set to meet or exceed NRC4 requirement estimates. Prior to beginning the 21-d study, all pigs were fed the negative control diet containing 0.12% aP for a 3-d period (d 18 to 21 post-weaning). Diets containing phytase were submitted for complete phytase analysis using the AOAC official method 2000.125 and analyzed concentrations were 190, 310, 500, 790, or 850 FTU/kg. On d 21 of the experiment, the pig closest to the mean BW in each pen was euthanized and the right and left fibula were collected to determine bone ash. One fibula from each animal was processed with defatting, and the other fibula was processed without defatting. Overall (d 0 to 21), pigs fed increasing aP from inorganic P or phytase had improved average daily gain (ADG), feed efficiency (F/G), and final BW. Additionally, pigs fed increasing aP from phytase had increased average daily feed intake (ADFI). For the defatted bones, pigs fed increasing aP from inorganic P had increased bone ash weights, resulting in increased percentage bone ash, while those fed increasing levels of phytase had increased bone ash weights and percentage bone ash. Similarly, using the non-defatted analytical method, pigs fed increasing aP from either inorganic P or phytase had increased bone ash weights and percentage bone ash. The aP release increased for all criteria up to the highest phytase dose when using ADG, F/G, or bone ash weight as the indicator of release, in contrast to using percentage bone ash of defatted bones which increased in a quadratic fashion.

**Bottom Line...** In conclusion, the magnitude of aP release at different FTU inclusion rates depends on the response criteria, but Smizyme TS G5 2,500 appears to have a similar aP release to other commercially available phytase sources. 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.R. Wensley, J.C. Woodworth, J.M. DeRouchey, S.S. Dritz, M.D. Tokach, R.D. Goodband, and J. Faser)

# ASI Faculty Spotlight



**KC Olson** ([kcolson@k-state.edu](mailto:kcolson@k-state.edu); 785-532-1254)

**Professor/Range Beef Cattle Nutrition and Management**

KC is a professor of range beef cattle nutrition and management. He is actively involved in the undergraduate and graduate teaching mission at KSU and takes great pride in the privilege of helping to train the next generation of Great Plains ranchers and farmers. KC's research program is designed to address questions that directly affect beef industry profitability. Specific areas of research include: nutritional management of cattle grazing native range; management of invasive range plants; effects of calfhood nutritional management on carcass quality and value; and factors influencing grazing behavior.

KC holds advanced degrees from Kansas State University and North Dakota State University. Prior to coming to KSU, he was on the faculty at the University of Missouri - Columbia. KC is active in the American Society of Animal Science, the Society for Range Management, the American Registry of Professional Animal

Scientists, and the American College of Animal Nutrition.

KC, his wife, Karli, and sons, Charles and Theodore live on a beautiful ranch in North Lyon County. In his off-time, KC enjoys spending time with his family, being active in his church, and coaching youth sports.



**Ken Odde** ([kenodde@k-state.edu](mailto:kenodde@k-state.edu); 785-532-1227)

**Professor**

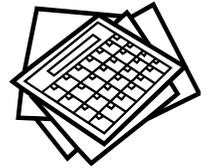
Dr. Ken Odde received a bachelor's degree in animal science from South Dakota State University, a master's degree in reproductive physiology, a doctor of veterinary medicine and a doctorate in physiology from Kansas State University. Dr. Odde served as Assistant Professor, Associate Professor and Professor 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. Dr. Odde served as Department Head for the Animal Sciences and Industry Department at Kansas State University from 2007 to 2017.

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.

# What Producers Should Be Thinking About.....

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



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

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 anestrous (days postpartum, 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](mailto:lschrein@ksu.edu) or phone 785-532-1267.*