



Newsletter from the Department of Animal Sciences and Industry 213 Weber Hall, Kansas State University, Manhattan, KS 66506 785-532-6131 - www.asi.ksu.edu

## **UPCOMING EVENTS...**

<u>2011 K-State Beef Conference</u> – Managing in a Transitioning Industry is the theme for the upcoming 2011 K-State Beef Conference 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

8:00 a.m. Registration

Wakeeney Public Library. The schedule includes:

9:00 a.m. Welcome – Dr. Ken Odde, KSU

9:05 a.m. Volatility factors and the cattle cycle – *Dr. Glynn Tonsor, KSU* 

9:45 a.m. Ranch management in volatile times – Dr. Justin Waggoner, KSU

10:30 a.m. Break

10:45 a.m. Does high input always mean high output? - Dr. Bob Weaber, KSU

11:30 a.m. Adapting to change at the ranch level – Virgil Huseman, Huseman Ranch

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; <a href="mailto:lhollis@ksu.edu">lhollis@ksu.edu</a>) or Charlotte Bruna (785-532-1280; cbruna@ksu.edu)

The <u>Kansas Livestock Sweepstakes</u> 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 <a href="https://www.YouthLivestock.KSU.edu">www.YouthLivestock.KSU.edu</a>. Schedule for the sweepstakes include:

Saturday, August 20

7:30 a.m. Sweepstakes Check-in Desk Opens (Coaches only) - Weber Hall West Lobby

Quiz Bowl Registration Opens (Coaches only) - Weber Hall West Lobby

8:00 a.m. Quiz Bowl Participants Qualifying Exam (30 Minutes) - Weber 123

8:15 a.m. Livestock Judging Check-in Opens (Coaches only) - Weber Hall West Lobby

9:00 a.m. Livestock Judging Contest Begins - Meet in Weber 123

9:30 a.m. College and Department Tour Departs – Weber Hall West Lobby

12:00 p.m. Lunch for non-livestock judging participants (must order online) – Weber Hall

Afternoon Please note Livestock Judging Contest will end in Weber Hall

Ice Cream Social & Quiz Bowl Teams Posted - Weber Hall West Lobby

Break for dinner on your own and hotel check-in

7:00 p.m. Quiz Bowl Competitions - Meet in Weber 123

Competition Rooms - Weber 111 & 146

#### Sunday, August 21

6:30 a.m. Meats Judging Contest Registration (Coaches only) – Weber 111

7:00 a.m. Meats Judging Contest Begins – Weber 111

11:00 a.m. College and Department Tour Departs – Weber Hall West Lobby

Skillathon Check-in Opens (Coaches only) – Weber Hall West Lobby

11:45 a.m. Lunch for participants (time approximate, must order online)
 12:00 p.m. Skillathon Begins for all Counties/Districts – Weber 123
 Afternoon Quiz Bowl Finals & Awards Presentation – Weber 123

Time TBD: Closing - following tabulation

All entries must be made by August 1, 2011. Registration forms and complete information can be found at <a href="www.YouthLivestockKSU.edu">www.YouthLivestockKSU.edu</a>. Fees must be paid at time of registration. No refunds after August 5. For more information, contact Chelsea Tomascik (785-532-1264; tomascik@ksu.edu).

- Dates for upcoming <a href="mailto:Applied Reproductive Strategies in Beef Cattle Workshops">Applied Reproductive Strategies in Beef Cattle Workshops</a> have been set for Aug. 31-Sept. 1, 2011 in Joplin, MO, and Sept. 30-Oct. 1, 2011 in Boise, Idaho. . For complete details and registration, visit <a href="mailto:www.beefrepro.info">www.beefrepro.info</a>. For more details, contact Sandy Johnson, <a href="mailto:sandyi@ksu.edu">sandyi@ksu.edu</a>.
- 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 <a href="https://www.KSUbeef.org">www.KSUbeef.org</a>. For more information, contact Dale Blasi (dblasi@ksu.edu; 785-532-5427).
- Developing and Implementing Your Company's HACCP Plan for Meat, Poultry, and Food Processors will be held October 3-5, 2011, in Regnier Hall, University of Kansas Edwards Campus, 127th & Quivira Road, Overland Park. Registration for the 2.5 day International HACCP Alliance accredited workshop is online at <a href="http://HACCP.unl.edu">http://HACCP.unl.edu</a>. The workshop fee is \$325, and meets USDA training requirements to become a HACCP trained individual. For more information, contact Liz Boyle (<a href="mailto:lboyle@ksu.edu">lboyle@ksu.edu</a>; 785-532-1247).
- Kansas State University will host a <a href="Sheep & Goat Conference">Sheep & Goat Conference</a> 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 serecia 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 <u>23rd Range Beef Cow Symposium</u> will be Nov. 29 Dec. 1, 2011 in Mitchell, Nebraska. 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, <u>sandyj@ksu.edu</u>.
- The **2011 KSU Swine Day** will be held Thursday, November 17, at the KSU Alumni Center. Mark the date on your calendar and watch for more details.

CALENDAR OF UPCOMING EVENTS		
Date	Event	Location
August 16, 2011 August 20-21, 2011 Aug. 31 – Sept. 1, 2011	K-State Beef Conference Kansas Livestock Sweepstakes Applied Reproductive Strategies in Beef Cattle	Manhattan Manhattan Joplin, MO
September 22, 2011 Sept. 30 – Oct. 1, 2011	KSU Beef Stocker Field Day Applied Reproductive Strategies in Beef Cattle	Manhattan Boise, ID
October 3-5, 2011	HACCP Workshop	Overland Park, KS
November 4-6, 2011 November 17, 2011 Nov. 29 – Dec. 1, 2011	KSU Sheep and Meat Goat Conference KSU Swine Day Range Beef Cow Symposium	Manhattan Manhattan Mitchell, NE



#### Management Minute - Chris Reinhardt, Ph.D., Extension Feedlot Specialist

"The Visionary Listener"

Every team needs a manager, and there's as many kinds of managers as there are managers. But effective leadership requires a delicate balance between strong, visionary command and flexibility based on open, vertical, two-way communication.

Ideas (fresh, innovative, cost-saving, labor-saving, etc.) can come from anywhere. Managers in agriculture are often over-consumed with the daily emergencies that there is no time to look around at their own operation, peer operations, suppliers, or customers. But one ever-present source of information is the very people with to most to gain from many of these ideas---your production team.

However, if you haven't intentionally carved out priority time in your calendar for meaningful dialog with team members, this potentially priceless resource could be lost. In addition to the intrinsic value of regularly scheduled one-on-one meetings with team members as a critical time for the manager to fully understand and address any issues present at the production level in real time, this time can also be invaluable as a source of operational improvement. When one team member thinks the process can be improved through a given modification, it's worth noting. If the entire team has the same suggestion, it definitely warrants further investigation.

All organizations would say they value their people, but do they value their input, their opinions, their expertise, their experience? Again, the modern manager is too busy to go out and constantly canvas the industry for bright ideas, and good consultants are well-paid for their experience and expertise. Why not fully capitalize on the resource you already on hand---your team and their know-how.

If you don't have people worth listening to, it's time to upgrade your people. But that's rarely the case. It's just a matter of not finding, but MAKING, the time, frequently, to listen. Even the most visionary leaders listen; where do you think they got their vision?

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

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

"Early Weaning: Crunch Time"

This topic may be the most difficult to come to grips with as a beef rancher. But this year has been tremendously taxing in the western plains region, and desperate times call for desperate measures.

Early weaning means lighter weights, a change in management, extra planning, perhaps additional facilities, feedstuffs, health concerns, etc. The calf is drawing nutrients from the cow, and drawing down her body condition during a time when the range is incapable of providing nutrients to replace body condition, and supplemental feed is expensive to use to replace those stores. Conversely, pulling the calf off early will allow the cow to dry off and use what little nutrition is available through range and supplement to replace precious lost stores. There is abundant time to re-gain body condition prior to spring calving, and supplementation can be adjusted based on range conditions and winter weather.

If calves are at least 90 days of age, they can be removed from the cow and survive---even thrive---in a feedlot environment. If facilities and feedstuffs are available, three scenarios are available: calves can be cost-effectively grown to a similar weight this fall as would be expected during a "normal" weaning situation; the calves can be retained through the fall and sold as feeders in the spring; or the calves can even be retained through finish.

One common concern is that of immune function of the calves. The health of early-weaned calves is at least equal to their normal-weaned counterparts, and in some cases may actually be improved due to residual circulating maternal antibodies from colostrum and improved weather conditions during summer vs. during a cold, wet, fall. Granted, weaning during extremely hot, dusty conditions can also contribute to stress and health challenges as well, but the risk is no greater than during normal fall weaning. Proper preparation of the calves 2-3 weeks prior to weaning can minimize some of the risk. These procedures may include:

- 1. Creep feeding in order to shore up areas of potential under-nutrition, including energy, protein, vitamins, and minerals.
- 2. Pre-conditioning vaccination.
- 3. Deworming.

"Soft" weaning may also be considered, which can be accomplished by either (1) use of nose clips which prevent the calf from nursing, or (2) by fence line weaning where cows and calves may continue nose-to-nose contact but the calf cannot nurse. This removes the nutrient drain on the cow by the nursing calf, but eliminates the added stress of abrupt and complete separation.

If there ever was a situation where "business as usual" needed to be cancelled and "outside the box" thinking was required, it is the summer of 2011. Above all, TAKE ACTION!, in order to salvage the most from a very challenging situation.

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

Supplementing Dried Distillers Grains with Solubles to Stocker Cattle Grazing Late-Season Forages Improves Animal Performance and Carcass Characteristics - Crossbred steers (n = 144; average initial body weight = 808 ± 40 lb) grazed mature and dormant native tallgrass pasture for 90 days. Treatments while grazing were no supplementation or supplementation with DDGS at 1% of body weight (dry basis). Cattle were supplemented daily. Cattle were then placed on feed and carcass characteristics were evaluated after harvest.

**Bottom Line...** Stocker operators can supplement DDGS while grazing late-season native tallgrass pastures to increase weight gain and improve carcass red meat yield without affecting quality or yield grade. Feedlot operators should be aware that supplemented stocker cattle will be slightly less efficient than non-supplemented stocker cattle during the finishing phase. View the complete research report at <a href="www.asi.ksu.edu/cattlemensday">www.asi.ksu.edu/cattlemensday</a>. For more information, contact Terry Houser (785-532-1253; <a href="houser@ksu.edu">houser@ksu.edu</a>) or Dale Blasi (785-532-5427; <a href="mailto:dblasi@ksu.edu">dblasi@ksu.edu</a>).

▶ Dietary Sulfur Concentration Has No Effect on In Vitro Fermentative Activity of Mixed Ruminal Microorganisms - Sulfur from sodium sulfate was added to substrates at 0, 0.1, 0.2, 0.3, 0.4, 0.5, or 0.6% of substrate (dry basis). Substrates consisted of a 94:4.5:1.5 mixture of ground corn, soybean meal, and urea, or a 69.4:30.6 mixture of ground corn and dried distillers grains with solubles (DDGS). Varying concentrations of sulfur were added to substrates containing 14.4% crude protein (dry basis) prior to being incubated in culture tubes containing a 2:1 mixture of artificial saliva and clarified ruminal fluid from a steer fed a diet based on corn and alfalfa. Three tubes per substrate and sulfur concentration were incubated for 24 hours at 104°F. After 24 hours of fermentation, tubes were chilled in an ice bath and centrifuged, and the supernatant was used for analysis of volatile fatty acid profiles and ammonia concentrations. Pellets of residue were dried and used to determine in vitro dry matter disappearance.

**Bottom Line...** Elevated dietary sulfur concentration had no effect on fermentative activity of mixed ruminal microorganisms. View the complete research report at <a href="www.asi.ksu.edu/cattlemensday">www.asi.ksu.edu/cattlemensday</a>. For more information, contact Jim Drouillard (785-532-1204; jdrouill@ksu.edu) or Larry Hollis (785-532-1246; lhollis@ksu.edu).

Evaluation of Increasing Select Menhaden Fish Meal or Peptone Protein Sources in Nursery Pig Diets - A total of 350 nursery pigs (PIC 1050 x C327, initially 14.3 lb and 28 d of age) were used in a 24d study to evaluate the effects of select menhaden fish meal (SMFM), PEP2 (also known as Ferm-O-Tide), and Peptone 50, on nursery pig performance. PEP2 and Peptone 50 are a combination of refined porcine intestinal mucosa that is co-dried with vegetable proteins. PEP2 contains an enzymatically processed vegetable protein, while Peptone 50 contains a complementary vegetable protein. There were 10 dietary treatments: a negative control containing no specialty protein, the negative control diet with 2, 4, or 6% SMFM, the negative control diet with 2, 4, or 6% PEP2, or the negative control diet with 2, 4, or 6% Peptone 50. A common pretest diet was fed in pellet form for the first 6 d postweaning. Experimental diets were fed in meal form from d 0 to 14 and a common diet was fed from d 14 to 24. From d 0 to 7. there were no differences among treatments for ADG. Pigs fed diets containing PEP2 had greater ADFI compared with pigs fed diets containing SMFM and Peptone 50. From d 7 to 14, increasing PEP2 or SMFM increased ADG, but there were no differences between pigs fed the two protein sources. Also during this period, pigs fed increasing PEP2 had increased ADFI compared to pigs fed SMFM or Peptone 50. In addition, as PEP2 increased from 2 to 4% ADFI increased. In Phase 2, pigs previously fed Peptone 50 had decreased ADG compared to pigs previously fed diets containing SMFM. Overall, pigs fed PEP2 had greater ADFI compared to pigs fed Peptone 50. In addition, pigs fed PEP2 had improved F/G compared to pigs fed SMFM. Finally, increasing PEP2 improved F/G, with the most improvement seen in pigs fed the 6% PEP2 diets.

**Bottom Line....**These results suggest that PEP2 or Peptone 50 are suitable replacements for SMFM. More information is available on this experiment and others in the KSU Swine Day Report at <a href="https://www.KSUswine.org">www.KSUswine.org</a>. (This study conducted by A.J. Myers, M.D. Tokach, R.D. Goodband, S.S. Dritz, J.M. DeRouchey, J.L. Nelssen, B.W. Ratliff, D. McKilligan, G. Xu, and J. Moline.)

**Bottom Line....**Overall, ADG and ADFI both improved while F/G became poorer for pigs fed the corn-soy control compared to those fed the DDGS treatments. Extruding the DDGS did not affect ADG or F/G but did reduce ADFI. There were no differences in growth performance among pigs fed the DDGS extruded with low vs. high shear. Pigs fed the corn-soy control diet had greater digestibility of DM, N, and GE compared to pigs fed the diets with DDGS. Among the DDGS treatments, extrusion improved digestibility of DM and GE, but digestibility of N was only improved with high-shear conditions. More information is available on this experiment and others in the KSU Swine Day Report at <a href="https://www.KSUswine.org">www.KSUswine.org</a>. (This study conducted by S.M. Williams, C.B. Paulk, J.D. Hancock, S. Issa, and T.L. Gugle.)

Strategy, and Diet Type on the Growth Performance and Carcass Characteristics of Growing-Finishing Pigs - A total of 1,287 pigs (PIC 337 x 1050, initially 82.7 lb) were used to compare the effects of a conventional dry feeder, 3 wet-dry feeder adjustment strategies, and 2 diet types on growing-finishing pig performance. There were 27 pigs per pen and 6 pens per treatment. The first wet-dry strategy consisted of maintaining a setting of 18 throughout the study (WD18). The second wet-dry strategy consisted of an initial setting of 18 until d 56 followed by a reduced setting of 14 for the remainder of the experiment (WD14). The third wet-dry strategy consisted of an initial setting of 18 until d 28, a setting of 14 until d 56, and a setting of 10 for the remainder of the experiment (WD10). The conventional dry feeder remained at a setting of 8 throughout the study. The 2 diet types evaluated in this study were a corn-soybean meal-15% DDGS diet and a corn-25% DDGS-20% bakery by-product-soybean meal diet; both diets were fed over 4 dietary phases. Overall (d 0 to 92), all pigs fed using the wet-dry feeder had greater ADG, ADFI, and final BW than pigs fed with the conventional dry feeder. However, within the wet-dry treatments, pigs fed with WD14 and WD10 had a reduced ADG compared with pigs fed with WD18. Additionally, ADFI of pigs fed using WD10 was lower than that of pigs fed with WD18, and ADFI of pigs fed with WD14 was intermediate. There were no differences in F/G among feeder treatments, and growth performance was similar between the 2 diet types. Pigs fed using the wet-dry feeder had greater HCW, yield, backfat depth, revenue per pig, and feed cost per pig than pigs fed with the conventional dry feeder. The loin depth of pigs fed using the wet-dry feeder was less than that of pigs fed with the conventional dry feeder. Differences in backfat and loin depth resulted in pigs using the wet-dry feeder having a lower fat-free lean index (FFLI) than pigs fed with the conventional dry feeder. However, within the wet-dry feeder treatments, pigs fed with WD10 had a reduced backfat depth and increased FFLI compared with pigs fed with WD18. The backfat depth and FFLI of pigs fed with WD14 were intermediate. Although not significantly different, income over feed cost was numerically greatest for pigs fed using WD10, followed by conventional dry, WD18, and WD14.

**Bottom Line....**In conclusion, reducing the wet-dry feeder setting in later growth periods may improve carcass leanness while maintaining the advantages in growth rate. More information is available on this experiment and others in the KSU Swine Day Report at <a href="www.KSUswine.org">www.KSUswine.org</a>. (This study conducted by J.R. Bergstrom, M.D. Tokach, S.S. Dritz, J.L. Nelssen, J.M. DeRouchey, and R.D. Goodband.)

# AS&I FACULTY SPOTLIGHT



### Joe Hancock (jhancock@k-state.edu; 785-532-1230) Professor/Swine Nutrition and Management

Dr. Joe Hancock grew up on a dry-land cotton farm near Gail, Texas. He earned a B.S. degree in Agricultural Education and an M.S. degree in Swine Production from Texas Tech University. After earning a Ph.D. degree in Swine Nutrition at the University of Nebraska, Dr. Hancock joined the faculty here at KSU in 1988.

Dr. Hancock's assignment is 50% teaching and 50% research. As for his teaching responsibilities, those include lecture and lab classes in nutrition (thus far 81 classes involving 2,607 students) and advising 15 to 20 students each semester at the undergraduate and graduate levels. His research activities have centered on factors that limit fat, protein, and carbohydrate utilization in weanling pigs and processing techniques to maximize nutrient utilization and minimize nutrient excretion in finishing pigs and sows. These activities have been funded by

104 grants/gifts from 36 companies and government agencies at the local, state, and federal level. Results from those activities have been shared in some 400 abstracts, technical reports, symposia proceedings, journal articles, and book chapters and have yielded invited presentations in 41 countries (Japan, Korea, China, Vietnam, Malaysia, Indonesia, the Philippines, Ireland, England, Denmark, Holland, Germany, France, Spain, Portugal, Italy, Romania, Russia, Senegal, Mali, Burkina Faso, Niger, Nigeria, South Africa, Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, Panama, Brazil, Venezuela, Colombia, Peru, Ecuador, Cuba, the Bahamas, Jamaica, and throughout Mexico, the United States, and Canada).

In his spare time, Dr. Hancock likes to reload, shoot, and hunt pretty much anything that walks, flies, or crawls and fish for pretty much anything that swims. Also, he tries to get away at least once a year to do a bit of SCUBA (Cabo, Puerto Vallarta, Costa Rica, Fiji, Sulawesi, Cheju-do, Oahu, Kauai, Catalina, Texas, Missouri, Iowa, Florida Keys, Grand Cayman, Bahamas, Grand Turk, Puerto Rico, St. Croix, St. Eustatius, Saba, Dominica, Bequia, Tobago, Bonaire, Panama, Los Roques, Utila, Roatan, Belize, and Cozumel ... so far ...) with his wife Melisa. Joe and Melisa live on a hill just northeast of Manhattan with Beano (Chihuahua), Dixie (Yorkie), a couple cats and the occasional possum, raccoon, deer, wild turkey, coyote, and copperhead.



#### Tim Rozell (trozell@k-state.edu; 785-532-2239) Associate Professor/Physiology

Dr. Rozell grew up in Garrison, Missouri and then went on to complete his B.S. and M.S. degrees at the University of Missouri. From Missouri he moved to Washington to complete his Ph.D. at Washington State University. In 1997, Dr. Rozell was hired on at Kansas State University, with a 70% Teaching and 30% Research appointment, to develop and teach a course in anatomy and physiology. Because of his unique combination of skills and interests in reproductive physiology and dairy cattle, Dr. Rozell also took over teaching a course on the physiology of lactation. In addition he co-teaches a lambing class in the Spring that offers students hands-on experience with livestock. Dr. Rozell has also developed an active research program in reproductive physiology.

Dr. Rozell's laboratory has broad interests in the area of reproductive physiology, with specific projects currently focused on the process of development of follicles on the ovary. The ultimate goal of Dr. Rozell's research program is to facilitate reproductive activity in postpartum dairy cows and in young heifers.

During the 2004-2005 school year, Dr. Rozell went on Sabattical in Scotland to help develop new research techniques. There he collaborated with the University of Glasgow's College of Veterinary Medicine. Dr. Rozell resides in Manhattan with his wife Marcia and his two children Sam and Josie.

## WHAT PRODUCERS SHOULD BE THINKING ABOUT...

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

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



September is when forages are maturing rapidly, weaning time can be appropriate, and weather dictates several key management decisions.

#### **Breeding Season**

Out of concern for trichomoniasis, an economically devastating reproductive disease, do not introduce untested bulls to your herd. Remove bulls after 60 days with cows, 45 days with heifers (Never run bulls for more than a 90-day breeding season).

#### **Cowherd Nutrition**

- ☑ Provide ample amounts of clean, fresh drinking water.
- ☑ Consider limited-intake creep feeding if:
  - Drought conditions develop and persist.
  - Range conditions limit milk production.
  - Creep feed/grain prices are relatively low.
  - Value of gain allows for economic benefits.
- ☑ Tips for successful limited-intake creep feeding:
  - Limit duration to last 30 to 75 days before weaning.
  - ♦ Limit intake to less than 2 pounds/head/day.
  - Use an ionophore or other feed additive to maximize efficiency.
  - Protein level should be equal to or greater than 16%.
  - High salt levels may help limit intake, but can be tough on feeders.
- ☑ Prepurchase bulk rate winter supplementation needs prior to 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.
- Control face flies.
- Clip pastures with tall, coarse grasses that may irritate eyes.
- Provide ample shade.

#### Therapy:

- Administer a long-acting antibiotic subcutaneously 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 winter nutritional program through pasture and forage management.
- For stocker cattle and replacement heifers, supplement maturing grasses with an acceptable degradable intake protein/ionophore (feed additive) type supplement.

#### Reproductive Management

- ☑ Remove bulls to consolidate calving season.
- Pregnancy check and age pregnancies 60 days after the end of the breeding season. Consider culling cows that are short-bred.

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

#### 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 early weaning if:
  - Drought conditions develop and persist.
  - Range conditions limit milk production.
  - Cows are losing body condition.
  - Calf and cull cow prices indicate maximum profit.
  - Facilities and management is available to handle lightweight calves.
    - ✓ First calf heifers have the most to gain.
    - ✓ Resist the temptation to feed the cows without weaning; feeding early-weaned calves is more efficient.
- ☑ Look for unsound cows that need to be culled from the herd.
- Prepare to have your calf crop weighed and analyzed through your state, regional, or breed performance-testing program.
- 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 Ischrein@ksu.edu, or phone 785-532-1267.