University of Missouri Extension

SEMO Livestock News

BQA Highlights

University of Missouri Extension and the SEMO Cattlemen’s Association combined efforts to provide county residents with an opportunity for Beef Quality Assurance training and certification. We were pleased to have 45 attendees traveling from Jefferson, Iron, Scott, Bollinger and Cape counties. Seven 4-H members participated to fulfill their SMQA requirement to show cattle at the fair. Dr. Craig Payne, BQA State Coordinator, covered numerous topics and information, but pushed his focus on new regulations for use of feed grade antibiotics, methods of vaccine administration, and use of the “bud box” for handling cattle.

The BQA program was developed for cattlemen, by cattlemen, to ensure food safety and reduce the chance of product defects entering the food chain. It was also introduced to ensure producer practices were safe and would pass the scrutiny of consumers to avoid additional government regulation. The voluntary program has been highly successful in nearly eliminating any problems associated with violative residues and significantly reduced incidences of injection site lesions in fed beef cattle. In addition, it is a valuable resource addressing all aspects of livestock production. Topics covered included: biosecurity, feeds and feed additives, judicious use of antibiotics/residue avoidance, vaccine administration and handling, and principles of cattle handling. Please contact the office if you would like more information on any of these topics.

Injection site management & vaccine handling

Tips to remember:

- When possible use SubQ (subcutaneous; under the skin) vs IM (Intramuscular; into the muscle) injections
- When multiple injections are required, keep injections 4-5 inches apart and inject no more than 10cc per injection site
- Needle selection- Craig preferred 16 gauge on everything (less needle bending) and liked ½ in. needles for SubQ and 1 in. needles for IM injections. The only time he recommends 1 ½ needles is if you are giving reproductive drugs (Factrel, Cystorelin, Lutalyse, etc.) in the hip or back of leg.
- MLV vaccines (the ones you have to mix up) are best if used within 30 min. after mixing
- Do NOT shake vaccines, DO roll them in your hand to mix thoroughly
- Keep syringes that are used for MLV and Killed vaccines SEPARATE
- Give MLV and Killed vaccines on opposite sides of the neck if you must give them on the same date
- Do not mix injections as it may increase withdrawal time drastically and never mix vaccines as one vaccine may inactivate the other
Regulations for feed grade antibiotics

There are new FDA guidelines addressing the use of antibiotics in food producing animals and they are to 1) limit the use of antibiotics for production or growth-enhancement purposes and 2) increase veterinary oversight for all therapeutic uses of antibiotics in the feed or water. What this means is any indication of “increased rate of weight gain/improved feed efficiency” that is printed on an antibiotic label will be removed and in order to obtain a feed or water grade antibiotic you will need a Veterinary Feed Directive (VFD) or prescription from a veterinarian. These guidelines will go into effect December of 2016 and feed grade antibiotics that were previously over-the-counter will now require veterinary consent.

- How should you prepare? If you do not have one already, start developing a Veterinary Client Patient Relationship (VCPR) because this is required before a veterinarian can prescribe feed grade or water soluble antibiotics.
- Extra-label drug use (ELDU) of feed grade antibiotics is illegal. For example, Aureomycin® is labeled for control of anaplasmosis, treatment of pneumonia and treatment of bacterial enteritis. Using this production for increased feed efficiency would be ELDU and illegal.
- These changes DO NOT apply to ionophores such as Rumensin®
- Some products you may be able to obtain over-the-counter now, but NOT later: Aureomycin, Terramycin, Neo-Terramycin, V-Max.

FDA Guidance for Industry 213
Released 2012, Finalized 2013
Can be found at www.fda.gov
Search: Guidance for Industry 213

The Bud Box

Focuses on the animal and facility design is not as important as knowing how to properly handle cattle. Why does the Bud Box work?
1. Must keep cattle moving
2. Want to go out the same way they came in
3. Want to go around you

Reminders: Do NOT pressure from the blind spot directly behind cattle, fill the tub or box with one less animal than your alley will hold.

For more information on BQA please contact:
Craig Payne
payneca@missouri.edu
573-882-8236

Or check out the BQA website at:
http://www.bqa.org/
Reducing Scours: Sandhills Calving System

Calf scours is a deadly and costly disease within the cattle industry. Treatment of scours is difficult because it is often difficult to identify the causative agent as scours can be caused by many agents: viruses, bacteria, and protozoa. Host and environmental factors also play a role in the susceptibility of animals.

Host Factors:
1. Passive immunity, or colostrum intake, is critical within the first 6-12 hours of life because after 24 hours gut closure is complete and the calf can no longer absorb whole antibodies. Calves are 5x more likely to die within the first month if there is a failure of passive transfer.
2. Calves older than 1 month are generally not affected because they have undergone physical changes within the gut that reduce susceptibility.
3. Nutrition of the mother impacts calf health as energy and protein deprivation leads to weaker calves. Also, dams in poor nutrition will have poorer quality colostrum with decreased concentration of immunoglobulins—what is passed to the calf to protect against disease.

Environmental Factors:
1. Early life exposure (first 24-48 hrs of life) are of primary importance and overwhelming exposure will even overwhelm a calf with great passive immunity. 
2. Stocking density refers to the number of animals within a space and the length of time they are there. Increasing the concentration of cows and calves in an area increases the concentration of pathogens.
3. Poor drainage and mud conditions increase the likelihood of transmission. Feeding and watering sites are generally areas where large amounts of pathogens are living due to increased manure deposition in these areas.

A system that has been developed to reduce the incidence of calf scours is the Sandhills Calving System and its rationale is as follows:
A. Neonatal beef calf diarrhea often results from overwhelming exposure to pathogens
B. Calf scours pathogens are carried by adult cows and healthy calves
C. Agents are very hardy in the environment—what is deposited there stays viable for weeks or months

How does it work?
- Multiple calving pastures are used
- Herd begins calving in one pasture
- 7-10 days later, pregnant cows move to new pasture
  - Cow-calf pairs are left behind
- Process is repeated every 7-10 days
- When youngest calf is greater than 4 weeks old, groups can be mixed

Why does it work?
- Small, age-similar groups of baby calves are grouped together
- Diminishes the “multiplier effect”—no new susceptible baby calves
- Calves are born on clean pastures—no long-term buildup of pathogens
- Physical separation from environmental and animal reservoirs of agents
- Dose-load is minimized by reducing stocking density/pasture

Eight calving pastures is not feasible for most herds, but these are good concepts to remember when dealing with, or preventing scours.

Tips: Scours normally occurs late in the calving season when there is a build-up of pathogens. Exposure occurs when the calf hits the ground. Try to save a pasture specifically for calving season so calves can be born on clean pasture. Consider moving pregnant females after AI calves are born. Try to keep calves away from feeding and watering areas.

Information credited to my Animal Diseases and Control course and Dr. Russ Dailey.
The 2015 Ag Expo will be held on January 30 & 31 (Friday 1 p.m.—8 p.m. and Saturday 9 a.m.—3 p.m.) at Black River Coliseum in Poplar Bluff, MO. There will be over 118 agricultural exhibits, several contests, beauty pageants, entertainment, and a petting farm. Other scheduled events include private appraiser training, presentations by extension specialists, kids gardening adventure, and youth farm safety training. Extension personnel are scheduled to present education events:

- **Using technology to increase yield, lower cost, and improve crop efficiency**
  A.J. Foster, Agronomy Specialist
  Friday, 5:00-6:00 PM
- **Forage selection and grazing methods**
  Joel Tatum, Livestock Specialist
  Friday, 6:30-7:30 PM

Cost is $1 for Adults, FREE to Youth & College Students
Sponsored by: Butler County University of Missouri Extension Council & Three Rivers College Agriculture Club
For more information call: 573-686-8064

On January 5, Governor Jay Nixon addressed opportunities to maximize the potential of Missouri’s cattle industry and stimulating the rural economy. He discussed that 95% of MO cattle are finished and slaughtered out of state and increasing the number of cattle fed/finished/slaughtered would increase beef value within the state. Panels were formed to provide their thoughts on economic expansion of the beef industry and to address headlining topics including the feasibility of building and operating a large-scale packing plant in Missouri and expanding the number of in-state feeding facilities. The governor discussed construction and operation of new processing and feeding facilities could create thousands of jobs in cattle and livestock-related industries, helping revitalize the rural economy. Many questions, concerns, and ideas on economic expansion arose at the summit.

Governor Nixon’s opening remarks can be viewed at: http://agriculture.mo.gov/beefsummit/

Entries for the March 27 sale are due **JANUARY 20**! Entry forms are available at SEMObeef.com. Please send the entry fee of $100 with the form. Contact Darrell if you are thinking about entering!

Entries may be mailed to: Darrell Aufdenberg
or emailed to: aufdenbergd@yahoo.com

If you would like to receive an electronic version of the newsletter please send an email to LarimoreE@missouri.edu with SEMO Livestock News in the Subject line and you will be added to the list.

If you have a local sale you would like to have listed please call or email with the Farm Name, Sale Date, Location, and type of cattle to be sold (bulls, bred heifers, cow/calf pairs).

If there is a particular subject you would like to have more information on, let me know and I will try to incorporate it into future newsletters. Chances are, if you have questions on the topic, so do others!