**Upcoming Events**

- **Four States Cattle Conference at Texas A&M University - Texarkana, December 13, 8am-2pm.** Pre-registration is encouraged. Pre-registration tickets are $30 individual, $50 couple. Onsite registration tickets are $45 individual, $70 couple.

- **Preparing for the Upcoming Calving Season - Nashville, December 15, 6pm** at the EH Center, 425 N. 2nd St. Meal provided. Please RSVP to the Howard County Extension Office by December 5.

- **Ag Expo at Four States Fairgrounds, February 9, 2017, 8am-3:30pm.** For more information contact Miller County Extension Office at 870-779-3609.

- **Tentative Pesticide Applicator’s Training set for February 16, 2017 at 12 pm AND again at 6pm for Howard County at the EH Center in Nashville.**

- **The New Veterinary Feed Directive goes into effect January 1, 2017.**

**GRAZING JOHNSONGRASS AFTER A FROST**

Temperatures have fluctuated throughout November. This time of year we are normally well into cooler weather, but not this year! In fact, as of mid-November, we have only had one recorded frost, a light one at that. This has dual meaning - maybe there’s still grass to graze, but if that pasture has johnsongrass in it, be aware of the prussic acid poisoning that comes after a frost.

Prussic acid poisoning can cause major health concerns or even death in cattle. So is it safe to graze? Producers should wait 7 days after a hard-killing frost to safely graze johnsongrass. “A key visual clue for safe grazing after a frost,” says Dr. John Jennings, Extension Forage Specialist at the University of Arkansas System Division of Agriculture, “is when the frosted plants become completely dried out and paper-brown colored.” Another point to remember is to never turn hungry cattle onto johnsongrass; make sure they have filled up on hay first. Why? So in case prussic acid poisoning is still present, they won’t gobble it down all at once because they are hungry. Also, do not turn cattle out onto johnsongrass in the evenings, (cont’d)
**Grazing Johnsongrass...cont’d**

when there is a dew expected.

Once the plant dries out, the prussic acid poisoning dissipates. Therefore, properly dried johnsongrass hay does not contain prussic acid and is safe to feed.

What causes prussic acid, also known as hydrocyanic acid, HCN? It is caused from the plant being stressed during adverse environmental conditions when growth is depressed. The breakdown of plant cells by crushing or bacterial action in the rumen may also result in prussic acid formation. To get technical, prussic acid comes from the enzymatic action on compounds called cyanogenic glucosides. So these cyanogenic glucosides can get into the rumen and if conditions are just right, the rumen can have a role in the enzymatic breakdown! Once this happens in the rumen, the newly developed cyanides (prussic acid) get into the bloodstream and combine with hemoglobin, thus trapping oxygen in the blood and inevitably, causing suffocation. This is why one symptom of prussic acid poisoning is bright red blood - because of the trapped oxygen.

What are some other symptoms? Anxiety, progressive weakness, labored breathing, elevated pulse, muscular twitching, convulsions and/or death. Remove cattle from johnsongrass immediately as soon as any of these symptoms are recognized. Consult a veterinarian for treatments for prussic acid poisoning.

Also keep in mind, johnsongrass is not the only plant susceptible to prussic acid. Any plant in the sorghum category is likely to contain it. For example, grain sorghum, sorghum-sudan hybrids and sudangrass. The effects of prussic acid are the same in these other plant species.

Additional information is available through University of Arkansas Cooperative Extension Service resources, where the above information was also obtained.

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**Feral Hogs**

Feral hogs were once domesticated animals. Once hogs are turned loose, after one to two generations they become feral. Their physical characteristics begin to develop differently - their snout may elongate and their hair may grow darker and longer. Feral hogs are very fertile, often having 2-3 litters per year and 6 or more offspring in each litter. Furthermore, feral hogs have very few predators; so taking all of these factors into consideration, they are very hardy animals.

A stray domestic hog is considered feral if it has escaped domestic confinement for more than 5 days and no notifications are made by the owner.

Why are feral hogs considered a public nuisance under Arkansas law? Aside from being so hardy and reproducing faster than they can be exterminated, it is because they are invasive and cause damage to farms and land. For the avid hunter, feral hogs can damage food plots or other crops meant for wild game. They can also prey on young wildlife. For farms, they can destroy crops and grasses the same as above, by wallowing and rooting them up. They can also prey on young calves, goats, and sheep, often times, not even leaving a single bone in sight. This can be a huge economic loss for the producer and a very boring hunting season for the outdoorsman! Feral hogs can cause diseases such as brucellosis and pseudorabies which can have detrimental effects on farmers and hunters, especially those hunting with dogs which are susceptible to pseudorabies. Feral hogs can cause water pollution, which could lead to disease transmission or other negative effects.

Before you go out and start shooting, know this: feral hog control has proven difficult. They are very adaptive and learn to avoid traps and human contact. They are very mobile and can travel across a wide area, many miles even. They are active day or night and tend to stay in wooded areas away from human contact. Shooting one hog in a
sounder (or herd) does little to control the population because it typically educates other hogs to stay away from those open areas or human contact. I know it is hard to not shoot a hog when you have the opportunity; believe me, we all want them gone! However, there are Extension resources available for trapping and baiting hogs in more effective ways.

Here is a brief overview of some of the laws governing feral hogs on PRIVATE LAND: State legislation allows property owners to control feral hogs on their property. Private land owners may control feral hogs themselves or allow others, with the land owner’s permission, and they may use any method of control. Arkansas Game and Fish does not regulate the harvest of feral hogs, but allows anyone to take (shoot, kill, injure, trap, net, snare, catch, capture, or reduce possession) feral hogs while legally hunting other wildlife. AR Game and Fish does not allow the incidental take of feral hogs while in legal pursuit of other wildlife. AR Game and Fish does allow the incidental take of feral hogs while in legal pursuit of other wildlife. Feral hogs may be killed or trapped year-round, day or night by the landowner or anyone who has permission from the landowner. There is no limit to the number of feral hogs that can be harvested. Using a spotlight to shoot feral hogs on private land is permitted, but it is recommended that you contact the local wildlife officer prior to spotlight hunting, simply to avoid any misunderstandings or issuance of a citation. The use of dogs to take hogs on private land is legal. Piling or scattering bait, such as corn, to attract hogs for trapping or other removal is legal on private land, in accordance with wildlife baiting laws in most of the state. However, baiting is illegal in designated Chronic Wasting Disease Management Zones. Check in with AR Game and Fish for updates or changes to the areas listed as CWD Management Zones.

Here is a brief overview of some of the laws governing feral hogs on PUBLIC LAND: Wildlife Services partners with other state and federal agencies to conduct feral hog removal on public land and monitors feral hog diseases in the state. Hunting on public land is regulated by the public agency charged with its management. The hunter must have a valid AR hunting license and comply with AR hunting regulations to pursue feral hogs on public land. On state land: hunters must check specific rules for each area. In some it may be permitted during other legal firearm seasons and others it may not be permitted at all. For questions regarding state land, contact AR Game and Fish Commission. On Federal land, National Wildlife Refuges with large populations of feral hogs may allow some restricted hunting; however, hunting with dogs is prohibited. For questions regarding which federal land does allow hunting, contact the National Wildlife Refuge office where you intend to hunt.

Ownership of feral hogs: transporting and or selling a live feral hog is illegal in the state. It is illegal to capture and purposefully release a hog into the wild on public or private land (A.C.A. 2-38-504). Only dead feral hogs may be transported to meat processors. For this reason, pork from feral hogs may not be sold directly for consumption because federal law requires animals to be inspected while alive, prior to slaughter. Hog hunting businesses are allowed to continue operating as a terminal facility if they were established prior to 2013, when state law became effective. A hog hunting operation must be certified by the Arkansas Livestock and Poultry Commission as a terminal facility to receive and release feral hogs inside hog-proof fences as a part of their operation. Rules and regulations for transporting live feral hogs to these terminal facilities is very specific and limited to those having special permits. For questions regarding transport of live feral hogs to terminal facilities, contact AR Livestock and Poultry Commission.

In case you were wondering, Tusk, the official mascot of The University of Arkansas Razorbacks, is not considered to be a feral hog.

All of the laws listed above and others pertaining to feral hogs can be found under Arkansas Law A.C.A § 2-38-501 through A.C.A § 2-38-504. Also, the web address below is a very handy resource when searching for information regarding feral hogs in Arkansas. There are links to other Extension resources, AR Game and Fish, AR Livestock and Poultry, plus many more.

What Causes Dystocia?

There are many factors that cause dystocia. Most are genetic or environmental - which we can often control, some are physical, and some are simply just bad luck.

The genetic factors include: calf breed, projected birth weight, sex, the breed of the sire and breed of the dam, which will play a role in the cow’s body size and pelvic area. However, age also plays a role in cow’s body size and pelvic area. It is well known that first-calf heifers, on average, have a higher percentage of calving difficulty. Genetic factors can be controlled by selection: selecting low birth weight bulls, using good common sense when cross breeding - i.e. not selecting large frame bulls to breed smaller framed cows, taking extra consideration when selecting a bull for first-calf heifers and looking at frame scores while making all of these selection decisions. With that said, a larger framed cow, when bred to a larger framed bull of a different breed, could still pose a threat when hybrid vigor and other factors are taken into consideration. Environmental factors include: health of the dam and overall body condition, including likelihood of disease transmission, and even the temperature. In a study from UGA Extension, it was noted that 55% of calving difficulties were due to environmental factors. Some of these environmental factors can be controlled by management, like body condition and overall health of the animal. Over-conditioned and under-conditioned cows can pose problems. Producers can adjust feeding levels to get the cow into the right body condition prior to calving; they can also insure good health by providing the cow with the appropriate vaccinations. The temperature plays a role as well. In a long-term study from University of Nebraska, it was concluded that for every 1 degree F drop in temperature in the winter months, calf birth weights increased by 1 pound and thus increased calving difficulty by 2.6%. These results are just from one study, but it does fall in line with other Extension resources that mention calves born in the winter months are on average larger than those born in the fall. This has to do with cows’ nutrient intake in the winter months in order to cope with the harsh temperatures.

Physical problems with the fetus are another factor: malpresentation of the fetus, such as being backwards (posterior-feet first), breech (buttocks first), upside down, one or both front legs back, or head deviated. Note that the posture of the fetus must be corrected before pulling the calf.

So what causes dystocia when most of the above factors have been taken into consideration? What do you do when mature cows, on a bull you have been using, when they have had healthy calves in past, start having problems? Unfortunately, I don’t have a one-and-done answer. My best suggestion would be to re-evaluate the bull, maybe his health is poor, maybe he is getting too old. Re-evaluate the health of the cows, whole herd health, re-evaluate your vaccine protocols and watch those ready to calve more closely. If none of these suggestions work, call the Extension office, call the vet, and always be open to others’ opinions, because there could be something you may not have thought of.

Information for this article was obtained through various Extension fact sheets, including those from Colorado State University, University of Georgia Cooperative Extension, University of Missouri-Columbia Extension, and University of Arkansas Extension resources.

Here are some photos, courtesy of infovets.com, of calves abnormally presented.

**Delivery of a calf that is coming backward, but in normal position and posture:**

Two front legs are coming through the pelvis, but the head is turned back:

Four Legs in the Birth Canal:
It is a federal regulation from the Food and Drug Administration that will change the additives that can be included in animal feed. It will change how producers manage their cattle and change the products that are available for use on the ranch.

The VFD was originally created in 1996. Two classes of drugs were created: over the counter (OTC) and prescription.

In 1996, medicated feeds were considered OTC. There were no prescriptions required for medicated feeds.

Amendments were made in 2016 to go into full effect by January 2017 and will include a new category: VFD drugs.

The new 2016 rules are meant to regulate the use of antibiotics in order to preserve efficacy of the drugs; therefore, they are now only to be used under supervision of a veterinarian.

The VFD was developed to address the potential for antibiotic resistance in human and animal pathogens that could be related to increased exposure of antibiotics in animals.

The new amendments make 3 significant changes to the original VFD rule, they are:
1. They require drug manufacturers to alter labels for certain drug products, remove the statements regarding production issues (e.g. "increased rate of weight gain") and only state therapeutic uses for health issues.
2. They change the designation of certain additives from OTC to "medically important," which categorizes them as VFD drugs and increases the regulatory requirements of the additives.
3. A veterinarian must fill out a VFD form before any VFD drug or feed containing a VFD drug is provided to a producer.

This new mandate means that medicated feeds cannot be used to improve growth or feed efficiency for production purposes. The terms “prevention,” “treatment,” and “control” have specific meanings when used in relation to disease as well as guidelines that veterinarians will have to consider in each situation.

The VFD will affect all animals, in particular, food animals. It will affect all aspects of beef cattle production.

A producer must have a valid veterinarian-client-patient relationship with a veterinarian.

Essentially, all feed-use antibiotics that the FDA, WHO, and CDC consider medically important to humans fall under VFD regulation.

Medically important antibiotics used in the cattle industry that will require additional labeling or relabeling to be compliant with the VFD regulations include:
1. Chlortetracycline
2. Chlortetracycline + Oxytetracycline
3. Neomycin + Oxytetracycline
4. Oxytetracycline
5. Streptomycin
6. Sulfadimethoxine
7. Tylosin
8. Virginiamycin

Certain information will be required on a VFD, such as: names, addresses, phone numbers of the owner and veterinarian; and information about the animals, such as physical location, number of animals to be treated and approximate body weights.

Necessary information about the feed additive to be included on the VFD includes: effective date, expiration date, withdrawal time, notes of the combinations or limitations with other VFD drugs or OTC products, total amount of VFD medication and feed to be manufactured, and specific feeding instructions.

A separate VFD will be required for animals on different premises.

A separate VFD will be required for an animal requiring treatment for longer than the original VFD states.

The VFD may provide the mechanism for the beef cattle industry to keep using antibiotics responsibly to treat animal disease and ensure continued production of a safe and wholesome protein source for a growing global population.

The information regarding VFD regulations was taken from a fact sheet entitled “How the Veterinary Feed Directive Affects Cattle Owners” published by the University of Florida Extension Service. It was published July of 2016.
About Me

I grew up around rodeo. Some close family-friends of ours are PRCA stock contractors and therefore I've been lucky enough to travel to the National Finals Rodeo in Las Vegas in the past. It truly is an experience of a lifetime! These are a couple pictures from last year’s trip. My aunt and I posing in front of Trigger! That’s right, Roy Roger’s actual horse, Trigger. He was stuffed and donated to RFD TV a few years back. The other is a view from our seats during “WNFR Tough Enough to Wear Pink” night 2015.

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County Extension Agent-
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