The New Year has arrived and brought with it icy flurries and unforgiving wind chills. I hope everyone has recovered and able to stay warm over the holiday season. With a new year here and future obstacles ahead of us, I would like to express a challenge…a challenge to all of our grass growers, cattle corrallers, goat grabbers, chicken chasers, sheep shepherds, hog heelers and all other wranglers inside and outside the scheme of things to make an improvement on your operation. Whether it be sprayer calibration, proper mineral selection, fertilization with soil sampling, or even to extend the grazing season….make an improvement on your farm. The years continue to build on top of one another and so does the market. Cattle prices are great, farming is good, and cattle are crazy but with acceptable conditions happening, steps to improve the operation are more appropriate to make now rather than when conditions are bad (drought, low prices). Call us to help make a pre-emptive plan for undesirable conditions such as storing hay suitably…little nutrient value is lost if stored in a barn properly. Buy hay at the low prices and keep it, we all remember what hay was selling for in 2012. A hay barn would pay for itself quickly if buying hay at $20 per bale instead of $60 per bale in drought conditions? I challenge all of our readers to be prepared and to invest in your enterprise and give us a call if you have any questions, inquiries, explorations, adventures, or even the wild stories you encounter on your day to day escapades battling the conditions. We might have reserved a few of our own.

Franklin County Cattlemen’s Meeting
Monday, January 13th -- 6:00 p.m.
North Franklin County Fairgrounds

Dr. Jeremy Powell-Extension Veterinarian is to speak at the Cattlemen’s Meeting. The meal will be provided by Cattlemen’s and sponsored by I-40 Livestock Auction. The presentation will discuss calving difficulty associated within herd health and tips to have successful births when trouble arises. 

From the Agent’s Desk
Calving Difficulty in Beef Cattle

Calving difficulty (dystocia) is a very important economic problem in the U.S. beef cattle industry. Approximately 3 percent of all beef calves born in the U.S. will be lost due to calving difficulty. Several factors can play a role in causing calving difficulty including heavy birth weights, abnormal fetal position, limited pelvic area and the female’s age. In order to recognize dystocia and know when assistance is required, it is important to be familiar with the different stages of labor. Typically, a normal delivery should be completed within one to three hours after the water bag appears. It is important to take proper action during each successive stage of labor to ensure a live calf. A couple of weeks before the calving season, cows and heifers that are due to calve should be moved to a smaller pasture where they can be easily observed. Always try to avoid extensive movement after labor has begun. Moving the animal will slow down the labor process because a cow or heifer will stop to examine its new surroundings. For more tips, we invite you to attend the January Cattlemen’s Meeting.

<table>
<thead>
<tr>
<th>Stages</th>
<th>Normal Duration</th>
<th>Normal Events</th>
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| Stage 1  | 2-6 hours       | a. Uterine contractions begin.lagen,  
b. Cervical dilation occurs.  
c. Restlessness; separate from herd.  
d. Water bag expelled at end of stage 1 |
| Stage 2  | < 2 hours        | a. Uterine contractions increase.  
b. Fetus enters birth canal.  
c. Calf delivery is completed |
| Stage 3  | 2-8 hours        | a. Afterbirth is expelled (cleaning). |

Conventionally produced beef…safe and sustainable?

We are all bombarded with the propaganda that conventionally raised beef is not healthy or sustainable by media, society, and even some of our fellow producers. Organic, all-natural, and grass-fed beef is lauded as the only environmentally sustainable way to produce beef. While these are great marketing tools for niche markets, they do not fit two of the cornerstones of sustainability…namely economically feasible for consumers to purchase and capability to produce adequately to meet demand. Current technology enables the beef industry to produce 131% more beef than in 1977 with 70% fewer animals, utilizing less water and feed while producing less methane and carbon dioxide. If production was shifted back to a grass finishing industry like America in the 1880’s or countries like Australia or Argentina are known for (which incidentally are developing their own grain finishing capabilities), Jude Capper, noted sustainability consultant, estimates it would require 64 million more head of grass fed cattle than are currently needed in

con’t
conventionally produced cattle. This would require millions more acres of pasture and much greater resource use (fuel, water, and fertilizer) to provide equivalent beef production to the consumers.

There are multiple tools that beef producers use to provide efficient economically sustainable protein to consumers. Growth promoting hormones and ionophores (compounds like Rumensin, Bovatec, or Gainpro) increase the rate of growth and feed efficiency of cattle. These are compounds that not only are available to the feedlot sector but can be used by Arkansas cow-calf and stocker producers as well. Research at the University of Arkansas Livestock Research Station proves that growing steers implanted with growth promotants and supplemented with ionophores gained 40 pounds more than steers that did not receive these technologies, leading to increased beef production and improved economic sustainability. Ionophores are antimicrobial compounds that inhibit the growth of rumen microbes that disrupt ruminal fermentation; thus they help capture more feed energy. Implants increase muscle mass and decrease fat which is more energetically efficient for growing calves. These compounds are proven safe in production of our food supply. A common misconception about our beef supply is the estrogen content of beef from implanted beef cattle. Where a 3 ounce serving of beef from an implanted contains about 1.9 nanograms of estrogen, common foods like peas or soybean products contain 10 times that amount and cabbage contains 100 times that amount per serving. As far as these levels of hormone affecting development of our youth, a pre-pubertal boy produces over 41,000 nanograms of estrogen per day and a pre-pubertal girl over 54,000 nanograms.

Great strides have been made in the efficiency of beef production over the last 30 years, retaining beef’s status as a safe, affordable, and preferred staple in our larders. Most of the increase in efficiency has come from the stocker and finishing segments of our industry, but between 60 and 80% of the carbon footprint of beef production is in the cow-calf sector. Thus, the cow-calf sector is where future improvements in efficiency need to be made. In many instances, simple improvements in the husbandry practices we have in place at the local level can boost the efficiency of the entire beef production chain.

In closing, the beef industry can continue to provide a safe, affordable, and plentiful (and thus sustainable) products to consumers, as long as we have available the tools to do it. If we begin limiting technology for beef production (such as beta agonists or lean finely textured beef) then our ability to meet consumer demand will be limited as well.

Dr. Paul Beck  
Associate Professor-Animal Science