

Of Cows & Plows



November 2010

Beef Conference Highlights

The Beef Conference was held once again at the Fayette County Extension Office with a full crowd. As usual, attendees received up to date market info and expert predictions.

Randy Blach, CattleFax, reported that:

- > Cow numbers are down to levels of 1963. Production remains high due to genetics, decreased calf death losses, improved nutrition, etc. (equal to 4.8 million cows) but still can't meet demand. Smallest beef supply per capita since 1952.
- > Exports are up 20%. Restaurant meat sales are up 3-5%.
- > Market needs 1 million more cows to meet demand and there are 750,000 cow/calf operations in US.
- > Each 1% increase in demand equals \$1.00/CTW.
- > Expect 500-550 lb calves to reach \$1.30 in 2011 and \$1.35 or higher in 2012.
- > The 2010 corn crop is 2nd biggest in history and still not enough due to 37% needed for ethanol.
- > Ethanol producers can pay more for corn than the beef producers. (Now costs \$130-140 more to finish a beeve).

A NOVEL ENDOPHYTE TALL FESCUE HAS BEEN DEVELOPED BY UK FOR THE UPPER FESCUE BELT

A productive and late-maturing tall fescue, KYFA9301, was selected and developed by UK forage breeder, Dr. Tim Phillips. In a collaboration with New Zealand AgResearch Ltd., KYFA9301 was infected with a nontoxic endophyte, AR584 and evaluated in a two year grazing trial with steers as a possible option to toxic-endophyte infected Kentucky 31, MaxQ (cv. Jessup infected with AR542 nontoxic endophyte, and endophyte-free KYFA9301.

Stocking rates were varied during the trial to maintain similar forage availabilities for making steer performance and pasture carrying capacities, as well as verifying that AR584 is a nontoxic endophyte. Average daily gain for AR584-KYFA9301 (1.79 lb/day) was similar to those for MaxQ (1.86 lb/day) and endophyte-free KYFA9301 (1.77 lb/day), and daily weight gain for the three nontoxic fescues was greater than for Kentucky 31 (1.45 lb/day). Steers grazing AR584-KYFA9301 did not exhibit symptoms of toxicosis, whereas those grazing toxic Kentucky 31 exhibited toxicosis. Kentucky 31 pastures carried more steers, but extended forage production by KYFA9301 resulted in these pastures maintaining higher stocking rates than MaxQ in the late spring and early summer.

This new novel endophyte tall fescue is an alternative to MaxQ in providing higher stocking rates into the summer and should be commercially available in 1 to 2 years. A cultivar name will be announced once it has been determined. (Jennifer Johnson and Glen Aiken, USDA/ARS Lexington, Ky)

Why Pinkeye Control Fails

Dr. Michelle Bilderback, Ruminant Extension Veterinarian, UK

Pinkeye or IBK (Infectious Bovine Keratoconjunctivitis) is a costly disease for the beef producer. The cost of treatment coupled with the fact that affected calves wean off on average 40 pounds lighter and bring less at the market make this disease a significant economic consideration. Despite all we know about how pinkeye develops, control programs are often only partially successful. To understand why, we must first understand the meaning of “necessary”, “component” and “sufficient” cause.

In the world of disease, we try to learn what causes a problem then eliminate it, often by vaccination. A disease such as tetanus has one “necessary cause”- the bacteria *Clostridium tetani* –that must be present for the disease to occur. However, pinkeye is much broader and not dependent on the presence of just one organism. Instead it is the result of several “component causes” or risk factors that combine just right to cause an outbreak. This combination of risk factors is called “sufficient cause” and, unfortunately for us, pinkeye has multiple sufficient causes that can occur in the same herd at the same time.

Probably the most important risk factor in pinkeye cases is the bacteria *Moraxella bovis* or *M. bovis*. It attaches to the eyeball (cornea) and produces toxins that cause the eye to ulcerate and melt (liquefy). It is against this target that we vaccinate with commercial pinkeye vaccine such as Piliguard, Vision 20/20, Alpha 7/MB-1, I-Site XP, Pinkeye Shield, OcuGuard and SolidBac. The problem is there are two other strains of *Moraxella* that can occur but are not included in the vaccine so we do not always get protection against the problem bacteria. The two most important contributing factors to pinkeye are UV light (sunlight) and face flies. Strong sunlight actually damages the cornea so bacteria can grab on and grow. Face flies serve as vectors to spread the bacteria throughout the herd. Other

risk factors (“component causes”) that initiate infection by eye irritation include dust, trauma or injury, wind, tall grass, “stemmy” hay, high ammonia levels and stress. Many different combinations of these can occur within one herd at one time. For example, a combination of *M. bovis*, face flies and sunlight may cause pinkeye in one group of calves while tall grass, *M. bovis*, stress and sunlight may combine to cause problems in another group. In this case, good fly control will make a big difference in the first group of calves while the second group will not show much improvement. This explains why in some years control measures seem to work well and others they seem to be ineffective.

As producers, what can you do to prevent pinkeye? The best plan is to reduce or remove as many risk factors as possible in order to keep the eyes healthy and able to fend off disease. An overall good level of nutrition and adequate trace minerals are also exceptionally important in improving the cow’s ability to fight off any disease process (not just pinkeye). Prevent eye irritation with good fly control, mow tall grass, and reduce stress if possible. A clean source of water is critical to keep plenty of fluid in the eye, especially in dry, dusty, and/or windy conditions. Vaccination may prove beneficial, especially when dealing with *Moraxella bovis*. Your veterinarian can take a culture from an affected eye and send it to a laboratory to isolate the offending bacteria. A vaccine can then be tailor-made for your farm (known as an “autogenous vaccine”) that may help if you have an exceptionally difficult time controlling this problem.



The Capital Classic Bred Heifer Sale, United Producers Stockyards Owenton, Friday October 22 with the following results:

141 head sold averaging \$1,100 per head. The low pen sold for \$1,000 per head, high pen sold for \$1,475 per head

Kentucky Beef Cattle Market Update

Kenny Burdine, Livestock Marketing Specialist, UK

September brought steep declines in feeder cattle prices, both seasonally, and in response to corn prices that gained more than \$0.50 in the first three weeks of the month. Calf prices were hit very hard, falling by more than a dime per pound on average. Heavier feeder cattle prices fell by only about half as much, a typical response to higher corn prices.

By the end of the month, things seemed to have a slightly stronger tone. The December corn contract tested the \$5.10 to \$5.20 range twice and failed to push through it. From there, corn headed downward, and as I write this is trading in the \$4.80's. In my opinion, there were two positive things that came from this movement in corn. The first and most obvious was the reduction in price, which positively affects the derived demand for feeder cattle and is supportive to price.

The second has to do with the fact that the December corn price unsuccessfully tested higher levels in September. That level will likely be treated as a resistance level and considered to be an upper range on corn in the near term. Feeder cattle markets are expectation markets by nature. Feedlots place feeder cattle on feed that won't be ready for harvest for another 4-7 months, so having a realistic feel for corn price risk is important as they bid on cattle.

With September in the books and the weather turning colder, we are in the time frame when feeder cattle prices tend to decline. Over the last five years, 7wt feeder steers have fallen by about \$10 per cwt from August to December, while 5wt feeder steers have fallen by about \$13.



Snow was present along the Great Divide in July when the FCCA took their trip to Colorado

MARKSBURY FARM MARKET

A new USDA approved slaughter facility has opened in Garrard County. Not only will this facility process poultry but they are teaming up with local producers to supply their retail market. The following information is from their website, marksburyfarm.com:

“A small scale, locally owned, Butchers Shop, Farm Market, and Processing Facility.

We partner with local farmers who share our commitment to sustainable, humane, and natural production methods. We use traditional and modern methods to deliver an array of high quality, healthy, and fresh products.

Please come in and reconnect with your food sources, and be a part of a productive local food network. Marksbury Farm Market is committed to bringing high quality, local, natural food and farm products to consumers... After indicating interest in becoming a supplier for Marksbury Farm Market, we will discuss with you further the core values and mission of our organization in addition to looking at our supply needs and your production plans.

If there is a fit we will present an agreement indicating that you understand the contents of the above guidelines and will undertake raising certain farm products at a stated volume, time schedule and price for us.”

7907 Nicholasville Road, Lancaster, KY 40444
(859) 548-2333

4-H Position

For those of you that haven't yet heard, our 4-H agent Samantha Jeffries has just transferred to Bullitt County. The District Board has decided to move forward and fill the position as soon as possible. The second 4-H Youth Development Agent position is soon to be posted on the <https://ukjobs.uky.edu> website.



USING MATURE HAY FOR BEDDING: POTENTIAL FOR TALL FESCUE TOXICITY

With budgets tight, a number of horse farm managers have reduced the cost of buying straw for bedding by using a hay harvest of overmature grass pastures for bedding.

On the surface, it makes sense to use this stemmy hay for bedding. But, be cautious when using this hay for pregnant mare bedding during their last trimester. It is not uncommon for horses to eat some of their bedding, especially if it is hay, and ergovaline levels over 200 ppb (parts per billion) can cause fescue toxicity in pregnant mares. Our surveys show that Central Kentucky horse pastures often contain over 25% tall fescue, and since the stem and seedhead of tall fescue contain the highest levels of the toxin ergovaline, there is a good chance that mature hay will contain toxic levels of ergovaline. In other areas of Kentucky and in surrounding states, tall fescue often makes up more than 50% of horse pastures.

If you are using overmature grass hay as bedding for pregnant mares, first have it tested for ergovaline concentration at the University of Kentucky Veterinary Diagnostic Laboratory (formerly the Livestock Disease Diagnostic Center) in Lexington. Work with your Veterinarian or county agent to submit samples. Samples should be taken from the bales with a hay probe, just as you would when taking samples to test for hay quality. Make sure that the sample you submit is comprised of cores from 5 to 10 separate bales from each hay cutting. In most counties, the county agent or farm service store can loan a hay probe for sampling. The cost of the ergovaline test is \$50.00 per sample. For more information contact Dr. Cindy Gaskill at 859-257-7912

In Central Kentucky, the University of Kentucky Pasture Evaluation Program will come to your farm, sample your hay, submit it to the VDL, and send you the results with an interpretation. For more information on the Pasture Evaluation Program visit <http://www.uky.edu/Ag/Forage/HorseLinks.htm> and click on "Testing Hay for Ergovaline."

From the November issue of UK's "Forage News"



FCCA tour members on one of Leachman's Ranches in CO checking out the cattle.



Deborah Conway and Mrs. Hockensmith make sure John Todd grills the steaks just right at the Grizzly Ranch in North Park of Colorado.

Handy Hints & Rules of Thumb

Start frost seeding clovers onto pastures after Christmas.

Perennial rye works good when sown into bare areas over the winter.

The rumen is 80-85 % water

A cow will eat about 10lbs in 1-1.5 hours. Intake peaks at ~ 6 hours, then waste increases.

Ruminant hay intake = about 3% body weight
Do not feed more than 0.25-0.5% body weight in grain to avoid upsetting the rumen pH.

A growing calf needs about 12% CP (crude protein)

A dry cow needs about 55% TDN & 10% CP

Heifers have 10-15% lower daily gain & feed conversion

2lbs of supplement can replace 1 lb hay in diet

A 1,100-lb. lactating cow will consume 8 gallons of water at 40°F and 20 gallons at 90°F in a 24 hour period. A 500lb calf needs half that.

Research shows that colostrum absorption occurs mostly within 12 hours, not 24 as previously thought.

All nitrogen fertilizer sources are "equal" until about mid-May when soil temps reach 65-70°F +

Kentucky Produce Auctions Expand Roles

Most Kentucky produce operations tend to be fairly small and/or part time as they emphasize direct markets. However, the number of producers involved in these direct markets continues to climb. Further, the absolute number of producers involved in fruit and vegetable production has continued to increase as well.

Much of this growth can be tied to the presence of the produce auctions. The Fairview Produce Auction, launched out of a tiny shed in 1996, involved a handful of Christian County growers and grossed less than \$200,000. The Fairview Auction has grown considerably and new auctions have come on-line with varying degrees of success. The auctions collectively have grown in sales volume and in vendor numbers. The last record indicated over 750 vendors selling at one of the now five produce actions in Kentucky.

These markets will typically bring close to wholesale prices, but they provide an option for growers with either a little excess volume, a new produce item being developed on a smaller scale, or where limited direct marketing demand exists.

New auctions and clusters of horticultural producers are developing quickly in KY. New auctions just opened in Hart County and Henry County (Capstone Produce) and these will be potentially joined by a new auction in Cincinnati (Findlay Auction). Some have expressed concern about overcrowding of these markets.

In reality, Kentucky is a very small volume produce supplier within the region, only 20-30% of the acreage of each of our neighboring states. There would appear to be plenty of growth opportunity. But some markets may feel some competition as buyers get accustomed to the auctions as a steady source of supply. (Tim Woods, UK Ag Econ)



MarketReady™



UK FOOD SYSTEMS INNOVATION CENTER

The UK Food Systems Innovation Center provides technical services, marketing intelligence, business services and training components to aid in developing the food industry of Kentucky.

Services:

- **Food Chemistry Testing** - Basic chemical analysis and testing requirements for the food industry.
- **Nutrition Labeling** - The FSIC performs the necessary analysis and develops nutrition labeling information for all product categories.
- **Analytical Services** - From process verification to contaminate monitoring and quality assessments we provide a wide range of services for food products.
- **Microbiological Testing** – Determining quality, safety and risk can all be performed by our microbiological testing laboratory.
- **Sensory Evaluations** - The FSICs sensory panel services can help our clients to determine consumer acceptance of a product, identify potential flavor, visual, other sensory issues and provide descriptive feedback.

For more info contact: Angela Anandappa
angela.anandappa@uky.edu
or 859-257-7272 ext. 286

Keenan Bishop

Keenan Bishop
County Extension Agent for Agriculture and
Natural Resources



Cooperative Extension Service
University of Kentucky
Franklin County
101 Lakeview Court
Frankfort, KY 40601-4950

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KSU Small Farm Conference

November 16-18

Capital Plaza Hotel & Mills Lane Research Farm

For details and more information contact Edwin Chavous at 695-9035
Louie Rivers at 597-5905, louie.rivers@kysu.edu



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