

# OFF THE HOOF

*Kentucky Beef Newsletter – March 2009*

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*Published Monthly by Dr. Les Anderson, Beef Extension Specialist, Department of Animal & Food Science, University of Kentucky*

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## Timely Tips

*Dr. Roy Burris, University of Kentucky Beef Specialist*

### Spring-Calving Cows

The spring calving season should be in full swing now, top priority should be to get a live calf and keep cows in sufficient body condition to rebreed early.

- Calving areas should be accessible and as clean and as free of mud as possible. Pastures which have good sod and are close to facilities work best.
- Check cows at least twice daily and first-calf heifers more frequently than that. Be ready to assist those not making progress after 1 to 2 hours of hard labor. Chilled calves should be dried and warmed as soon as possible.
- See that each calf gets colostrum within an hour of birth, or administer colostrum (or a commercial colostrum replacement) with an esophageal feeder.
- Identify calves with eartags and/or tattoos while calves are young and easy to handle and record birthdate and Dam ID. Commercial male calves should be castrated and implanted as soon as possible. Registered calves should be weighed in the first 24 hours.
- Separate cows that have calved and increase their feed. Energy supplementation to cows receiving hay is necessary to prepare them for rebreeding. For example, a 1250 lb cow giving 25 lb/day of milk would need about 25 lb of fescue hay and 5 lb of concentrate daily or 12 hay and 14 lb of concentrate (if you are limiting hay) to maintain condition. If you need to go from a condition score of 4 to 5, you will need to add about 2 more lb of concentrate. Cows must be in good condition to conceive early in the upcoming breeding season.

- Watch for calf scours! If scours become a problem, move cows which have not calved to a clean pasture. Be prepared to give fluids to scouring calves that become dehydrated. Consult your veterinarian for advice and send fecal samples to diagnostic lab to determine which drug therapy will be most effective. Try to avoid feeding hay in excessively muddy areas to avoid contamination of the dams' udders.
- Continue grass tetany prevention. Be sure that the mineral mix contains magnesium and that cows consume adequate amounts. You can feed the UK Beef IRM High Magnesium mineral.
- Vaccinate calves for clostridial diseases (Blackleg, Malignant Edema) as soon as possible. You might choose to do this at the prebreeding working in late April or early May.
- Prepare bulls for the breeding season. Increase feed if necessary to have bulls in adequate condition for breeding.
- Obtain yearling measurements on bulls and heifers this month (weight, height, pelvic area, scrotal circumference, ultrasound data, etc.) if needed for special sales. Heifers should reach their target weight (65% of mature weight) by the breeding season.
- Finalize plans for your spring breeding program. Purchase new bulls at least 30 days before the breeding season – demand performance records and check health history including immunizations. Use visual evaluation and expected progeny differences (EPD's) to select a bull that fits your program. Order semen now, if using artificial insemination.

### **Fall-Calving Cows**

- Bull should be away from the cows now!
- Creep feed calves with grain, by-products or high quality forage. Calves will not make satisfactory gains on the dam's milk alone after about 4 mos. of age – since there isn't much pasture in March, fall calves need supplemental nutrition. Consider creep grazing on wheat pasture, if available. Calves can also be early-weaned.
- Calves intended for feeders should be implanted.
- Plan to pregnancy check cows soon.

### **General**

- Renovation and fertilization of pastures should be completed.
- If you have a dry, sunny day, use chain-link harrow to spread manure in areas where cattle have overwintered. This may be done in conjunction with renovation.
- Plan for a feeding area with filter fabric and crushed rocks, if mud is a problem this year. You can check on cost-share availability.
- Watch for lice and treat if needed.
- Start thistle control. They can be a severe problem in Kentucky pastures. Chemical control must be done early to be effective.
- Repair fences, equipment and handling facilities.

## **Failure Can Be a Strong Motivator**

*Dr. Roy Burris, Beef Extension Specialist, University of Kentucky*

I'm writing this on the tenth day without power during winter storm 2009. I could really use a hot shower but that is just a minor inconvenience – a bath in the tub isn't that bad. In fact, I am downright lucky to have water and a generator.

I keep thinking that young folks, who are growing up with luxuries that we now take for granted, are missing something. What they are missing is a sense of self-reliance that comes with “making do with what you have.” We may not give them a chance to do things for themselves because we don't want them to fail. You know ... blue ribbons all around and A's for everyone. What happens when they finally get to a level or a place in life where success isn't guaranteed or easy? They need to be resilient and learn to bounce back from failure.

When I started in 4-H as a nine-year old, we actually had to do everything ourselves and live with the results. My first year of showing calves went pretty well and I thought that I knew it all. I'd really clean-up next time. I worked every day the next summer to get my heifer trained for the show ring and I thought that she looked great. Well, when the district show came around I was ready. I was supremely confident but when the judge finished lining us up, I was crushed. A red ribbon! I didn't notice, or know, that she was “sickle-hocked”. That was okay, I learned from the experience and tried again next year..

I also remember that an Extension specialist – Lynn Copeland - from the University of Tennessee came to our farm to give a demonstration on “fitting and showing”. But what I really remember is that he wrote a booklet on the subject which had a little poem on the back that has stuck with me over the years. I've tried every way that I know to find a copy, but to no avail. Here is what I remember – with apologies to be author:

### **When I stood twenty-first**

by Lynn Copeland

I showed my heifer at the fair  
She was my pride and joy  
For near six weeks I fitted her  
I was a happy boy

I had the pride of ownership  
For she was really mine  
I could not find a single fault  
I thought she was so fine

With twenty others in the ring  
I thought I might stand first  
Or may even second  
But third at very worst

When the judge stopped in front of me  
I thought my heart would burst  
And when he finished lining us up

I stood twenty-first

Since then blue ribbons I have won  
My club work now is past  
But that show taught me most  
When I was standing last.

In a world of “instant gratification”, we have to be able to handle the times when things get difficult. The cattle business can be a tough teacher but we have to persevere to be a success. Achieving your goals is usually a matter of surviving setbacks and dealing with failure.

Wait a minute ... that reminds me of another little poem from high school. It is Stanton’s “Keep a-Goin’”. I can still see Mrs. Cassetty reciting it.

If you strike a thorn or rose,  
Keep a-goin’!  
If it hails or if it snows,  
Keep a-goin’!  
‘Taint no use in sit an’ whine  
When the fish ain’t on your line;  
Bait your hook an’ keep a-tryin’-  
Keep a-goin’!

When the weather kills your crop  
Keep a-goin’!  
Though ‘tis work to reach the top,  
Keep a-goin’!  
S’pose you’re out o’ ev’ry dime,  
Gittin’ broke ain’t any crime;  
Tell the world you’re feelin’ prime –  
Keep a-goin’!

My sincere best wishes to all of you who have suffered the effects of this winter storm – downed trees, fences, and powerlines. To those of you who are trying to care for your family and keep the cattle fed and watered – “Keep a-goin’”. I salute you. You represent the best in our business.

## **Webinar Focuses on Estrus Synchronization**

*Dr. Les Anderson, Beef Extension Specialist, University of Kentucky*

With the breeding season quickly approaching, it is not too early to start the planning process. A webinar is being offered to help you sort out estrus synchronization protocols that are used for heifers and cows and application of those protocols.

This webinar will be presented by Dr. Glenn Selk, Oklahoma State University and Dr. Les Anderson, University of Kentucky. Dr. Selk is a beef cattle specialist at Oklahoma State University with a focus in Beef Cattle Reproduction. The seminar will discuss the basic reproductive biology, products used to control estrus, estrus synchronization protocols and the economics associated with using this tool. Dr. Selk

and I are looking forward to helping cattlemen understand this information and answer any questions that you might have.

You can view this webinar from your home or office computer. Join us for this webinar event scheduled March 25, 2009, 1:00 to 1:15 pm EDT. At the meeting time, simply click on the following link or copy and paste it into your browser to enter the meeting: <http://connect.extension.iastate.edu/beefcattle/> When you go to that URL you will find yourself at a login page. Simply enter your name under the "Enter as a Guest" heading. Click on "Enter Room." The instructions that detail how to join the integrated phone audio conference will be on the screen when you join the meeting.

Anytime before the meeting you can visit the following URL to confirm your ability to connect to the Connect server: <http://www.extension.iastate.edu/testconnect/>

This webinar is being presented by the Beef Cattle Clearinghouse eXtension Community of Practice.

## Getting the Moisture Out

*Dr. Jeff Lehmkuhler, Beef Extension Specialist, University of Kentucky*

Recently I have had the opportunity to be involved with discussions on alternative feeds in which protein levels were discussed. It was evident that the concept of Dry Matter (DM) was not well understood. This is not surprising as when I was a teaching assistant in graduate school it took some students nearly half the semester before they grasped the concept. Yet, when we discuss pricing alternative feeds, this simple concept is very important to understand.

With the increased availability of distillers products combined with two years of severe drought there has been an increased use of these alternative feeds. In Kentucky, we need to distinguish these products as those coming from bourbon distilleries and those from fuel ethanol plants. Fuel ethanol plants in the area may produce a distillers grains product that may contain 35-38% DM, 45-50% DM or a dry product 88-92%. While a bourbon plant may also dry the product to 88-92% DM or have a wet distillers grains product that may contain as much as 75% moisture. Thin stillage or slop may also come from distilleries and tend to be low in solids at only 4%-8%.

The nutrient content is relatively similar among these products on a dry matter basis. The crude protein content on a DM basis typically is near 30% to 35%. Let's assume that to balance the protein needs for a calf that 1 lb of actual protein is to be consumed. The distillers products have 33% crude protein on a DM basis. Heading to the piles of distillers products to get the feed, how much feed is actually required to get this 1 lb of protein? In Table 1, we illustrate how the moisture content dilutes the protein and the amounts needed in the bucket to get the 1 lb of protein when the moisture level varies in these different products.

	DM % of the Various Distiller Products				
As-fed	6%	25%	38%	45%	92%
Lb of Water / Lb of Feed	0.94	0.75	0.62	0.55	0.08
Lb of Protein / Lb of Feed	0.001	0.083	0.125	0.149	0.304
Lb of feed for 1 lb Protein	50	12	8	6.7	3.3

It should be clear that if we are using dried distillers grains at 92% DM, it takes the least amount of this product to deliver 1 lb of protein to the calf at approximately 3 lbs. Logically thinking, we said that all these products contained about 1/3 lb of protein (33%) on a DM basis. Therefore, for every pound of dried distillers fed we deliver about 1/3 of a pound of protein as there is little water diluting the nutrient concentration. Now let's look at the 25% DM wet distillers product. For every pound of feed we put in the bucket, we are putting in 0.75 lbs of water. Thus, there is only 0.25 lb of actual nutrients. In this 0.25 lb of nutrients we said that roughly 1/3 is protein (33%) or 0.25 lbs dried nutrients \* 0.33 = 0.083 lbs protein per pound of feed we put in the bucket. We needed 1 lb of protein, so 1 lb divided by 0.083 lb protein / lb feed as-fed = 12 lbs needed in the bucket! Remember of this 12 lbs we put in the bucket that 9 lbs of it is simply water (12 lbs feed \* 0.75 lb moisture/lb feed = 9 lb moisture).

I am certain that many of you are asking yourself "What's the point?" Let's now look at how to compare prices of the products above on a similar DM basis. In Table 2, the same distillers products are listed with a price per ton as-is or just how it comes off the truck. Again, we need 1 lb of protein supplemented to our calf. Which is the better buy without figuring transportation, handling, shrink losses? At first glance, it would be the 25% DM product at \$35/ton. It is the cheapest per pound at 1.75 cents on an as-fed basis while the dried is the most expensive at 8 cents/lb.

	DM % of the Various Distiller Products			
	25%	38%	45%	92%
Cost, \$/ton as-fed	\$35.00	\$50.00	\$80.00	\$160.00
Cost/lb as-fed, Cents	1.75	2.5	4.0	8.0
Lbs fed for 1 lb Protein	12	8	6.7	3.3
Cost / lb protein, Cents	21	20	26.7	26.4

However, when we account for how much is fed daily to achieve the 1 lb intake of protein needed by the calf, the best value in this scenario would be the 38% DM product at 20 cents. There is little difference between the 45% and 92% products in this example both costing just over 26 cents. Please note that the prices above are not actual prices for these products and it is important to obtain local prices for various products.

Often nutrient analyses are reported on a DM basis. One needs to be able to use these analyses to calculate cost per nutrient. The mathematical approach for comparing feeds on a nutrient basis, protein in this example, is as follows. 1) Calculate the pounds of DM per ton. Multiply 2,000 lbs/ton by %DM. If moisture is reported simply subtract moisture value from 100 to obtain DM. Example 2,000 lbs/ton \* (38%DM/100) = 760 lbs of DM. 2) Determine lbs of Protein. Multiply the pounds of DM by the %CP on DM basis. Example 760 lbs DM feed \* (33%CP DM basis/100) = 250.8 lbs CP DM. 3) Calculate the price per pound of protein DM. Divide the price per ton by the pounds of protein DM. Example \$50/ton / 250.8 lbs CP DM = \$0.20/lb CP DM.

If you receive a report or analysis that contains the protein on an as-fed or as-is basis. You can simply multiply the percent CP on as-fed basis times 2,000 lbs. Then divide the price per ton by the lbs of protein on as-fed basis to arrive at the price per unit of protein. For example, distillers product is listed to contain

12.5% crude protein and 62% moisture. Example  $2,000 \text{ lbs/ton} * (12.5\% \text{CP} / 100) = 250 \text{ lbs CP}$ . Dividing the price per ton of \$50 / ton by 250 lbs of protein we arrive at \$0.20 / lb crude protein just as above.

With an increasing number of coproducts available, it is important to understand how to compare them on a nutrient value basis. Hopefully, you have a better understanding of how feed moisture can impact how much feed is needed to get the needed amount of a nutrient into an animal and how to compare feeds on a nutrient basis. If you have additional questions, contact your county Extension office. Happy Calving!

## **Cattle on Feed: Supply is not the Problem**

*Dr. Derrell S. Peel, Ohio State University Extension Livestock Marketing Specialist*

The USDA February Cattle on Feed report showed that feedlot inventories on February 1 were 11.3 million head, down 5.6 percent from last year. January placements were 1.858 million head, up 4 percent from last year and January marketings were 1.737 million head, down 6 percent from one year ago. Both the placement and marketings numbers were slightly higher than expected and the resulting on-feed total was in line with pre-report estimates.

At face value, the decrease in feedlot inventories from last year ought to be bullish and yet fed cattle prices are currently \$11 - \$12/cwt. lower than this time last year. While fed cattle supplies do not seem to be at burdensome levels, clearly current production is more than adequate for the current level of demand. Since about mid-January the impact of the recession has been increasingly apparent with almost daily indications of demand meltdown and, unfortunately, no end in sight at the moment. Boxed beef prices have dropped \$7/cwt. since mid-January. The decline has been larger for Choice relative to Select meat, a further indication of weak demand, with the result that the Choice-Select spread has been less than \$1/cwt. several days recently.

The relatively large January placement value was not indicative of strong feeder demand as much as it was the result of feeder cattle carried over from last fall that needed to be moved combined with increasingly dry conditions in some regions, the Southern Plains in particular. We have continued to see relatively large Oklahoma auction runs in February as winter forage and wheat pasture supplies dwindled. We may see a relatively large placement level in February but there will be less feeder cattle movement in March and April as a result. The slight uptick in the estimated January 1 feeder supplies was a short run timing issue as a result of feeder cattle being carried over from November and December into January and February. Feeder supplies will remain tight, particularly as we move past the first quarter of the year.

January feedlot marketings were down from last year but there was one less business day this year compared to 2008. Marketings as a percent of the on-feed total were actually slightly higher than one year ago. There is no strong indication that feedlot supply is a problem or the major cause of the current freefall in fed cattle prices. Some have worried that large carcass weights indicate that feedlots are backed up but these carcass weights are mostly a function of heavier placement weights and good feedlot performance with little winter weather impact on feedlots so far.

The problem is not that we are overfeeding cattle (or feeding too many cattle, in general). The fact is that the recession is severe enough to be impacting food demand generally and beef demand in particular in a much more severe manner than was expected as little as a month ago. Until there are solid signs that macroeconomic confidence is rebuilding, there is little room for optimism in cattle prices. The good news is that when such rebuilding takes place, the supply fundamentals should ensure that beef and cattle prices will respond very quickly.

## Kentucky Beef Cattle Market Update

*Kenny Burdine, Livestock Marketing Specialist, University of Kentucky*

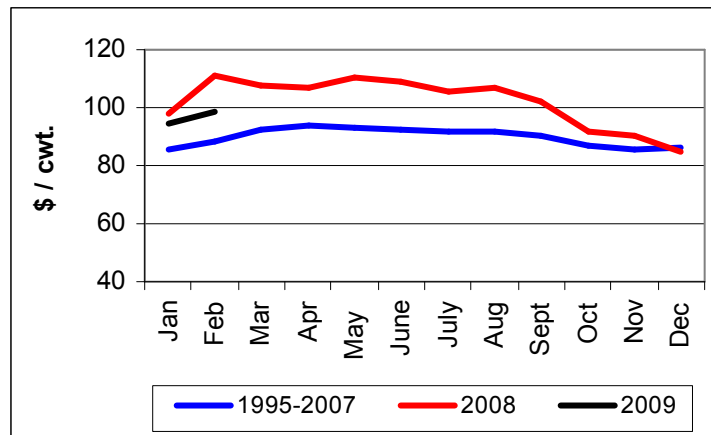
Live cattle prices continue to move largely in tandem with the US economy. During February, slaughter cattle stayed in the very low \$80's. Concern about the economy and how consumers will respond continues to weigh the complex down. As further evidence, the Choice / Select spread remains low and retailers seem to be featuring a great deal of the more expensive "middle meats".

Fortunately, Kentucky feeder cattle prices have rallied from their levels in December. The chart below shows the state average prices of 500 to 600 lb steers through last month. They have moved from the mid-\$80's in December to nearly \$100 in February. This was welcome news for cow-calf operators.

At the same time, many backgrounders took advantage of those November and December prices to place stockers into winter programs. Summer feeder cattle futures have been trading in the mid-upper \$90's, which makes the outlook pretty solid for calves placed late in 2008. With the recent rally in stocker prices, expected margins on newly placed calves are much tighter.

As the weather warms up, many things start to happen. Spring has historically been a strong season for beef demand. As the grilling season kicks in, it will be interesting to see if cash slaughter cattle prices respond positively. This will be a good gauge of what to expect for the rest of 2009. Spring is also when traditional summer grazers will be looking to place lightweight calves in summer grazing programs. This usually puts some positive pressure on prices for stocker cattle in April and May.

500 to 600 lb Medium / Large Frame #1 Steers



Source: KY Livestock and Grain Market news

## Roberts Agricultural Commodity Market Report

*Mike Roberts, Commodity Marketing Agent, Virginia Tech University*

LIVE CATTLE futures on the Chicago Mercantile Exchange (CME) finished down Monday on sell stops, Wall Street troubles, and chart signals. The APR'09LC contract closed at \$83.950/cwt; down \$1.975cwt. The AUG'09LC contract was down \$1.275/cwt at \$82.950/cwt. Declines in outside markets and the other commodities were just too heavy on the market. The commodity markets are not immune to what's

happening in the stock market. Higher cash cattle last week and on Monday were not enough to lift futures. Fund and speculative selling accelerated as futures declined on weak money flows into fund's pockets. The Dow Jones industrial average fell below 7000 for the first time since 1997. The USDA 5- area average was placed at \$81.455/cwt as cash cattle were \$0.50/cwt - \$1.00/cwt higher. USDA on Monday put Choice Boxed beef at \$132.21/cwt, down \$0.44./cwt. According to HedgersEdge the average packer margin was placed at a negative \$22.10/head based on the average buy of \$79.75/cwt vs. the average breakeven of \$78.06/cwt. It would be a good idea to hold off pricing short term corn needs at this time. If the economy continues to weaken opportunities to price feed will be better in a week or two. Cattle fundamentals are in place to hold at least current levels for a bit.

FEEDER CATTLE at the CME closed off on Monday. MAR'09FC futures were off \$1.150/cwt to \$91.450/cwt. The APR'09FC contract closed at \$92.350/cwt; down \$1.525/cwt. Feeders followed live cattle lower in light trading with all the bearish outside influences being major players. Normally bullish lower corn futures couldn't help feeders finish in the positive column. Cash cattle in Oklahoma were off \$4-\$8/cwt on fears of a very shaky economy. Some profit taking was noted on chart based selling. The premium to the CME Feeder Cattle index and spreading of May into March were also contributors to the pullback in feeders. If you can afford to wait for a week or two to price corn you are in good shape.