

OFF THE HOOF

Kentucky Beef Newsletter – February 2009

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 Herd

- Replacement heifers should be gaining adequately to reach target breeding weights by May 1. Be sure that their feeding program is adequate for early breeding.
- Have calving equipment, supplies and labor ready for the spring calving season. Some supplies which may be needed are: eartags and applicator (put numbers on eartags now), tattoo pliers and ink, record book, scales for calf weights, iodine for calves' navels and colostrum supplement. Calving equipment (puller and chains, etc.) and facilities should be ready and clean.
- Overall condition of the cow herd should be evaluated. Cows losing weight now are most likely to have weak or dead calves. These cows will likely be a poor source of colostrum milk for the newborn calf. Feed cows, if necessary to keep them in good body condition.
- Record birthdate, cow I.D., and birthweight immediately (use your Beef IRM calendar). Identify calf with eartag and/or tattoo. Registered calves should be weighed in the first 24 hours. Male calves in commercial herds should be castrated and implanted as soon as possible.
- Heifers should begin head-start calving in early February. Move them to a clean, accessible pasture, away from cow herd and near facilities so that calving assistance can be given. Cows may start calving later this month. Signs of calving are relaxation of pelvic ligaments, enlargement and swelling of the vulva, and enlargement of the udder. Expect calving difficulty if (1) calf's head and two feet are not visible, (2) only the calf's tail is visible, and (3) the cow has been in labor for 1½ hours. Be sure calf is being presented normally before using calf puller. Recognize situations that are beyond your capability and seek professional help as early as possible. Calves that aren't breathing should receive

assistance. Try sticking a straw in nostril to stimulate a reflex or try alternate pressure and release on rib cage. Commercial respirators are also available. Calves should consume colostrum within 30 minutes of birth to achieve good immunity.

- Separate cows that calve away from dry cows and increase their feed. Avoid muddy feeding areas so that cows' udders won't become contaminated and spread scours. Don't confine cows to muddy lots.
- Increase feed after calving to 25-27 pounds of high quality hay. Concentrate (3-4 lb. for mature cows and about 8 lb. for first-calf heifers) may be needed if you are feeding lower quality hay. Supplementation may have a beneficial effect on date and rate of conception. The most important time to feed a beef cow is after calving. Thin cows don't come into heat very soon after calving. We must have cows in good condition, if we plan to breed them early in the season for best pregnancy rates, especially on high-endophyte fescue pastures.
- Sub-zero weather can mean death for newborn calves. During extremely cold spells, bring the cow(s) into a sheltered area as calving approaches to protect the calf. Be prepared to warm-up and feed newborn, chilled calves. Calving in mud can also cause problems.
- Watch for scours in newborn calves. Consult your veterinarian for diagnosis, cause, and treatment. Obtain fecal samples and submit to diagnostic lab, if scouring begins.

Fall-calving Herd

- Breeding season should end this month. Remove bulls and confine them so that they regain condition.
- **Important!** Consider creep feed or creep grazing (wheat, etc.) to supply extra nutrition to fall-born calves which may have to depend solely on their dam's milk supply for growth. They are not getting much except their dam's milk now (i.e. there is nothing to graze). February/March is the worst time of the year for fall-born calves.
- Provide windbreaks or clean shelter for calves.

General

- Begin pasture renovation. You can overseed clover on frozen or snow-covered pastures.
- You should be feeding a mineral supplement with adequate magnesium to prevent grass tetany (~ 15% Mg) now. The Hi-mag UK Beef IRM mineral can be used now.
- Provide shelter or increase feed as temperature drops. When temperature falls below 15 degrees, cattle need access to windbreaks. For each 10 degree drop below 15 degrees, add three pounds of hay, two pounds of corn, or six pounds of silage to their rations.
- Provide water at all times. Watch for frozen pond hazards.
- Control lice. Watch for signs such as rubbing.
- Continue looking for herd sire replacements, if needed.

“Sometime You Just Have To Say Something.....”

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

I was recently reminded of a funny story that Comedian Ron White tells. In his story, he was thrown out of a bar in New York and arrested. The policeman advised him that he had “the right to remain silent”. His comedic reply was that “I had the right to remain silent but I didn't have the ability”. Sometimes you just have to say something.

I recently received some letters from various individuals concerning the election for president and board of directors of one of the breed associations. One candidate sent out a letter that took the current board to task over declining membership in the organization and decreasing circulation of the breed magazine. An outgoing officer took issue with that and sent out a letter explaining that the “average purebred producers only stays in the business 5 to 7 years”. I don’t know if those numbers are correct but ... I just have to say something.

Even if the numbers aren’t exactly right, it points out a common occurrence in our business. Folks are constantly getting in and out of the purebred seedstock business. Recent discussions over the auto makers’ “bail-out” revealed concern over people buying cars from companies that might not be around for the long term. Should these feelings apply to the cattle business?

Cattle operations that are only around for about one-half of the average life span of a good cow aren’t likely interested in the same traits that you are. I think it is good to find an animal that you are interested in then ask to see the dam and grand dam. Do they still have them? Why not?

Here’s a typical scenario. Someone that has made a good deal of money – doing something else – wants to enter the cattle business “starting at the top”. They can afford to buy a showplace, get some real expensive cattle from various established “big-name” breeders, have some glossy-print ads in the breed magazines and they have “arrived”. Even if they go out of business later, there will be a huge dispersal sale with a lot of expensive glossy catalogs. They can pump a lot of money into the “business” – so what’s the problem.

Well, I’m not as concerned about these folks as I am the more typical cattle producers that look to purebred producers for their seedstock. You can ride around in a new pickup, looking through board fences at yearling bulls eating corn out of a self-feeder, talk about bloodlines and think that this is what it is all about. I am reminded of what one of my mentors, Dr. Neil Bradley, once said when we were talking about the nice barns that many successful cattle operations had. He said that “most of those folks built their barns after they made their money, not before”.

But, here’s the problem (or problems). That’s not the real world, in my opinion. What traits are you selecting cattle for? Does your farm look like that or is it barb wire fence and fescue pastures? You should select cattle – first and foremost – for reproductive efficiency in your environment. Remember many breeders and all feedlots aren’t concerned about your herd’s reproductive efficiency. But you should be.

You need to have a well-defined set of goals for your operation and a vision of what you want your operation to be. Select breeding stock that will help you meet your goals.

I am slightly biased (I admit that) but I always believe that our future is with forages – and with cattle that will perform profitably on forage. Why? Because it will be more profitable and more sustainable in the long term. Does a calf that has been creep fed until weaning and then fed a high grain diet postweaning represent the genetics that you need in your grazing operation? Will they hold up in the real world? You just don’t know.

I also believe that you should have enough confidence and trust in the knowledge and integrity of your seedstock suppliers that you can tell them what you are looking for. They can help you determine which animals should meet your needs, and you can choose from those. I don’t believe that you should walk up

to a pen of bulls, look across them and say “I’ll take that one”. There’s a lot of information to consider before you make your final decision. Someone that has raised 3 or 4 generations of the “parents” could help you with your selection. I suggest that you cultivate those relationships, remember what is important in the selection process and ignore the “scenery”.

Oh well, sometimes you just have to say something.....

Breed Selection and Crossbreeding

Dr. Darrh Bullock, UK Beef Specialist

As we approach the bull buying season it is once again time to think about our overall breeding program. It is important to assess what traits are going to have the greatest economic impact in your management system and target a bull to give the production level that you need. If you are in the commercial cattle business and you have been using the same breed of bull for several years then you should probably consider adopting a crossbreeding program.

One of the easiest and best ways to improve whole herd productivity is by having a good crossbreeding system. There are many systems that are available to commercial producers and additional information can be found in fact sheet ASC-168. Depending on how many cows you own and how many breeding pastures that you have will influence which system is best. The important thing is to decide on a system that you are comfortable with and stick with it. In the simplest of these systems income can be increased by approximately 12% and in some of the more complex systems over 20% compared to straight breeding. If you decide to practice crossbreeding in a more random fashion you should practice this rule of thumb: Do not keep replacements that have greater than 75% of any one breed. Once you have settled on a system it is time to select the breeds that best fit your operation.

It is important to realize that breeds are different in their production levels and breed type should be considered carefully. The following descriptions will assist in determining the breed types that are best for your operation:

British/Smaller Continental – Angus, Hereford, Shorthorn, Red Poll, Tarentaise, Salers, and others. This breed type is generally moderate in birth weight, growth, mature size and milking ability; they have good quality grades at acceptable market weights and reach puberty at acceptable ages.

Continental Milk – Braunvieh, Gelbvieh, Simmental and others. This breed type is generally characterized as having heavier birth weights, high growth, large mature size and exceptional milking ability. They produce carcasses that are lean at acceptable harvest weights and they reach puberty at acceptable ages.

Continental Lean – Charolais, Chianina, Limousin, and others. This breed type in general has heavier birth weights, high growth, and large mature size, with low milking ability. These breeds have very lean carcasses and females tend to reach puberty at later ages.

Brahman – Beef Master, Brangus, Santa Gertrudis, Simbrah, and others. This breed type is typically moderate to high in birth weight, growth, mature size and milking ability. These breeds are acceptable in leanness and females tend to reach puberty at later ages.

Depending on your management and marketing systems and personal preferences you should choose a breed that has the right characteristics for the traits you are interested in. This does not mean that you can not find a bull to fit your needs in other breeds, but it may be more difficult.

Implementing a crossbreeding system can be a very simple, yet profitable, management practice. Decide on a crossbreeding system then carefully choose the breeds that best fit your production goals. Of course, buying a good bull within your breed of choice is necessary as well. If you would like more information on crossbreeding or sire selection there are several fact sheets, the Kentucky Beef Book and the NBCEC Sire Selection Manual available through your county Extension office.

Re-warming Methods for Cold-stressed Newborn Calves

Dr. Glenn Selk, Beef Extension Specialist, Oklahoma State University

Recently an Oklahoma rancher called to tell of the success he had noticed in using a warm water bath to revive new born calves that had been severely cold stressed. A quick check of the scientific data on that subject bears out his observation. Canadian animal scientists compared methods of reviving hypothermic or cold stressed baby calves. Heat production and rectal temperature were measured in 19 newborn calves during hypothermia (cold stress) and recovery when four different means of assistance were provided. Hypothermia of 86° F rectal temperature was induced by immersion in cold water. Calves were rewarmed in a 68 to 77° F air environment where thermal assistance was provided by added thermal insulation or by supplemental heat from infrared lamps. Other calves were rewarmed by immersion in warm water (100°F), with or without a 40cc drench of 20% ethanol in water. Normal rectal temperatures before cold stress were 103 °F. The time required to regain normal body temperature from a rectal temperature of 86°F was longer for calves with added insulation and those exposed to heat lamps than for the calves in the warm water and warm water plus ethanol treatments (90 and 92 vs 59 and 63, respectively). During recovery, the calves rewarmed with the added insulation and heat lamps produced more heat metabolically than the calves rewarmed in warm water. Total heat production during recovery was nearly twice as great for the calves with added insulation, exposed to the heat lamps than for calves in warm water and in warm water plus an oral drench of ethanol, respectively. By immersion of hypothermic calves in warm (100 °F) water, normal body temperature was regained most rapidly and with minimal metabolic effort; no advantage was evident from oral administration of ethanol. When immersing these baby calves, do not forget to support the head above the water to avoid drowning the calf that you are trying to save.

Source: Robinson and Young. Univ. of Alberta. J. Anim. Sci., 1988

Passive Immune Status Within 24 Hours Of Birth

Dr. Glenn Selk, Beef Extension Specialist, Oklahoma State University

You have heard the warning: "What happens in Las Vegas, stays in Las Vegas!!!" Perhaps you have not heard: "What happens in the first 24 hours, impacts the rest of a calf's life"! Veterinary scientists, while with the USDA experiment station at Clay Center, Nebraska monitored health events and growth performance in a population of range beef calves in order to identify associations of production factors with baby calf passive immune status.

Blood samples were collected at 24 hours after calving from 263 crossbred calves to determine the amount of passive maternal immunity that had been obtained from colostrum. Colostrum is the first milk produced by a cow upon giving birth. The baby calves were classified with "Inadequate" or "Adequate" Passive Immune status based on that blood sample at 24 hours of age. Growth performance and health events in

the study population were monitored from birth to weaning, and after weaning throughout the feedlot phase.

The lowest levels of passive immunity were observed among calves that were sick or died prior to weaning. Calves with "inadequate" passive immunity had a 5.4 times greater risk of death prior to weaning, 6.4 times greater risk of being sick during the first 28 days of life, and 3.2 times greater risk of being sick any time prior to weaning when compared to calves with "adequate" passive transfer. Based on 24 hour proteins (most of which are antibodies or immunoglobulins) in the blood, the risk of being sick in the feedlot was also three times greater for "Inadequate" compared to "Adequate" calves. Passive immune status was also indirectly associated with growth rates through its effects on calf health. Sickness during the first 28 days of life was associated with a 35 pound lower expected weaning weight. Respiratory disease in the feedlot resulted in a .09 lb lower expected average daily gain.

Thus, passive immunity obtained from colostrum was an important factor determining the health of calves both pre- and post-weaning, and indirectly influenced calf growth rate during the same periods. Therefore, the cow calf producers can help themselves and the future owners of their calves, by properly growing replacement heifers, providing a good health program for cows and heifers, and providing natural or commercial colostrum replacers to calves that do not receive it in adequate quantities on their own. Remember that most of the transfer of antibodies from colostrum to the calf happens in the first 6 hours. The first day sets the stage for the rest of his life. (Source: Wittum and Perino. 1995. Amer. Jour. Of Vet. Research. 56:1149.)

2009 CattleFax Outlook: Tough, Volatile, and Hard to Come By

PHOENIX (Jan. 30, 2009) - With a slowing economy and consumers keeping a closer eye on their spending, some of the dynamics in the beef industry are shifting in 2009. Cattlemen attending the annual CattleFax Outlook Seminar here heard that cattlemen face softer beef demand to start 2009, but that could change if the financial markets begin to stabilize.

As in previous years where market volatility was prevalent, risk management will be an important strategy this year. "Know basis," says Randy Blach, executive vice president for CattleFax. "It needs to become second nature. We've got to learn to understand risk."

Consumer are making more meals at home and eating out less at nicer restaurants. That has lowered the value of the higher priced middle meats like the rib and loin. At the same time, the chuck and round are claiming a larger share of carcass value (21 percent vs. 19 percent) compared to a year ago.

Overall cattle supplies are expected to decline in 2009, following a 1.5 percent dip in 2008. Beef cow numbers have declined 600,000 head to 31.9 million in response to drought in some areas and marginal profitability elsewhere. Beef cow slaughter is projected to be at a liquidation pace in 2009. As a result, the calf crop for 2009 and 2010 is projected to shrink by 2 percent.

A decline in cattle inventory means a smaller beef supply and that could bump beef imports to 2.7 billion pounds for 2009, also encouraged by a stronger dollar that makes the U.S. market more attractive than it was a year ago. Supplies of competing meats also are projected to be lower in 2009, marking the first time in decades that all the major protein supplies have declined. This is happening partly as a result of higher feeding costs in the livestock industry.

Even with softening domestic demand for beef, worldwide demand for protein is increasing, says Brett Stuart, a CattleFax analyst specializing in exports. While the credit crunch will limit exports to some top markets, U.S. beef exports should post some growth, led by gains in the South Korean market as Mexico continues to be the No. 1 export destination for U.S. beef. For the year, CattleFax projects that beef exports will reach 2.3 billion pounds. That figure taken with net imports represents an improvement in the beef trade gap as U.S. exports continue to rebuild from the 2003 BSE incident.

Increased production costs for corn, estimated to be as much as 30 to 40 percent more than 2008, will impact planting decisions. The current crop is forecast at 12.5 billion bushels, and increased production is needed to meet ethanol demands, although that market is softening. U.S. and world stock levels remain historically low, which tends to support prices.

"You better have a disciplined approach to how you manage risk or you will not like the results," Blach says.

Over the last two years the average price of a bushel of corn has increased \$2.70. CattleFax projects that the overall U.S. price for a bushel of corn in 2009 will be lower than 2008, \$4.25 vs. \$5.30.

"Economic conditions and credit availability, especially in foreign markets, are going to affect us a lot this year," Blach says. "We'll get through this and those who do a better job of managing their risk will get through a little better than the rest of us."

CattleFax is a Denver-based, market analysis and information firm. For information about CattleFax services, call 303-694-0323, or visit with Duane Lenz of CattleFax during the first session of [Managing Dynamic Change in the Beef Cattle Industry](#) on February 4 or 5.

Kentucky Beef Cattle Market Update

Kenny Burdine and Dr. Dick Trimble, Livestock Marketing Specialists, University of Kentucky

Cattle markets opened 2009 a little stronger than they closed 2008. 5wt steer calves pushed back into the \$90's, which was a welcome site for many. 7 and 8 wt steers were not up as much, but generally pushed their way into the mid-\$80s, compared to the low \$80's in December. Weather challenges forced many auction markets to close during the last week of January and will likely cause things to be slow the first week of February.

Just as we did last year, we will dedicate the February issue to discussing the results from USDA's Cattle Inventory report, which was released on January 30th, 2009. As expected, beef herd liquidation continued during 2008, which was likely the result of both drought in the southeast and widespread profitability challenges. Total cattle and calves, total beef cow numbers, and the number of heifers held for beef cow replacement were all estimated to be down by about 2%. Many analysts had been tossing numbers around in the 2-3% range.

Kentucky was dealing with its second straight drought year during 2008 and managing rising production costs in the face of declining prices. According to USDA, Kentucky will start 2009 with 45,000 (4%) fewer beef cows in production. This is comparable to the reduction seen during 2007. However, the biggest Kentucky story was the estimate for the number of heifers being developed. The report estimated a 13.5% reduction in the number of heifers being held for beef cow replacements. While this is only an estimate, and producer intentions can certainly change, it does remind us that there is not much interest in

rebuilding herd numbers in Kentucky given our weather and financial situation. The table below shows the January 1, 2009 estimates discussed above.

USDA January 1, 2009 Cattle Inventory Report

	2008 (1,000 hd)	2009 (1,000 hd)	2009 as % of 2008
Total Cattle and Calves	96,035	94,491	98
Cows and Heifers That Have Calved	41,692	41,005	98
Beef Cows	32,435	31,671	98
Milk Cows	9,257	9,333	101
Heifers 500 Pounds and Over	19,854	19,586	99
For Beef Cow Replacement	5,647	5,526	98
For Milk Cow Replacement	4,415	4,410	100
Other Heifers	9,793	9,650	99
Steers 500 Pounds and Over	17,163	16,774	98
Bulls 500 Pounds and Over	2,207	2,184	99
Calves Under 500 Pounds	15,118	14,943	99
Cattle on Feed	14,827	13,851	93
	2007	2008	
Calf Crop	36,759	36,113	98

Source: NASS, USDA

Roberts Agricultural Commodity Market Report

Mike Roberts, Commodity Marketing Agent, Virginia Tech University

LIVE CATTLE futures on the Chicago Mercantile Exchange (CME) found strength on Monday. FEB'09LC futures closed up \$1.900/cwt at \$83.900/cwt; \$1.55/cwt over a week ago. The APR'09LC contract closed at \$86.825/cwt; up \$1.725/cwt and \$3.00/cwt higher than this time last week. Fundamental strength was found in Friday's bullish Cattle Inventory data. Cash cattle reflected that strength trading better than expected on a weakening economy. The USDA 5-area average was placed at \$80.11/cwt. USDA placed the choice boxed beef at \$142.78/cwt, up \$0.95/cwt. According to HedgersEdge.com, the average packer margin was lowered \$4.80/head from last week to a positive \$49.60/head based on the average buy of \$80.88/cwt vs. the average breakeven of \$84.56/cwt. It might be a good idea to sell cattle when ready while trying to price a couple months' near-term corn needs.

FEEDER CATTLE at the CME closed up on Monday. MAR'09FC futures were up \$3.000/cwt to \$93.000/cwt and \$1.275/cwt over a week ago. The APR'09FC contract closed at \$93.325/cwt; up \$3.00/cwt. Lower feed prices rallied some contract limits. USDA's bullish report also provided support to feeders even as cash feeders still showed weakness early Monday. The CME Feeder Cattle Index for January 29 was placed at \$94.36/lb; down \$0.34/lb. Advance feeder sales when ready. It also is a good idea to price a couple of months' near-term corn needs.