

OFF THE HOOF

Kentucky Beef Newsletter – March 2013

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 handling 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, if needed.
- 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 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.

- 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 be on target to be cycling by the start of the breeding season.
- 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.
- Plan to 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.
- 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.
- Prepare bulls for the breeding season. Increase feed if necessary to have bulls in adequate condition for breeding.

Fall-Calving Cows

- Bull(s) should be away from the cows now!
- Calves intended for feeders should be implanted.
- Plan to pregnancy check cows soon.
- 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.

General

- 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.
- Renovation and fertilization of pastures should be completed.
- Watch for lice and treat if needed.
- Repair fences, equipment and handling facilities.
- Start thistle control. They can be a severe problem in Kentucky pastures. Chemical control must be done early to be effective.

I Didn't Expect That!

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

I was aware of Paul Harvey's "So God Made a Farmer" poem that he first delivered at an FFA convention in 1978 but you can't imagine my surprise when it was aired during the Super Bowl XLII! It was composed entirely of photographs and cost Dodge about \$16 million to present. Amongst all of the glitz and glamour, here was a simple, beautifully-done tribute to farmers. I didn't expect that.

I am not surprised that folks, especially farmers, liked the ad but I am pleasantly surprised at how well it was received by the public. We are more accustomed to negativity by some folks that oppose agriculture. Why did this ad resonate so well with the public (it was one of the highest rated ads during the Super Bowl) and what does that mean?

The iconic image of the American cowboy sold a lot of cigarettes a few decades ago (remember the Marlboro man?) but somehow this is different. This tribute “paints” the American farmer as a nurturing, caring, neighborly kind of person that is a vital part of the community – not just the independent, rugged type. This might be a change but it does tell us what people think we are – and want us to be.

Even McDonalds recently ran an ad to capitalize on the American cattlemen’s role in producing wholesome meat in an environmentally sustainable way. That can be our “brand” and our message to the consuming public.

The American farmer has always been viewed as an enigma. We produce food to feed the world and see it as a noble calling but we want to profit from it (of course, we have to in order to stay in business). We produce livestock and believe in giving them excellent care, yet we consume meat. We see it as the “natural order of things” but folks that believe that all sentient beings are equal (a boy equals a rat) won’t agree. I suspect that we will just have to “agree to disagree”.

I think that the reading of “So God made a farmer” helps people understand farmers.

Dodge also ran a 4-page color ad in USA Today the morning of the Super Bowl which was dedicated “to the farmer in all of us” with the words to “So God Made a Farmer.” These words are worth reading again and again, especially when our very way of life is threatened by folks that want to paint us as villains.

This is who we are.

So God Made a Farmer – Paul Harvey

And on the eighth day, God looked down on his planned paradise and said, “I need a caretaker.” So God made a farmer.

God said, “I need somebody willing to get up before dawn, milk cows, work all day in the fields, milk cows again, eat supper, then go to town and stay past midnight at a meeting of the school board.” So God made a farmer.

God said, “I need somebody willing to sit up all night with a newborn colt, and watch it die, and dry his eyes and say, ‘Maybe next year.’ I need somebody who can shape an ax handle from a persimmon sprout, shoe a horse with a hunk of car tire, who can make harness out of haywire, feed sacks and shoe scraps.

Who, planting time and harvest season, will finish his 40-hour week by Tuesday noon and then, painin’ from tractor back, put in another 72 hours. So God made a farmer.

God said, “I need somebody strong enough to clear trees and heave bales, yet gentle enough to yean lambs and wean pigs and tend the pink-comb pullets, who will stop his mower for an hour to splint the broken leg of a meadowlark.” So God made a farmer.

It had to be somebody who’d plow deep and straight and not cut corners. Somebody to seed, weed, feed, breed and rake, and disk and plow, and plant, and tie the fleece and strain the milk.

Somebody who'd bale a family together with the soft, strong bonds of sharing. Who would laugh, and then sigh, and then reply with smiling eyes when his son says that he wants to spend his life doing what Dad does.

So God made a farmer.

UK Fundamentals of Herd Health: Vaccinations for the Cow-Calf Operation

Dr. Michelle Arnold, Large Ruminant Extension Veterinarian, University of Kentucky

One of the most common questions in cow/calf production is what vaccines are necessary on an annual basis in Kentucky to keep the herd healthy. The guidelines set forth in this article are designed to help answer that question but the details of what products to use and when to administer them are best decided by the producer and his or her veterinarian. Technology is constantly changing and updating science to make today's vaccines safer and more effective than any time in the history of cattle production. However, the sheer number and types of vaccines and dewormers available today can make the correct selection of products challenging at the very least. Every farm is different with regards to the disease risk the cattle face and the challenges of labor and facilities needed to work the cattle. Your veterinarian is equipped with the knowledge and skills to determine what will work best for your unique situation.

Consult your veterinarian before instituting any health protocol.

Cows and Bulls 4-6 weeks Prior to Breeding

1. Viral respiratory vaccine (IBR, BVD, PI₃, BRSV) with *Campylobacter fetus* (Vibriosis) and 5-way Leptospirosis- Fetal Protection (FP) product preferred. If the cow is pregnant at the time of vaccination, use a killed vaccine product to reduce the risk of accidental abortion. Certain modified live vaccines can be used in pregnant animals but only if used strictly according to label directions.
2. 7 way Clostridial (Blackleg)-necessary if under 2 years of age. Optional after that depending on the exposure risk of the herd.
3. Deworm-perform at least twice per year (spring and summer). If only once is possible, deworm in late June or July. Deworming in the fall is a good practice to reduce the number of worms that overwinter in the cow but is not as important as the spring and summer when larvae are active in the pasture.
4. Tag cattle for identification and/or re-tag those that have lost tags.
5. Breeding Soundness Exams are highly recommended for herd bulls.

Heifers 6 weeks Prior to Breeding

1. Viral respiratory vaccine (IBR, BVD, PI₃, BRSV) with *Campylobacter fetus* (Vibriosis) and 5-way Leptospirosis-Modified live or killed product. Fetal Protection (FP) product is preferred. Follow label directions; some vaccines require a booster and some do not.
2. 7 way Clostridial (Blackleg)
3. Deworm with a branded (not generic) product. A heifer is under increased nutritional demand because she is still growing herself and trying to reproduce. Young animals do not have the immunity to parasites that adult cattle possess; therefore it is important to use effective dewormers.

Calves 1-3 months of age:

1. Identify with tag
2. Vaccinate with 7 way Clostridial (Blackleg) vaccine-Although the calves are too young to mount a good immune response, this dose of vaccine will initiate the immune process.
3. Dehorn, Castrate-the earlier these practices are completed, the better.

4. Optional Practices:
 - a. Implant steers at the time of castration (unless you plan to sell calves in an organic or natural market)
 - b. Viral Respiratory Vaccine-Killed, MLV *, or intranasal (preferred for young animals)
 - c. Pinkeye vaccine (administer in late spring/summer just before fly season)
 - d. Deworm-Begin deworming calves at 4-8 weeks old depending on time of year and expected level of pasture contamination with parasite larvae.
 - e. Test for BVD-PI (ear notch)-Consult your veterinarian if this is something to consider. If BVD has been diagnosed in an animal from your farm or there is a history of unexplained abortions in the herd, testing all calves is the proven first step to find persistently infected (PI) animals.

Calves 2-3 weeks pre-weaning:

1. Viral respiratory vaccine (IBR, BVD, PI₃, BRSV)-Killed or MLV * but follow label directions regarding MLV usage in nursing calves.
2. Deworm with an endectocide (examples: Ivomec, Dectomax, Eprinex, Cydectin, LongRange) for internal and external parasites. Use a branded product-not a generic. A drench anthelmintic such as Safeguard, Synanthic, or Valbazen may be used but a second product will be required for external parasite control.
3. 7 way Clostridial vaccine (Blackleg). Follow label directions regarding the need for a booster.
4. Optional:
 - a. Vaccinate with *Mannheimia haemolytica* toxoid-This vaccine, commonly known as a “Pasteurella shot” or “Pneumonia shot” is given pre-weaning in anticipation of the stress associated with weaning. In a low risk situation in which the calves are weaned on the farm and no new additions are added to the group, this vaccine may be delayed until after weaning. Consult your veterinarian and check your marketing plan since many programs specify what vaccines must be administered and when in order to participate.

Calves at Weaning:

Delay working calves until the stress of weaning is over. It is best to wait until the calves are eating, drinking, and most (if not all) have stopped walking and bawling.

1. Booster viral respiratory vaccine-MLV strongly recommended /often required by special sales.
 - a. For Replacement Heifers: Viral respiratory with *Campylobacter fetus* (Vibriosis) and 5-way Leptospirosis vaccine included. Booster according to label directions-MLV is strongly recommended for recently weaned females to be kept in the herd.
2. Booster 7 way Clostridial *if required* by label direction
3. Optional Practices:
 - a. Implant-Follow label directions if re-implanting. Do not implant females to be used for breeding purposes. Do not implant if planning to sell on the natural or organic markets.
 - b. *Pasteurella multocida* and/or *Histophilus somni* (formerly known as *Hemophilus somnus*) vaccines-consult your veterinarian.

Cows after calves are weaned:

1. Check cows for pregnancy by palpation, ultrasound, or blood test. If open, strongly consider culling her.
2. Check for other problems: Eyes, mouth, udder, feet and legs, body condition, disposition.
3. Scours Vaccine-Administer prior to calving. Products vary on when to administer them so follow label directions carefully.

Additional Considerations:

1. If calves cannot be processed pre-weaning, then do the steps for “Calves at Weaning” then, in 2-3 weeks, booster the viral respiratory vaccine (and the 7 way Clostridial if required on label). If castrations and dehorning were not done earlier, these practices need to be completed as soon as possible. Tetanus vaccination is strongly recommended when performing late castration; especially if banding. Consult your veterinarian regarding whether to use a tetanus toxoid or antitoxin.
2. *Modified Live Vaccines (MLV) provide fast, broad immunity and are excellent stimulators of cell-mediated immunity. They are generally preferred in recently weaned calves and usually required by most preconditioned sales. However, only use modified live vaccines ***in pregnant cows and in nursing calves*** if the cows were vaccinated with MLV in the last 12 months (check label for specific requirements). If this requirement is not met, a killed vaccine must be used until the cow is open and the calf is weaned.
3. Killed vaccines provide safe, protective immunity but must be given twice (usually 2-3 weeks apart) if it is the first time viral respiratory vaccine is administered. Annual boosters are required after the initial two-shot sequence.
4. If heifers have been allowed to stay with the herd bull until weaning, most likely some are pregnant. A prostaglandin injection (Lutalyse®) can be given to the heifers once they have been away from the bull a minimum of 10 days. These injections work best in early pregnancy so do not delay administration if needed.
5. Try to minimize the number of vaccines given at one time as much as possible. Multiple vaccinations cause neck soreness. Multiple Gram negative vaccines may cause cattle to spike a fever and go off feed for a short period of time.
6. Keep good vaccination records. Record date, vaccine name, serial numbers and expiration dates at a minimum.
7. Utilize fly control and pinkeye vaccine beginning in late spring.
8. Letters in a vaccine name mean:
 - a. IBR, BVD, BRSV and PI₃ : Diseases included in a viral respiratory vaccine.
 - b. An “FP” in the vaccine name stands for “fetal protection” and means protection against fetal infection and abortion due to the BVD virus.
 - c. An “HB” in the vaccine name stands for the strain of *Leptospira* known as “Hardjo bovis” that is a common cause of abortion in cattle.
 - d. “HS” stands for “*Histophilus somni*” (formerly known as *Hemophilus somnus*)
 - e. “L₅” stands for the 5 strains of Leptospirosis.
 - f. “V” stands for “Vibriosis”

In summary, vaccination programs must be designed around the specific needs of your cattle. There are numerous vaccines available on the market for other diseases (for example: Brucellosis, Anaplasmosis, Trichomoniasis, *Clostridium perfringens* Type A, Foot Rot, Papilloma or Wart Virus) but they may or may not be useful in your situation. Always discuss your concerns with your veterinarian to develop the plan that will work the best for you.

Fresh Grass Means New Calves

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

As ol’ man winter releases us from his grip, the pastures will begin to flourish. We’ve had a good fall and winter as far as precipitation is considered and forages are expected to take off quickly once the temperatures warm. Many stocker producers are hitting or will soon hit the stockyards in search of light

feeders to turn on grass. Following are a few considerations to ponder this year as you consider buying those calves.

Preparation is essential to ensure that you have adequate supplies on hand. Take an inventory of your health supplies. Be sure you have adequate syringes, needles, and products to treat sick cattle. Be sure you have your thermometer and it is in working order. Order your vaccines, parasite control products, and implants in advance so you are not waiting for them to come in after the cattle have arrived. Discuss with your farm hands your treatment protocol for first and second pulls. Discuss when the veterinarian should be contacted and when a mortality should be sent to the diagnostic laboratory. Gather your processing tools and make sure everyone knows where to find them. It is not uncommon to have morbidity rates near 30%. Staying on top of the health program cannot be stressed enough.

Getting calves out of lots and on grass as soon as possible after processing has been shown to lower morbidity or sickness in purchased calves (Dalrymple <http://www.noble.org/ag/livestock/stockercattle>). These researchers transported calves the day of or the following day from the auction market. Feeders were processed immediately after arrival or the next day if they arrived during the night and then turned out to pasture or grass traps. This system was used with light feeders known to be fresh calves directly from the ranch or farm. Calves received a metaphylactic dose of an antibiotic at processing as well. Gains were near 1.8 pounds per day by the second week after arrival with sick non-treated calves gaining nearly a pound less than healthy calves. Sick calves that were treated gained only 0.5 lb less than healthy feeders. Detecting sick calves early and getting them treated continues to show positive impacts on performance and the bottom-line.

Provide access to fresh, clean water upon arrival. There is some debate on whether it is better to withhold water to stimulate more feed intake upon arrival or to provide water immediately. The research does not show benefits for withholding water upon arrival. Consider the rumen is 80% plus water and this water is important for the microbes to access the feed consumed and begin digesting the forage and feeds consumed. Several researchers have shown that restricting water intake negatively impacts feed intake, not something desirable in stressed calves. Provide ample access to fresh water upon arrival. Lastly, stocker producers should begin to consider their pasture management for the upcoming year. Review the quality of pastures from last year and plan to soil test early this spring. Apply fertilizer based on soil test results. Monitor pastures for clover as legume bloat has challenged many producers in the central Kentucky area the last few years. Visual assessments with clover near or exceeding 50% should trigger a bloat prevention strategy. Using feed additives such as poloxalene or monensin can aid in reducing the incidence and severity of bloat. Feeding hay and avoiding moving calves into legume fields following heavy dews or a rain also help reduce the risk to bloat. Apply seed to thin areas or areas damaged during the fall/winter feeding to control soil erosion, control weeds and increase grazable forage.

With feeder calf prices where they are this spring, spend some time preparing for the arrival of fresh stocker calves. Being prepared will allow for a planned response and less stress on you and the livestock. Reviewing things that you identified as needing repaired or improved now will allow them to get some attention before you are caught up in the day to day management of the calves. Good luck this spring and may you have ample grass all summer.

CPH-45 Case Study - Fall 2012

Diamond P Farms, Cadiz, KY

Kevin Laurent, Beef Extension Associate, University of Kentucky

The following data was collected by the P'Pool family of Diamond P Farms on their 2012 calf crop. There were 55 calves consisting of 29 steers and 26 heifers. Cattle were weaned on September 8 and fed between 10 and 12 lbs of 3/4:1/4 soyhull:gluten mix. Calves were pastured on approximately 25 acres of fescue-clover and offered hay and UK IRM Stocker mineral with Rumensin free choice for the 86 day backgrounding period. The calves gained an average of 214 lbs per head for an average daily gain of 2.49 lbs. Calves were sold in the December 3 CPH-45 sale held in Guthrie, KY and returned an average of \$71.57 per head or a total of \$3,936 over expenses. This case study uses actual data to illustrate the advantages of preconditioning and marketing calves in the CPH-45 program.

Weaning weight (Weighed on the farm Sept 8)	548 lbs
Estimated sale weight at weaning (On farm weight minus 2% shrink)	537 lbs
Est. value at weaning (Guthrie graded pens, Sept 6 minus commission)	\$732.91
Sale weight (Guthrie CPH sale held Dec. 3)	762 lbs
Value at CPH Sale (Guthrie CPH sale held Dec. 3 minus commission)	\$981.24
Gross added value (CPH value minus Est. weaned value)	\$248.33
Expenses – Feed (75:25 soyhull:gluten fed at 12 lbs/head /day)	\$140.51
Expenses – Pasture (25 acres, 86 days , \$90/acre annual cost)	\$13.03
Expenses – Hay (12 rolls @ \$50/roll)	\$10.91
Expenses – Vaccine and tag	\$10.54
Expenses – Mineral (UK IRM Stocker w/Rumensin)	\$1.77
Total Expenses	\$176.76
Net returns/head over selling at weaning	\$71.57

Kentucky Beef Cattle Market Update

Kenny Burdine, Livestock Marketing Specialist, University of Kentucky

As the market processed the cattle inventory numbers that came out in early February, it also began to deal with multiple factors that lead to softening cattle prices. April fed cattle futures have fallen by more than \$7 per cwt since early January, beef cutout values softened through early March (a time when they typically improve), a serious acreage battle has been brewing for spring, and talk of sequestration impacts and rising fuel prices have raised questions about consumer demand.

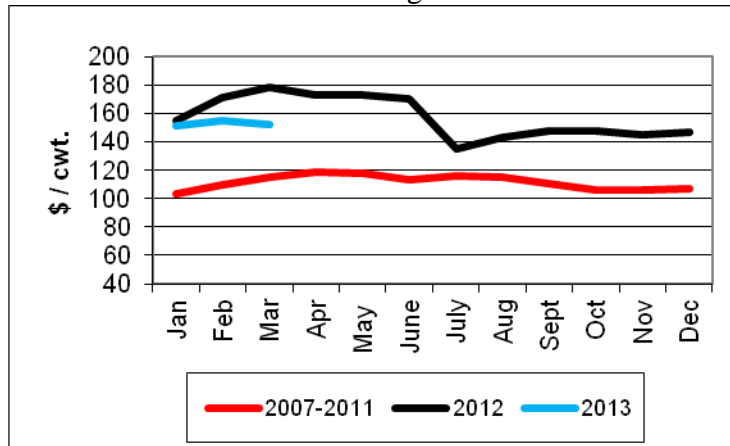
Feeder cattle markets by nature are expectation markets and the combination of all these factors has put downward pressure on Kentucky feeder cattle prices since January. Heavy feeders have been hit hardest, falling between \$5 and \$10 per cwt. Calf prices have not fallen as much since the first of the year, but it is important to remember that we are quickly approaching our typical seasonal highs, which usually coincide with grass growth. For the week ending March 8, 500 to 600 lb Medium / Large 1-2 steer prices were at \$153 per cwt on a state average basis, compared to \$178 per cwt for the same week in 2012.

The current calf market does set us up nicely for a short discussion of summer backgrounding. We are getting very close to pasture growth and summer stocker operators are no doubt eyeing the calf markets.

Despite the recent market decline, fall feeder cattle futures remain in the \$150's. A basis estimate around \$12-\$14 under would suggest 850# feeder steers in Kentucky would be selling for more than \$1,150 this fall. As of the first week in March, 550# steers could likely be placed for around \$850 per head. While I still think that calf markets will pick up some steam in the coming weeks, it is hard to imagine that summer grazing margins won't be considerably more attractive in 2013 than they were in 2012.

While I often comment on price risk management, the market unfortunately continues to provide teachable moments. Winter backgrounders who planned to market this spring are bearing the full brunt of the recent downturn. Had a portion of these cattle been protected through the use of futures and options, Livestock Risk Protection Insurance, or some other price risk management strategy, producers could have been partially protected from this market decline.

Kentucky Auction Prices
500 to 600 lb Medium /Large Frame #1-2 Steers



Kentucky Auction Prices
700 to 800 lb Medium / Large Frame #1-2 Steers

