

OFF THE HOOF

Kentucky Beef Newsletter September 2016

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, Beef Extension Professor, University of Kentucky

Spring-Calving Cows

- This has been a good year (so far) for pastures. You may not HAVE TO wean as early as usual.
- Stresses associated with weaning can be minimized by spreading-out other activities commonly associated with weaning – like vaccinations, deworming and, perhaps, castration and dehorning (which should have already been done!). Therefore, this month is a good time to do a “preweaning” working of cows and calves.
- When planning the preweaning working, consult with your veterinarian for advice on animal health products and procedures. Some procedures which can be done now are pregnancy checking cows (which will allow time to make culling decisions prior to weaning time). The remainder of the work, like booster shots, can be done at weaning time.
- Limited creep feeding can prepare calves for the weaning process since they can become accustomed to eating dry feed. This will especially benefit those calves which you are going to keep for a short postweaning period – like the CPH-45 program. It's time to start planning the marketing of this year's calf crop.
- Begin evaluating heifer calves for herd replacements – or culling. Each time you put them through the chute you can evaluate them for several traits, including disposition.

Fall-Calving Cows

- Fall-calving should start this month. Get your eartags ready. Cows should be moved to a clean, accessible pasture and be watched closely. Tag calves soon after they are born and record dam ID and calf birthdate, etc. Castration is less stressful when performed on young animals and calves which are intended for feeders can be implanted now, too.
- Watch for those calves which may come early and be prepared to care for them.

- Be on guard for predators – especially black vultures.
- Start planning now for the breeding season. If using AI, order supplies, plan matings and order semen now.
- Move cows to best quality fall pasture after calving. Stockpiled fescue should be available to these cows in November-December to meet their nutritional needs for milking and rebreeding.

Stockers

- Plan your receiving program. Weanling calves undergo a great deal of stress associated with weaning, hauling, marketing, and wide fluctuations in environmental temperature at this time of year. Plan a program which avoids stale cattle, get calves consuming water and high quality feed rapidly. Guard against respiratory diseases and other health problems.
- Calves to be backgrounded through the winter can be purchased soon. A good source is Kentucky preconditioned (CPH-45) calves which are immunized and have been preweaned and “boosted”.

General

- Plan to attend Beef Bash 2016 at the UKREC!
- Generally an abundance of moisture this year should make stockpiling fescue a viable option. Nitrogen application to fescue pastures can be made now and allow them to grow and accumulate until November, or when other sources of grazing have been used up. To make best use of this pasture, put fall calvers, thin spring-calvers or stockers on this pasture and strip graze.
- Plan the winter feeding program. Take forage samples of hay which you will feed this winter. Request protein and TDN analysis so that supplemental feed needs may be estimated. Don't wait until you run out of feed in February to purchase extra feed. Plan to minimize hay storage and feeding losses because feed is too expensive to waste.
- Don't graze sorghum or sudan pastures between the first frost and a definite killing frost because of the danger of prussic acid poisoning. Johnsongrass in stalk fields can also be a problem after a light frost. Grazing can resume after the sorghum-type grasses have undergone a killing frost and dried up.

“Form and Function” in the Cow Herd

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

Replacement heifers are critical to the success of your herd. Open (non-pregnant), unsound, aged cows or animals that die need to be replaced annually to maintain herd size. Since it can be difficult to find a source of mature cows that are problem-free, many producers direct their efforts toward producing or purchasing yearling replacement heifers.

Should you raise or purchase your replacements? That depends upon what you are producing now and what you want your cow herd to be in the future. Someone with a very small cow herd might choose to purchase replacements to simplify the breeding program and allow their herd bull to stay around longer. Others that are using terminal bulls (generally the larger breeds), might prefer to sell all of their feeder calves and buy the needed replacement heifers. Thereby eliminating the need for another enterprise on their farm – breeding and managing replacement heifers.

Some folks, feeling that their heifer calves are a known quantity, choose to breed and develop their own. No problem. But choosing the best ones can be challenging. A lot of cattle judges say that “form follows function”. So if you need 10 replacements select a few more, say 12, by choosing the 12 best looking heifer calves from the calf crop. Or if you have records, you might consider choosing the older calves that are more likely to be cycling at the start of the breeding season.

I remember one gentleman several years ago that would call me when he weaned his calves and wanted me to pick his replacements. He would run them past me and I would pick out his “best ones”. He would send the rest directly to market. That’s okay ‘cause “form follows function”, right?

Could there be a better way? I know that you might need sales to generate a land payment, etc. However, a different approach would be to keep most of the heifer calves and sell at different intervals throughout the years – spread your risk (but you will have smaller groups to sell).

I understand that “form follows function” so we could just go ahead and actually focus on function. In a sense, letting the calves sort themselves. Here’s what I like to do at the UKREC:

- (1) At weaning, sell all obvious culls – like poor doers, extremely rough hair coats, disposition problem, etc.
- (2) Every time you put the calves through the chute, or move them around, take off anything that “acts up”. They’ll just disturb the other calves and can generate some periodic “cash flow”. Be critical and be generous with the “trailermycin”.
- (3) Develop calves on a normal plane of nutrition – you don’t have to fatten them. Breeders should, in my opinion, put some “selection pressure” on heifers so that we can eliminate problems early in the production cycle instead of passing them on.
- (4) Do a reproductive “workup” at a year of age and prior to breeding (of course). Cull those heifers that aren’t cycling, have abnormal reproductive tracts or don’t have sufficient pelvic area to have a normal-size calf. They can be then sold as feeder calves.

Disposition is very important – you don’t necessarily have to assign a chute score or measure exit speed but the way that they behave “under pressure” is a great predictor of their future – administer trailermycin as needed. Those that do make it through this step are good candidates for breeding.

- (5) We do one round of timed A.I. followed by a short “clean-up” period. Pregnancy diagnosis is done as soon as possible so that open heifers can be removed and sold while they are heavy feeder calves.

Out of the bred heifers remaining, we select the ones that we want to put back in the herd (usually AI bred) and the rest should be good enough and eligible for bred heifer sales. Selling bred replacement heifers is another potential enterprise on the farm – especially if you have a quality cow herd, you are selecting for maternal traits, have a good health program, etc.

Heifer selection is a continual process. The final evaluation won’t be until they wean their first calf. They need to meet these criteria: (1) wean a good calf, (2) maintain good body condition, and (3) breed back early in the breeding season. If they do this, they just graduated to the cow herd. Congratulations.

Form does follow function but don’t get so concerned about appearances that you forget about function. I’ve seen some pretty common looking cows that were outstanding producers. It would have been a shame to have overlooked them.

Test Your Knowledge on Veterinary Feed Directive: Changing the Way Producers Obtain Medicated Feeds Beginning January 1, 2017
Michelle Arnold, DVM (UK Ruminant Veterinarian)

The Food and Drug Administration (FDA) is amending its animal drug regulations regarding veterinary feed directive (VFD) drugs. This amendment is intended to improve the efficiency of FDA's VFD program

while protecting human and animal health. The new rule limits “medically important antimicrobial drugs” to the treatment, control, and prevention of disease but does not allow weight gain or feed efficiency claims. Secondly, the rule states that the use of medically important antimicrobials will have veterinary oversight. This will be accomplished by changing previously labeled over-the counter (OTC) drugs used in feeds to Veterinary Feed Directive (VFD) drugs. As a result of this amendment, many drugs that are currently considered over the counter (OTC) will require a VFD, effective January 1, 2017. A list of all of the affected drugs is below.

Drugs Transitioning From OTC to VFD Status

Established drug name	Examples of proprietary drug name(s) \$
chlortetracycline (CTC)	Aureomycin, CLTC, CTC, Chloratet, Chlorachel, ChlorMax,
chlortetracycline/sulfamethazine*	Aureo S, Aureomix S, Pennchlor S
chlortetracycline/sulfamethazine/penicilli	Aureomix 500, Chlorachel/Pficlor SP, Pennchlor SP, ChlorMax SP
hygromycin B	Hygromix
lincomycin	Lincomix
oxytetracycline (OTC)	TM, OXTC, Oxytetracycline, Pennox, Terramycin
oxytetracycline/neomycin*	Neo- Oxy, Neo- Terramycin
penicillin+	Penicillin, Penicillin G Procaine
sulfadimethoxine/ormetoprim*	Rofenaid, Romet
tylosin	Tylan, Tylosin, Tylovet
tylosin/sulfamethazine*	Tylan Sulfa G, Tylan Plus Sulfa G, Tylosin Plus Sulfamethazine
virginiamycin	Stafac, Virginiamycin, V- Max

What is a VFD?

A VFD is a written (nonverbal) statement issued by a licensed veterinarian in the course of the veterinarian’s professional practice that authorizes the use of a VFD drug or combination VFD drug in or on an animal feed. This written statement authorizes the client (the owner of the animal or animals or other caretaker) to obtain and use animal feed bearing or containing a VFD drug or combination VFD drug to treat the client’s animals only in accordance with the conditions for use approved by the FDA. A VFD is also referred to as a VFD order.

How will the FDA changes affect the way producers purchase these feed additives? Test your knowledge by taking the quiz below.

Question 1 (T or F): _____ As long as a producer buys bagged medicated feed such as Aureomycin® or medicated mineral at the feed store, he or she doesn’t need a veterinarian’s written directive.

Answer: False. Use of any VFD feed requires professional supervision of a licensed veterinarian (the veterinarian-client-patient relationship (VCPR) is the basis of professional supervision-see box). Producers must obtain a VFD order from his or her veterinarian, then send, or take, the VFD order to a feed manufacturer or supplier to get the VFD feed.

Key Elements that Define a VCPR

- I. The veterinarian engages with the client to assume responsibility for making clinical judgments about patient health
- II. The veterinarian has sufficient knowledge of the patient by virtue of patient examination and/or visits to the facility where the patient is managed
- III. The veterinarian will provide for any necessary follow-up evaluation or care.

Question 2 (T or F): _____ Once a producer obtains a VFD feed, he can legally feed it to any of his cattle at whatever dose and for however many days he chooses.

Answer: False- **Producers must use VFD feeds according to the label on the bag.** Any usage contrary to the label by anyone is illegal under U.S. law. Animal feed bearing or containing a VFD drug or a combination VFD drug must be fed to animals based on the VFD issued by a licensed veterinarian, including:

- premises at which the animals specified in the VFD are located;
 - species and production class of animals to be fed the VFD feed;
 - approximate number of animals to be fed the VFD
 - indication for which the VFD is issued;
- level of VFD drug in the feed and duration of use;
 - withdrawal time, special instructions, and cautionary statements necessary for use of the drug in conformance with the approval.

Question 3 (T or F): _____ A producer can continue to feed a medicated feed already present on his or her farm even after the VFD expiration date has passed.

Answer: False. It is not legal to feed a VFD feed or combination VFD feed to animals after the expiration date specified on the VFD. A new VFD must be issued to continue feeding any VFD feed.

Question 4 (T or F): _____ A producer must maintain a copy of the VFD order for a minimum of 2 years and provide VFD orders for inspection and copying by FDA upon request.

Answer: True. Additionally, the veterinarian is required to keep the original VFD (in hardcopy or electronically) and the distributor must keep a copy of the VFD (in hardcopy or electronically) for 2 years.

Question 5 (T or F): _____ If a producer mixes his own medicated feed on farm, the new VFD rules do not apply.

Answer: False. Producers who manufacture their own feed must have a VFD in order to get the medicated VFD feed to manufacture from. Producers who also manufacture feed for others should be aware that they are acting as a distributor and additional requirements apply. More information on manufacturing and distributing VFD feeds as well as any of this information and more can be found online by visiting the FDA's website at:

<http://www.fda.gov/AnimalVeterinary/DevelopmentApprovalProcess/ucm071807.htm>

Question 6 (T or F) _____ Water soluble drugs (those that dissolve in water) do not require a VFD.

Answer: True. However, water soluble drugs are transitioning from OTC to Prescription (Rx). All water uses of these drugs will require a prescription from a veterinarian as of January 1, 2017, except in cases where a sponsor chooses to voluntarily withdraw the approved drug application.

Water Soluble Drugs Transitioning From OTC to Rx Status

Established drug name	Examples of proprietary drug name(s)
chlortetracycline	Aureomycin, Aureomycyn, Chlora-Cycline, Chloronex, Chlortetracycline, Chlortetracycline Bisulfate, Chlortet-Soluble-O, CTC, Fermycin, Pennchlor
erythromycin	Gallimycin
gentamicin	Garacin, Gen-Gard, GentaMed, Gentocin, Gentoral
lincomycin	Linco, Lincomed, Lincomix, Lincomycin, Lincomycin Hydrochloride, Lincosol, Linxmed-SP
lincomycin/spectinomycin	Lincomycin S, Lincomycin-Spectinomycin, L-S, SpecLinx
neomycin	Biosol Liquid, Neo, Neomed, Neomix, Neomycin, Neomycin Liquid, Neomycin Sulfate, Neo-Sol, Neosol, Neosol-Oral, Neovet
oxytetracycline	Agrimycin, Citratet, Medamycin, Oxymarine, Oxymycin, Oxy-Sol, Oxytet, Oxytetracycline, Oxytetracycline HCL, Oxy WS, Pennox, Terramycin, Terra-Vet, Tetravet-CA, Tetroxy, Tetroxy Aquatic, Tetroxy HCA
penicillin	Han-Pen, Penaqua Sol-G, Penicillin G Potassium, R-Pen, Solu-Pen
spectinomycin	Spectam
sulfadimethoxine	Agribon, Albon, Di-Methox, SDM, Sulfabiotic, Sulfadimethoxine, Sulfadived, Sulfamed-G, Sulforal, Sulfasol
sulfamethazine	SMZ-Med, Sulfa, Sulmet
sulfaquinoxaline	S.Q. Solution, Sulfa-Nox, Sulfaquinoxaline Sodium, Sulfaquinoxaline
tetracycline	Duramycin, Polyotic, Solu/Tet, Solu-Tet, Supercycline, Terra-Vet, Tet, Tetra-Bac, Tetracycline, Tetracycline Hydrochloride, Tetramed, Tetra- Sal, Tetrasol, Tet-Sol, TC Vet

Kentucky Forage and Grassland Council Annual Field Day

Dr. Ray Smith, Extension Professor, Forage Specialist, University of Kentucky

When: Tuesday September 13, 2016

Location: Edenshale Research and Demonstration Farm

Address: 245 Eden Shale Road, Owenton, KY 40359

3:30 Registration and view exhibits

4:15 Overview of farm – Becky Thompson and Dan Miller, Kentucky Beef Network

4:30 Wagon tours depart

- **Novel Endophyte Tall Fescue and Seedhead Suppression** – Dr. Glen Aiken, Agronomist and Director USDA/ARS-FAPRU and Dr. Ray Smith, UK Forage Specialist
- **Alternative Summer Forages to Maximize Beef Gain in Kentucky** – Dr. Jeff Lehmkuhler, UK Beef Specialist
- **Rainfall Collection Watering Systems and Manure Management for Livestock Producers** – Dr.

Steve Higgins, UK Bioenvironmental Engineer

6:30 Meal sponsored by the Kentucky Cattlemen's Association

7:00 Program "Russell Hackley's Legacy to Forages in KY and the U.S."

To register, visit <http://KFGCFieldDay.eventbrite.com> or call 502-484-5703.

This field day will be a CAIP qualified educational meeting.

Supporting Organizations:

KY Forage & Grassland Council, Kentucky Beef Network, Owen County Cooperative Extension Service, Kentucky Cattlemen's Association and Byron Seed.

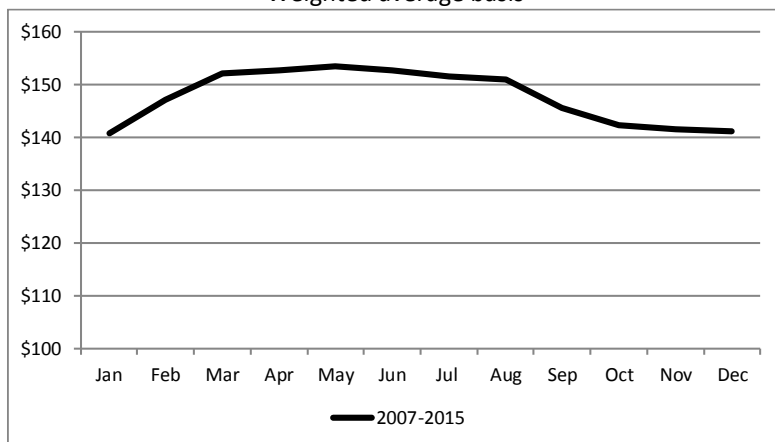
Kentucky Beef Cattle Market Update

Dr. Kenny Burdine, Livestock Marketing Specialist, University of Kentucky

The feeder cattle market took yet another hit over the last month. The April 2017 CME© Live cattle futures contract lost around \$10 per cwt from mid-August to mid-September and that decline resulted in another \$10 to \$15 drop in calf prices. Steer calves (550#) have moved into the \$130's per cwt on a state average basis. Feeders above 700 lbs have generally held their ground better, but have also declined. Price slides (price decreases on heavier feeders) have really narrowed over the last several months.

This most recent drop in the calf market has moved calf prices below their 2007-2015 average (see chart below). Last's month article focused on the impact of profitability and established just how small returns currently are for cow-calf operations. Producers are covering cash costs, but very little is left for depreciation on breeding stock and other capital or returns to land, labor, and capital.

Kentucky Auction Prices – 550# Steers
Weighted average basis



Source: USDA-AMS, author calculations

We are quickly moving toward typical weaning time for most cow-calf operations. Producers will once again be thinking about marketing strategies for their spring-born calves. Cow-calf operators seemed less interested in post-weaning programs the last couple of years, likely since the calf market was so high. I expect there will be more interest in pre-conditioning and winter backgrounding this fall given the much lower calf market. It is also commonplace for price premiums to increase on preconditioned cattle as the

overall supply of calves on the market increases. With greater numbers of calves, feedlots can be a bit pickier about the calves they place.

I always encourage cow-calf operators, who wish to precondition calves, to analyze preconditioning as another enterprise. In other words, value the calf at weaning time, and treat that as the first expense to the preconditioning program. By choosing to keep calves post-weaning, you forgo their weaning value. In addition to this “opportunity cost”, expenses such as feed, mineral, vet and medicine, etc. are incurred. The value of the preconditioned feeder calf must exceed these expenses for the preconditioning program to be profitable. Further, this return should adequately compensate the producer for his or her time and provide a reasonable return to capital during that time period.

A final point I would make involves preconditioning and backgrounding from a cow-calf producers’ perspective versus someone who purchases calves for the same purpose. I like to say that the most profitable group of calves that you can precondition is the group that you raised yourself. Whenever I develop a preconditioning budget, I start with the value of the weaned calf, then add additional expenses such as feed or pasture costs, mineral, vet / medicine, etc. Expenses such as marketing costs, transportation, and deathloss are also relevant expenses to a preconditioning enterprise. However, for cow-calf operators who are preconditioning calves they raised, these expenses are typically lower.

Marketing costs will be paid whether the calves are sold at weaning, or after the preconditioning period. So, for a cow-calf operator preconditioning his or her own calves, the additional marketing cost for the preconditioning enterprise is just the additional commission paid on the preconditioned feeders, above what would have been paid on the weaned calves. The same is generally true for transportation as calves will be transported to sale either way (it could cost slightly more per head to haul larger calves depending on the situation). Finally, mortality and morbidity are likely to be lower on owned calves than those that are purchased for re-sale.

Cow-calf profits were easy to come by in 2014 and 2015 as calf prices made most all operations profitable. However, those profits are going to be much more elusive this year as our calf market looks to be significantly below \$1.50 per lb. Post-weaning programs likely provide some potential to gain additional income for cow-calf operators and are likely worth consideration this fall.