

OFF THE HOOF

Kentucky Beef Newsletter September 2017

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

Contents

This month's newsletter includes:

Timely Tips – Burris

Back To School – Burris

Bypassing Technology Has a Cost – Lehmkuhler

Tips For Stockpiling Tall Fescue for Winter Grazing – Teutsch

Epizootic Hemorrhagic Disease (EHD) Producer Update - Is it Bluetongue or EHD? – Arnold

Mid-October is the Ideal Time to Plant Small Grains – Smith

Kentucky Beef Cattle Market Update – Burdine

Timely Tips

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

Spring-Calving Cows

- 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, especially disposition.
- This has generally been a good year for pastures but many parts of the state are dry now. Evaluate moisture condition and consider stockpiling some fescue pastures.
- 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.

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.
- 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.
- Start planning now for the breeding season. If using AI, order supplies, plan matings and order semen now.

Stockers

- 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”.
- 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.

General

- 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.
- If you have adequate moisture, stockpiling fescue might be 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.
- 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.

Back To School!

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

My grandkids just came in for their last visit before the new school year starts and I am now reflecting on the changes that more knowledge can bring to them. Is it just me or are they smarter than we were at that age? I think they are much smarter. One thing is for sure, the youth are the future of our industry – and of this great country. We must make an investment in young folks while they want to learn.

People ask “what’s wrong with this new generation?” I’ll tell you what’s wrong. We are! They need more and better role models. They need parents and families that pay attention to them and do things with them – share their interests. You can’t spoil a good kid with attention, but lack of attention and giving “things” in lieu of attention is a bad plan. Children without a supportive family unit are at a big disadvantage.

There is one great equalizer that money can’t buy and that is the ability to learn. It is my firm belief that almost all kids have an innate ability to be very good at something. We (all of us) need to help young folks find out what that something is and then mentor and encourage them to reach their dreams. Smart kids can be rich or poor – doesn’t matter but opportunities do matter.

The most common need for young folks is an education. That’s right. It’s an education. It always has been and still is. Education is the great equalizer. I recently read “Hillbilly Elegy” by J.D. Vance. I won’t do a review but he points out how he escaped poverty, beat the odds and got a Harvard education. More importantly, he points out that we “lose” a lot of kids before they get to college. They need help and encouragement before that. Sometimes we forget about the importance of secondary education. I do not understand the recent trend (by

some folks) to think that knowledge and education isn't important. It is.

Here's what I think scares people about the future: we have extended science and technology to the point that the seemingly impossible may now be possible. Now we also need to add bioethics to the study of science. Education and knowledge are taking us to heights that we never expected. We must now, as always, use this knowledge to benefit mankind.

People that haven't studied science have a difficult time understanding a lot of scientific advancements and frequently dismiss anything that they don't understand as "junk science" but it won't go away. College professors don't get these young minds together and trick them into believing that the world is round – knowledge is gained "one brick at a time" with each generation adding more and making new discoveries. I believe that the millennials will not care as much about the "rich getting richer" but will be much more attuned to societal needs than my generation (the baby boomers) ever was.

Several years ago, I printed a poem in this column and didn't think a lot about it until I saw the late Russell Hackley and he had laminated it and was carrying it in his billfold. Maybe this is a good time to print it again as we watch our kids and grandkids go off to school.

"Hold Fast the Summer"

by

Mary W. Abel

Hold fast the summer. It is the beauty of the day and all it contains.
The laughter and work and finally the sleep. The quiet.
Oh September, do not put your weight upon my mind.
For I know he will be going.
This son of mine who is now a man – he must go.
Time will lace my thoughts with joyous years.
The walls will echo his "Hello". His caring will be around each corner.
His tears will be tucked into our memory book.
Life calls him beyond our reach – to different walls.
New faces, shiny halls, shy smiles, many places.
Greater learning – he must go.
But wait, before he leaves, be sure he knows you love him.
Hide the lump in your throat as you hug him.
He will soon be home again – but he will be different.
The little boy will have disappeared.
How I wish I could take September and shake it, for it came too soon.
I must look to the beauty of each new day, and silently give thanks.

The "next" generation is our greatest resource. We must help them be successful. They might just do better than we did. I hope so.

Bypassing Technology Has a Cost

Dr. Jeff Lehmkuhler, Associate Beef Extension Professor, University of Kentucky

Discussions on the potential to expand exports to China are continuing. The optimists will see this as a means to add value to feeders sold to feedyards in response to increase beef demand. The actual impact of this foreign market on the cow-calf operator is yet to be determined, but increasing demand is generally always favorable. Yet nothing is free in this world, and the current proposed guidelines for beef to be exported to China will likely increase production costs.

As I write this, the most recent guidelines for the beef to be exported as reported by USDA AMS are listed below.

- 1.) Must be derived from cattle born, raised and slaughtered in the U.S.
 - a. Imported cattle from Canada and Mexico that are raised and slaughtered in the U.S.
 - b. Cattle imported from Canada and Mexico directly for slaughter
- 2.) Cattle must be traceable to the U.S. farm of origin/birth
 - a. Imported cattle must be traceable to the farm of origin or port of entry
- 3.) Beef must be from cattle less than 30 months of age
- 4.) Chilled or frozen bone-in and deboned beef products are eligible as well as offal products
- 5.) Carcasses, beef and beef products must be uniquely identified and tracked up to the time of export

China imports beef from other countries as well. Canada and Australia export beef to China currently. This beef must not contain hormones that are not naturally occurring (i.e. trenbolone acetate) and must be free of beta-agonists (i.e. ractopamine). In addition, pork exported to China from the U.S. must be free of beta-agonists. Though nothing is stated on the USDA AMS website to date regarding the use of growth promotants, reading between the lines, several have stated the use of implants and growth promoting feed additives will not be allowed. With the recent herd expansion and increased beef production, export markets will be important in the near future to sustain beef prices. Yet, what will the cost be for beef to qualify for China?

In the past, Kentucky had an active PVP program for feeder calves when the market demand existed. One had to pay a nominal fee with most of the cost going towards the electronic ear tag, but this was an expense incurred to market calves. In 2007, Iowa State economists estimated that implants improved average daily gain in the feedlot by 12.85% and lowered the breakeven price by 2.3%. This penciled out to about \$18/hd potential return. This work also indicated that ionophores such as monensin and lasalocid provided a 7.7% increase in average daily gain, lowered breakeven price 1.46% and with a cost savings near \$11.51. Lastly, growth promoting additives like ractopamine were estimated to lower production cost by \$43 per head through a 29.9% increase in average daily gain and lowering breakeven cost by 5.5%. If each of these are independent of each other and responses are additive, the potential technology savings is \$72.50 per head for finished steer. Accounting for an increased production cost, this would lower the price one could pay on feeders. Thus, a 500-pound feeder calf would potentially be priced \$14-15/cwt lower to compensate higher production costs.

Granted it is a stretch to assume an additive response for each of the technologies. However, it should illustrate the point that forgoing technology without receiving a higher market price will result in reduced profit margins. Sustaining or increasing market prices are what we are banking on with the opening of the China export market. Be sure to follow this situation so you fully understand the impact it may have on our beef markets.

Tips for Stockpiling Tall Fescue for Winter Grazing

Dr. Chris Teutsch, Forage Extension Specialist, UK Research and Education Center, Princeton, KY

Feed and specifically winter feeding is the single highest expense in cow-calf production systems. In many cases it can make up more than 50% of the total cow-calf budget. Traditionally, hay is the main feed that is used during the winter months. Producing hay that is high enough in forage quality to meet the nutritional needs of lactating brood cows can be difficult. Feeding that hay during the cold, wet, and muddy winter months can also be a challenge, especially if you work off the farm since it is dark when you leave and dark when you get home.

In contrast to hay, tall fescue stockpiled for winter grazing is almost always higher in nutritional value and will in most cases meet the requirements of a fall calving cow. In addition, grazing stockpiled grass costs about half as much as feeding hay that is supplemented. To me one of the biggest advantages of grazing stockpiled grass is that you don't have to climb onto an old tractor and try to get it started in the freezing cold and then trudge through the mud to get the hay out to the pasture. The following steps will help to optimize your stockpiling

program.

Choose a strong tall fescue sod in a field that is well drained. To get the maximum yield response to nitrogen applications you will need a healthy stand of tall fescue. Choosing a field that is well-drained will help to ensure that the stockpile can be grazed with minimal pugging damage during the wet winter months.

Clip pastures that will be stockpiled to 3-4 inches prior to applying nitrogen. Clipping pastures removes old growth and increases the forage quality of the stockpiled grass.

Apply 60-80 lb of nitrogen per acre in late August to mid-September. Applying nitrogen too early can stimulate warm-season grass growth in pastures, while applying nitrogen too late decreases dry matter yield. When applying nitrogen in mid-September, decrease application rates to 60 lb/A.

Allow growth to accumulate until mid-December before grazing. If limited grazing is available, feed hay during late summer and fall.

Graze stockpiled pastures that contain legumes first. Legumes deteriorate at faster rate than grass and should be grazed first to minimize losses.

Strip graze tall fescue to maximize grazing days. Ideally, allocating only enough stockpiled grass for 2-3 days will increase grazing days per acre by 30 to 40%. However, if you work off the farm, it may make more sense to allocate 7 days of grass. This would allow you move fences on days off.

Frost seed legumes on grazed areas. Closely grazed stockpile provides an excellent opportunity to establish legumes in grass dominated pastures. Broadcasting the seed as the pasture is being grazed can enhance soil-seed contact and increase overseeding success.

For more information on stockpiling and winter grazing, please contact your local Cooperative Extension office.

Epizootic Hemorrhagic Disease (EHD) Producer Update - Is it Bluetongue or EHD?

Michelle Arnold, DVM (Ruminant Extension Veterinarian, UKVDL), University of Kentucky

Bluetongue virus (BTV) is very similar to Epizootic hemorrhagic disease virus (EHDV) and belongs to the same genus *Orbivirus*, and family *Reoviridae* but they cause two different diseases. The EHD virus is a disease-causing organism in wild and domestic ruminants, especially white-tailed deer. The EHD virus occasionally causes serious epidemics in wild deer populations that can spill over into domestic animals, including cattle. This virus is not contagious from animal-to-animal but is transmitted through the bite of blood feeding gnats, or midges, of the *Culicoides* genus. Deer are often severely affected and epidemics result in significant death loss. Sick deer may be found unable to stand or be seen drooling or foaming at the mouth and nose. Dead deer may be found in or near water with no apparent wounds. EHDV-1 and 2 are the most common strains in the US with EHDV-2 most frequently isolated. Epizootic Hemorrhagic Disease (often referred to as “EHD”) has a very predictable pattern with cases concentrated in the months of August, September and October. Traditionally there is an outbreak every 5-10 years in KY (the last two occurred in 2007 and 2012) but over the past decade or more, there have been numerous changes in the epidemiology of EHD. There is now recognition of a new EHDV-6 serotype in the US, an increase in frequency of EHD outbreaks in northern states where it was rarely seen before, and increasing reports of EHD being diagnosed in cattle around the world.

Both beef and dairy cattle are affected by EHDV and both cows and calves may show signs of disease. EHD in cattle is often subclinical (no obvious symptoms) but clinical cases are occurring more frequently than ever before. Typical clinical signs in cattle include fever, ulcers in the mouth causing excessive drooling, lameness associated with inflammation of the coronary band (around the top of the hoof), and weight loss. In dairy cattle,

udder lesions and a severe drop in milk production may occur. These same symptoms, especially the oral ulcers and lameness, may be due to other important diseases such as Foot and Mouth disease so it is extremely important to contact a veterinarian in suspected cases of EHD. Most cattle recover within 2-3 weeks but may lose substantial body condition during that period of time. Sheep rarely develop clinical signs when infected with EHDV and goats are not considered susceptible.

Bluetongue virus (BTV) is very similar to EHDV but Bluetongue is considered a disease of sheep rather than deer. Sheep are highly susceptible to bluetongue and BTV has often resulted in huge losses to this industry. Cattle are also susceptible to BTV infection, although it is generally a mild infection with fever that frequently goes unnoticed. There are some reports of abortion and congenital defects in the fetus if pregnant dams are infected with either BTV or EHDV between 70-120 days gestation. BTV is also of regulatory significance to the cattle industry because it is reportable to the State Veterinarian.

EHD in deer has been correlated with droughts because the deer tend to concentrate around the few wet areas available and these are where the gnats breed. The gnats that transmit EHD tend to feed on the underbelly and lower legs, areas in cattle that are hard to treat effectively with insecticides. Whole animal sprays of pyrethroids (MOA 3-see chart below) should provide the best protection – especially with coverage to under belly and legs where these gnats feed. Organophosphate insecticides are less desirable due to shorter residual life. The gnats are poor fliers so, if possible, keep animals in open areas away (30’ or more) from edges of woods. Gnats tend to be in and around wooded areas and usually do not venture far from margins. Air movement (windy conditions) will disrupt their flight. If practical, keeping cattle out of wooded areas, especially around wet spots can help decrease the risk of exposure. Building heavy use areas incorporating rock and geotextile fabric underlayment around watering points helps keep these areas dry and clean.



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Diagnosis in cattle is accomplished through several types of blood tests. Virus isolation or real time PCR can detect the virus in whole blood (purple top tube). The UKVDL offers a BTV/EHD PCR that detects virus antigen in 10 ml of whole blood (drawn in an EDTA or “purple top” tube), or from a swab or tissue samples (lung and spleen preferred) for \$50 in-state + \$10 Accession fee. There are less expensive serologic tests available (BTV ELISA \$6 and EHD AGID is \$5) but a positive result only indicates exposure to the virus and not active infection. Work with your veterinarian for proper diagnosis and treatment options, especially in areas with deer death loss.

No specific treatment for EHD or BT virus infections is available in cattle. Supportive treatment with anti-inflammatory drugs and supplemental feed may be helpful in affected animals showing severe lameness or those that go off feed. Animals recovering from the infection may harbor the virus in their blood for several weeks which aids in the continued transmission of the virus. However, the biting midges that spread the virus will cease activity after the first killing frost and transmission will stop.

Sheep / Goats Whole Animal Sprays for Lice, Keds and other Biting flies

Insecticide	Withholding Time
Permethrin - Atroban EC, GardStar 40% EC, Goat & Sheep Spray, or Permethrin CDS	0
days	
Pour- ons and Dusts for Keds and Lice Insecticide	Withholding
Time	
Permethrin - Atroban DeLice, Back Side, BackSide Plus, Durasect II, or Permethrin CDS 2	0 days
milk or slaughter for sheep	
Synergized DeLice Ultra Boss 5% Pour on	

zeta- Cypermethrin - Python 0.075% Dust
goats

0 days milk or slaughter for sheep and

Cattle

	MOA	Slaughter Interval
Animal sprays for face flies and horn flies		
Coumaphos - Co- Ral 6.15% Fly and Tick Spray, Coral 42% Flowable	1B	0
Dichlorvos - Vapona Concentrate Insecticide 40.2%	1B	1
Phosmet - Prolate/Lintox – HD (phosmet)	1B	3
Tetrachlorvinphos - Rabon 50% WP	1B	0
Tetrachlorvinphos + Dichlorvos - Ravap 28.7% EC	1B	0
Permethrin - Atroban 11% EC, GardStar EC, Permethrin II 10% or 25% WP	3	3
Pour- on insecticides for horn flies	MOA	Slaughter
Interval		
g- Cyhalothrin 0.5% - StandGuard	3	0
l- Cyhalothrin 1% - Ultra Sabre	3	0
Cyfluthrin 1% - CyLence	3	0
Permethrin - Atroban, Back Side, Back Side Plus, Boss, Brute, Buzz Off, DeLice, Durasect II, Permethrin CD, Permethrin CDS,	3	0
Ultra Boss Permethrin 5% +5% Diflubenzurin - Clean- up	3 + 15	0

Mid-October is Ideal Time to Plant Small Grains

Dr. S. Ray Smith, Forage Specialist, University of Kentucky

A group of UK specialists were recently discussing what is the best small grain for high quality forage. The consensus was wheat, since it is widely available and favored by many KY growers for forage. For dairy or other high producing livestock, you need to harvest at the boot stage (or sooner) to maintain high quality. At this stage protein content and digestibility are high – similar to alfalfa haylage or corn silage. When harvesting at this early stage, the field can be double-cropped with corn or full season soybeans. It is very difficult to cure early season small grain forages for hay, so most producers preserve as silage or baleage.

Beef producers growing wheat for forage often graze the crop late winter (early March) and then harvest later in the reproductive growth stage (at the milk to soft-dough stage). At this later stage, yields are much higher, but the forage is said to be nutritionally equivalent to an average hay crop. When grazing wheat or any small grains, make sure to remove cattle once stems begin to elongate if you plan to harvest the regrowth.



Daviess County farmer Tim Taylor explains how he uses corn for his grazing operation at the recent field day of the Kentucky Forage and Grassland Council. Co-hosted by the Daviess Co. Cooperative Extension Service, over fifty farmers learned how Taylor uses corn in his stocker/freezer beef operation and as a rotation crop to high quality endophyte-free tall fescue-red clover-annual lespedeza pastures.

Forage yields between wheat varieties vary by over one ton per acre so refer to Table 4 of the 2017 Kentucky Small Grain Variety Performance Test <http://www.uky.edu/Ag/wheatvarietytest/>. Ideally, choose a variety that performs well over several years. For example, the 3 year average shows Pioneer26R10 with consistently high forage yields and also high grain yields. Other varieties that have done well over the past 3 years are: Beck 125; Agrimax 438 DynaGro 9223, DynaGro 9522; Agrimax 454 and VaTech Hilliard. Newer high yielding varieties with only 2 years of test data include: Seed Consultants 13S26, Croplan SRW 9415 and USG 3197.

Nick Roy, Adair County Extension Agent, shared his experiences with local farmers. I see very few dairy farmers planting cereal rye anymore, unless they are just using it for grazing or cover crop. Rye has a very small harvest window for high quality. The most planted crop for us (Adair County) is still wheat. Cosaque black oats and annual ryegrass are gaining in popularity. There are now later maturing triticale varieties

available, but they seem to have the same quality problems as older varieties, just a few weeks later in the season. A lot of my farmers who have planted barley have had trouble with Barley Yellow Dwarf Virus. I seldom see winter oats planted in Adair county because they are not very winter hardy.

Overall, my “go to” recommendation is still wheat. A certified wheat selected from our forage trials would be ideal, but many farmers still plant bin run seed. (Note: it is illegal to save seed of some propriety wheat varieties). If they want higher quality I recommend annual ryegrass

Kentucky Beef Cattle Market Update

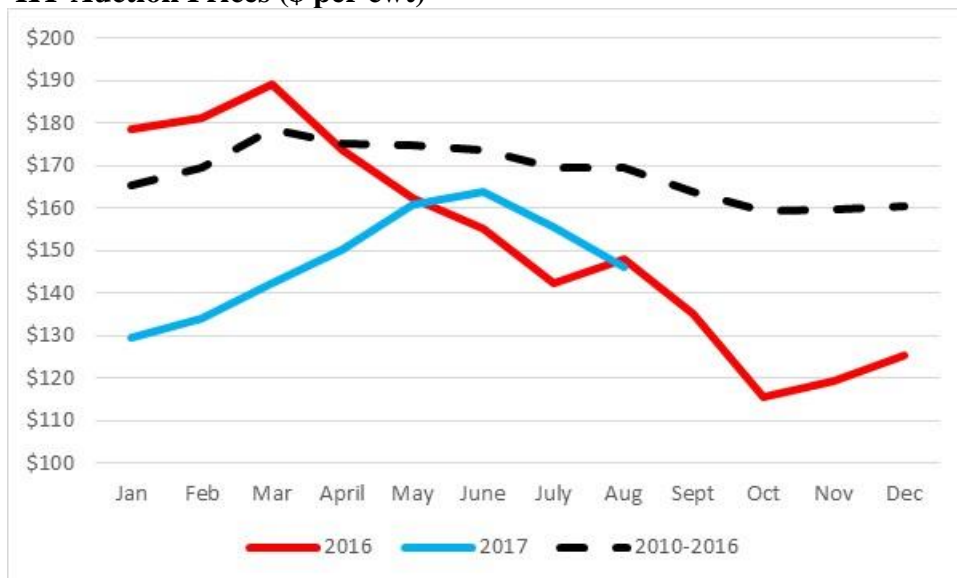
Dr. Kenny Burdine, Livestock Marketing Specialist, University of Kentucky

Following up from last month, the feeder cattle market has not pushed much higher, but has managed to hold its ground. At the time of this writing (September 8, 2017), most all CME© Feeder Cattle futures contracts were trading in the mid-\$140’s. Fed cattle prices, which didn’t reach their annual lows last year until mid-October, still haven’t found a bottom for 2017. Slightly lower grain prices have helped somewhat, as has better news on the export front. The horrible flooding in Texas continues to be something to watch, but overall markets have not shown much reaction. Clearly, a large number of cattle and producers were adversely affected.

Glancing at the local cash market price charts that follow, the general downward trend has continued. Calf markets should continue to decline seasonally for the next month or two. Heavy feeder cattle usually peak in late summer or early fall, so 2017 may be a year with a July top. It is worth noting that August average prices were pulled down somewhat by a sharp drop in the last week of the month. Prices in the first week of September were more in line with what was seen in the first three weeks of August.

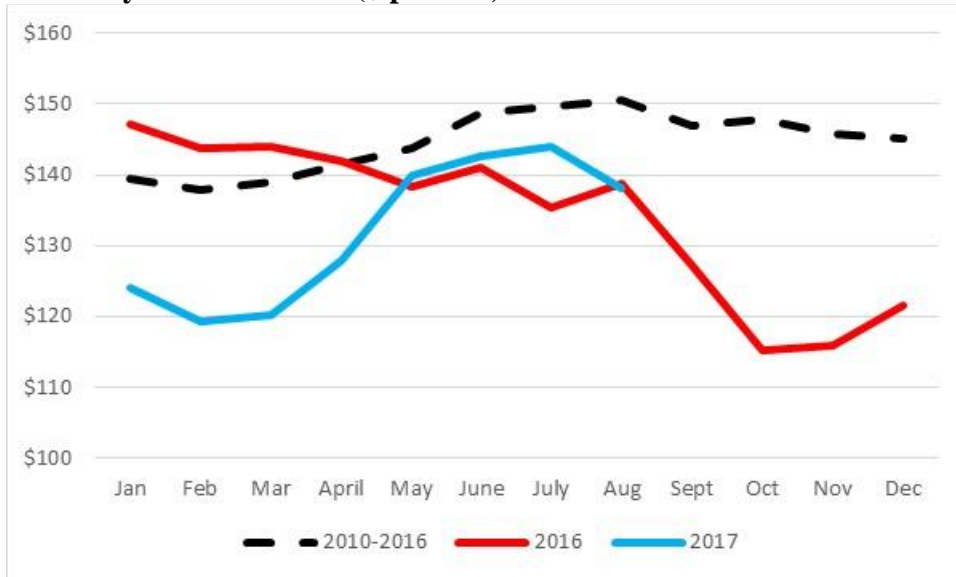
While rainfall has been a serious problem for many producers, it has set many Kentucky cattle operators up very well for fall grazing. We had nearly three inches of rain at my house from September 1st through September 5th, and more is expected for the week of September 11th. The combination of moisture and cooler temperatures should really support pasture growth. The best defense against market declines is usually weight gain and fall pasture growth should provide an opportunity to add some inexpensive pounds to calves or feeders. Stockpiled forage is also an excellent way to reduce winter feed needs for a cow-calf operation. Regardless of the situation, cattle producers should take advantage of this growth to the best extent possible.

**Figure 1. 550# Medium & Large frame #1-2 Steers
KY Auction Prices (\$ per cwt)**



Source: USDA-AMS, Livestock Marketing Information Center, Author Calculations

**Figure 2. 850# Medium & Large Frame #1-2 Steers
Kentucky Auction Prices (\$ per cwt)**



Source: USDA-AMS, Livestock Marketing Information Center, Author Calculations