

OFF THE HOOF

KENTUCKY BEEF CATTLE NEWSLETTER, SEPTEMBER 2019



University of Kentucky
College of Agriculture,
Food and Environment
Cooperative Extension Service

Cooperative Extension Service
University of Kentucky

Beef IRM Team

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Timely Tips

Dr. Les Anderson, Beef Extension Professor, University of Kentucky

Spring-Calving Cows

- Bulls should have been removed from the cow herd by now! They should be pastured away from the cow herd with a good fence and allowed to regain lost weight and condition. It is a good time to evaluate physical condition, especially feet and legs. Bulls can be given medical attention and still have plenty of time to recover, e.g., corns, abscesses, split hooves, etc. Don't keep trying to get open spring cows bred – move them to fall calving or sell them when they wean this year's calf.
- Repair and improve corrals for fall working and weaning. Consider having an area to wean calves and retain ownership for postweaning feeding rather than selling "green", lightweight calves. Plan to participate in CPH-45 feeder calf sales in your area.
- 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. It's not too late to apply nitrogen for stockpiling fescue if moisture conditions have improved.
- 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.
- If you haven't started calving quite yet, then it's time to get ready. Be sure you have the following:
 - record book
 - eartags for identification
 - iodine solution for newborn calf's navel
 - calf puller
 - castration equipment
- 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 “boostered”.
- 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

- Always keep a good mineral mix available. The UK Beef IRM Basic Cow-Calf mineral is a good choice.
- Do not give up on fly control in late summer, especially if fly numbers are greater than about 50 flies per animal. You can use a different “type” of spray or pour-on to kill any resistant flies at the end of fly season.
- Avoid working cattle when temperatures are extremely high – especially those grazing high-endophyte fescue. If cattle must be handled, do so in the early morning.
- Provide shade and water! Cattle will need shade during the hot part of the day. Check water supply frequently – as much as 20 gallons may be required by high producing cows in very hot weather.
- 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.

Don't Forget Beef Bash 2019

Dr. Les Anderson, Extension Professor and Ben Crites, IRM Coordinator, University of Kentucky

You've got to see this one! The University of Kentucky and the Kentucky Cattlemen's Association are busy planning a fall educational event with something for everyone. Circle Thursday, September 26th on your calendar and join us at the UK C. Oran Little Research Station in Versailles for an afternoon with the cows, grass, and fellowship.

We have hosted Beef Bash at the UKREC in Princeton since 2008. For those of you that have not been able to attend, our goal is to have a more "user-friendly" field day – more interactive and less structured. You can come and go as you please, attend various demonstrations of your choosing, look at cattle exhibits, visit with commercial exhibitors, visit with other producers, or study various educational exhibits. Your choice. The name "Beef Bash" implies that we want you to have an enjoyable time while you learn.

Educational Opportunities. You can see our cattle operation which provides animals for beef research. Education opportunities will abound and will be scattered throughout the entire research station. Many stations will host researchers from the across CAFE will be share their research and it relevance to the Kentucky Beef Industry. ANR Agents will share successful beef programming ideas and their impact on beef productivity. Extension Specialist will discuss state educational programming and impact. Finally, we will discuss the management program of our cow herd; our goals, plans, and procedures.

Commercial exhibits. A large tent in the staging area will house commercial exhibits and serve as the focal point of all activities. You can visit with various company representatives as you please and make plans for purchasing products for weaning calves or wintering the cow herd. Information on many new products will be available. Take your time and visit a while.

Hands-on Demonstrations. Various "how-to" demonstrations will be conducted throughout the day. You can attend those that interest you and ask questions in a less formal environment. Examples of demonstrations may include: bull selection, estrous synchronization technology, ration balancing, freeze-branding, alternative fertilizers, fencing and water, etc. We'll spend more time "doing" and less time speech making.

Social: Visit with the leadership of the Kentucky Cattlemen's Association and the University of Kentucky. The Dean and Associate Deans of the UK College of Agriculture are planning to attend and look forward to visiting with you. Bring any prospective agriculture students, especially those interested in Animal and Food Sciences with you. The beef Extension specialists and researchers will, of course, be available to visit and answer questions. We want to hear from you and get to know you.

KCA will be represented with leaders from across the state, especially the western part. This event has been a fantastic opportunity for KCA leadership to interact not only with UK personnel but also with other industry leaders. Come and visit with other cattlemen from across the state and be a part of making KCA the voice for all Kentucky cattle producers.

Make plans now to spend some time with folks who are interested in the same things that you are – improving our position in the beef industry. Mark September 26th on your calendar and bring a neighbor.

These are difficult economic times, but we'll keep moving forward with meaningful research and continue to build an even stronger cattlemen's organization. We need you!

Registration begins at 8:30 a.m. EST, with programs and tours starting at 9 a.m. EST. A lunchtime meal will be made available to purchase. No preregistration is required. Participants will receive a free pair of cotton-knit gloves.

For more information, please contact Ben Crites (859)-257-7512 or benjamin.crites@uky.edu

It's Been Hot and Dry and Will We have Enough Hay?

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

It has been unseasonably warm for early September. Lack of meaningful precipitation has resulted in dormant pastures and limited forage availability. As of this morning, the US drought monitor site has a significant portion of the state listed as abnormally dry or as a moderate drought situation. Many beef operations have started feeding hay already. A challenging spring for making hay and limited late summer rain could be leading us to a shortage of hay this year.

Hay is always cheaper closer to the time that hay is made. Many of us recall putting small square bales up and taking the grain truck to the field to load. As a kid it was a challenge to heave those bales that were as big as you up over your head to the floor of the grain truck. When we got to throw bales on a flatbed trailer we thought we had made it to the big time since we only had to lift them above our waist. Where was I going with this? We were in the field because hay was usually priced lower when you picked it up out of field versus getting it out of the barn. This is the same as it relates to points in time or seasonality. Hay will be cheaper when hay stocks are higher, shortly after being made, in comparison to February when hay stocks have declined.

Inventory your hay stores now. This is as simple as counting the number of bales for each type (round, large square, small square, etc...) you have on hand. Hopefully, you have a rough idea of how much your hay bales weigh. Weight of round bales will depend on size, forage density, forage type and cutting. Dr. Banta, my colleague in Texas, has a nice publication on bale weights. From their work, a bale that is 4'X5' may weigh 880 lb while a 5'X6' bale could weigh 1584 lb. How dense or tight bales are when made will also impact the weight. Bales that are 5'X5' with a density of 9.5 lb/cu ft may weigh 935 lb while bales with a density of 12.3 lb/cu ft will be near 1200 lbs. Point, when you can, buy on a weight basis rather than by the bale. Also, if you are not certain what your bales weigh that you made, when inventorying, estimate on the low end rather than assuming the bales are extremely heavy.

Determining how much hay will be needed is the next step. Hay needs are a factor storage and feeding losses in combination with animal intake. Hay losses during storage can range widely depending on method of storage. Storage in a barn could be 5-10% while hay stored outside on the ground uncovered may have losses of 25-40%. A significant amount of loss from outside storage is due to the bale wicking moisture from the ground and having significant rot on the bottom of the bale. Set bales on a gravel pad that allows precipitation to drain away. Feeding losses can be significant as well. When using hay rings, use rings that minimize waste. Sheeted bottoms on rings will reduce waste. Hay saver type feeders can reduce feeding losses 5-10% as well. If unrolling, consider using a temporary electric wire over the top to reduce losses from cattle bedding down and/or fouling hay with feces and urine.

Animal intake can be estimated by assuming 3% of body weight for hay intake. A 1,000 lb bred heifer would potential consume 30 lbs of hay daily. Mature cows weighing 1,400 lb would consume about 42 lbs

of hay daily. Be sure to account for feeding losses when estimating daily hay allocation. Estimate how many days you likely will need to feed hay this year. Hay feeding will be longer than normal with the lack of fall pasture growth.

Plan now to inventory your hay and compare to your predicted needs. If you are short on inventory, procure hay now rather than waiting. If hay is in short supply, we can feed grain as a replacement for hay. However, be sure to talk to your county agent or nutritionist to get a feeding program developed. I hope we all get some needed rain soon. Call your county Extension office for assistance in dealing with hay shortages.

Goodbye Metal Tags-Say Hello to Radio Frequency Identification (RFID)

Michelle Arnold, DVM-Ruminant Extension Veterinarian (UKVDL)

On January 9, 2013, USDA published a final rule (9 CFR, part 86) titled “Traceability for Livestock Moving Interstate.” The rule established requirements for the official identification of livestock and documentation for interstate movements. An effective traceability system in place would allow the United States to track animal disease more quickly and efficiently, hopefully minimizing not only the spread of disease but also the trade impacts an outbreak may have. Although there is much to be done to strengthen the traceability system, USDA has prioritized the move from metal identification tags to electronic identification tags in beef and dairy cattle, as well as in bison. The electronic tags use radio frequency identification (RFID) technology, which speeds information capture and sharing provided the correct equipment is in place to read it.

The USDA website addresses this move to RFIDs with the following statement from their website: *A comprehensive animal disease traceability system is our best protection against a devastating disease outbreak. USDA is committed to implementing a modern system that tracks animals from birth to slaughter using affordable technology that allows for quick tracing of sick and exposed animals to stop disease spread. In September 2018, USDA established four overarching goals to increase traceability. These goals are:*

- *Advance the electronic sharing of data among federal and state animal health officials, veterinarians, and industry; including sharing basic animal disease traceability data with the federal animal health events repository (AHER);*
- *Use electronic identification tags for animals requiring individual identification in order to make the transmission of data more efficient;*
- *Enhance the ability to track animals from birth to slaughter through a system that allows tracking data points to be connected; and*
- *Elevate the discussion with States and industry to work toward a system where animal health certificates are electronically transmitted from private veterinarians to state animal health officials.*

The RFID tag technology can be either low (LF) or ultrahigh frequency (UHF)—whichever the State, producer or industry sector prefers. Tags must be approved by USDA and meet standards for quality and performance, be tamper proof, contain a unique ID, and display the U.S. official eartag shield. So which technology (low or high frequency) is better? RFID identification devices using UHF technology appear to be faster at reading tags and can perform at longer distances which will be necessary to read official ID numbers at the speed of commerce. In situations where cattle are handled in chutes or in close confinement, UHF has no advantage over LF. The question of which frequency to use will become more important as the industry moves toward electronic ID implementation since the equipment to read the tags differs depending on the frequency.

Which cattle are required to have “official identification” when moving interstate?

Currently, animals that move interstate and fall into specific categories need official, individual ear tags. Beginning January 1, 2023, the ear tags must be RFID ear tags. **The requirement for individual identification does not include feeder cattle**, nor any cattle or bison moving directly to slaughter.

Beef Cattle (and Bison) that currently require official ID:

- All sexually intact beef cattle and bison 18 months of age or over;
- Cattle and bison of any age used for rodeo or recreational events; and
- Cattle and bison of any age used for shows or exhibitions.

Dairy Cattle that currently require official ID:

- All female dairy cattle of any age and all dairy males born after March 11, 2013; Specifically, dairy cattle are defined as all cattle, regardless of age or sex or current use, that are of a breed(s) used to produce milk or other dairy products for human consumption, including, but not limited to, Ayrshire, Brown Swiss, Holstein, Jersey, Guernsey, Milking Shorthorn, and Red and Whites.

Timeline for the Transition from Metal Tags to Electronic Identification

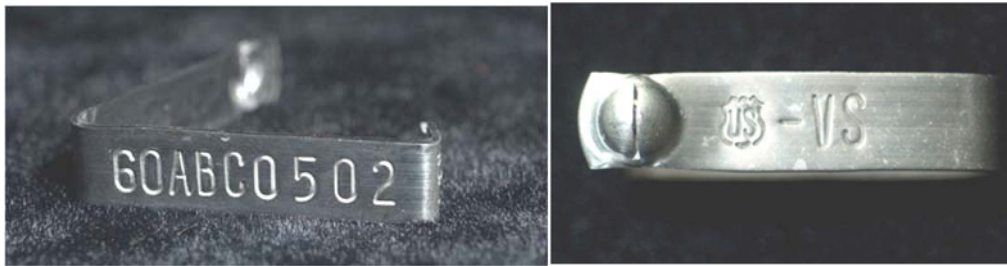


Figure 1: National Uniform Eartagging System (NUES) Metal Tag (“Silver” or “Brite” tag)

Official, individual tags have historically been the metal NUES tags (Figure 1), commonly referred to as “silver” or “brite” tags, used for disease testing, interstate movement, and change of ownership by veterinarians and also distributed to producers through State and Tribal authorities. Another acceptable form of official identification is the Brucellosis Vaccination metal tag, an orange metal tag that indicates the animal was calfhood vaccinated for Brucellosis (Bangs Disease). The orange Brucellosis metal tags are only available to federally accredited veterinarians.

On December 31, 2019, USDA will no longer provide free NUES metal tags (Figure 1). However, approved vendors will still be permitted to produce official metal tags for one additional year. Approved vendor tags will be available for purchase on a State-by-State basis as authorized by each State animal health official through December 31, 2020.

Beginning January 1, 2021, USDA will no longer approve vendor production of metal ear tags with the official USDA shield. Accredited veterinarians and/or producers can no longer apply metal ear tags for official identification and must start using only Official RFID tags.

As of January 1, 2023, RFID ear tags (Figure 2) will be required for beef and dairy cattle and bison moving interstate that are included in the specific categories of cattle required to have individual identification. Animals previously tagged with metal ear tags will have to be retagged with RFID ear tags in order to move interstate. Bear in mind that there are AIN 840 visual panel tags without RFID technology that will not be accepted. Feeder cattle and animals moving directly to slaughter are not subject to the RFID requirements.

How to Obtain Official RFID Ear Tags:

Producers may acquire official tags from local or online retailers, certain accredited veterinarians or directly from tag manufacturers. Approved manufacturers are allocated the 840 numbers through the Animal Identification Management System (AIMS) and are authorized to imprint these numbers on their approved “devices” (tags). The manufacturers then distribute the tags through “AIN device managers” to producers, resellers and accredited veterinarians. A producer must have a premise identification number (PIN) to purchase official ID tags. USDA has an interactive map that helps direct producers to state-specific resources for obtaining a PIN: [https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/traceability/state-](https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/traceability/state-pin/)



Figure 2: Examples of Official 840 Animal Identification Number (AIN) RFID Tags

[pin/](https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/traceability/state-pin/)

In order for the traceability system to work with the RFID tags, a robust tag distribution record must be in place. USDA created “AIN Device Managers” to handle this task. AIN device managers may be any person or entity, such as a feed store, farm equipment supplier, producer organization, online retailer, accredited veterinarian, etc., willing to do the following:

1. Distribute AIN devices (tags) only to a premises or entity that has either a Location Identification (LID) number, a Premises Identification Number (PIN) or Nonproducer Participant Number (NPN) and validate the accuracy of the LID, PIN, or NPN before distributing the AIN device;
2. Maintain a record of inventoried AIN devices received from the AIN device manufacturer and have such records available to USDA upon request;
3. Submit all AIN device distribution records to the AIMS in accordance with prescribed protocols;
4. Educate producers receiving AIN devices on the proper use of official animal identification devices.

There is no application to submit to USDA; rather, the tag manufacturer establishes an “AIN device manager relationship” with the person or entity which is then recorded on the web-based Animal Identification Management System (AIMS). Detailed instructions on how to become an authorized tag manager are available at: <https://www.aphis.usda.gov/traceability/downloads/how-to-become-an-ain-device-manager.pdf>.

All distribution records of 840 tags must be reported to the AIMS by the AIN device manager when the tags move to the next individual, whether it is a producer or another reseller. The record includes the official tag numbers, date of distribution, and PIN, LID, or NPN where the devices were distributed. Producers should not sell, loan, or give tags away they have purchased to other producers, because all AIN tags they have purchased are recorded as being distributed to them using the location identification system used by their State.

It is unlawful to remove official ID but, in some cases, tags must be replaced. In case of a lost tag, a replacement tag with a different official identification number may be applied. However, the person applying the new tag must record the new tag number, the date applied, and the old official number (if known) and maintain the information for 5 years. Other situations where the state veterinarian may authorize replacement include deterioration of the tag, infection at tagging site in the ear, malfunction of the

RFID electronic component, or incompatibility of the electronic component of an RFID device with the technology of the management system.

Duplicate official identification ear tags may only be obtained from approved manufacturers by an organization authorized (e.g., breed registries or genetic companies) to order reissued tags when an official ear tag is lost and the owner or person responsible for the animal needs to retag the animal with the official identification number of the lost ear tag.

WARNING WHEN PURCHASING TAGS:

Beginning March 11, 2015, APHIS began recognizing only AINs beginning with numeric country codes (“840” for the United States) as defined by ISO 3166 as official. **Tags containing numbers with the prefix “USA” or a numeric manufacturer code (see Figure 4) assigned by the International Committee for Animal Recording (ICAR) are not considered official identification unless applied to animals prior to March 11, 2015. However, these tags are still available for purchase and, in many cases, cannot be returned or exchanged for the correct tags.**

What must be on an official ear tag?

USDA Official Eartags (Figure 3) are designed for one-time use (tamper evident) and imprinted with:

- A unique animal identification number or “AIN” which is a 15-digit number starting with 840;
- Official Ear tag Shield
- The words “Unlawful to Remove”;
- Manufacturer’s Logo or Trademark (printed or impression of)
- Tags with RFID technology (referred to as AIN RF tags) must have all 15 digits of the AIN printed on the tag pieces that contains the transponder. The Official Ear tag Shield and text, “Unlawful to Remove” must be printed on the other piece.
- AIN RF tags, when applied, are to be attached to the animal’s left ear according to the manufacturer’s instructions.



Figure 3: Example of an



Why is traceability important? The specific characteristics of a disease lead to differences in the way they are investigated. Knowing the history of the location of the diseased animal is critical when dealing with a highly contagious pathogen, in particular its prior contacts with other animals. Complete information can help animal health officials narrow down the number of herds tested. However, when information is limited or vague, the testing of herds is expanded to ensure all possible herds are included. If the herd owner cannot be located for an animal of concern, the herds of all potential suppliers of the subject animal must be tested. Numbers of animals needing to be tested can rapidly multiply as all potential sources are considered. Time is also a critical factor in a disease investigation. The more time it takes, the more herds and animals may become infected or exposed, the more man-hours are needed to respond. Without traceability, the industry could potentially experience the loss or delay of sales and potential market share.

In summary, a good rule of thumb to remember is adult breeding cattle, all dairy cattle, and animals used for recreation or exhibition that are moved interstate warrant inspection which must be documented on an interstate certificate of veterinary inspection (ICVI or “health certificate”) along with their official individual identification. These animals are considered at higher risk for exposure and transmission of disease because of their contact with other livestock and their longevity. Younger beef animals (under 18 months of age), steers and spayed heifers, and animals moving directly to slaughter have less stringent regulations because they have short lifespans and few movements. Work with your federally accredited veterinarian if you will be moving any cattle interstate as he or she will know what is needed for legal transportation. Additionally, many states (including Kentucky), require official identification and health certificates for animals in shows and sales within the state’s borders. This contact with a veterinarian must be made in a timely manner in order to complete all testing and paperwork required before the animals are scheduled to leave the farm.

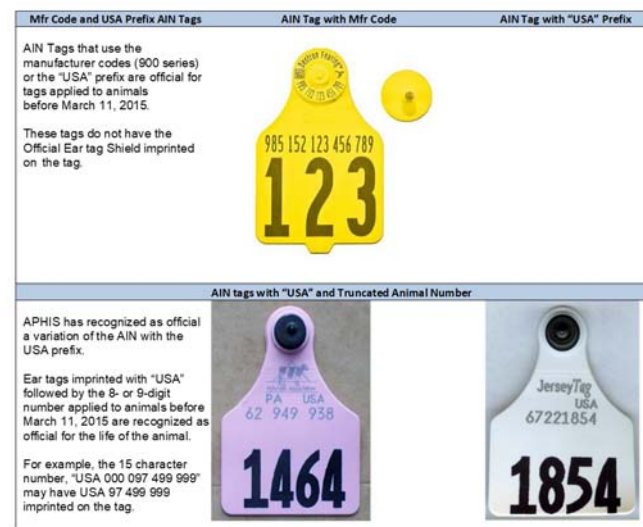


Figure 4: Examples of tags no longer recognized as “official” unless applied before March 11, 2015.

Additional Information:

Animal Disease Traceability-General Standards (July 2019-Version 2.8):

<https://www.aphis.usda.gov/traceability/downloads/adt-standards.pdf>

Animal Disease Traceability USDA Website:

https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/SA_Traceability

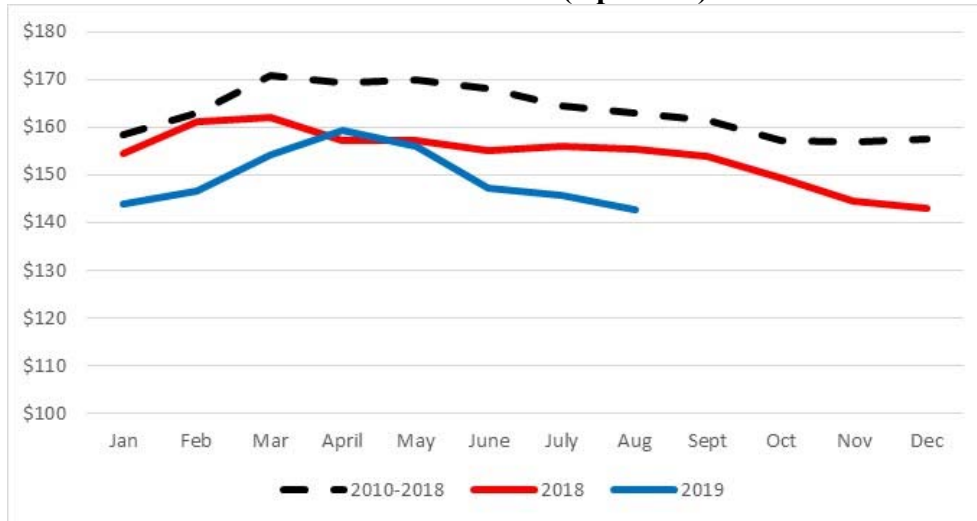
Kentucky Beef Cattle Market Update

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

Given the sharp decline in the futures market since late July, which only got worse after the Tyson fire, heavy feeder cattle prices in Kentucky have held up reasonably well. Groups of 8wt steers have generally been in the low-mid \$130’s, which is about par with the board. Late summer / early fall is typically associated with strong basis, but basis does tend to weaken as we move towards winter.

While it’s still a little early for large calf runs, they do seem to be feeling the market impacts more heavily. Calf prices typically decrease from spring to fall, but 550 lb steer calves averaged \$142.69 per cwt for the month of August. This was down more than \$16 per cwt from their April highs and more than \$12 per cwt from August 2018. Things appear to be setting up for another challenging year for cow-calf operators selling calves this fall. Calf prices typically decline another \$5-\$10 per cwt from August into the fall months. Increasingly dry conditions also aren’t helping as many operations are starting to feed some hay already. If this weather pattern continues, early calf runs are possible and hay prices are likely to only be higher by winter.

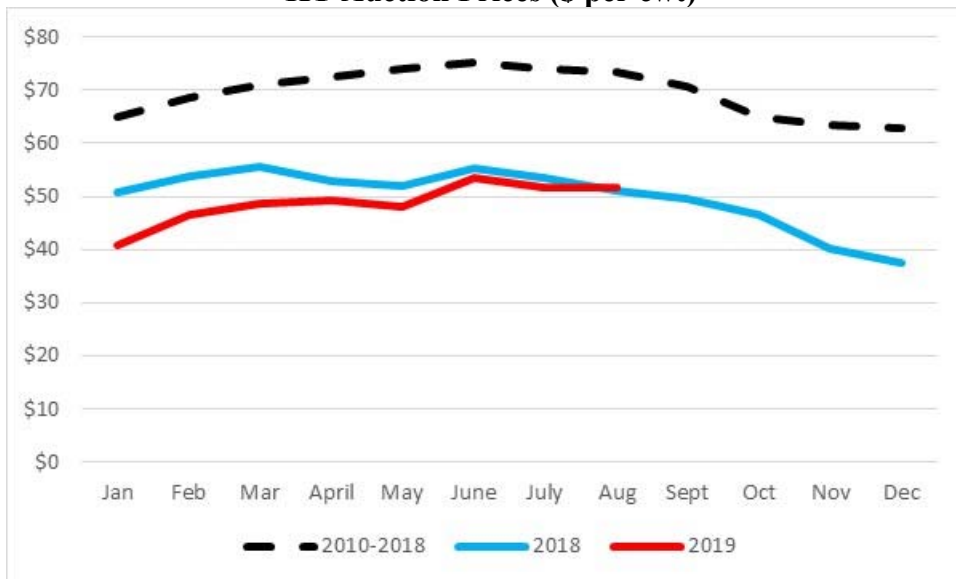
**Figure 1. 550# Medium & Large Frame #1-2 Steers
KY Auction Prices (\$ per cwt)**



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

I have read several things recently about improving cull cow markets. Cull cow prices certainly have improved since winter, but I still struggle with calling an 80-85% boning cow in the low \$50's per cwt a good price. August prices were just about even with year-ago levels but were below levels seen in each of the previous five years. Like calf markets, cull cow prices tend to decline \$5-\$10 per cwt from August to the fall months.

**Figure 2. 80-85% Boning Cows
KY Auction Prices (\$ per cwt)**



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

I summarized the mid-year cattle inventory report last month, which did show a very slight decrease in beef cow numbers. I don't think anybody expects a major decrease in beef cow numbers next year, but it does appear that expansion is over. It is going to take some time for the size of calf crops to decrease significantly and we going to have to deal with increases in pork and poultry production. But this is the first step in seeing some improvement in these calf markets.