

# OFF THE HOOF

**KENTUCKY BEEF CATTLE NEWSLETTER MARCH 1, 2022**



Cooperative Extension Service  
University of Kentucky

**Beef IRM Team**

*Published Monthly by UK Beef IRM Team and edited by Dr. Les Anderson, Beef Extension Specialist, Department of Animal & Food Science, University of Kentucky*

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## Timely Tips

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

### Spring-Calving Cows

- Observe spring-calving cows closely. 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 ear tags 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 that 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.
- Continue grass tetany prevention. Be sure that the mineral mix contains high levels (~15%) of

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.
- 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.
- Prepare bulls for the breeding season. Increase feed if necessary to have bulls in adequate condition for breeding. Obtain Breeding Soundness Evaluation (BSE) on bulls, even if they were checked last breeding season. Only use bulls that pass the BSE.
- Finalize plans for your spring breeding program. Purchase new bulls at least 30 days before the breeding. Order semen now, if using artificial insemination.

### **Fall-Calving Cows**

- Bull(s) should be away from the cows now!
- Plan to pregnancy check cows soon. You can also blood test for pregnancy as early as 30 days after bull removal.
- 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. Be sure that feed bunks are low enough that calves can eat with the cows.
- Calves intended for feeders should be implanted.
- Consider adding weight and selling your fall calves as “heavy” feeder calves. Keep them gaining!

### **General**

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

## **Recent and Upcoming On-line Beef Education Opportunities**

***Beef IRM Team, University of Kentucky***

*UK Beef Management Series*

February 8, 2022      Selenium's Impact on Females Reproduction – Dr. Ben Crites, Director of Beef Market Development, ST Genetics

March 8, 2022

Shooting the Bull: Answering all your beef related questions! – Roundtable discussion with UK Beef Specialists

To access this and other excellent beef educational content, visit our Facebook Page (facebook.com/KyBeefIRM) and/or on the Department of Animal & Food Science YouTube page ([https://www.youtube.com/channel/UCu4t18Zo2E\\_4\\_DBBELPjPMg](https://www.youtube.com/channel/UCu4t18Zo2E_4_DBBELPjPMg)). Subscribe to the AFS YouTube page and click the notifications bell to receive a notification whenever we publish new beef education content. Beef Bits can also be accessed on the podcast website ([https://www.podbean.com/media/share/pb-meqic-e6f8f1?utm\\_campaign=u\\_share\\_ep&utm\\_medium=dlink&utm\\_source=u\\_share](https://www.podbean.com/media/share/pb-meqic-e6f8f1?utm_campaign=u_share_ep&utm_medium=dlink&utm_source=u_share)).

## **Updated Guidelines for CAIP Genetic Improvement Program for Beef**

*Darrh Bullock*

At the beginning of every year, we update the guidelines for the CAIP Genetic Improvement Program. These changes include adjusting the EPD requirements for any breed that has had a change to their genetic evaluation or any other changes that the Kentucky Agriculture Development Board's Program Evaluation Committee decide to implement. This year there were minimal changes to the EPD guidelines with Charolais being the only breed to have changes in their EPD values because of changes to their genetic evaluation. Also, Red Angus was included in the Alternative - Selection Index for the Balanced Trait category. Last year bulls were required to have Genomically Enhanced EPDs, which will continue, but an alternative is that the bull can have an Accuracy value for Calving Ease Direct of .25 or greater (this was lowered by the committee from .30). One last change is there is no longer an upper limit to Weaning Weight for a balanced trait bull (however, the upper limit for Yearly Weight remains). We are still in the process of getting the KY Bull Assessment Tool updated (<https://afs.ca.uky.edu/beef/KBAT>) but hope that will be completed this week. Also, as of this post the new materials are not up on the KDA website, yet, but should be soon. To get the latest updates to the EPD guidelines please go to: <https://afs.ca.uky.edu/beef/publications/breeding-management> and click on the "Beef Sire Selection for Cattle Genetic Improvement Program - CAIP EPD Guidelines for Bulls" link.

## **X10D: A New Era of Connectivity for the Beef Industry**

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

Remember trying to find a remote location "back in the day"? To find a remote town in an unfamiliar place required work. First, we would likely ask our friends and neighbors if they knew of the place and could write down directions. The accuracy and dependability of these directions were quite variable. But it was cheap and obtaining the directions was easy. Sometimes, perhaps, we found a Road Atlas. For the younger generations, this was a hardcopy book or pamphlet that had the names of towns and the roads connecting them. Normally very accurate but not always simple to use and cost a few dollars. Then the journey began. Maybe you could drive right there but most often wrong turns and maybe even stopping to ask for directions. A few times.

But technology has really changed our ability to navigate the world. Today, type an address in your phone, leave the sound on, and you will get turn by turn navigation to your goal. If you want to eat, type in “restaurant near me” and you will get a ton of choices. And directions to get there!

It struck me the other day that the beef industry is similar in some ways to navigation. Most beef producers have goals, targets for their enterprise. Even though the lifestyle is likely the biggest draw to raising cattle, I think many producers would like to profit. But their path to profitability is like navigation from “back in the day”. According to the USDA, nearly 100% of cattle producers say they take records but only 3% use electronic methods for data collection and management. I know a lot of producers and I think these numbers are pretty accurate. Most write things down, but few write everything down. We get weaning weights, sometimes, cow weights occasionally. Maybe vaccination dates. Seems like we are trying to reach a destination with handwritten directions to the beginning of the trip, but the last few turns are left out!

In 2014 the KADB funded the UK Farm Program, a cooperative effort of UK Beef Extension and Kentucky Beef Network. This program was designed to provide participants with modern beef practices, demonstrate their adoption into these farms, and then document the outcomes. Since we had as many as 147 farms in this program at one time, we needed a tool to help us with data collection and management. We found several options in the industry but, frankly, they were all too expensive and far too complicated. So, we decided to make our own.

Thanks again to the KADB, we received funding to develop new program to help cattle producers “navigate” to higher revenue and profits. This new app is X10D (pronounced “extend”). X10D is a cloud-based web/app interface and can be used on any device (iOS, Android, PC). X10D is designed to conveniently connect cattle producers with the information they need for their operation to grow and thrive. X10D has three major components; Learn, Connect, Manage.

The Learn component is the users connection to the Cooperative Extension Service. Educational content will be pushed to the system and available to users on any device in a fast, simple, convenient, searchable format. State and local events will be publicized, and all users will have access to unbiased information from a trusted source. It will take some time to populate the database with educational content, but it will be worth the wait. The Connect component is an exclusive social media feed designed strictly for beef cattle producers, agribusinesses, extension professionals, and veterinarians in each county. Users can post questions, events, comments, sale items, or items for purchase to other users in their county. Both components connect users with information.

The Manage component helps users collect and manage data from their beef cattle operations. Depending upon the size of your herd, setup will take a little time. Typically, it takes about 1-2 hours to input the animals in a normal 30 cow herd. Once your herd is in the system, collection and reporting are incredibly easy. Data input and recording is simple with most inputs requiring fewer than 10 button pushes and takes less than 30 seconds to enter. Reports are even easier as most can be obtained in fewer than 4 button pushes and less than 20 seconds. Imagine spending less than 1 minute a day recording your management data and yet having all that data available anytime, anywhere, on any device.

If interested, you can go to the website, [x10d.org](http://x10d.org), and signup for the PC version. The app will be available for use on Android devices within the next 7 days by going to Google Play. The iOS version

(Apple) won't be available for another 10 days or so from today. We highly recommend calling your local ANR Agent. Many counties have promo codes for free use to the app. Even if a promo code is not available, X10D only cost \$20 per year per farm, less than one trip for your family to a local fast food restaurant. Revenues collected will be used for maintenance and upgrades to the system. Any additional funds will flow through the Animal & Food Science Department at UK and used for beef extension programming.

Fast, convenient access to information can put the world at your fingertips. The beef industry has lagged behind but no longer. Give X10D a try. We are confident you will see a difference.

## Expanding your Herd? Frequently Asked Questions about Johne's Disease and How to Keep it Off the Farm

### *What is Johne's Disease?*

Johne's (pronounced *Yo-knees*) Disease is a slow, progressive disease of profuse, watery diarrhea and weight loss or "wasting" in adult cattle (Figure 1) caused by the bacterium *Mycobacterium avium* subsp. *paratuberculosis*, also known as "MAP". This disease begins when calves (not adult cattle) are infected with MAP-contaminated colostrum, milk, feed, or water, most often around the time of birth. Once MAP enters a calf, the organism lives permanently within the cells of the large intestine where it multiplies and causes the intestinal lining to slowly thicken. Over years of time, the thickened intestine loses the ability to absorb nutrients, resulting in watery diarrhea and weight loss despite continuing to eat well. There is no blood or mucus in the feces, no straining, and no fever. These symptoms do not show up in adult cattle until 2-5 years of age or even older. There is no treatment available, and the animal eventually dies due to starvation and dehydration.



*Figure 1: Recently calved cow with signs of Johne's disease; dull hair coat, profuse watery diarrhea, and weight loss. Photo from "Management and Control of Johne's Disease in Beef Sucker Herds" by Drs. Isabelle Truylers and Amy Jennings. In Practice July/August 2016/Volume 38, page 348.*

### *Why should a commercial beef producer care if they have Johne's Disease in the herd?*

Economically, Johne's disease can be costly in a beef operation. It is believed that for every clinical (sick) cow with Johne's in a herd, there may be 10-20 more who are infected but not yet showing signs. Obviously, death loss and premature culling will mean higher replacement costs to keep herd numbers stable. Perhaps less obvious is that MAP-infected cows showing no signs of disease are less fertile and produce less milk, resulting in lighter calves at weaning and more open cows at pregnancy check.

***Why worry about buying Johne's Disease? No beef producer in his or her right mind would buy a cow or bull with diarrhea and weight loss to add to their own herd!***

Very true but the infection can be spread long before diarrhea and weight loss begin. In a typical case, an infected cow starts shedding the MAP bacteria in her manure after delivering her first calf, but she doesn't develop diarrhea until after her third calf, resulting in 2 years of "silent" disease spread. In almost all cases, the MAP bacteria arrive on the farm when an infected but healthy-looking animal is purchased and added to the herd. The bacteria can be hiding in replacement heifers, cows, breeding bulls, recipients used for embryo transfer, or even in an infected calf purchased to graft on a cow. It is easy to buy (and sell) infected, young breeding age animals with no obvious symptoms even though they are already incubating and spreading the disease. These infected animals will shed the MAP organism in increasing numbers as the disease progresses, contaminating the farm environment and increasing the risk of infection spread within the herd. Unfortunately, infected animals will often test negative when young and may not have a positive blood test until they reach 3-5 years old.

***How do calves get infected with MAP bacteria?***

Johne's infection is mainly caused by calves ingesting MAP-contaminated manure when nursing dirty teats. Most infections (75+%) occur around the time of birth up to 6 months of age but very rarely after 12 months. In beef cattle, mud and manure are frequently splashed on the udder when calving cows in dirty sheds or barns, in high traffic areas (around hay rings, feeding areas) or when cattle are held in close confinement. MAP is also shed in colostrum and milk of infected cattle. There is great opportunity for transmission thru colostrum and milk in beef calves since they remain with dams 6-7 months or more and many calves steal extra milk from cows other than their own dams. Colostrum from other herds, especially from dairies, is another potential source of MAP. There can be MAP transmission from an infected cow to her fetus during pregnancy, but this rarely occurs unless the dam has already developed diarrhea. Infected bulls can contaminate the environment with their MAP-infected feces. To date, transmission by bulls through infected semen has not been proven.

Diagnosing a clinical case: Does this animal exhibiting weight loss and diarrhea have Johne's disease? Options for testing individual cattle:

- Best test if animal is dead or near death: Submission of a dead animal to a veterinary diagnostic laboratory. The affected animal should be humanely euthanized then promptly taken to the lab for a necropsy. Histopathology (with special staining) on necropsy-collected tissue is definitive confirmation of Johne's.
- Best test in a live animal: If this is the first suspected case of Johne's disease in the herd, PCR on a fecal sample is the best primary diagnostic test to confirm the disease. PCR is an "organism detection test" meaning it detects the DNA of the MAP bacteria in the feces. The PCR result is very accurate and also a good indicator of the amount of MAP being shed in the feces (see Figure 2). If the PCR is positive, the first question to consider is was this infected animal born and raised in this herd? If the answer is yes, there are likely to be other infected animals in the herd.
- The blood test (known as a "Serum ELISA") is an "antibody detection test". It is not the preferred test for confirmation of an individual clinical case but can be used if the herd is already known to be Johne's-infected. The test is not perfect; cattle with Johne's disease can test

negative on serum. However, the blood test is considered a good herd screening test for MAP antibodies and positives should be confirmed with PCR.

Specimen	Test Name	Result	Ct Value
No ID - Mammalian - Bovidae - Bovine - Angus - Female - Adult			
Small intestine - Scraping - 9	Mycobacterium paratuberculosis (Real Time PCR) - 10/25/2018 1:39 PM	POSITIVE	17.50

Mycobacterium paratuberculosis(Real Time PCR):  
 Cycle Threshold (Ct) provides an estimate of the amount of M. avium subsp. paratuberculosis (MAP) DNA in the fecal material. Generally the lower the number, the more DNA in the fecal material. MAP DNA can then be correlated to the number of organisms shed in the fecal material.

General guidelines per USDA are as follows:  
 <25 Ct = Very Heavy Fecal Shedder  
 <30 Ct = Heavy Fecal Shedder  
 <33 Ct = Moderate Fecal Shedder  
 <36 Ct = Light Fecal Shedder  
 <40 Ct = Suspect Fecal Shedder - DNA was detected, but at a low level. Without epidemiological information, correlation to fecal culture is not consistent.

Figure 2: Sample result from a *Mycobacterium paratuberculosis* real time PCR test for detection of the MAP organism (UKVDL)

### ***Once a diagnosis of Johne’s Disease is made, what are the next steps?***

Once a diagnosis is made, the next steps depend on the type of beef operation involved. For registered herds selling seed stock, the goal should be to classify as test-negative or work towards it as quickly as possible. Farms that sell any breeding stock should enter a rigorous testing program using fecal PCR to eradicate this disease once identified. Many producers are reluctant to test for Johne’s Disease for fear that a positive diagnosis will ruin their reputation. However, a seed stock herd’s reputation may be damaged much more severely by selling a MAP-infected animal to a customer and introducing a contagious, incurable disease into a buyer’s herd. Commercial operations, on the other hand, may opt to reduce the disease prevalence gradually through blood testing and herd management changes to improve hygiene, especially during calving.

After the goal is established, decisions on which animals to test and what test to use will depend on the answers to the following questions. What management changes will be made based on test results? Will positive animals be culled or will test positive, and test negative herds be established based on results? How much money will be allocated for testing? How quickly is progress needed towards goals? Remember that herd testing is done on healthy animals over multiple years so decisions should be made in advance on how positive results will be handled. It takes at least 5 years of consistently following a written plan to control this disease. If no management changes will be instituted, then testing is a waste of time and money.

### ***How does a producer avoid buying MAP-infected cattle?***

The safest option is to have a “closed” herd with no purchased animals. If this is not possible, the next best option is to buy from low-risk herds with Johne’s test results available within the last year. Since low-risk beef herds are uncommon, a good rule of thumb is to purchase animals from as few different herds as possible and test them prior to mixing with the home herd. Remember that infected cattle, especially young cattle under 3 years of age, may test negative although they are actually positive. Purchased animals should test negative at least 3 years in a row (begin testing no younger than 2 years old) before calling them “negative” or “low risk”. The number of cattle purchased is not as important as the number of herds these animals came from. However, buying randomly sourced cattle from random herds is not a question of if, but when, your herd will become MAP-infected.

Where can someone learn more about Johne’s Disease?

First and foremost, talk with your veterinarian about detection and prevention strategies tailored for your specific operation. The Johne’s Information Center at the University of Wisconsin maintains an excellent website full of information at <https://johnes.org>.

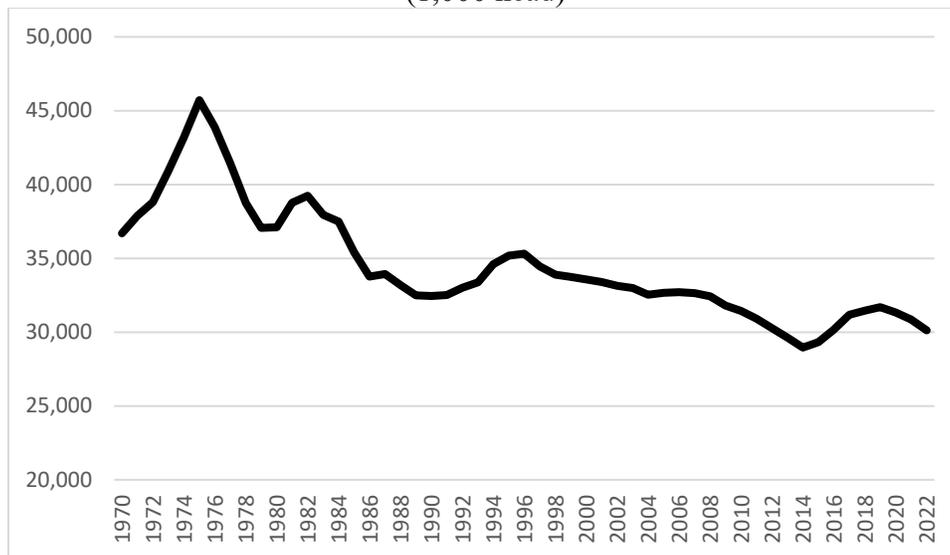
## Beef Cattle Numbers Continue to Decline

*Dr. Kenny Burdine, Extension Professor, Livestock Marketing, University of Kentucky*

USDA-NASS released their January 1, 2022, cattle inventory estimates on January 31<sup>st</sup>. Beef cow slaughter was significantly higher in 2021, so expectations were for continued contraction of cattle inventory. The USDA report confirmed that and provided some perspective on the magnitude of these decreases. Total cattle and calves were down by 2%, which was a slightly larger decrease than pre-report estimates. As an economist in a predominantly feeder cattle state, I tend to pay more attention to the number of beef cows in the US, which was down by about 2% as well.

An important note to the report was that the January 1, 2021, beef cow inventory estimate was revised downward by over 300 thousand cows, which is about 1%. Perhaps a better way to put beef cow numbers in perspective is to consider the total change in beef cow inventory over the last three years. From the recent high in 2019, beef cow inventory is down by more than 1.5 million head, which is about 5% of the total cowherd. Put simply, calf crops are getting smaller and will continue to do so in the coming year, which is bullish for feeder cattle markets. The following chart plots US beef cow inventory going back to 1970.

**January 1 US Beef Cow Inventory (1970 to 2022)**  
(1,000 head)



Source: USDA-NASS and Livestock Marketing Information Center

Heifer retention is also important as it provides some perspective on future trends in beef cow inventory. January heifer retention estimates were down by more than 191 thousand from 2021, which is about 3%. This suggests continued contraction is likely during 2022. Of course, weather will play a key role as well.

The Kentucky estimates were also interesting, and many people had commented to me on how many cows had moved through auctions last year. USDA estimated a decrease in Kentucky beef cow numbers of 0.7% during 2021. There was also a slight decrease in the January 2021 beef cow inventory estimate. I would not have been surprised if the beef cow inventory was even lower in Kentucky, but this does put the cowherd in the Commonwealth at the smallest level seen since 1968. Heifer retention was also estimated to be down by more than 7% in our state.

The cattle on feed estimate from this report is also worth discussion and stands out a bit as it shows a slight increase from last January. For perspective, I would point back to the January Cattle on Feed report, which reflects on-feed inventories at feedyards with one-time capacity over 1,000 head. First, heifers on feed were higher in that report, which is consistent with fewer heifers being held for replacement and continues to point to a decreasing cow herd going forward. More females are moving into the beef system. Secondly, and probably most significantly, December placements were up 6% in 2021. But the largest increases were in the lower placement weight categories, which suggests they may be more a function of dry conditions in the Southern Plains forcing producers to move cattle out of wheat grazing programs. If this is the case, those are cattle that would have been placed on feed this spring, so it speaks more to the timing of their placement, than total cattle supply.

The USDA report is summarized in the table below and the full report can be accessed at:

<https://downloads.usda.library.cornell.edu/usda-esmis/files/h702q636h/pn89f870n/jw828f69f/catl0122.pdf>

#### USDA January 1, 2022 Cattle Inventory Estimates

	<b>2021 (1,000 head)</b>	<b>2022 (1,000 head)</b>	<b>2022 as % of 2021</b>
<b>All Cattle and Calves</b>	93,789.5	91,901.6	98
<b>Cows and Heifers That Have Calved</b>	40,286.0	39,500.1	98
<b>Beef Cows</b>	30,843.6	30,125.1	98
<b>Milk Cows</b>	9,442.4	9,375.0	99
<b>Heifers 500 Pounds and Over</b>	20,200.1	19,776.0	98
<b>For Beef Cow Replacement</b>	5,803.1	5,611.5	97
<b>For Milk Cow Replacement</b>	4,608.5	4,450.6	97
<b>Other Heifers</b>	9,788.5	9,713.9	99
<b>Steers 500 Pounds and Over</b>	16,787.8	16,579.7	99
<b>Bulls 500 Pounds and Over</b>	2,210.5	2,109.6	95
<b>Calves Under 500 Pounds</b>	14,305.1	13,936.2	97
<b>Cattle on Feed</b>	14,667.4	14,692.6	100
	<b>2020 (1,000 head)</b>	<b>2021 (1,000 head)</b>	<b>2021 as % of 2020</b>
<b>Calf Crop</b>	35,495.5	35,085.4	99

Source: NASS, USDA

## **Six Things to Consider When Developing a Price Risk Management Strategy**

*Dr. Kenny Burdine, Extension Professor, Livestock Marketing, University of Kentucky*

Over time, I have probably done more programs focused on price risk management than any other cattle marketing topic. This article will not be focused on specific risk management tools and how they work, but rather will focus on some overarching considerations as cattle producers look at ways to manage price risk. Some of these are based on generally accepted strategies, while others are things that I felt important to share based on my experience working with producers. I often share some of these ideas at the conclusion of my risk management programs but wanted to briefly walk through a few of them for this article. While they are in no order, these are some things that I think producers should understand as they develop their risk management plans. I also think the timing is good as the market is currently offering feeder cattle pricing opportunities that we have not seen in quite some time.

### **Know what risk management tools are available**

For the first 10 years of my career, my price risk management extension programs were almost always focused on futures and options strategies. I would also briefly cover forward contracts, although they tend to be used on a limited basis in Kentucky. As internet sales became more common, I was able to discuss using internet sales with delayed delivery. Over the last 15 years, I have been able to also discuss Livestock Risk Protection (LRP) Insurance, which opened the door for smaller scale operators to better manage price risk. And recently increased subsidy levels have made LRP much more attractive. There are a lot more price risk management tools available than there used to be, and producers need to be familiar with what is available to them. Regardless of the strategy or tool that is used, downside price risk needs to be a consideration in every producer's marketing plan.

### **Know how changes in sale price impact profit**

Producers need to fully understand the impact that changes in sale price can have on profitability. This may be best illustrated through a backgrounding or stocker illustration. Let's just say for the sake of argument that after purchasing calves, incurring all expenses, and using futures to estimate an expected sale price, return per head was expected to be \$120 per cwt. If the expected sale weight on the cattle were 800 lbs, a drop in expected sale price of \$0.15 per lb results in profit going to zero. If the last several years have taught us anything, we have learned that this level of market fluctuation is absolutely possible. This speaks to the importance of doing something to manage that downside price risk. Once those cattle are placed, it is unlikely that anything will have more impact on return than what they eventually sell for.

### **Fully understand the strategy being used**

Price risk management strategies range from very simple to very complex. But whichever strategy that a producer employs, they need to fully understand its mechanics and potential outcomes. As an example, I have been contracted more than once by a producer asking me how they were getting margin calls after purchasing a put option. After looking over their paperwork, they had actually purchased a put option and simultaneously written (sold) a call option. They were unaware that the written call was a marginable position, and they would be losing money on the call as the market moved upward. This strategy is commonly called "fence" in cattle price risk management. To be clear, there is nothing wrong with this strategy and I teach it in my advanced price risk management programs. But these producers did not fully understand the strategy they were utilizing. There is nothing wrong with simple strategies

and producers may need to start simple and increase the complexity of their risk management strategies as they become more comfortable over time.

### **Manage the downside first, then worry about the upside**

Most risk management strategies involve tradeoffs. Forward contracts and short futures positions trade most all upside price potential to eliminate downside price risk. The exception to this is basis risk, which still exists with futures positions. Strategies like put options, synthetic puts and LRP insurance require payment of premium, which becomes an additional cost. But these strategies have the advantage of providing some downside protection, while also allowing for upside potential. For the most part, I do like strategies that allow for upside gains as we have seen some crazy volatility over the last several years. However, I typically tell folks to make sure the downside is adequately covered before worrying about upside potential.

### **Set pricing targets ahead of time**

It is nearly impossible to make risk management decisions in real-time as our minds start to play tricks on us. Take for example a backgrounder that places calves in the fall to feed through winter. Then, during the first month or so after placement, the market runs up considerably and expected profit doubles. He / she may really want to take advantage of the higher price expectation, but the market is moving very quickly. And human nature has them questioning how much higher the market might go. They don't want to lock in a price, only to see the market continue its rally. This often leads to inaction and sometimes that pricing opportunity gets away. For this reason, if a producer does not want to implement a pricing strategy at placement, I suggest having predefined targets and automatically moving on them when they become available. This might be a certain forward contract price level or an attractive premium for a specific option or LRP coverage level. By setting these targets ahead of time, much of the real-time human nature hesitations are removed.

### **Don't look back once a decision is made**

When I talk about this during in-person extension programs, I jokingly say "reach up and rip the rear-view mirror off the windshield." The point is that it is impossible to manage risk looking backwards. Risk management is about planning and looking forward. If you do a good job managing price risk, you will occasionally jump on a market too soon and price cattle well below what would have been possible. This is frustrating for anyone as it feels like money was left on the table. But there will also be times when you prevent a significant loss by jumping on an opportunity that was attractive at the time. Risk management is not about maximizing price, it's about managing downside risk. I like to say that if you aren't leaving some money on the table occasionally, you are probably taking on too much risk.