



Cooperative Extension Service University of Kentucky

Beef IRM Team

KENTUCKY BEEF CATTLE NEWSLETTER APRIL 3, 2020

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

Contents

This month's newsletter includes:

Kentucky Beef IRM Social Media – VanValin
Remote Bull Buying – Bullock
Three Good Reasons for Early Castration of Bull Calves – Laurent
The US Meat Supply During the Pandemic – Rentfrow
UK Fundamentals of Herd Health: Vaccinations for the Cow-Calf Operation – Arnold
Understanding Soil Mechanics to Improve Beef Cattle Winter-Feeding Areas – Higgins and Hayes
Kentucky Beef Cattle Market Update - Burdine

Kentucky Beef IRM Social Media

Katie VanValin, PhD, Beef Extension Specialist, University of Kentucky

Although we are more isolated more than we have ever been, our extension team is working hard to stay as connected as ever to our clientele. We recognize the challenges facing every single community in our Commonwealth and we want to make sure we are as accessible as we can be while ensuring everyone's health and safety!

To help us in this effort, we have expanded our social media outlets, and are working on developing timely content, so please give us a like or a follow!

• Facebook, Instagram, Twitter: KyBeefIRM

We look forward to the days when we can come out to your farms and into your county offices and greet you with a smile and a handshake, but for now we will continue to work creatively to continue to serve you!

Remote Bull Buying

Darrh Bullock, Ph.D., Extension Professor, Beef Genetics Specialist, University of Kentucky

During this time of social distancing you may want to consider alternate means for securing your bull if you haven't already taken care of it. Bull buying is often a very social event including things like auctions, open houses or on-farm visits. All of these events require, and actually encourage, close interactions with others. Well if you haven't heard, now is not the time to be doing these things!

Many seedstock producers are already using the internet to help market their bulls and this crisis will likely push many more in that direction. If you are in the seedstock business and you do not have a website I would strongly encourage you to get one established. Now is a great opportunity, your kids/grandkids are home from school, and this would be a good way to keep them occupied and benefit your business. Social media is also a good mechanism to get your message out, once again, consult the young folks, if needed.

Trying to sell bulls via the internet or social media should be very similar to how you normally sell bulls; provide your customers with the information they need. This will include performance information, hopefully in the form of EPDs and indexes, and a way to visually evaluate the bulls. Of course, the best way to show off your stock is with good video footage, but having some still photos could be helpful, too. It is also important to clearly state your policies, such as returns, exchanges, etc. Now may be the time to be more flexible with some of these policies; customers are likely going to be much more willing to buy a bull without seeing him in person if they feel comfortable, they can exchange him if he is not what they expected.

For bull buyers, this may be a way to expand the population of bulls you are considering as replacements. Most farmers likely attend no more than two or three sales to buy their bull, but by shopping online your selection options are greatly expanded. I encourage you to buy bulls online the same way we advise in person; identify the bulls you are interested in based on their performance information (EPDs, Indexes) and then evaluate them visually via videos and still photographs. One thing to be aware of is that disposition is going to be difficult to evaluate. This is one area you need to discuss with the seller to ensure the bull has good temperament.

We are in unprecedented times and everyone is having to adapt to new ways of conducting business. Although buying bulls from a distance may not be your first choice, technology has provided us with a viable means to stay safe while accomplishing this task. Who knows, you may find you like this method of bull shopping.

Three Good Reasons for Early Castration of Bull Calves Kevin Laurent – Beef Extension Specialist, University of Kentucky

These are challenging times market wise and it is easy to dwell on the negative and become complacent in our management. But in times like these we really need to explore every avenue to add value to our calves. If you watch the weekly market reports, you notice that we still have a significant number of intact bull calves being sold. Some producers choose to leave bulls intact until weaning to increase weaning weights. Bulls will be 5-15% heavier at weaning. However, chasing pounds in this manner comes at a discount.

Following are three good reasons to castrate bull calves early in life.

- 1. It's the right thing to do. Research trials have shown time and time again that the earlier calves are castrated the better. Early castration is associated with less pain, stress and trauma. In fact, research has shown that calves castrated from 1-7 days old showed very few behaviors associated with pain and their plasma cortisol levels were essentially the same as the calves left intact. Ask yourself. Would you be comfortable inviting your non-agricultural friends out to watch the castration of 500 lb. bulls? I know I wouldn't. Here is a link to an excellent article on this subject by Dr. Michele Arnold that appeared in Drovers Journal in 2011. https://www.drovers.com/article/why-early-castration-bull-calves-important
- 2. Avoid the bull discount. Dr. Kenny Burdine has made price data comparisons for 550 pound bulls and steers since 2010. Over the last ten years, the average discount for 550 pound bulls was -

\$11.20/cwt. or roughly \$62/head. In today's market, a discount that large could be the difference between profit and loss. A 2018 article in Drovers Journal by Dr. Burdine explores the economics of bulls vs steers in more detail https://www.drovers.com/article/value-selling-steer-calves-vs-bull-calves

3. Keep them gaining. It is well documented that late castration results in depressed weight gains and an increase in sickness. Calves castrated at weaning or on arrival to backgrounding operations can see a reduction in weight gain of a half a pound or more per day. This reduced performance usually lasts for 2-4 weeks post castration and these calves are twice as likely to get sick. Real-life examples of this was observed this past fall in our PVAP-Precondition projects. Producers who castrated at weaning saw heifers outgain steers during the precondition feeding period. Research data has proven definitively that calves castrated at less than 90 days of age and implanted will weigh the same at weaning. So, a \$2 dollar investment and a little time will not only return that extra \$60 per head at weaning, but also set that calf up for efficient postweaning gains during the precondition or backgrounding period.

There is still ample time this spring to get those calves castrated before fly season and hot weather arrives. We have all heard the old cliché: "Somebody's got to do it, might as well be you". Well, I'll change that statement slightly. If the calf was born on your farm: "It Needs to be You".

The US Meat Supply during the Pandemic

Dr. Gregg Rentfrow, Ph.D., Associate Extension Professor - Meat Science

Life has changed drastically in the last few weeks. Restaurants, gyms, bars, and shopping malls have closed, and only essential businesses are open as we try to social distance ourselves to slow the spread of COVID-19. We go to the grocery store only to see bare shelves and empty meat cases. Some are questioning our food and meat supply as well as the safety of these items. Rest assured, what we are witnessing is panic buying and stockpiling. Simply, people are buying more and this is not an indication of shortages in the meat/food supply chain.

Farming and meat processing are essential. Recently the North American Meat Institute (NAMI) reported a sharp increase in meat sales, which is evident at local grocery stores. When COVID-19 began to spread globally, the meats industry with help from NAMI began to prepare for the increased demand. Furthermore, the USDA-Food Safety Inspection Service (FSIS) continues to actively inspect both large meat processors as well as our local, small family-owned processors. There are no national meat/food shortages, only certain items may not always be available.

Food safety has been a major concern in the meats industry over the last 30 years. However, during this pandemic some consumers are asking questions related to the transmission of COVID-19 through meat/food. According to the FDA, there is no evidence that COVID-19 can be transmitted through food or packaging. It is important to note that COVID-19 causes respiratory illness and is spread via personal contact; unlike other pathogens associated with foodborne illness that cause gastrointestinal illness. Meat processing facilities are cleaned and sanitized daily as well as the workers wear protective equipment to help prevent contamination.

These are trying times and people are scared, but the meat/food supply chain is intact and there are no shortages predicted. Furthermore, the meats industry has been laser focused on food safety and nothing has changed during this pandemic. Remember to maintain traditional buying habits and social distance when shopping.

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

Dr. Michelle Arnold, UK Veterinary Diagnostic Laboratory

One of the most common questions in cow/calf production is what vaccines are necessary on an annual basis in Kentucky to keep the herd healthy. The guidelines below are designed to help answer that question but the details of what products to use and when to administer them are best decided by the producer and his or her veterinarian. Every farm is different with regards to the disease risk and the challenges of labor and facilities needed to work the cattle. Your veterinarian is equipped with the knowledge and skills to determine what will work best for your unique situation.

Consult your veterinarian before instituting any health protocol.

Remember: "Vaccination" (drawing up the vaccine in a syringe and injecting it into the animal) is not the same as "immunization" (the animal mounts an immune response) and "vaccination + immunization" never adds up to 100% protection from infection, even in the best of circumstances. The vaccines must be handled correctly (proper mixing, right temperature) and cattle in good health (low stress, good plane of nutrition, trace mineral needs met, few parasites present) in order to get the most response from vaccines.

Cows and Bulls 4-6 weeks Prior to Breeding

- 1. Viral respiratory vaccine (IBR, BVD, PI₃, BRSV) with *Campylobacter fetus* (Vibriosis) and 5-way Leptospirosis- Fetal Protection (FP) product preferred.
 - a. If the cow is open at the time of vaccination, select a modified live vaccine.
 - b. If the cow is pregnant at the time of vaccination or less than 30 days before breeding, select a killed vaccine to reduce the risk of accidental abortion or interference with pregnancy. Certain modified live vaccines can be used in pregnant animals but only if used strictly according to label directions.
- 2. 7 way or 8 way Clostridial (Blackleg)-necessary if under 2 years of age. Optional as the cow ages depending on the exposure risk of the herd.
- 3. Deworm-perform at least once per year (spring and possibly fall) and twice a year if under 2 years of age. If only once is possible, deworm in Spring (May). Deworming in the fall is a good practice to reduce the number of worms that overwinter in the cow but is not as important as the spring when larvae are active in the pasture.
- 4. Tag cattle for identification and/or re-tag those that have lost tags.
- 5. Breeding Soundness Exams are highly recommended for herd bulls and should be conducted 60-75 days prior to turnout. Bulls need the same vaccinations and deworming as the cow herd.

Heifers at least 6 weeks Prior to Breeding

- 1. Viral respiratory vaccine (IBR, BVD, PI₃, BRSV) with *Campylobacter fetus* (Vibriosis) and 5-way Leptospirosis-Modified live or killed product. Fetal Protection (FP) product is preferred. Follow label directions; some vaccines require a booster and some do not. Timing is very important-if less than 6 weeks from breeding, use a killed product.
- 2. 7 way Clostridial (Blackleg)
- 3. Deworm with a branded (not generic) product. A heifer is under increased nutritional demand because she is still growing herself and trying to reproduce. Young animals do not have the immunity to parasites that adult cattle possess; therefore, it is important to use effective dewormers.

Calves 1-3 months of age:

1. Identify with tag

- 2. Vaccinate with 7 way Clostridial (Blackleg) vaccine-Although the calves are young, this dose of vaccine will initiate ("jump start") the immune process, especially cell-mediated immunity. Do not give blackleg vaccine at birth.
- 3. Dehorn
- 4. Castrate-the earlier these practices are completed, the better.
- 5. Optional Practices:
 - a. Implant steers at the time of castration (unless you plan to sell calves in an organic or natural market)
 - b. Viral Respiratory Vaccine-Killed or MLV (but follow label directions regarding MLV usage in nursing calves), or intranasal (preferred for young animals)
 - c. Pinkeye vaccine (administer in late spring/summer just before fly season)
 - d. Deworm-Begin deworming calves at 4-8 weeks old depending on time of year and expected level of pasture contamination with parasite larvae.
 - e. Test for BVD-PI (ear notch)-Consult your veterinarian if this is something to consider. If BVD has been diagnosed in an animal from your farm or there is a history of unexplained abortions in the herd, testing all calves is the proven first step to find persistently infected (PI) animals. Wait until the calf is at least 14 days of age to take an ear notch sample.

Calves 2-3 weeks pre-weaning (best) or shortly after Weaning:

Consult your veterinarian and check your marketing plan since many programs (for example: CPH) specify what vaccines must be administered and when in order to participate.

Administer vaccines 2-3 weeks pre-weaning for best protection. If calves cannot be processed pre-weaning, then do this protocol after weaning when the stress is essentially over (calves are eating, drinking, and the majority have stopped walking and bawling). Booster vaccines if required by label. If castrations and dehorning were not done earlier, these practices need to be completed as soon as possible. Tetanus vaccination is strongly recommended when performing late castration; especially if banding. Consult your veterinarian regarding whether to use a tetanus toxoid or antitoxin.

- 1. Viral respiratory vaccine (IBR, BVD, PI₃, BRSV)-Killed or MLV * but follow label directions regarding MLV usage in nursing calves if vaccinating before weaning. If using killed, a booster is required. If planning to give a *Mannheimia haemolytica* toxoid, see #3a comment below for additional vaccine choice.
- 2. For Heifers to be kept as Replacements: Viral respiratory with *Campylobacter fetus* (Vibriosis) and 5-way Leptospirosis vaccine included. Booster according to label directions-MLV is strongly recommended for females to be kept in the herd.
- 3. Vaccinate with *Mannheimia haemolytica* toxoid. This vaccine, commonly known as a "Pasteurella shot" or "Pneumonia shot" is given pre-weaning in anticipation of the stress associated with weaning. In a low risk situation in which the calves are weaned on the farm and no new additions are added to the group, this vaccine may be delayed until after weaning if desired.
 - a. Or use a *Mannheimia haemolytica* toxoid and MLV Respiratory Virus Vaccine Combination such as Pyramid 5 + Presponse (BI), Vista Once (Merck), or Bovi-Shield Gold One Shot (Zoetis)
- 4. Deworm with an endectocide (examples: Ivomec, Dectomax, Eprinex, Cydectin, LongRange) for internal and external parasites. Use a branded product-not a generic. A drench anthelmintic such as Safeguard, Synanthic, or Valbazen may also be used but a second product is required for external parasite (lice/flies/ticks) control.
- 5. 7 way Clostridial vaccine (Blackleg). Follow label directions regarding the need for a booster.

6. Optional:

- a. Implant-Follow label directions if re-implanting. Do not implant females to be used for breeding purposes. Do not implant if planning to sell on the natural or organic markets.
- b. *Pasteurella multocida* and/or *Histophilus somni* (formerly known as Hemophilus somnus) vaccines-consult your veterinarian.

Cows after calves are weaned:

- 1. Check cows for pregnancy by palpation, ultrasound, or blood test. If open, strongly consider culling her.
- 2. Check for other problems: Eyes, mouth, udder, feet and legs, body condition, disposition.
- 3. Scours Vaccine-Administer 1-3 months prior to calving. Initially this is a two-shot series then it is given annually. Products vary on when to administer them so follow label directions carefully.
- 4. If leptospirosis is a persistent problem, cows may need a booster of 5-way Leptospirosis vaccine such as Spirovac (Zoetis) for continued strong protection during the third trimester of pregnancy.

Additional Considerations:

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



Always read and follow label directions.

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

Understanding Soil Mechanics to Improve Beef Cattle Winter-Feeding Areas and Production

Steve Higgins Ph.D and Morgan Hayes Ph.D., Ag Engineering Specialists, University of Kentucky

Soils directly affect beef and forage production, yet active soils management is limited. Understanding soil mechanics and management in winter-feeding areas could improve beef cattle production, with less effort on the producer and cattle. This publication is intended to guide evaluating soil strength for winter-feeding areas, the pollution potential of winter-feeding areas, and to provide solutions for correcting structural deficiencies and reducing mud on both the ground and on the cattle.

Addressing these challenges is important because of the cyclical and repetitive nature of beef and forage production problems. Every winter and spring, beef cattle producers complain that too much hay is wasted, which requires more hay production and storage. Other common complaints include poor gains, weak calves, loss of body condition, and mortalities. In spring, technical assistance requests are often related to reducing or eliminating mud, weeds, erosion, and compaction (if the producer knows about it) due to winter hay feeding. If pasture renovation is conducted, winter-feeding areas might incur additional costs and labor for equipment, seed, fertilizer, chemicals, and fuel.

Geotechnical engineers or others who study soil mechanics usually refer to soil as the soil material from the subsoil to bedrock. To them, "soil" is the building material on which the foundations of structures and buildings such as farm roads, barns, buildings, and houses, are situated. To an engineer, topsoil has an agricultural value, but it has no structural value because it essentially has no load bearing strength. That is why contractors and builders scrape off topsoil to a depth of 4 to 12 inches to get to a compactible clay layer or remove all material to bedrock.

Water-soil interactions affect how soil responds to winter feeding. When water in the soil is frozen, it increases the force of loads that can be handled by the soil, such as the weight of tractor tires. The frost depth represents the depth in which water in the soil is expected to freeze. In northern climates, there are expected frost depths of greater than 3 feet that can be maintained for months. Kentucky's climate typically does not freeze topsoil for prolonged periods. For example, January is the coldest month; however, average daily temperatures in Lexington remain around 32° Fahrenheit (NOAA/NESDIS/NCEI). During winter, Kentucky does not have the intensity of sunlight and warm temperatures for evaporation or plant transpiration to dry out soils.

When topsoil becomes saturated with liquid water it makes the soil particles slick. The soil moves around easily, which explains why winter feeding creates so much mud and large ruts as the tires mold, compact, and push water and soil particles away to try an achieve traction. This is one reason winter-feeding in areas with above average moisture or poorly draining soils should be avoided. Winter-feeding areas should not be placed in ditches, draws, or bottoms that receive runoff and moisture from upland areas.

To choose a good winter-feeding area, a producer needs to consider all aspects of animal, soil, and land husbandry standards. Producers can determine their farm's soil properties by using tools such as the NRCS Web Soil Survey, county soil survey manuals, databases accessed using ARCMAP, and maps supplied by

the conservation district. Similarly, topographic maps can be used to identify higher and lower areas. This information is extremely useful to a beef producer because it determines best and worst locations for practices such as winter-feeding and infrastructure improvements. Water content, soil texture, drainage, and landscape position, such as summits and slopes, are very important factors to consider for siting conservation practices such as sustainable winter-feeding areas for cattle.

The main criteria for selecting a winter feeding area has more to do with the content and potential of soil water than anything else. The amount of water that falls on, flows over, or through the soil profile, and that is contained in a column of soil, affects many soil mechanical properties. These mechanical properties relate to the slipperiness, stickiness, plasticity, strength, trafficability, and compressibility of a soil. Using winter feeding as an example, a producer should look up the soil hydrologic grouping (A, B, C, D) to quickly and easily determine the suitability for winter feeding. Select soil hydrologic groups A and B for this kind of use because these are well-drained soils. Selection standards for winter-feeding areas require that soils have a moderately low runoff potential when thoroughly wet (hydrologic soil group B). Choose soil with a good infiltration rate, but not so great that the infiltrated water passes immediately through the soil profile. Sandy soils often demonstrate these very high infiltration rates. The goal is to filter the water as it passes through the soil profile. Inadequate infiltration is also not good, because it increases runoff potential without any filtering. Be aware when using hydrologic classifications that existing soil properties will change with time because of animal treading, tractor traffic, compaction, erosion, organic matter content, and soil phosphorus levels, etc. Long term use may require periodic re-location.

Once the producer has identified possible locations for winter feeding the next step is to rule out any low-lying areas, particularly those along floodplains. Even though sites may provide well drained conditions, these areas should be avoided if flooding periodically occurs or if they are in close proximity to a water body. Also exclude areas where streams of stormwater flow through the winter-feeding area or where ephemeral ponding occurs. These areas will often collect additional water originating from upland watershed areas. Moisture levels from a rising water table and drainage can easily shift a soil from a friable (workable) to plastic (moldable) to a liquid state. Plasticity in soil refers to soil that can be formed and reformed into shapes similar to clay used in pottery. Plasticity requires moderate water content; whereas dry soils will crumble - moderately wet soil particles will adhere to other particles. The liquid state for soils occurs when the moisture content is greater than the plastic state can handle. A liquid consistency can cause soil to shift, flow, or move offsite. The soil particles become suspended in the liquid water. This liquid state causes erosion.

Solar radiation should be used during winter feeding to dry and stiffen soil. Shade from buildings, structures, and trees can interfere with solar energy and lower wind speeds across the area. High humidity tends to be concentrated in low-lying areas and is most common overnight and in the morning as the sun rises. During a typical day, humidity will be lowest when high temperatures are reached in midafternoon. To leverage these trends, orienting your winter-feeding area on slopes with a southern exposure is best. If southern exposures are not easily accessible, western, then eastern aspects should be chosen over northern aspects.

The slope for a winter-feeding area should be less than 4%. A vegetative buffer or area that maintains good vegetative cover should be provided downhill from the winter-feeding area prior to entering a water body. The vegetation can filter solids/organic matter and trap potential pathogens in the manure, while allowing nutrients to infiltrate into the soil profile and boost yields for the vegetation being grown. A standard setback minimum distance from a water body located downhill from a winter-feeding area is 100 feet. A steeper slope requires a significantly greater setback. The number of cattle being fed as a group is a criterion that also affects the setback distance.

Selecting an ideal site is the first step. But even with good siting, well drained soils, with time (and depending on stocking rates) can erode, compact, and modify inherent soil properties. These conditions are predictable based on measured values applied to soil engineering concepts. To keep a winter-feeding area in the same site for a longer term might mean using an adaptive strategy such as installing an all-weather surface, which should be designed to increase the load-bearing capacity of the surface, while reducing mud creation. Gravel and geotextile fabric, concrete, or appropriate similar structural materials are examples of all-weather surfaces.

The benefits of understanding a soil's physical properties can be invaluable to a beef producer. Engineering properties are used to determine a soil's suitability for septic systems, manure application, burial sites, roads, the ability to corrode steel and concrete materials, and as a structural material. Engineering concepts are no less important as a critical part of the planning process for the beef producer designing infrastructure improvements like winter-feeding areas. These plans can prevent structural failure and limit future management difficulties on a farm, which means improved feeding situations, compliance with environmental regulations and sustainability for the operation.

Useful Resources

Web Soil Survey Available at: https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm Topographic Map Available at:

 $\underline{https://viewer.nationalmap.gov/basic/?basemap=b1\&category=histtopo\%2Custopo\&title=Map\%20View\#startUp}\\$

Typical Weather Available at: https://www.ncdc.noaa.gov/cdo-web/datatools/normals

Kentucky Beef Cattle Market Update

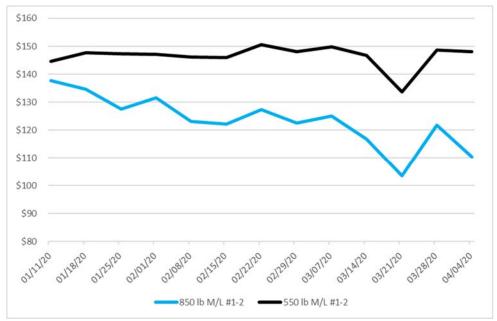
Dr. Kenny Burdine, Livestock Marketing Specialist, University of Kentucky

Another week and another set of swings in cattle markets. Everything that I have said previously still applies in that the volatile nature of these markets is causing prices to change constantly. This is my attempt to summarize the most recent weekly USDA-AMS price data for Kentucky, which is based on auctions from March 27th through April 2nd. Understand that by early next week, things could be very different.

As was largely expected, Kentucky cattle markets were unable to hold their gains from last week. The number of cattle sold increased substantially, which was no doubt part of the reason for the declines, but the larger issue is that the market continues to struggle with factoring in changes in demand and potential impacts on the supply chain. It's also worth noting that both live cattle and feeder cattle futures saw limit down movements on April 1st and 2nd, the two days prior to me writing this update. So, we will enter next week with a bearish tone because of this.

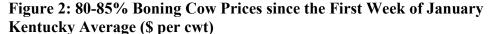
For the current week, calf prices were only off slightly, which can be seen in the black line in figure 1. I think they are clearly being helped by spring grass demand. CME© feeder cattle futures prices for fall 2020 have dropped by more than \$25 per cwt since early March. It's hard to imagine how high this spring calf market would be if we were still in an environment where fall feeder cattle futures were in the \$140's. At the same time, heavy feeder cattle prices gave back more than half of their gains from last week, falling by about \$11 per cwt.

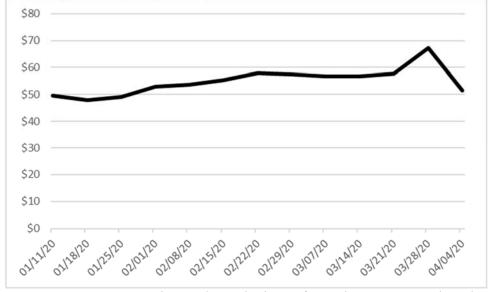
Figure 1: Feeder Steer Prices since the First Week of January Kentucky Average (\$ per cwt)



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

It was also not a good week for slaughter cow and bull prices, which had been a bright spot up until this point. The impact of plant closures, and concern about the potential for more plant closures, has the largest impact on cattle closest to harvest. This is primarily fed cattle, slaughter cows, and slaughter bulls. The state average prices for 80-85% boning cows fell by more than \$15 per cwt from last week to this week. Cull cow prices can be seen in figure 2.





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

We continue to be operating in an environment where there are virtually no certainties. Today's cattle prices are not necessarily a good indication of where prices will be tomorrow. One question that continues to come up is whether it makes sense to retain ownership on feeder cattle that are ready for market now, as opposed to selling those feeders on the current depressed market. As I write this on April 3rd, CME© fall live cattle futures are trading in the mid-upper \$80's on a per cwt basis. Now, basis has been strong

recently, but it's difficult to project that 6 months into the future. My point is that the current market is not offering an opportunity to place cattle on feed and lock in an acceptable return. So, by doing this, one is betting on considerable price improvement in the fed cattle market. Some producers may well choose to do this and it may end up being a good decision, but I can promise you it is not without risk. My basic advice remains the same – focus on what you can control and avoid doing things that are completely outside of typical marketing plan.