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Beef IRM Team

OFF THE HOOF

KENTUCKY BEEF CATTLE NEWSLETTER. MAY 1, 2021

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Contents

This month's newsletter includes:

Timely Tips

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

Spring-Calving Cow Herd

- Continue supplying a high magnesium mineral until daytime temperatures are consistently above 60 degrees F.
- Improve or maintain body condition (BCS 5) of cows before breeding season starts. If necessary, increase energy intake even on pasture.
- Bulls should have a breeding soundness evaluation (BSE) well before the breeding season (at least 30 days). Contact your local veterinarian to schedule a BSE for your herd sires. They should also receive their annual booster vaccinations and be dewormed.
- Schedule spring "turn-out "working in late-April or early-May; i.e. at the end of calving season and before the start of breeding season. Consult with your veterinarian about vaccines and health products for your herd.

"Turn-out" working for the cow herd *may* include:

- Prebreeding vaccinations
- Deworming
- Replacing lost identification tags
- Sort cows into breeding groups, if using more than one bull
- Insecticide eartags (best to wait until fly population builds up)

"Turn-out" working of calves may include:

- Vaccinate for IBR-PI3, Clostridial diseases and Pinkeye
- Dehorn, if needed (can be done with electric dehorner and fly repellent during fly season)

  - Castrate and implant male feeder calves (if not done at birth)
  - Deworm
  - Insecticide eartags

- Consider breeding yearling replacement heifers one heat cycle (about 21 days) earlier than cows for "head-start" calving. Mate to known calving-ease bulls.
- Record identification of all cows and bulls in each breeding group.
- Begin breeding cows no later than mid-May, especially if they are on high endophyte fescue. Cows should be in good condition so that conception occurs prior to periods of extreme heat.
- Consider synchronizing estrus in all cows. Exposing late-calving cows and first-calf heifers to a progestin (MGA feed or CIDR device) for 7 days before bull turn out increases pregnancy rates.
- Choose best pastures for grazing during the breeding season. Select those with the best stand of clover and the lowest level of the fescue endophyte, if known. Keep these pastures vegetative by grazing or clipping. *High quality pastures are important for a successful breeding season.*
- If using **artificial insemination:**
  - Use an experienced inseminator.
  - Make positive identification of cows and semen used. This will permit accurate records on date bred, return to heat, calving date and sire.
  - Good handling facilities and gentle working of the cows are essential.
  - Choose AI sires that will meet <u>your</u> goals and resist the temptation to get your cows bigger.

- Observe breeding pastures often to see if bulls are working. Records cows' heat dates and then check 18-21 days later, for return to heat.

Fall-Calving Herd

- Pregnancy check the cow herd. Remove open cows at weaning time.
- Plan marketing program for calves. Consider various options, such as maintaining ownership and backgrounding in a grazing program, or precondition and sell in a CPH-45 feeder calf sale.
- Initiate fly control for the cows when fly population builds up.
- Calves may be weaned anytime now but you can take advantage of the spring grass by leaving them on the cow a while or weaning and grazing.

Stockers

- Keep calves on good pasture and rotate pastures rapidly during periods of lush growth. Manage to keep pastures vegetative for best performance.
- Provide mineral mix with an ionophore.
- Implant as needed.
- Control internal and external parasites.

General

- Harvest hay. *Work around the weather and cut early before plants become too mature. Harvesting forage early is the key to nutritional quality.* Replenish your hay supply!
- Rotate pastures as needed to keep them vegetative.
- Clip pastures to prevent seedhead formation on fescue and to control weeds.

- Seed warm season grasses this month.

Recent and Upcoming On-line Beef Education Opportunities

Beef IRM Team, University of Kentucky

Beef Minutes	*Using Ultrasound to Assess Backfat and Marbling* – Dr. Katie VanValin *Pregnancy Diagnosis in Cattle* – Dr. Les Anderson *Utilizing Annual Ryegrass* – Dr. Chris Teutsch
Beef Bits Podcast	*Episode 13. Mississippi to Kentucky Freezer Beef* – Dr. Lehmkuhler with guests Dr. Katie VanValin and Dr. Daniel Rivera (Mississippi State University) *Episode 14. Fermentable Forages* – Dr. Lehmkuhler with guest Dr. Jimmy Henning. *Episode 15. Retaining for Knowledge* – Dr. Lehmkuhler with guests Doug Shepherd, Matt Adams, and Kevin Laurent
Reaching Out While Locked In	*April 6. Playing the Long Game with Reproductive Management* – Dr. Justin Rhinehart, Associate Professor, University of Tennessee *April 20. Risk Management Strategies for the 2021 Market* – Dr. Kenny Burdine and Dr. Josh Maples (Mississippi State University)

The UK Beef IRM team is pleased to announce that the ***updated and current*** version of ID-108: ***The Kentucky Beef Book*****,** can now be viewed electronically at the link provided below. It is our intent that providing an electronic version of this publication will allow for easy access to a wealth of knowledge relating to cattle production in Kentucky. To view or download this publication (ID-108: *The Kentucky Beef Book)* visit http://www2.ca.uky.edu/agc/pubs/ID/ID108/ID108.pdf. Additionally, a full listing of all Beef Extension Publications can be viewed at the following link: http://afs.ca.uky.edu/beef/publications.

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). 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).

Piecing the puzzle together to get the cows fed

Dr. Katie VanValin, Assistant Extension Professor, University of Kentucky.

I like to think about feeding the cowherd like a puzzle. The puzzle pieces are things like stage of production, performance goals, available (and economical) feed ingredients, labor resources, equipment, and even the time of year. As a nutritionist, I could take any number of feed ingredients and piece together a ration, but if it doesn't fit with the other pieces of the puzzle, it will not benefit the producer or their cattle.

Whether you are starting from scratch and just getting into the cattle business, or perhaps you've been at this for quite some time, I think it is essential to evaluate the puzzle every once in a while. Is there a more manageable, or perhaps better way to solve the puzzle? When we start thinking about a small part of our operation, like feeding the cows as just one piece of the larger puzzle, we start moving to a more holistic or systems approach.

Let me give an example of what I am talking about here. In my example, we have about 200 fall calving cows that calve from late August through October. During calving, cows graze cool-season pastures and eventually move to hay and a supplement to meet the lactating cows' energy and protein requirements. There is limited opportunity to stockpile fescue for later grazing in this system. We also have somewhat limited hay ground available but can feed corn silage. So, from January to march, the cows (and their calves) receive corn silage with some added protein, which must be fed 7-days a week. Once the silage runs out, we move back to a hay-based system until grass is available in the spring. This system doesn't sound too bad at face value, and I suspect that this hypothetical producer can maintain adequate body condition on the cows and wean a pretty good calf in the spring.

However, if we take a step back and start digging in a litter deeper, some changes could be made using existing pieces that might make this system work with fewer "puzzle pieces" (think supplemental feed and added inputs). What if we fed the most energy-dense feed (corn silage) to cows when they had the greatest energy demand (early lactation)? Now corn silage is provided during the fall instead of winter. The producer and the cows can work with mother nature (and her mud) instead of against her. Another bonus is the opportunity to stockpile fescue that can be strip grazed after feeding corn silage. The herd will still need hay to carry them through to spring. However, the amount of hay required decreased with the addition of stockpiled fescue. Furthermore, supplement costs may also be decreased since now cows are being supplemented to meet lower energy and protein requirements.

I always say there is no one size fits all approach to cattle production, and your puzzle most likely does not need to look just like your neighbors. So I'll leave you with a challenge to take some time and think about whether your puzzle pieces are working to their greatest potential to meet the goals of your cow herd.

Don’t Forget a Breeding Soundness Exam

Dr. Les Anderson, Extension Professor, University of Kentucky

The spring breeding season is here and hopefully your herd is prepared. One key management tool we can use to reduce the risk of pregnancy failures is getting a breeding soundness examination in your bulls. A breeding soundness examination is done by a veterinarian, costs $50-100, and is a producer’s only method to assess the breeding capability of their herd sire(s). Breeding soundness exams accurately determine bulls who cannot produce normal sperm cells and bulls who are no longer capable of breeding cows due to injury or a physical ailment. Breeding soundness exams should be done about 30-45 days before the breeding season to allow enough time to purchase a replacement bull. If you haven’t gotten your bulls checked yet, call your herd veterinarian and set up an appointment. Breeding soundness exams are like an “insurance policy” on your bull. It costs a little money, but you can’t afford the risk of turning out an infertile bull.

The Do's and Don'ts of Submitting a Dead Animal for Necropsy to a Veterinary Diagnostic Laboratory

Dr. Michelle Arnold, Ruminant Extension Veterinarian, University of Kentucky Veterinary Diagnostic Lab

UK Veterinary Diagnostic Laboratory Useful links:
Home page http://vdl.uky.edu
Directions: http://vdl.uky.edu/LaboratoryServices/Location.aspx
Hours of Operation and Holiday Schedule: http://vdl.uky.edu/HoursofOperationHolidays.aspx
Accession (Submission) Form: http://vdl.uky.edu/portals/0/documents/UKVDLAccessionForm.pdf
Feed and Forage Sample Collection Guidelines:
http://vdl.uky.edu/LaboratoryServices/Sections/Toxicology/Feedsandforagesspecimencollectionguidelines.aspx

Sickness and death loss of farm animals is an unavoidable consequence of owning them. Whether it is one animal that dies unexpectedly or multiple animals developing symptoms of disease over a short span of time, most producers want to know the reason, the best effective treatment and how to prevent it. The local veterinarian should be the first person contacted to examine any sick animals and determine an appropriate treatment. The earlier the veterinarian is contacted in the disease process, the better the chance of instituting an effective therapy. However, in cases of sudden death or when disease appears to be spreading or in cases where treatment is ineffective, a veterinary diagnostic laboratory can help make a diagnosis and assist in development of a plan for treatment and control based on test results. The UK Veterinary Diagnostic Laboratory in Lexington (Web: http://vdl.uky.edu) and the Breathitt Veterinary Center in Hopkinsville (Web: https://breathitt.murraystate.edu/) are both full service laboratories

serving the veterinarians and producers across the Commonwealth of Kentucky. Their websites contain complete, up-to-date access to all services offered as well as hours of operation, location, forms, and all other pertinent information. To save valuable time and money, if there are any questions, call the laboratory ahead of time. A phone call to the lab prior to leaving the farm is never a bad idea to avoid any unforeseen circumstances.

Do's ✓	Don'ts ✗
○ **Do call the laboratory prior to leaving the farm to avoid any unforeseen circumstances**	○ Do not bring live animals to the lab because euthanasia services are not offered
○ **Do bring dead animals to the lab within 24 hours after death, the sooner the better, for the best chance at an accurate diagnosis**	○ If euthanasia is performed prior to submission, do not damage the brain if the animal has symptoms of rabies or other neurologic problem
○ **If timely submission to a diagnostic laboratory is not possible, the herd veterinarian can perform a "field" necropsy and take the necessary samples to send to the lab.**	○ Do not arrive at the lab after-hours with a dead animal without prior approval because there is no 24-hour service available to unload and place the animal in the cooler
○ **Do compile a complete "history" which is simply a snapshot of what the situation is on the farm, making sure to note anything out of the ordinary. Pictures and videos are worth a thousand words and can easily be added to the case by the staff at the laboratory**	○ Once the animal is submitted, do not expect answers immediately. Some diseases are easily recognized but others are more challenging and require additional tests to diagnose correctly.
○ **In cases of multiple death loss, do send more than one animal as it increases the odds of finding the cause and to ensure they died from the same problem**	○ In cases where a diagnosis is not found, do not consider it a waste of time and money because many diseases may be ruled out with negative test results.

When you go to the lab, be prepared with as much information as possible to help guide the investigation.

Description of Animal and Herd ○ **A full description of this animal (breed, age, sex).** ○ **If female, was she pregnant and did she have a calf on her?** ○ **Was this animal raised on the farm or purchased?** ○ **If purchased, when and where?** ○ **Also, a description of the herd. How many cattle on the farm, how many in the group this animal came from and how many deaths have occurred in that group over what period?** ○ **Know recent vaccination history. What was given and when?**	**Description of the diet currently being fed** ○ Include what type of feed (grain) if offered and how much is consumed, all types of forage available (hay/ pasture/ silage/baleage), and any tubs, trace mineral or salt available. ○ Bring any feed and mineral tags or take pictures of labels from the bag. ○ Note any recent changes to the diet and when the changes were made. For example, have the cattle been without salt or mineral and were just given a new bag? Have they just rotated onto a new pasture? Is water source a pond, creek, or stock tank? If it is a tank, is it city water, well water or pond/creek water? ○ If a feed, forage, or water-related problem is suspected, do bring samples of those, too.
Description of Disease or Health Problem ○ **When did this problem first begin?** ○ **Have you ever had a similar problem on the farm?** ○ **Are any other cattle showing signs of illness now?** ○ **If sick when found, what symptoms were observed? Any pictures or videos taken?**	○ Was a vet contacted and/or treatment attempted? ○ If found dead, when was the last time you saw the animal alive? ○ Any signs of struggle at the time of death?
Potential Transmission from an Outside Source ○ **Is there recent history of contact with cattle from other farms?** ○ **Any fence line contact with neighbors' animals?** ○ **Are there cats, dogs, rats, and/or wildlife in contact with your herd or their feed?**	○ Do note when any new additions joined the herd, including purchased replacement females, bulls, or sale barn animals. ○ Also note if any animals have been on the show circuit and, if so, when they returned to the farm.

Other Potential Problem Sources ○ **Are there any junk piles, burn piles, compost piles, weed or yard trimmings in the pasture?** ○ **Any sheds or old barns accessible to the herd?** ○ **Are their woods available for the cattle to run in?** ○ **Recent pesticide or herbicide use?**	○ Is there a road next to the farm where trash could be thrown over the fence? ○ Any recent bad weather such as flooding, high winds causing down trees, lightning storms?

Opportunities to Manage Price Risk in 2021

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

When Josh, James, and I put together our spring market outlook article and video in early March, we shared an expectation of improving feeder cattle prices throughout 2021. Similar forecasts have been made by many analysts given an expectation of improving domestic demand and some encouraging export levels to start the year. This same general optimism can be seen in CME© feeder cattle futures prices as deferred months are trading at significant premiums to nearer months. This is not uncommon in the spring of the year, but the magnitude of this carry in 2021 is much larger than usual. James referenced the wide April to September spread in his article last week. As I write this on April 12, 2021, the August through November feeder cattle futures contracts were trading at a $14-$18 premium over the April contract.

The simple way to think about this is that the futures market is expecting heavy feeder cattle prices to increase by $14-$18 per cwt between now and the August to November time period. While there is value in that implied forecast, it also speaks of opportunity. From a price risk management perspective, the futures market is giving us an opportunity to capitalize on a much higher price expectation for summer and fall. Cow-calf operators who plan to keep calves through until summer or stocker operators / backgrounders who will be selling heavy feeders this fall, may want to consider what the market is currently offering. Fortunately, there are several ways this can be done.

The first possibility would be to enter into a cash forward contract with a buyer looking to place feeders later in the year. The two parties would agree on a price now for cattle to be delivered at a later date and this expectation of higher prices should be reflected in the contract price. Assuming the contract is binding and enforceable, this strategy eliminates price risk. However, production risk remains a concern if cattle don't perform as expected, fail to reach the agreed upon weight, or if weather conditions necessitate earlier sale of the cattle. While I certainly feel forward contracts are an excellent price risk management tool, they are very limited in much of the South.

Hedging, through the sale of deferred futures contracts, is another way to capitalize on a strong futures market. As an example, a producer who plans to sell cattle in September, may choose to sell a September CME© Feeder Cattle futures contract now in order to have downside price protection. If feeder cattle markets decline between now and September, they can make money on the short futures position, which will offset the loss in value of the cattle they will sell. Producers who choose to implement this strategy need to be certain they have access to considerable capital for margin calls. In a

bull market, producers can lose a lot of money on short futures positions well before they are able to sell their cattle on the stronger market. Lenders need to be fully aware of the plans if this strategy is used. Producers must also consider basis as they evaluate this strategy. A September CME© feeder cattle futures prices of $160 per cwt, likely translates into something closer to $150 for an 800 lb steer in the Southeast, but this will vary based on the location, type and quality of the cattle.

Options on futures contracts provide an opportunity to have some downside protection, but also keep the ability to capitalize on rising prices. For example, if the September CME© feeder cattle futures contract were trading at $160 per cwt, the producer might buy a put option with a strike price of $154. The put option gives the producer the right to sell September futures at $154, which means they will gain on the option as the market falls below $154. They will pay a premium for this right, which becomes an additional cost. They must also self-insure the first $6 per cwt drop in the market (the difference between the futures price and the strike price on the put). Much like hedging through the sale of a futures contract, basis must also be considered with an option strategy as the strike price is based on the futures market.

An additional limitation of both futures-based strategies (sale of futures and purchasing of options) is the 50,000 lb CME© Feeder Cattle contract size. The vast majority of cattle producers in the South are not large enough to utilize futures and options. Fortunately, Livestock Risk Protection (LRP) insurance provides an opportunity to purchase an insurance product very much like a put option, but that can be scaled to any sized operation. Additionally, the subsidy on LRP has been increased substantially over the last couple of year, which makes it much more attractive from a premium perspective.

LRP is an insurance product that pays an indemnity if the CME© Feeder Cattle Index is below a selected coverage level on the ending date of the insurance policy. The CME© Feeder Cattle Index is used to cash settle open CME© Feeder Cattle contracts at expiration, so this insurance product is very similar to a put option. Consider the option example from before for a producer that planned to sell 800 lb feeder steers in September. Rather than purchasing a September put, that producer could instead purchase LRP insurance with a coverage level of $154 per cwt and an ending date in September. If the CME© Feeder Cattle Index was below $154 on the ending date of the policy, they would be indemnified for the difference on every cwt they covered. They must still self-insure the decrease until the index reaches $154 and they must also understand basis – the policy is indemnified based on the CME© Feeder Cattle Index, rather than what they sell their cattle for.

Risk management strategies are very much dependent on the financial situation and risk preferences of the individual. The purpose of this week's article was largely to point out what is being offered by the market and review some price risk management strategies that are available. The futures market does seem to be offering some attractive opportunities right now for someone who wants to establish some downside price risk protection for the rest of the year. By no means is that to say that this market can't go higher. Ask anyone who jumped on the 2014 market too early and they will quickly tell you that markets can always go higher. But there are just as many examples of producers who chose not to cover their downside and watched expected profits quickly turn into losses. Predicting the future direction of the cattle market is impossible but having risk management as part of a marketing plan is something every producer should consider.