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Beef IRM Team

KENTUCKY BEEF CATTLE NEWSLETTER AUGUST 17, 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:

I Bought a Farm…..Now What?

Les Anderson, Extension Professor, Beef Specialist, University of Kentucky

Episode 24 – Moving heifers to paddock 1 – Anderson
Episode 25 – Good lesson in overstocking/overgrazing – Anderson

To watch this docuseries, follow this link to the Department of Animal & Food Science YouTube page, subscribe, and click the notification bell. https://www.youtube.com/channel/UCu4t18Zo2E_4_DBBELPjPMg

New Video Series – Beef Minutes

Katie VanValin, Assistant Extension Professor, Beef Specialist, University of Kentucky

Beef Minutes is a new video series that will be posted weekly (on Thursdays) to our social media sites.

Episode 1. Impact of heat stress on cattle – Dr. VanValin
Episode 2. Genomics testing update for purchasing bulls in the CAIP program – Bullock
Episode 3. Recap of the Beef Extension Education Forum – Lehmkuhler

Beef Minutes will be published on our Facebook Page (facebook.com/KyBeefIRM) and on the Department of Animal & Food Science YouTube page (https://www.youtube.com/channel/UCu4t18Zo2E_4_DBBELPjPMg).

BeefBits - New Beef Podcast!

Jeff Lehmkuhler, Associate Extension Professor, Beef Specialist, University of Kentucky

UK Beef Extension is publishing a new podcast on the beef industry called BeefBits. BeefBits will be a 45-minute long podcast on hot topics in the beef industry. The first episode, "An Eclectic Group" featured the entire UK Beef Extension Group. They discussed their backgrounds, what lead them to UK Beef Extension, and the NCBA Long Range plan. Podcasts will occur every two weeks and Dr. Lehmkuhler will be joined by various local, regional, and national guests.

Links can be found on the UK Beef IRM Facebook page (facebook.com/KyBeefIRM) and 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).

Register Now for Beef Bash 2020!

Dr. Darrh Bullock, Extension Professor, Dr. Katie VanValin, Assistant Extension Professor, and Ben Crites, IRM Coordinator, University of Kentucky

Beef Bash is an event that we always look forward to hosting. It is a chance to learn, network, and socialize with likeminded individuals from across the state. Although we will not be able to host the field day in-person, we are excited to deliver the program virtually and we will be broadcasting live from Princeton.

In this virtual field day of Beef Bash, Beef Extension Specialists and researchers from the University of Kentucky will share their current research projects and "how-to" demonstrations from the field. We will also take a virtual tour of the new University of Kentucky Research and Education Center in Princeton, KY. After each virtual session, each speaker will be available for a Q/A discussion.

The program schedule for the Virtual Field Day is being finalized and we have a great set of speakers joining us. The program will take place virtually through the Zoom meeting platform and as always, there is no cost to attend. However, preregistration will be required. To register for the virtual field day and view the program schedule and sponsors, please visit http://afs.ca.uky.edu/beef/irm or scan the QR code below. We hope you make plans to join us (from the comfort of your homes) for the first ever Beef Bash as a Virtual Field Day, on October 1st, 2020 at 9 AM EST.

For registration and program information, please visit the UK Beef IRM website at the link below or by scanning the QR Code.

UK Beef IRM: http://afs.ca.uky.edu/beef/irm

QR Code:

For questions, please contact any of the 2020 Beef Bash committee members; Dr. Darrh Bullock (dbullock@uky.edu), Dr. Katie VanValin (katie.vanvalin@uky.edu) or Ben Crites (benjamin.crites@uky.edu).

Enroll Now for the PVAP-PRECONDITION Program

Kevin Laurent, Beef Extension Specialist, University of Kentucky

The Post Weaning Valued Added Program - Precondition (**PVAP-PRECONDITION**) is in its second year. This program is being offered through support of a grant from the Kentucky Agricultural Development Fund and is administered by the University of Kentucky and the Kentucky Beef Network. There are adequate funds available this year for approximately 20 producers. This program is aimed at Kentucky cow-calf producers who have never marketed weaned calves. The objective of **PVAP-PRECONDITION** is to encourage cow-calf producers to retain ownership and capture added value from their investment in beef cattle genetics, facilities, and improved management through diversified marketing strategies.

Following is a checklist of procedures and expectations for producers interested in participating in **PVAP-PRECONDITION**:

Eligibility

- Producers who have never weaned and preconditioned calves on the farm.
- Home raised weaned calves retained on the farm for 45-120 days prior to marketing.

Procedures

- A site visit by the UK ANR Agent or KBN Facilitator and UK Specialist to inspect facilities to determine the suitability of a weaning pen, on farm feed storage, etc. will be conducted. This visit will include planning the weaning process and designing a proper feeding program.
- Work, weigh and wean the calves using CPH-45 or similar approved protocol. Begin the feeding program. Calves will be graded and valued at this time using current KDA market information.
- Market calves at a recognized preconditioned sale or outlet such as CPH-45, Red Tag, Yellow Tag, Farmers' Elite, etc.
- Complete required paperwork detailing beginning weights, feed and vet costs, and sales receipts. Producers must submit completed paperwork to receive a PVAP-incentive payment.
- Payment will be $30/head (maximum $1,000) for producers completing the program.
- Producers will receive a closeout report detailing the costs and returns of the project.

How to enroll

- Contact your local county ANR Agent or KBN Facilitator to obtain an enrollment form.
- Upon returning the enrollment form, a farm visit will be scheduled.

State has Strong Representation for Beef Extension Education Forum (BEEF) Online Program

Jeff Lehmkuhler, PhD, PAS, Associate Extension Professor, University of Kentucky

During the last week of July, beef cattle producers, University of Kentucky Cooperative Extension agents and specialists, and industry representatives participated in an online program to identify and prioritize issues to focus on in the near future.

County agents reached out to beef leaders in their counties to participate in the online program. A total of 58 counties with more than 200 individuals registered to participate. Participants were asked to complete an online survey to identify threats and opportunities facing the beef industry. It is estimated that more than 160 individuals participated in the online program. Dr. Laura Stephenson, Associate Dean for Extension, welcomed everyone and encouraged them to be active in the program. Dr. Richard Coffey, chair of the Animal & Food Science department, presented a department overview and college's support of the beef industry. Later Dave Maples, executive director of the Kentucky Cattlemen's Association, shared both the recently released NCBA long range plan as well as Kentucky's.

Breakout sessions allowed for individuals to discuss the survey responses and identify other issues. The feedback was then categorized, and participants were then asked to complete another online survey to rank the issues identified.

During the second evening, Mr. Warren Beeler, Executive Director of the Governor's Office of Agricultural Policy, shared with participants the investments that have been made to support the state's beef industry. Don Sorrell and Doug Shepherd, UK ANR agents, later shared how sessions such as these could be utilized to develop local beef programs and efforts to help local communities. Participants were then asked to consider the issues identified by the survey feedback.

Results from the ranking of issues were aggregated based on overlapping areas of focus. The top 5 areas focal areas included: expanded marketing opportunities, educational programs supporting expansion of finishing and processing cattle; business approach to cattle management; new farmer educational programs, and continuing education. Agents and beef leaders were challenged to go back and work with local beef producers to develop action plans to implement programs locally.

The UK Beef IRM team along with the Kentucky Beef Network will be utilizing the feedback gathered to develop future grant applications and programs for the state. On behalf of the UK Beef IRM team, I want to thank all the agents, producers, and industry partners for the time they dedicated to this process and providing their feedback. THANK YOU!

To spray or not to spray

Jimmy Henning, Extension Professsor, Livestock Forage Specialist, University of Kentucky

Would you spray this field? Tough question to weigh the value of a good stand of vigorous red clover (18 inches tall) compared to freedom from ironweed (24 inches tall). The decision to spray is a subjective process depending on many factors, including

weed pressure, invasiveness and/or toxicity of the weed, cost of the control measure, forage value of the weed and its life cycle, and the ability to restore the pasture stand.

'Should I spray this field?' is such a common question, it should be easy to answer, right? Turns out, it is not. I was recently looking at an excellent orchardgrass/red clover pasture (with occasional ironweed and Queen Anne's lace) when the producer asked me if he should spray the field. I think he was surprised when I said no. Spraying was not warranted for several reasons, but mainly because spraying to kill the problem broadleaf weeds would completely take out the clover, which was significant.

Here are some guidelines that help me formulate a weed control plan. I will be the first to admit this is a highly subjective set of guidelines or suggestions.

Weed management is more than chemical control.

Farmers have other options besides spraying herbicides. Sometimes the best approach is to use agronomic or grazing management to strengthen the forage crop and deal with the weed. Johnsongrass is a classic example of a weed that can be managed by grazing but it is very problematic in a hay field.

Mowing is another tool for weed management. Mowing annual or biennial thistles after they bolt (put up a seed head) but before they make seed is a good way to prevent the spread of these weeds. Timely mowing of cockleburs can prevent seed production as well. The UK publication AGR 207 'Controlling Broadleaf Weeds in Kentucky Pastures' evaluates the effectiveness of mowing as a weed management tool for many of our problem pasture weeds.

Determining if a spray threshold has been reached

The Clover Dilemma

Controlling broadleaf weeds usually means killing the clover present, something I call the clover dilemma. How do you decide if the infestation is bad enough? How much clover does it take to withhold the herbicide and live with the weeds? Certainly it does depend on the weed and the extent of the infestation. And it depends on the type and amount of clover. A vigorous, thick stand of red clover would be worth protecting in all but the worst infestations. A stand of small, white dutch clover probably not. And remember that some new herbicide formulations will take out broadleaves without killing clover. Proclova ® is one example.

Annuals

With annual weeds, it is usually best to first try to thicken up the stand of the forage. Annuals are opportunistic; they germinate and grow when forage stands get sparse. Addressing lime, P and K needs and strategic use of nitrogen fertilizer are some of the most powerful tools to shift the advantage to the desirable forage. Implementing rotational grazing and maintaining good residual heights on the base grass will help suppress the onset of these weeds.

Managing toxic and invasive plants

Toxic and invasive weeds will often necessitate the use of herbicides. The cost/benefit ratio of using chemical control is influenced greatly by the threat of loss of livestock and the loss of value due to their presence in hay. An infestation of hemp dogbane, which contains toxic glycosides cause one farm owner to avoid using that field for horse hay and used it for cattle after he had sprayed it. The harvest interval for the herbicide he used was 14 days, which means he had to wait 14 days after spraying to cut for hay. The

harvest intervals for many common forage herbicides are found in AGR 172 ‘Weed management in grass pastures, hayfields and other farmstead sites.’

Cash hay vs pasture

Some weeds can be tolerated or even be beneficial in pasture that would warrant herbicide application in a cash hay crop. For example, johnsongrass and crabgrass are highly palatable forages that benefit summer pastures but are not welcome in hay intended for high end horse markets.

Estimating the spray threshold

Quantifying the area of the pasture covered by weeds can help assess the spray threshold. Assuming these weeds are not palatable, they will reduce the expected yield on the field by the proportion of weeds present. Infestations of ironweed have been shown to reduce pasture yield by 25% or more. If the expected yield for the field is 2 tons per acre, then the ironweed infestation would ‘cost’ you 0.5 tons per acre. At $50 value per ton of forage yield, the ironweed could be said to ‘cost’ you $25 per acre, which is close to the cost of spraying.

Weed growth stage matters.

Weeds are most easily controlled when they are vegetatively and actively growing. Ironweed in full flower in August is very hard to control. For that reason, late summer may be a poor time to try to control weeds even though they may be very visible at this time. For perennials like ironweed, initiate herbicide applications when plants are young and vegetative. Often that means timely mowing in mid-summer to knock them back and following up with herbicide in two or three weeks.

A replant strategy is needed

A plan to spray almost always requires a plan to replant because when the weed is gone, mother nature will insert another one. I find the various replant schedules and labels confusing. For this reason, I refer often to the label for the proper re-seeding interval.

The decision to spray herbicide on pastures and hayfields is complicated. The decision to spray is a subjective process depending on many factors, including the visual assessment of the weed pressure, the invasiveness and/or toxicity of the weed, the cost of the control measure, the forage value of the weed and its life cycle and the ability to restore the pasture stand. Don’t forget that the best first step is to thicken up the existing stand of forage. The best weed control is a thick, dense stand of the desired species in a pasture or hay field.

Happy foraging.

(first published in August 6th issue of Farmer’s Pride)

How to Use a Veterinary Diagnostic Laboratory Effectively

Dr. Michelle Arnold, UK Veterinary Diagnostic Laboratory

Unusual or unexplained sickness and death loss of farm animals is an unavoidable occurrence for all producers at some point. Whether it is one animal affected suddenly or multiple animals developing symptoms of disease in a short span of time, most producers want to find the cause, the best effective

treatment and how to prevent reoccurrence. The local veterinarian is the best resource for this information and should be the first person contacted to examine any affected 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 (found dead) or when disease is spreading or in cases where treatment appears ineffective, veterinarians often turn to a vet diagnostic laboratory for help confirming a diagnosis and assisting in development of a plan for treatment and control based on test results. The UK Veterinary Diagnostic Laboratory in Lexington (Website: vdl.uky.edu) and the Breathitt Veterinary Center in Hopkinsville (Website: https://breathitt.murraystate.edu/) are both full service laboratories serving the veterinarians and producers across the Commonwealth of Kentucky.

Much useful information about an individual animal death and overall health issues in the herd can be gleaned by performing a necropsy (the animal equivalent of a human "autopsy"). During the necropsy, the pathologist will first look for abnormalities they can see with their eyes; this is called "gross necropsy" and often gives an initial indication of the cause of death. Samples are then taken from all the organ systems as well as blood and other bodily fluids and submitted to different laboratory sections for specific testing. In addition, sections of each organ (liver, lung, heart, kidney, brain, etc.) are cut into thin slices, processed and placed on glass slides for examination under the microscope (histopathology). It is under the scope, at the cellular level, that pathologists most often identify the cause of death by recognizing the characteristic patterns of tissue damage caused by a certain disease. It is important to understand that autolysis (rotting) begins immediately after death and progresses rapidly which makes interpretation of tests and other findings very difficult if not impossible. Dead animals should be in the lab within 12-24 hours after death, the sooner the better especially when the weather is hot. If timely submission to a diagnostic laboratory is not possible, the herd veterinarian can open the carcass and take the necessary samples to send to the lab (a "field necropsy"). Once the pieces of the puzzle come together, the pathologist will arrive at a diagnosis and a plan can be formulated with the local veterinarian to control and hopefully prevent the problem in the remainder of the herd.

At the diagnostic laboratory, the tests ordered are based on initial necropsy findings and the history submitted with the animal. The more information available, the easier and faster it is to narrow down the list of possibilities. Try to send 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. The answers to the following questions will often yield useful information:

1. A description of the herd. How many cattle on the farm, how many in this specific group and how many deaths have occurred over what time period?
2. If sick when found, what symptoms were observed? Was treatment attempted? If found dead, when was the last time you saw her/him alive?
3. When did this problem first begin? Have you ever had a similar problem on the farm?
4. Vaccination history-what was given and when?
5. Summarize the diet currently being fed. Include what type of feed (grain) if offered and how much is consumed, forage available (hay/pasture/silage/baleage), and any trace mineral or salt the affected animals are actually consuming daily. It is exceptionally important to 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? Is water from a pond, creek or stock tank? Is it city water, well water or pond/creek water?
6. 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.

7. Is there recent history of contact with other animals? Fenceline contact with neighbors' animals? Are there cats, dogs, rats, and/or wildlife in contact with your herd or their feed?
8. Are there any junk piles, burn piles, compost piles, weed trimmings or old barns accessible to the herd? Recent pesticide or herbicide use? Is there a road next to the farm where trash could be thrown over the fence?

Test results come from the lab periodically until a final report is issued. It can take as long as 2 weeks (or longer) to generate the final report if tests were sent to outside laboratories but most are finished quickly. Questions about the report can be addressed by the referring veterinarian or by the faculty and staff at the diagnostic laboratory.

It is important to understand that no veterinary diagnostic laboratory is 100% successful at figuring out every cause of death. To utilize a veterinary diagnostic lab most effectively, come with fresh samples and plenty of information. One of the most important factors is the degree of autolysis (rotting) before submission. Getting the dead animal to the lab as soon as it is found or having a veterinarian euthanize an animal that is close to death and bringing it straight to the lab will increase the effectiveness of testing. In cases of multiple death loss, it is always best to send more than one animal as it increases the odds of finding a cause and to make sure they actually died from the same problem. In cases where a diagnosis is not found, it is not a waste of time and money if there are many diseases ruled out with negative test results. However, rotten animals or those that have been scavenged are much more difficult to work with and often give very few answers.

Kentucky Beef Cattle Market Update

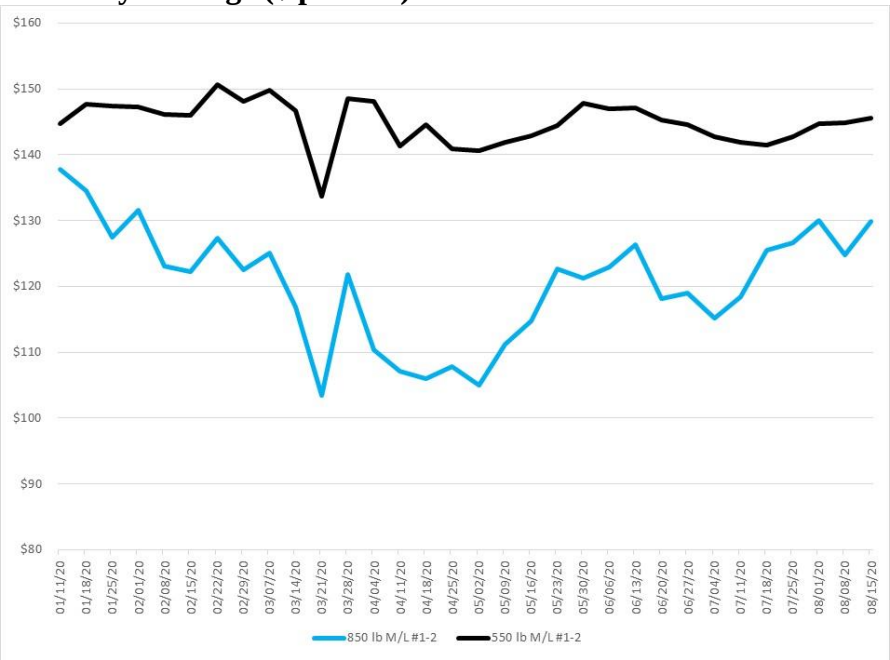
Dr. Kenny Burdine, Livestock Marketing Specialist, University of Kentucky

As I summarize the cattle markets in mid-August, I am struck by how much better things look than they did in the spring. It looks like fed cattle are going to trade north of $104 per cwt this week, which is an increase of almost $10 per cwt from the first week of July. As I write this on the afternoon of Friday August 14th, August CME© Live Cattle Futures are trading around $107-$108 per cwt, which suggests a relatively normal cash-to-futures relationship. And, April fats are above $117, which bodes very well for feeders this fall.

For the last 6 weeks, federally inspected slaughter has been running from right at 2019 levels to about 2% below. Slaughter weights aren't coming down, but seasonally they tend to increase until late fall / early winter anyway. The rate of increase above year-ago is slowly decreasing and I have to think that will continue for a couple more months. This is a sign that we are working through the backlog of cattle in the system, which has been a topic of much discussion since spring and one that I will revisit at the end of this update.

CME© feeder cattle futures have continued to increase and are now in the mid-upper $140's for fall. Spring contracts are at a slight discount, trading in the low-mid $140's. Heavy feeders at Kentucky auctions have continued to improve since early July. Figure 1 shows a drop during the second week of August for an 850 lb M/L #1-2 steer, but I think that was an anomaly in the 850 to 900 lb range for that week. That will happen some when showing weekly prices as I have been lately. On a state average basis, 850 lb steers are up almost $15 per cwt from early July and around $25 per cwt from early May. Calf prices have held pretty well through summer too. We never got our spring run-up, but also really haven't backed off either. 550 lb M/L #1-2 steers have pushed back into the mid-$140's with groups and value-added calves in the $150's.

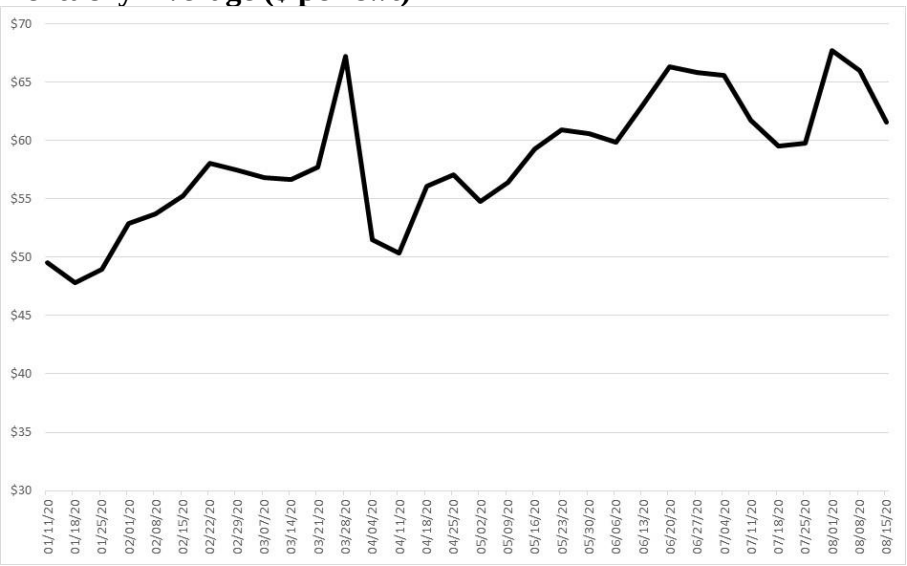
Figure 1: Feeder Steer Prices since the First Week of January
Kentucky Average ($ per cwt)



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

Cull cow prices have dropped over the last two weeks but remain strong. Average dressing 80-85% boning cows averaged $61.55 per cwt for the week (see figure 2), but a lot of quality cull cows were in the $70's. Each time this year that I have seen the cull cow market pull back, as it has the last couple weeks, it surprises me by pushing higher again. But I have to think that we are moving into a seasonal decline in cull cow markets.

Figure 2: 80-85% Boning Cow Prices since the First Week of January
Kentucky Average ($ per cwt)



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

Finally, I wanted to quickly revisit the potential backlog of cattle that we have been discussing since spring. Cattle-on-feed numbers are running very close to where they were last year and July estimates suggested

that a larger than usual number of these cattle had been on feed over 90 and 120 days. The good news there is that those cattle will likely be harvested soon, and feedlots should be able to aggressively place cattle this fall.

It is always more difficult to estimate the number of feeder cattle outside of feedlots, but the USDA mid-year cattle inventory report does give us a chance to do that. If I exclude heifers held for replacement purposes, the number of steers and heifers over 500 lbs was up by 400,000 head, or a little less than 2%. If I also consider the fact that the 2020 calf crop is a little smaller, total feeder cattle outside of feedlots is less than 1% larger than last year. So, while I don't question that we still have some cattle to work through, I do think this approach puts that in perspective to some degree. And, I think it paints a much more optimistic picture for this fall.