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Beef IRM Team

KENTUCKY BEEF CATTLE NEWSLETTER JUNE 5, 2020

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Contents

This month's newsletter includes:

Timely Topics – Anderson
Webinar Series Continues – Beef IRM Team
I Bought a Farm…Now What? Episodes 9-10 - Anderson
BIF Online – Bullock
Kentucky Beef Quality and Care Assurance (BQCA) Certification Now Available Online – Bullock/Laurent
Some Ideas on Converting from Year-round Calving to a Controlled Breeding Season – Anderson
Buttercup (*Ranunculus*) risk in pasture and hay – Arnold and Romano
Kentucky Beef Cattle Market Update – Burdine

Timely Tips

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

Spring-Calving Cow Herd

- Cows should be on good pasture with clover and preferably low endophyte levels in fescue for the spring breeding season. Keep pastures vegetative by clipping or making hay. They should have abundant shade and water. Our goal is to have cows become pregnant before July when temperatures and heat stress can ruin the "spring" breeding season.
- Observe the cows and bulls as the breeding season continues. Watch bulls for injury or lameness and change bulls if a high percentage of cows are returning to heat. Record cow breeding dates to determine next year's calving dates and keep records of cows and bulls in each breeding group.
- Keep a good pasture mineral mix, which contains adequate levels of phosphorus, vitamin A, selenium and copper, available at all times.
- Consider a special area for creep grazing calves, or practice "forward grazing" this summer, allowing calves to graze fresh pasture ahead of the cows. This can be accomplished by raising an electric wire or building a creep gate.

Fall-Calving Herd

- Pregnancy test cows if not done previously.
- Cull cows at weaning time
  - Smooth-mouthed cows
  - Cows weaning light weight and/or poor-quality calves

  - Open cows
  - "Problem cows" with bad feet, teats, udders, etc.
- Select replacement heifers on the basis of:
  - age – heifers born early in a calving season are more likely to become productive cows
  - temperament
  - conformation
  - weaning weight
  - dam and sire records
  - Select more than needed to allow for culling after a short breeding season

General

- Finish harvesting excess pasture as hay soon! It should be cut before it becomes too mature. Be sure and replenish your reserves. Try to put up more than you think you will need in case of a late summer drought.
- Pasture should supply adequate energy, protein and vitamins at this time. However, be prepared for drought situations. Don't overgraze pastures so that recovery time will be faster. Overgrazed pastures will recover very slowly during July/August.
- Keep pastures small for rotational grazing so that nutritive quality can be maintained. They should be small enough so cattle do not graze longer than a week. As the season progresses, you need several paddocks to give each properly stocked pasture about 4 weeks' rest.
- Maintain a clean water supply and check it routinely. Water is extremely important in hot weather.
- Control flies. Consider changing insecticides and/or methods of control this year, because insecticide resistant flies may have developed if you have used the same chemical year after year. Consider pour-on and sprays that allow you to put cattle in the corral or through the chute with little stress on them. It will make subsequent trips through the "chute" less stressful.
- Prevent/Control pinkeye
  - consider vaccinating
  - control flies
  - clip tall, mature grass
  - treat problems quickly
- Clip grazed-over pastures for weed control and so that seed heads do not irritate eyes. Pastures should be kept in a vegetative state for best quality.

Webinar Series Continues

Beef IRM Team, University of Kentucky

The University of Kentucky Beef IRM Group has been conducting a weekly Zoom webinar at 8 pm Eastern every Tuesday evening. Viewing is available on Zoom or on the UK Beef IRM Facebook page. Many county offices also share the live broadcasts. These webinars have ranged in topics and have been extensively watched. Our beef research faculty will be highlighted over the next several weeks. Each researcher will provide a brief overview of their research and its relevance to our industry. Extension Specialists will pair with each research to demonstrate how the research is incorporated into management practices. Please contact your local County Extension ANR Agent for viewing information.

I Bought a Farm…..Now What?

Les Anderson, Extension Professor, University of Kentucky

Episode 12: Heifers Turned Out to portion of Paddock 1 – Lehmkuhler and Anderson
Episode 13: Fencing Complete and Heifers turned out to full Paddock 1 - Anderson

Both of these episodes are filmed outside and document the beginning of the rotational grazing program. Setting up the solar charger is discussed in more detail, water access points are demonstrated, and daily observations of the heifers are shown.

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

Beef Improvement Federation 2020 is Online!

Dr. Darrh Bullock, Beef Extension Professor, University of Kentucky

The 52nd Annual Beef Improvement Federation Symposium — Online will be hosted the week of June 8 starting at noon CDT each day. The conference will be hosted on the Zoom webinar platform.

This year registration is **FREE** for all participants. The symposium is made possible through the generous support of many organizations including 2020 Patron Level sponsors Neogen, C-Lock Inc. and Zoetis. Please visit *http://www.beefimprovement.org/symposium/sponsors* to learn more about the businesses and organizations that have partnered with BIF to host this premier beef genetics producer education program.

Follow along during this year's symposium on social media channels and by using the hashtag #BIF2020.

For a schedule and to register, visit *beefimprovement.org/symposium.*

The Beef Improvement Federation (BIF) is an organization dedicated to coordinating all segments of the beef industry — from researchers and producers to retailers — in an effort to improve the efficiency, profitability and sustainability of beef production. The organization was initiated almost 70 years ago to encourage the use of objective measurements to evaluate beef cattle. Continuing the tradition, BIF is now the clearinghouse for developing standardized programs and methodologies for recording of performance data for all traits, from birth weights to carcass traits. Its three-leaf-clover logo symbolizes the link between industry, extension and research.

Kentucky Beef Quality and Care Assurance (BQCA) Certification Now Available Online - *Dr. Darrh Bullock, Kevin Laurent, and Becky Thompson, University of Kentucky and Kentucky Beef Network*

Starting June 1, 2020, the Kentucky Beef Quality and Care Assurance (BQCA) Certification is now available online. Producers can access the online BQCA program by visiting kybeefnetwork.com or http://afs.ca.uky.edu/beef/irm and clicking on "Beef Quality & Care Assurance". The Beef Quality & Care Assurance certification costs $5 and can be paid online prior to the accessing the course.

This online process is similar to how in-person BQCA trainings are conducted. Producers must complete Module A - BQCA Overview, and two of the other modules: B – Genetics and Handling, C – Proper Equipment and Additional Cattle Handling, and/or D – Veterinary Diagnostics Lab. Each module contains a video that must be watched before completing the corresponding test. Producers have multiple attempts to achieve a passing score of at least 85%, for each test.

Upon successful completion of the course, your training will be processed by the Kentucky Beef Network and your BQCA training card will be mailed to your county Extension office at the end of each month. If you should need your BQCA number sooner, you can call KBN at 859-278-0899 or email at kbn@kycattle.org.

If a farmer cannot access the online course or wishes to wait until in-person trainings are available, and they had a valid BQCA number on March 1, 2020, their existing BQCA certification will remain active until live trainings are available again. These steps have been approved by the Governor's Office for Ag Policy staff for compliance in the CAIP program.

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The Kentucky Beef Network and University of Kentucky merged their Cattle Handling and Care Program with the National BQA program to create a new program, aptly named the Beef Quality and Care Assurance (BQCA) program. This program was implemented to raise awareness of practices that insure the proper handling and welfare of cattle while keeping farmers safe and continuing to supply healthy beef to consumers. In turn, this program enables beef and dairy producers to enhance their product, maximize marketability and strengthen consumer confidence.

The Kentucky BQCA program takes national BQA practices one step further to provide a holistic program for Kentucky producers, by adding a cattle handling and care component to the training model. Educational modules provide the best management practices for handling cattle and providing for their well-being, in addition to training on the core principles of BQA.

Some Ideas on Converting from Year-round Calving to a Controlled Breeding Season
Dr. Les Anderson, Extension Beef Specialist, University of Kentucky

Maintaining a controlled breeding and calving season can be one of the most important management tools for cow-calf producers. A uniform, heavier, and more valuable calf crop is one key reason for keeping the breeding season short. Plus, more efficient cow supplementation and cow herd health programs are products of a short breeding season. However, converting from a year-long breeding season to a shortened 2 to 3 month breeding season should not be done haphazardly.

A system for converting from year-round to a 75-day controlled calving season over a period of two years

would present less loss and fewer problems than to try to convert in one year. The following steps are suggested for getting on a controlled breeding system:

1. Determine the ideal time of year and the length of your new calving season. For example, my cows will calve from February 15th to April 30th (74 days).
2. Determine the reproductive status of each cow in your herd. First, go to your record book to determine the last date each cow calved. If you don't keep records, try to match the cows and calves up and estimate their age. For example, let's assume we have 30 cows. Calving dates from fall 2014 to spring 2015 are as follows: Last Aug 2014 = 0 cows calved, Sept = 2 calved, Oct = 2 calved, Nov = 1 calved, Dec = 0 calved, Jan = 0 calved, Feb = 3 calved, Mar = 9 calved, Apr = 5 calved, May = 5 calved, June = 2 calved, July = 1 just calved. Keep in mind that the 5 cows that calved in the fall are likely pregnant.
3. Based upon the reproductive status of your herd, determine if you would like one controlled calving season or two. In our example, 5 cows calving in the fall are likely not worth the hassle so they will be held over and should NOT be exposed to a bull until next spring. If, however, half of your herd calved July-December, it is a better economic decision to make these your fall-calving cows and the ones that calve from January-June your spring-calving cows.
4. Build a good strong bull pen or well-fenced bull pasture. An electric fence in addition to the regular fence may be needed.
5. Remove your bull(s) from the herd. Select the removal date to coincide with about a 120 day season for your spring-calving cows. In our example, we would remove the bull(s) near the end of August. He would stay in the bull pen until May 7th of next year.
6. Sixty days after removing the bulls from the herd (or at a convenient time near this date), pregnancy check all cows and cull all non-pregnant dry, breeding-age females that have been running with the bull and all non-pregnant cows with calves 5 months of age or older. Your fall-calving cows have likely either calved or are very close to calving.
7. You may want to consider starting the breeding season of your replacement heifers 20 to 30 days ahead of the final breeding date for your herd. Most extended calving seasons are the result of failure of young cows to rebreed in a timely fashion. The additional 20-30 days enhances the opportunity for these young cows to rebreed next season. So, your replacement heifer breeding season would start around April 10th and these females would begin calving around January 20th. I realize that this is a bit early for calving and you might experience 1-2% higher calf death loss. Financially, 1-2% death loss is easier to swallow than a 25% decrease in pregnancy rate the following year.
8. The second year, follow the same system as outlined about except remove the bull on the week of July 20th. If you have fall and spring calvers, then put the bull in for the fall cows around November 20th and remove him around January 20th.

Buttercup (*Ranunculus*) risk in pasture and hay

Dr. Michelle Arnold and Dr. Megan Romano, DABVT, UK Veterinary Diagnostic Laboratory

Worldwide, there are approximately 600 species of *Ranunculus*, commonly known as buttercup or crowfoot. According to the current USDA PLANTS database, nearly 30 different *Ranunculus* species are found in Kentucky. Fresh buttercup leaves, flowers, and stems have a sharp, pungent taste and are usually avoided by grazing livestock; they can also impart this bitter taste to the milk of dairy animals. Some buttercups also cause irritation on contact, the degree of irritation varies between buttercup species. Buttercups contain ranunculin, a glycoside which is converted by plant enzymes to the irritant oil "protoanemonin" when the plant is chewed or crushed (Figure 1). Protoanemonin can blister the skin and mouth, causing excessive salivation (drooling). Irritation further down the digestive tract may result in ulcers, abdominal pain and diarrhea. Protoanemonin is volatilized with drying so hay contaminated with

buttercups is of less risk, as the plants have been shown to become less toxic when dried. Results of one study suggest that ensiling might decrease toxicity of buttercups, although limited information was included.

Buttercup ingestion can cause problems in multiple species, with horses probably the most sensitive species to the gastrointestinal effects. Sheep appear to be more likely to eat buttercups, particularly the immature plants. Clinical signs of drooling, diarrhea and abdominal pain can be severe if large quantities are ingested, but the foul taste usually deters further grazing, at least in horses and cattle. However, problems will occur when other forage is unavailable and animals are forced to consume buttercups. Affected animals may go off feed completely if too painful to chew and swallow because of the blistering, increasing the risk of death due to starvation. Although one report suggested a possible link between buttercup consumption and abortion in cattle and horses, this link has never been proven. Attempts to reproduce abortions by feeding large quantities of buttercups have not been successful in either horses or cattle, and the suggested association remains unconfirmed and unlikely.

A review of UKVDL records over the last 13 years found no cases of livestock deaths attributable to buttercup ingestion. It is possible that cases of colic, diarrhea, or starvation may have involved buttercup consumption but were never directly attributed to the plant. Because animals avoid grazing buttercups when possible, poisoning is most likely to occur in starving animals. It proliferates in overgrazed pastures, outcompeting desirable pasture grasses and clovers. Overgrazing is prevented by maintaining appropriate stocking rates and pasture rotation. The risk in Kentucky is minimal as long as plenty of other forage is available as unpalatable fresh plants are generally avoided when possible. Although dried plants (such as in hay) are less toxic than fresh, hay with excessive amounts of any types of weeds should be tested for nutrient content prior to feeding and supplemented to meet dietary requirements.

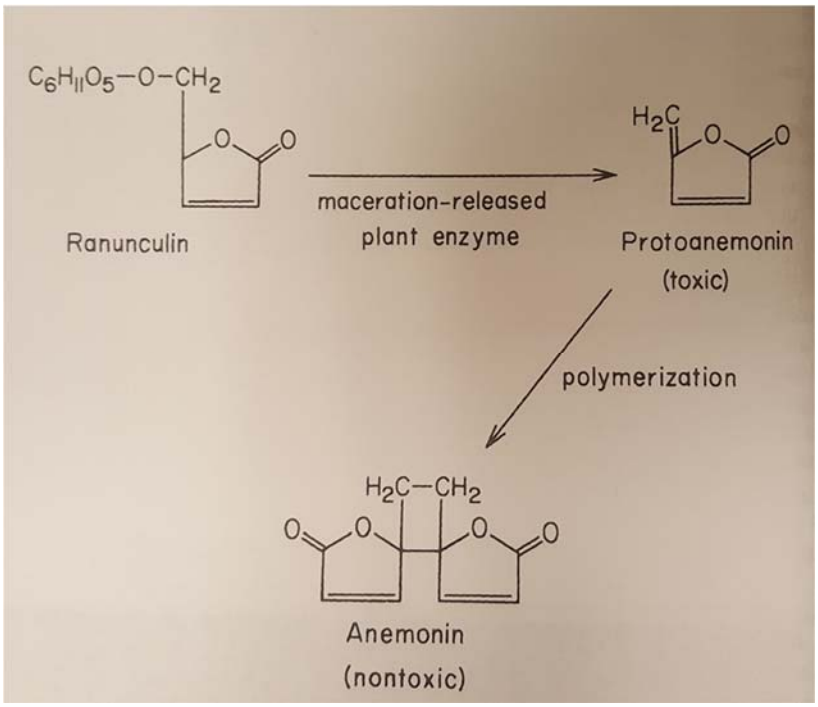


Figure 1: From "Natural Toxicants in Feeds, Forages, and Poisonous Plants"- Cheeke, P.; 1998, Interstate Publishers, pg. 448

Kentucky Beef Cattle Market Update

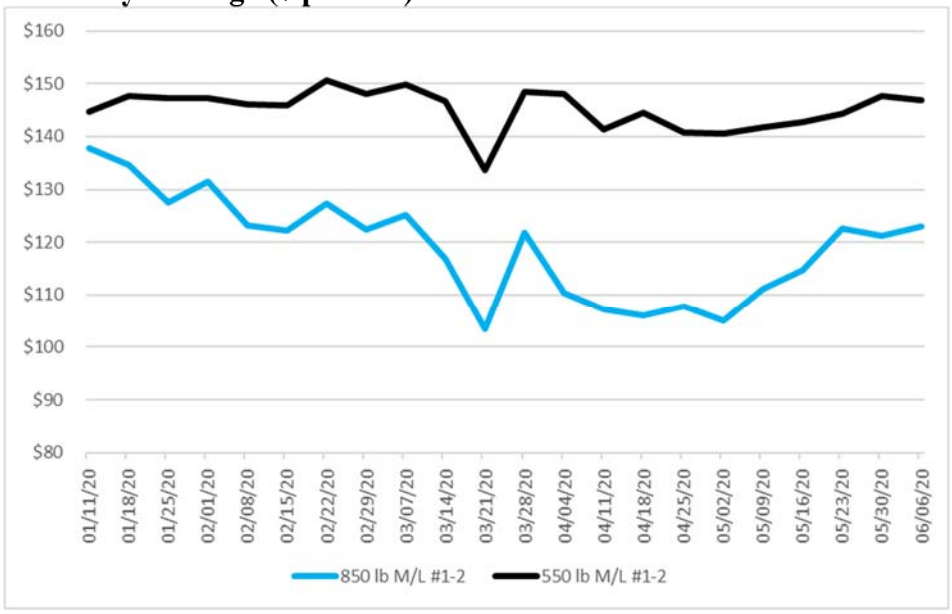
Dr. Kenny Burdine, Livestock Marketing Specialist, University of Kentucky

Scrolling through individual auction reports was a bit of a mixed bag this week. Monday comparisons were not possible due to the holiday last week. Reports from Tuesday sales generally indicated stronger prices, but the terms "steady" or "lower" were used more often when reporters described Thursday sales. Slaughter levels, and the impact of re-opening, still seem to be driving the markets. It does appear that fed cattle prices are pulling back from their May levels, but it is important to remember that this is the seasonal tendency. As I write this on the morning of June 5th, June CME© Live cattle futures are trading in the mid-$90's. But, I just can't see that much drop in fed cattle prices between now and the end of the month.

Feeder cattle futures held well this week with August trading in the mid-$130's and fall contracts trading in the upper-$130's. It's probably too early to be thinking about fall calf prices, but I just can't help but take a speculative glance at those thinly traded spring 2021 contracts. Starting with them trading in the mid-$130's, then backing out a KY basis and a ballpark winter backgrounding cost, would project a 550 lb steer in the upper $120's to low $130's this fall on a state average basis. This would also probably put groups and value-added calves in the upper $130's to low-$140's, which would be just below the levels that we saw in 2019.

On a state average basis, 550 lb M / L #1-2 steer calf prices decreased by about $1 per cwt this week, averaging around $147 per cwt. Groups, and higher quality calves in the same weight range, remained in the $150's. The average price for an 850 lb M/L #1-2 steer increased by $1-2 per cwt this week and actually posted its highest weekly average since early March. The last three weeks have been very encouraging for heavy feeders. They aren't where we would like them to be, but they are up around $15 per cwt from their March / April lows. Weekly prices for calves and feeders can be seen in figure 1.

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

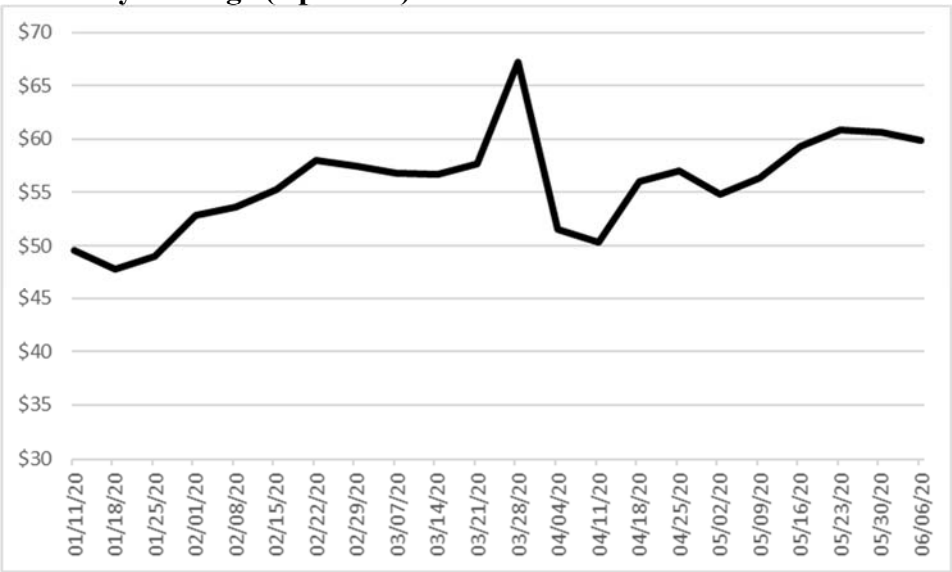


Source: USDA-AMS, Livestock Marketing Information Center, and Author Calculations

Average dressing 80-85% boning cow prices dropped by a little less than $1 per cwt from last week (see figure 2). This put their state average price just under $60 per cwt, after being above $60 the last two weeks. We are at about the time that cull cow prices usually make their seasonal highs, but I don't know that seasonal trends will provide much direction this year. Ground beef demand still seems very strong and is supporting cull cow markets. I've also heard anecdotal reports of processors grinding more muscle than

usual to meet the demand for ground beef. As food service picks back up it will be interesting to see if this dynamic changes.

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