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Timely Tips

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

### Spring-calving herds

- Schedule a pregnancy examination of cows if not done previously. Winter feeding costs can be minimized by eliminating open cows prior to winterfeeding. Pregnancy status (pregnant versus open) can be determined using palpation, transrectal ultrasonography, or blood sampling. Stage of pregnancy can only be determined by palpation or ultrasonography (performed by your veterinarian).
- Evaluate the body condition of your cows and improve their condition prior to winter. It takes about 75 pounds to increase body condition a full score.
- If you have already done a preweaning working, revaccinate (booster) calves as needed. Treat calves for internal and external parasites. If you vaccinate calves yourself, be sure to store, handle and administer vaccines properly.
- Wean calves before cows lose body condition.
- Obtain weaning weights of your calves and remember weaning is the time to do your first round of culling and selecting breeding stock. You can eliminate obviously inferior calves, especially those with wild or nervous dispositions. Consider the number of heifers that you will need to save for your cow herd. Bulls that are old, unsound, roguish, etc. can be culled now. It is not too early to begin thinking about replacements.

### Fall-calving herds

- The calving season should be in full swing for fall-calving cows. Check cows frequently. Identify calves
and commercial males should be castrated and implanted.

- Put fall-calving cows on accumulated pasture before the breeding season. Be sure to save some grass in the breeding pastures.
- It is time to get everything ready for the fall-breeding season, too. Line-up semen, supplies, etc. now and get your bulls ready to go (don’t forget their breeding soundness evaluation).
- Obtain yearling measurements (weight, hip height, scrotal circumference, etc.) on replacement animals - especially for registered ones.
- Contact your herd veterinarian and schedule pelvic area examinations and reproductive tract scores for your potential replacements. Use pelvic area to identify larger heifers with smaller than normal pelvic areas so you can remove them from the breeding pool. Reproductive tract scores can be used to identify immature heifers for culling. Typically, heifers with a reproductive tract score less than 3 have limited ability to conceive early in the breeding season.

**Stockers**

- If you are purchasing weaned/stressed calves, have your receiving/feeding program in place. Feed a stress ration which contains at least 13% protein and is fairly energy dense.
- Manage to keep newly weaned and/or purchased calves healthy. Calves should be penned in a small lot with adequate feed, water and shade to reduce stress. Careful handling and comfortable, uncrowded conditions can decrease stress.
- When newly-weaned calves are purchased in the fall, sickness and death loss can be a big problem. Work with your veterinarian on a health and receiving program. Consider purchasing CPH-45 feeder calves that are preweaned, vaccinated, bunk-adjusted and treated for parasites.
- Watch calves closely for a few weeks after their arrival. Have a treatment program ready for any health problems. Early recognition of sick cattle improves their chance of recovery. Watch for drooped ears, hollow appearance, reluctance to rise, stiff gait, coughing and dull or sunken eyes. A good “receiving” program is essential to profitability.

**General Reminders**

- Avoid prussic acid poisoning that can happen when frost ruptures the plant cells in sorghums, sorghum-sudan hybrids, sudangrass and johnsongrass releasing prussic (hydrocyanic) acid. Fields can be grazed after the plants have dried up after a frost. New growth that occurs in stalk fields is potentially dangerous whether frosted or not.
- Take soil samples for soil analysis to determine pasture fertility needs. Apply phosphate, potash and lime accordingly.
- Test hay quality and make inventory of hay supplies and needs. Adjust now - buy feed before you run out in the winter.
- Do not harvest or graze alfalfa now in order for it to replenish root reserves.
- Remove fly-control eartags from all animals, dispose of according to instructions on package. Treat for grubs/lice.
Don’t Forget 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

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).

Weaning 101 Workshop – a Virtual Weaning Program
Jeff Lehmkuhler, Associate Extension Professor, Beef Specialist, University of Kentucky

Check out our new virtual Weaning 101 Workshop! This video series will launch tomorrow, September 9th and a new video will be uploaded each week. See the schedule for more details!
Beef Minutes
*Katie VanValin, Assistant Extension Professor, Beef Specialist, University of Kentucky*

New episodes of Beef Minutes are available on our social media sites.

   Episode 8 – Weaning featuring Dr. Lehmkuhler
   Episode 9 – Progress in UK IRM Farm Program featuring Dr. Anderson

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.

**Episode 2.** Host Dr. Jeff Lehmkuhler is joined by during this episode by his Cajun colleague Kevin Laurent, Extension beef cattle specialist. We discuss the feeder cattle marketing programs to add value to the calves, market news, famous hometown folks, COVID and football.

**Episode 3.** Host Dr. Jeff Lehmkuhler is joined by during this episode by his colleague Dr. Darrh Bullock, Extension beef cattle specialist and Auburn fan. We discuss the ROWLI educational program, beef science class, market news, and football.

**Episode 4.** Host Dr. Jeff Lehmkuhler is joined by during this episode by his colleague Dr. Katie VanValin, Extension beef cattle specialist at the Princeton research station. We discuss the research station, Beef Bash, market news, and football.

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).

**Reaching Out While Locked In Beef Webinar Series Continues Through the Fall**
*Darrh Bullock, Extension Professor, University of Kentucky*

During these unprecedented times of limited meeting size and social distancing it has been difficult to conduct in person educational programs at county Extension offices. To help facilitate beef producer education and stay in touch with Kentucky’s beef farmers we are continuing our online webinar series through the fall. This is an opportunity for you to learn new concepts, refresh yourself on some common practices, receive CAIP education credit and stay up to date on what’s happening in the beef industry. We have included speakers from many areas within the UK College of Agriculture, Food and Environment, as well as, invited speakers on special topics of interest. If you already receive the invitations for the series then you don’t need to do anything, you will continue to get the invitations on the morning of the webinar. If you have not registered, please send an email to dbullock@uky.edu with you name and county and put Beef Webinar on the Subject line. Here is the remaining schedule for this fall:

October 13, 2020  
   **Organizing for the Breeding Season** – Les Anderson, Professor
Preparation for Winter Feeding

Tips to Improve the Success of Weaning Beef Calves

A Few Tips to Successful Weaning

1) Minimize Transitional Stress – have castration, dehorning, first round vaccines and other procedures done prior to weaning; minimize diet changes and wean on pasture if possible and/or provide the same grain mix if calves were creep fed; consider fenceline weaning if facilities allow; watch the weather forecast and avoid weaning when rain or significant temperature changes (20+ degrees) are predicted within 3-5 days of weaning

2) Ensure calves can drink clean, fresh water – for energy free/freeze proof waterers, consider removing balls/lids or locking balls/lids down so calves have access to water; long, shallow water troughs will encourage water intake the first 2-3 days post-weaning; check waterers daily and clean routinely to keep water free of feed, hay, and fecal contamination

3) When feeding hay, provide a high quality grass hay – second or third cutting, leafy grass hay with 50% or less legumes is preferred; provide hay free-choice and drape hay over the feed bunk if using concrete bunks; ensure round bales are not so tightly wrapped that calves can’t pull hay from the bale easily; hay should be free of mold to encourage intake

4) When offering a grain mix, start at 0.5-0.75% of body weight – hand-feed 3-4 pounds per calf (400-500 lb weaning weights) the first few days; encourage calves to approach the feed bunk by walking them up to the bunk if needed; provide 18-24 inches of linear bunk space per calf (10 foot feed trough for every 10-12 head);

5) Grain mix considerations – if using a commercial grain mix read and follow the feeding directions; for custom mixes consider including low starch containing feedstuffs such as soybean hulls, corn gluten feed, dried distillers grains, rice bran, wheat middlings, and others; corn can be used for weaning mixtures and requires additional bunk management; consult your nutritionist for recommendations

6) Balance ration for target gains – Ensure the energy and protein levels of the diet are going to support desired performance; Often hay will need to supplemented with a grain mix that is 80%+ TDN and 16-20% crude protein; Have the minerals, vitamins, and any medications mixed into the grain mix; grain supplementation of 1-2% of body weight may be necessary to achieve target gains after calves have overcome weaning stress

7) Take preventative steps for coccidiosis – consider including an ionophore, decoquinate or other medication to prevent or control coccidiosis

8) Manage the environment – Provide access to shade when weaning during warm months; Keep barn areas dry and well bedded; Ensure fences are sound and free of broken boards or breaks in the fence that could lead to injury
9) Be prepared to treat – having antibiotics on-hand for treatment of respiratory disease quickly will provide for a quicker response; digestive disorders can occur so have the necessary tools to manage bloat ready; evaluate castrated calves to ensure they are healing

10) Market your calves – this means to communicate the to the market manager information on what products have been given, length of time calves have been weaned and other information that will make your calves more marketable; market calves in sales when other weaned calves of similar weight/type will be marketed to allow load lots to be assembled to increase opportunities for capturing premiums; consider preconditioning market programs

For more information on managing the beef cattle herd, contact your local county Extension office. Additional information on weaning can be found in our Extension fact sheet ID-258 Weaning Beef Calves [http://www2.ca.uky.edu/agcomm/pubs/ID/ID258/ID258.pdf](http://www2.ca.uky.edu/agcomm/pubs/ID/ID258/ID258.pdf). See you soon and hoping your calves top the market!

**Part II: Thinking About Weaning and Preconditioning Calves? Know the Vaccines Available**

*Dr. Michelle Arnold, UK Veterinary Diagnostic Laboratory*

Preconditioning of feeder cattle has been recognized by industry experts as a way for cow-calf operators to add value to their annual calf crops. Most preconditioning programs specify two rounds of viral and Clostridial vaccinations, a *Mannheimia haemolytica* toxoid, deworming, castration of bull calves and healed, heifers guaranteed not pregnant, and a minimum of 45 days weaned. Some require producers to use one pharmaceutical company’s products. In addition, weaned calves are usually expected to know how to eat from a feed bunk and drink from a fountain or tank. Buyers prefer weaned calves that have been properly fed and vaccinated compared to similar non-vaccinated and non-weaned calves, which can translate to price premiums depending on the market that day.

Last month, a list of vaccine terminology was compiled to bridge the communication gap between industry and health program requirements. This article includes an expanded and more up-to-date listing of available vaccines and their manufacturers. The products listed are in no particular order and are not to be considered as endorsements by the University of Kentucky. In addition, the list is not “all-inclusive” as there are too many products on the market to list them all. The pharmaceutical companies are accurate to the best of my knowledge but recent acquisitions may change the manufacturer listed.

“Two Rounds Viral Vaccines”

a. First round contains the respiratory viruses (IBR, BVD, PI3, BRSV) in either a killed or modified live viral (MLV) vaccine preparation.
   - Best Time to Administer: 2-3 weeks prior to weaning
   - Best Type of Vaccine: Modified Live (MLV)-See List C1
     - Warning: Only use modified live vaccines in calves nursing pregnant cows if the dams were vaccinated with MLV within the last 12 months because of the risk of abortion (always check vaccine label for specific requirements).
   - If this requirement is not met, a killed vaccine (List C2) must be used until the calf is weaned.
   - 2nd Best Time to Administer: “At” weaning (after stress is over). Use MLV (List C1)
   - What you actually see on the label of a virus vaccine: Bovine Rhinotracheitis-Virus Diarrhea-Parainfluenza 3-Respiratory Syncytial Virus Vaccine

b. Second Round-Booster according to label. Use MLV (List C1)
c. A combination product containing both MLV viral vaccine and *Mannheimia haemolytica* (“Pasteurella”) vaccine may be used instead. See “Live Product with Pasteurella” option below for further explanation.

d. Virus vaccines may also contain *Histophilus somni* bacterin or “Somnus”. Killed virus vaccine + Somnus (List C2A) and MLV vaccine + Somnus (List C1A) are both available.

“Two Rounds of Blackleg”

- There are many 7 or 8-way Clostridial vaccine products available (List C5). Most require a two shot series, administered 2-3 weeks apart for protection. A few vaccines also contain tetanus toxoid (important if banding bull calves).
- Blackleg vaccines may be found in combinations with Pinkeye Vaccine (List C5A), with *Histophilus somni* bacterin “Blackleg + Somnus” (List C5B), or with *Mannheimia haemolytica* toxoid “Blackleg + Pasteurella” (List C5C)
- What you typically see on the label for a 7-way blackleg vaccine:
  Clostridium chauvoei-septicum-novyi-sordelli-Perfringens Types C & D Bacterin-Toxoid

“A ‘Pasteurella’ shot-calves must get at least one round”

- This is actually a *Mannheimia haemolytica* toxoid (List C3). Some of these products also contain a *Pasteurella multocida* bacterial extract.
- Best Time to Administer: 2-3 weeks prior to weaning. Safe in nursing calves.
- Read the label! Available in many combinations so be careful when selecting products.
- What you see on the label: *Mannheimia haemolytica* toxoid (may also say “*Pasteurella multocida* bacterial extract or bacterin)

“Live Product with Pasteurella” option

- A *Mannheimia haemolytica* toxoid and MLV Respiratory Virus Vaccine Combination product (List C4) can be given to meet the one “Pasteurella” vaccine requirement and one of the two MLV viral vaccine requirements with just one injection.
- Best Time to Administer: 2-3 weeks prior to weaning
- Warning: Only use modified live vaccines in calves nursing pregnant cows if the dams were vaccinated with MLV within the last 12 months because of the risk of abortion (always check vaccine label for specific requirements).
- If this requirement is not met, wait until the calf is weaned.
- What you actually see on the label:
  Bovine Rhinotracheitis-Virus Diarrhea-Parainfluenza 3-Respiratory Syncytial Virus-
  *Mannheimia haemolytica* (± *Pasteurella multocida*) Vaccine

“Deworming-must include product and date”

- Deworming with an endectocide (List C6) will control internal and external parasites, usually 30 days or longer (LongRange is an extended duration product of 120+ days).
- A drench anthelmintic or ‘white dewormer’ (List C6a) is given by mouth and has a short duration but very effective clean-out of internal parasites. A second product is often required for external parasite (lice/flies/ticks) control.
Partial List of Vaccines and Dewormers for Nursing Calves and Weaned Calves*

C1 Modified Live Virus Vaccines (Often called “Live Virus”)
*Pyramid 5 — Boehringer Ingelheim
*Vista 5 — Merck
*Inforce 3 (Intranasal) + Bovishield BVD — Zoetis
*Express 5 — Boehringer Ingelheim
*Bovishield Gold 5 — Zoetis
*Titanium 5 — Elanco
*Labeled for use in pregnant cattle and nursing calves
— follow directions carefully

C1A Modified Live Virus Vaccines + Somnus
*Express 5-HS— Boehringer Ingelheim Resvac 4/Somubac-Zoetis

C2 Killed Virus Vaccines
Triangle 5—Boehringer Ingelheim Cattlemaster Gold
FP5 — Zoetis Vira Shield 6 — Elanco
Master Guard 5—contains killed IBR and BVD-Elanco

C2A Killed Virus Vaccines + Somnus
Elite 4-HS—Boehringer Ingelheim Vira Shield 6 Somnus—Elanco

C3 Mannheimia (Pasteurella or Pneumonia) Vaccines
Presponse HM—Boehringer Ingelheim Presponse SQ—Boehringer Ingelheim One Shot—Zoetis
Pulmoguard PHM —1— Huvepharma Nuplura PH—Elanco
Once PMH—SQ or IN intranasal—Merck

C4 Modified Live Respiratory Virus Vaccines + Mannheimia toxoid
*Pyramid 5 + Presponse SQ —Boehringer Ingelheim
*Vista Once SQ — Merck
*Bovi-Shield Gold One Shot—Zoetis
*Titanium 5 + PHM—Elanco
*Inforce 3 (intranasal) + One Shot BVD-Zoetis
*Labeled for use in pregnant cattle and nursing calves
— follow directions carefully

C5 Clostridial (Blackleg) 7 Way Vaccines
Ultrabac 7 or UltraChoice 7—Zoetis Caliber 7—Boehringer Ingelheim
Alpha 7—1 single dose -No booster—Boehringer Ingelheim Vision 7 with SPUR—Merck
Calvary 9 or Covexin 8—Contains tetanus—Merck

C5A Clostridial (Blackleg) + Pinkeye
Alpha 7/MB— No booster—Boehringer Ingelheim 20/20 Vision 7 with SPUR-Merck

C5B Clostridial (Blackleg) + Somnus
Ultrabac 7/Somubac—Zoetis
Bar Vac 7 Somnus—Boehringer Ingelheim Vision 7
Somnus with SPUR—Merck

C5C Clostridial (Blackleg) + Pasteurella
One Shot Ultra 7 or 8 -Zoetis

C6 Dewormers (Injectables and Pour-ons)
Cydectin— Bayer Dectomax — Zoetis
Ivomec or Ivomec + — Boehringer Ingelheim
Eprinex—Boehringer Ingelheim
Noromectin—Norbrook
LongRange - (extended duration) - Boehringer Ingelheim

C6a Drench Dewormers
Valbazen + (Pour on) - Zoetis Safeguard + (Pour on) - Merck
Synanthic + (Pour on) - Boehringer Ingelheim
(“Pour on” for external parasite control—lice, flies)

C7. Pinkeye Vaccines
Maxi/Guard—Addison Labs Vision 20/20—Merck
i-site XP—AgriLabs
Pinkeye Shield XT4—Elanco
Piliguard Pinkeye-1 Trivalent or Triview—Merck
SolidBac Pinkeye IR/PR—Zoetis
Ocu-guard MB-1—Boehringer Ingelheim

*A special thanks to Don Sorrell, Campbell County Extension Agent for Ag and Natural Resources, who helped compile the original list of vaccines and dewormers.
Kentucky Beef Cattle Market Update

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

The volatile fed cattle market appears to be on another upswing as the 5 market average slaughter steer price came in around $105 for the last full week of September. Fed cattle prices started the year in the mid-$120’s and dropped to the mid-$90’s in spring, and again in summer. Seasonally, fed cattle prices tend to improve during the fall and CME© feeder cattle futures are fully supporting this. At the time this was written, April live cattle futures were trading at a $9 per cwt premium to October.

Cattle slaughter is still running within a couple percent of last year and signs continue to suggest that feedlots have worked through a lot of their backlogged inventory. After rapidly increasing this spring, the September cattle on feed report suggested cattle on feed over 90 and 120 days is now around last years’ levels. Feedlot placements have been running higher the last couple months and a large share of placements are of cattle weighing more than 700 lbs, which would suggest more placements of cattle that were backlogged outside of feedyards. Getting a lot of heavy feeders out of growing programs, and on feed, is very important for our fall calf market.

Prices of heavy feeders in KY did pull back about $1 per cwt for the month of September. Figure 1 below shows monthly prices for 850 lb M/L #1-2 steers on a state average basis. These prices are $5-$10 per cwt behind what groups are selling for. With the April live cattle board in the $116 to $117 range, I think heavy feeders can hold through the month of October. After about that time, heavy feeders will be selling on a lower-priced summer live cattle board and I expect prices to drop.

**Figure 1: 850 lb Medium / Large Frame #1-2 Steers**

Kentucky Auction Prices ($ per cwt)

![Graph showing monthly prices for 850 lb M/L #1-2 steers on a state average basis.]

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

This has been a bizarre calf market as there has been virtually no seasonality. On a monthly state average basis, 550 lb steer calves have traded between $142 and $148 all year (see figure 2). COVID took out our spring price increase that usually comes from grass demand and the calf market has held reasonably well through early fall. Market reporters noted stronger demand for weaned and preconditioned calves as we move into a time when changing weather patterns tend to lead to increased health problems. I expect continued incentives to sell weaned calves this fall.
Finally, producers are likely already aware that another round of Coronavirus Food Assistance Program (CFAP) payments have been announced. For CFAP 2.0, cattle producers can receive payments of $55 per head on eligible inventory on a date they choose between April 16 and August 31. While breeding stock is not eligible for this payment, spring calving cow-calf operations should receive payments on spring born calves and fall calving operations can receive payments on any fall 2019 born calves that were held past April 15. Payments will also be received on cattle in growing programs such as stocker and backgrounding operations. Finally, my understanding is that bred heifers are eligible for this payment as females are not considered breeding stock until after they have their first calf. Signup is very similar to CFAP 1.0 and handled through local USDA Farm Service Agency offices.