

Russell County Agriculture and Natural Resources Jan. - Feb. Newsletter

 **Martin-Gatton**
College of Agriculture,
Food and Environment
University of Kentucky.


Jonathan Oakes, CEA for
Agriculture and Natural Resources

**MONEY FOR ON-FARM
INVESTMENTS AVAILABLE...**


**KENTUCKY AGRICULTURAL
DEVELOPMENT FUND**

Russell County Extension Office
2688 South Highway 127
Russell Springs, KY 42642
270-866-4477
270-866-8645
russell.ext@uky.edu

Visit russell.ca.uky.edu for more
details or directions.

**COUNTY AGRICULTURAL
INVESTMENT PROGRAM (CAIP)**

Applications will be available for Russell
County's CAIP to assist farmers in making
important on-farm investments.

Application Period:

January 2, 2024- January 24, 2024

No applications will be accepted after January 24, 2024.

Application Availability:

Russell County Extension Office
Monday – Friday (7:30 a.m.- 12:00 p.m. –
1:00 p.m. - 4:00 p.m.)

For More Information:

Contact Jonathan Oakes at 270-866-4477 or
email jonathan.oakes@uky.edu.

*All applications are scored, based on the scoring criteria
set by the Kentucky Agricultural Development Board.*

2688 S. Hwy 127 | Russell Springs, KY 42642 | P: 270-866-4477 | F: 270-866-8645 | russell.ca.uky.edu

**Cooperative
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MARTIN-GATTON COLLEGE OF AGRICULTURE, FOOD AND ENVIRONMENT

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Lexington, KY 40506



Disabilities
accommodated
with prior notice

Deciding Who to Cull and When

Dr. Michelle Arnold, UK Veterinary Diagnostic Laboratory

Which cows in your herd are consistently making you money? Every year, the cow-calf producer needs to critically evaluate each female and decide if she is paying her upkeep or if she needs to be removed or “culled” from the herd. This is exceptionally important during times of drought or a year with marginal hay production as culling deeper in the herd may be necessary to manage the forage supply. There are also times it makes sense to keep or buy more replacement heifers and let older cows go, such as when the herd is getting older, cull cows are selling at favorable prices and the potential replacement heifers have the genetic potential to produce better quality calves. Open cows (those that are not pregnant) at the end of breeding season obviously are high on the cull list as they are difficult to justify financially. Beyond pregnancy status, what other variables are important to evaluate? Structural soundness, body condition score, age, annual performance, and disposition are significant factors to consider when developing a “culling order” specifically for your farm. In addition, it is important not to keep replacements from sires or dams with undesirable traits that are heritable. The culling order is essentially a ranking of the most important reasons a cow would NOT be a productive member of the herd on your farming operation. The following is a list of factors to carefully consider when deciding who to cull this year.

Reasons to Cull:

1. Mean Disposition
2. Open Females
3. Structurally Unsound/Chronic Health Condition
4. Advanced Age
5. Poor Performance-Records
6. Phenotype-color, stature
7. Replacement Heifers that get pregnant late in the breeding season

- **Disposition.** A cow’s attitude is an important consideration in any cattle operation. Bad behavior has both a genetic component and is also learned by her calf at an early age. Mean, nervous, “high strung” cattle are dangerous to people, damage facilities, tear up fences and make gathering and working cattle difficult at best. Remember, a good cow can be protective of her calf without being dangerous and destructive. Bulls that show aggression towards humans should be culled immediately.
- **Pregnancy Status.** A cow should produce a calf once a year and the sale of that calf needs to pay the dam’s “living expenses”. Diagnosing a cow as “open” (not pregnant) is as simple as having a veterinarian palpate for pregnancy at least 40 days after breeding or after the bull is removed. There are also several simple, inexpensive blood tests available on the market that may be used post-breeding to determine pregnancy status. If multiple cows are found open at pregnancy check, work with your veterinarian to try to determine the cause. Summer heat and fescue toxicosis can be important

contributors to low conception rates as well as infectious causes of abortion and early embryonic death.

- **Structural Soundness.** Cattle exhibiting structural problems that adversely affect performance and are not correctable need to be identified and removed. Good feet and legs are essential for maintaining body condition, breeding, calving, self-defense, and raising a calf. A conformational defect such as corkscrew claw (Figure 1) is regarded as a heritable trait and a strong reason to cull. Other



Figure 1: Corkscrew claw (also called screw claw) is a heritable defect found most often in the outside claws of the rear legs. There is twisting of the toe in a way that places the side wall of the hoof in direct contact with ground. The condition begins with toes pointing inward instead of forward and leads to lameness due to improper weight distribution. Corrective trimming is necessary every 3-4 months. Photo from: <https://nwdistrict.ifas.ufl.edu/phag/2016/05/27/watch-for-a-lameness-issue-in-cattle-called-corkscrew-claw/>

structural problems such as cows that have repeated episodes of vaginal prolapse during pregnancy (Figure 2), or cattle extremely sensitive to the effects of fescue toxicosis, should be removed from the herd as soon as the calf is weaned.

- **Udder Quality.** Milk production in beef cows is one of the most important factors affecting calf pre-weaning growth and body weight at weaning. A structurally sound udder should be firmly attached and high enough that newborn calves can easily find and latch onto clean, average-sized teats. Cows with blind or light quarters, funnel or balloon shaped teats, teats that drag in the mud or with any previous history of mastitis are strong candidates for culling. Mastitis (Figure 3) will result in decreased milk production, reduced calf weaning weights, and lifelong damage to the quarter. Udder quality in beef cattle is moderately heritable so females with good, or bad, udders tend to pass that trait to their daughters. Culling these cows with poor teat and



Figure 2: Cow with prolapsed vagina. This problem, seen in some pregnant cows, will reoccur year after year and is a



Figure 3. Cow with mastitis in the left rear quarter.

udder conformation and selecting replacements with better udder traits will make a noticeable difference in calf performance.

- **Chronic Disease.** Cows showing signs of chronic disease conditions that will not improve should be culled and only sold for slaughter. Two examples of chronic disease conditions include diarrhea and progressive weight loss from Johne's Disease and bovine ocular squamous cell carcinoma or "cancer eye" (Figure 4). Waiting too long to cull may result in carcass condemnation at slaughter.
- **Age.** Cows are considered most productive between 4-9 years of age. The size and shape of the teeth can be used to assess age but always evaluate tooth wear considering the diet. Cows that eat gritty or sandy feeds and forages have increased tooth wear beyond their years. Regardless, cows with badly worn or missing teeth may have a difficult time maintaining body condition. However, aged cows that stay in good condition and raise a calf every year do not have to be removed just because of advanced age.
- **Poor Performance.** Record keeping is an invaluable tool for evaluating performance. Readable visual tags on both the cow and calf allow one to match calf sale weights to their respective dams and identify cows that did not produce a calf. Dams with inferior genetics and poor milk production produce lightweight calves that do not grow well. An overweight cow with a small calf that doesn't gain weight as it should generally means the cow is keeping calories to herself rather than producing milk. Calves that get sick prior to weaning may indicate dams that produced poor-quality colostrum or have poor mothering ability. Any health issues, treatments given, and veterinary visit or expenses should be recorded in a standardized format for every herd member. Record any abortions or stillbirths, any difficulties with labor and delivery, and all calf death losses. It is important that all calves born, whether dead or alive, are recorded and taken into consideration when the herd is being analyzed and record that information on the specific cow's lifetime history.
- **Phenotype.** Cows that do not "fit" the herd because of external features such as unusual breed, size, muscling, and color are candidates for culling. These challenges may be overcome to some degree by choice of sire to balance out the unwanted traits. Remember that buyers of commercial calves look for uniformity in color, weight, and frame in a set of calves and will pay a premium price for it.
- **The last ones to go.** If conditions are such that only the best females can remain in the herd, consider selling those with the fewest productive years left such as bred cows over 9 years old. Also, bred heifers or thin cows that conceived late in the breeding season



Figure 4: Cow with early cancer eye.
Photo from:
<https://blogs.extension.msstate.edu/theriskproject/ocular-lesions-in-cattle-series-part-ii-cancer-eye/>

will likely have a difficult time rebreeding next year and may be good candidates to leave while pregnant.

Since 20% of gross receipts in a typical cow-calf operation come from the sale of cull animals, pay attention to price seasonality and body condition score before sending these animals to market. Prices are historically highest in spring and lowest in late fall when spring born calves are weaned and many culls are sent to market. Adding weight and body condition to culls is an opportunity to increase profitability but can be expensive. Work with a nutritionist to come up with realistic cost projections before feeding cull cattle for a long period of time. When it comes to making decisions on who to cull, remember to consider functionality in your environment. Is she an “easy keeper”? Does she keep flesh and condition and raise a good calf, even when feed and forage is limited? Or does she give too much milk or is her frame size so

large that you can’t keep weight on her, even when pasture is plentiful? Is her pelvis so small and tight that calving is a problem for her and will become a problem in her offspring? Functionality leads to longevity and improved efficiency. By retaining more young cows in the herd, you can decrease the number of replacement heifers needed each year and cull cows that are only marginally profitable. Young cows also increase in value as they mature because the body weight of the cow and her calf’s weaning weight will continue to increase until approximately 5 years of age. Longevity will also be improved through crossbreeding because hybrid vigor adds essentially 1.3 years of productivity or one more calf per cow! If considering buying heifers, UK has a decision support tool available at <https://agecon.ca.uky.edu/budgets> (under the Livestock/Forages heading) to help understand how to evaluate the investment potential for bred heifers in your specific circumstances.

In summary, a herd of easy-keeping, efficient cows is possible through rigorous culling, careful selection of replacements, and retention of young cows. Match your genetics to your management and environment for maximum efficiency, longevity, and ultimately, maximum enjoyment of cattle production.

Cull Cow Language

Breakers (75-80% lean)- Highest conditioned cull cows (BCS \geq 7), excellent dressing percentages

Boners or “boning utility” (80-85% lean)- Moderately conditioned (BCS 5-7), well-nourished commercial beef cows (usually highest price cull)

Leans (85-90%)- Lower BCS (1-4), lower dressing percentages, susceptible to bruising during transport and expect more trim loss. Moving cows from lean to boner status can usually be done efficiently

Upcoming Meetings and Events: January-February 2024

January:

2: Russell County CAIP Application Period Begins

3-4: KY Fruit and Vegetable Conference

8: Cook Wild Recipes Taste Test Event @ Russell Co. Extension Office @ 6 pm CST

11: Private Pesticide App. Training @ Russell County Extension Office @ 5 pm CST

15: Office Closed-MLK Jr. Day

18: Private Pesticide App. Training @ Russell County Extension Office @ 5 pm CST

24: Russell County CAIP Application Period Ends

25: Lake Cumberland Area Grain Meeting for Russell, Casey, Pulaski, and McCreary Counties @ Casey Co. Extension Office @ 1pm CST- see attached flyer

25: Private Pesticide App. Training @ Russell County Extension Office @ 5 pm CST

29: Master Cattlemen Session 1- see attached flyer

February:

1: Vegetable Series Session 1- see attached flyer

6: Russell County Cattlemen's Association Meeting @ 6 pm CST, location TBD

8: Master Cattlemen Session 2- see attached flyer

8: Vegetable Series Session 2- see attached flyer

12: Master Cattlemen Session 3- see attached flyer

15: Private Pesticide App. Training @ Russell County Extension Office @ 5 pm CST

20: Master Cattlemen Session 4- see attached flyer

22: Vegetable Series Session 3- see attached flyer

29: Master Cattlemen Session 5- see attached flyer

29: Pruning and Grafting Workshop @ Russell County Extension Office @ 5pm
Limit 20 participants

Master Cattleman

The Master Cattleman Program is a Kentucky Beef Network program, funded by the Kentucky Agriculture Development Board, that is developed and delivered by the University of Kentucky College of Agriculture.

It consists of:

- Six 3-hour sessions focusing on beef production and the beef industry
- On-line session for forages (with option to attend Kentucky Grazing school)
- Completion of BQCA program

These sessions focus on educational topics related to beef production and the beef industry. These sessions are designed to enhance the profitability of beef operations by equipping producers with vital information provided by University of Kentucky specialists and agents. The program provides participants with a ready reference and introduces them to several different record-keeping programs. The time spent in the sessions also allows beef producers the opportunity to network with specialists, agents, industry leaders, associates, facilitators and one another.

Cost: \$75 or \$100/couple, due the first night of class.

TO REGISTER,
CONTACT US:



(270) 866-4477



Genetics

January 29th, 2024 | 5:30pm CT/6:30pm EST
at Your Own County's Extension Office
with Instructor Darrh Bullock

Nutrition

February 8th, 2020 | 5:30pm CT/6:30pm EST
at the Wayne County Extension Office
255 Rolling Hills Blvd., Monticello, KY
with instructor Kate Vanvalin

Marketing

February 12th, 2024 | 5:30pm CT/6:30pm EST
at the Cumberland County Extension Office
90 Smith Grove Rd., Burkesville, KY
with instructor Kevin Laurent

Facilities and Winter Feeding

February 20th, 2024 | 5:30pm CT/6:30pm EST
at the Clinton County Extension Office
2601 Business Hwy 127 N, Albany, KY
with Instructors Morgan Hayes and Josh Jackson

Reproduction & Record Keeping

February 29th, 2024 | 5:30pm CT/6:30pm EST
at the Wayne County Extension Office
255 Rolling Hills Blvd., Monticello, KY
with instructor Les Anderson

Animal Health

March 7th, 2024 | 5:30pm CT/6:30pm EST
at the Russell County Extension Office
2688 S. Hwy 127, Russell Springs, KY
with instructor Michelle Arnold



Roasted Root Vegetables

6 medium beets
2 large sweet potatoes
3 parsnips
2 tablespoons olive oil

1 teaspoon salt
1 teaspoon pepper
Dressing (recipe follows)

Dressing

$\frac{1}{3}$ cup white wine vinegar
 $\frac{1}{4}$ cup olive oil
2 tablespoons horseradish
1 tablespoon Dijon mustard
2 teaspoons honey
 $\frac{1}{2}$ teaspoon each salt and pepper

1. **Preheat** oven to 400 degrees.
2. **Stir** together ingredients and drizzle over vegetables.
3. **Peel** beets, sweet potatoes and parsnips and cut into $\frac{1}{2}$ -inch-thick cubes.

4. **Toss** vegetables with olive oil and place in a single layer on a greased baking sheet.
5. **Sprinkle** with salt and pepper.
6. **Bake** at 400°F for 20 – 25 minutes until tender. Cool. Arrange vegetables on a serving dish and drizzle with dressing.

Yield: 6 servings

Nutritional Analysis: 210 calories, 10 g fat, 1.5 g sat fat, 3 g protein, 30 g carbohydrate, 0 mg cholesterol, 750 mg sodium, 7 g fiber.

Buying Kentucky Proud is easy. Look for the label at your grocery store, farmers' market, or roadside stand.



Kentucky Beets

SEASON: June through November.

NUTRITION INFORMATION: Beets are good sources of fiber, folate, calcium, and vitamin C, and they are low in fat. One cup of cooked beets or one medium raw beet contains about 50 calories and 2 grams fiber.

SELECTION: When selecting beets, choose those that are round, firm, rich in color, and smooth over most of the surface. Wilted or decayed tops may indicate a lack of freshness. Two bunches, or 6 to 8 individual beets, weigh approximately 2 pounds.

STORAGE: The roots of the beets can be stored in plastic bags for 1 – 2 weeks in the refrigerator. You can also refrigerate the greens in plastic bags and use them within 2 – 3 days. Cooked beets may be stored in the refrigerator for up to a week.

PREPARATION: Rinse beets under running water, removing any visible traces of dirt. To keep the juices

of the beets locked inside while cooking, leave the skin, tail, and an inch of the stem attached. The skin will be easier to remove after the beet is cooked.

TO BAKE Scrub unpeeled beets and place in a baking pan with $\frac{1}{4}$ inch of water and cover. Bake at 375°F for about 40 minutes for a large beet.

TO STEAM Scrub unpeeled beets and place in a steaming basket. Cover and steam for about 35 to 40 minutes for large beets, 20 – 25 minutes for smaller beets, or until tender.

BEETS 1

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Source: USDA

COOPERATIVE
EXTENSION
SERVICE

UK
UNIVERSITY OF
KENTUCKY
College of Agriculture

Lake Cumberland Area Grain Meeting

Dr. Chad Lee
UK Extension Grain Crops Specialist

January 25th
2:00pm EST

Casey County Extension Office
Educational Building

Please call to register, a meal will be provided.
606-787-7384

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University of Kentucky, Kentucky State University, U.S. Department of Agriculture and Kentucky Counties, Cooperating



Disabilities
accommodated

Russell and Casey County Extension Offices Vegetable Production Workshops

3 Part Series
CAIP Eligible

Feb. 1: Vegetable Diseases and Control Methods with Dr. Gauthier
Location: Russell County Extension Office at 5pm CST

Feb. 8: Vegetable Pest and Control Methods with Dr. Bessin
Location: Russell County Extension Office at 5pm CST

Feb. 22: Vegetable Production Considerations with Dr. Rudolph
Location: Zoom Meeting at 5pm CST

Please call you local Extension Office to register by the Monday before each meeting. This helps us to plan for handouts and meal numbers.

Russell Co. 270-866-4477 or Casey Co. 606-787-7384

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Economic & Policy Update

E-newsletter Volume 23, Issue 11

Editors: Will Snell & Nicole Atherton



Department of Agricultural Economics
University of Kentucky

A black and white photograph of a farm scene. In the foreground, two cows are visible in a field. In the background, there are trees and a fence. The text 'NOV 2023' is overlaid on the right side of the image.

**NOV
2023**

Secrets of Successful Farm Managers

Author(s): Kayla Brashears

Published: November 29th, 2023

After spending over a decade analyzing a plethora of farm operations, I've learned a few things about what makes an operation successful. There isn't a hidden formula anyone can follow to become successful, but there are best practices that operations can implement to position themselves favorably.

Maintain Their Equipment

One of the most frequent questions I receive as a Farm Management Specialist is "should I buy new equipment, or keep old equipment?" The true answer is – it depends. The difference is old equipment and high repair bills, or new equipment but high depreciation/debt load. Profitable farm managers can take either approach, and there are different philosophies on which is better. The common thread between these is that successful farmers manage and maintain their equipment. They keep the combines blown off to prevent fires, they inspect grain trucks frequently and pull them off the road if there's problems to prevent accidents. They know when their equipment needs oil changes, they read the parts books and the owner's manual. They take their equipment in for inspection and keep leased equipment in good condition. Successful farm managers recognize that equipment is the most rapidly depreciating asset they have, and they take reasonable measures to preserve the value of their investment.

Know Their Numbers

This point feels obvious, but many producers do not take the time to learn and understand their financial position. Knowing your numbers begins during the year, with input cost per acre and feed cost per cow. Profitable farmers review billing statements to understand the cost of maintenance, fuel, utilities, insurance, etc. Profitable farmers know how much rising interest rates cost them and are proactive in managing it. Finally, successful farmers are familiar with their year-end numbers. They understand working capital and the impact a new equipment purchase may have on it. They work with trusted professionals to develop their financial numbers if they can't do it themselves, and also dedicate the time each year to reflect on those numbers in order to improve the next year.

Build a Rewarding Place to Work

Many small farming operations are successful through only the work of the owner. However, many medium to large-size operations will have employees. Quality, hard-working employees are crucial to

the success of the farm. Many producers will argue those types of employees are close to impossible to find. However, successful operators flip that mindset and know that to maintain dedicated, skilled employees, they must cultivate an attractive and rewarding work environment. How this is achieved varies, but most likely means provisions such as competitive pay, paid time off and, of course, effective, solicitous leadership.

Know What They Don't Know

A successful farm manager doesn't get bogged down by something as trivial as pride. They spend resources to draw on the knowledge of those that know more than them. Depending on the producers (and what they DO know) and the varying operation, this looks different everywhere. They may be involved with an organized peer group, or other agricultural civic organizations. They find a good financial sounding board, a solid banker, a competent agronomist, and handy mechanics. If they have a failed crop or herd, they seek out answers from other people with that specific knowledge. It is possible to go too far on this spectrum and harm decision-making ability by taking in too many opinions. Considering that, it's important to develop a discerning voice when seeking the knowledge of others. This isn't something that is easily taught and must be developed over time.

Use Excess Cash Wisely

Profitable producers are strategic in how they manage excess cash flow from good years. Most often, that cash is best used to bolster cash reserves, although it may feel tempting to pay down long-term debt. They also seek to balance those reserves and know when and how to invest back into their operation. When interest rates began to rise, they pursued options to give them a larger return on their money and didn't let complacency keep their money in the same place. They carefully evaluate when to purchase more breeding livestock or add a second combine. They take the time to understand prepay deals to determine if they make sense for the operation. To summarize, successful farm managers see extra cash in the bank account for what it is – a tool to help them build and create a stronger balance sheet and operation.

Build on Previous Generations

Despite hard work and grift, it can't be left unsaid that many successful farming operations today are built from tenacity, timing, and a bit of luck from prior generations. The barriers to entry into farming are formidable, and many farmers today would not be farming without the influence of those before them. Successful farmers do not negate that influence by assuming credit. Instead, they reflect and appreciate the dedication of previous generations and seek to protect those prior investments from deteriorating. They recognize that their parents and grandparents may have gained valuable insight from their farming experience, although the world has changed in the past several years. Successful farmers glean and build on that knowledge, adding their own work and experiences to build an operation that continues forward indefinitely.

Recommended Citation Format:

Brashears, K. "**Secrets of Successful Farm Managers.**" *Economic and Policy Update* (23):11, Department of Agricultural Economics, University of Kentucky, November 29th, 2023.

Author(s) Contact Information:

Kayla Brashears | **KFBM** Area Extension Specialist | **kayla.brashears@uky.edu**