



# From the Ground Up

*Bath County Agricultural Newsletter*

Bath County  
Ag and Natural Resources

**January**

*Robert Amburgey*

**2024**

*Bath County Extension Agent for Agriculture  
and Natural Resources*



## PROGRAMS AVAILABLE:

**FOR MORE INFORMATION, YOU CAN CONTACT THE BATH COUNTY  
EXTENSION OFFICE AT 674-6121**

**Private pesticide applicator training  
Tuesday, January 23rd Bath County Extension office  
10:00 a.m. and 6:00 p.m.**

**Ag Commodity Night  
Thursday, January 25th  
6:00 p.m.—Montgomery County Extension Office  
RSVP to 674-6121**

**Regional Farmers Market Program  
Thursday, February 8th  
6:00 p.m.—Morehead State Farm  
RSVP to 674-6121**

2914 E. Hwy 60 | Owingsville, KY 40360 | P: 606-674-6121 | F: 606-674-6687 | [bath.ca.uky.edu](http://bath.ca.uky.edu)

## Cooperative Extension Service

Agriculture and Natural Resources  
Family and Consumer Sciences  
4-H Youth Development  
Community and Economic Development

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Disabilities  
accommodated  
with prior notification.

## UK Beef Management Webinar Series

Registration is necessary, however, if you received this email directly from Darrh Bullock then you are already registered. If you received this from another source, or have not registered previously, then please send an email to [dbullock@uky.edu](mailto:dbullock@uky.edu) with Beef Webinar in the subject line and your name and county in the message. You will receive the direct link with a password the morning of each meeting. This invitation will directly link you to the site and you will be asked for the password which can be found just below the link. Each session will be recorded and posted for later viewing. **All meeting times are 8:00pm ET/7:00pm CT.**

December 12, 2023


**Shooting the Bull: Answering all your Beef Related Questions!** – Updates and Roundtable discussion with UK Specialists

January 9, 2024

**Management decisions that impact reproductive efficiency in beef herds** – George Perry, Professor, Texas A&M University

February 13, 2024

**What's the Cost of a Cheap Mineral** – Katie VanValin, Assistant Extension Professor, University of Kentucky

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## REGIONAL Farmer's Market MEETING

Morehead State University Farm Classroom  
(Inside the Horse Arena)

Thursday, February 8, 2024

**Meal & Registration - 5:30 Program - 6:00 PM**

**Preregister by January 29.**

**Scan the QR code or call your local Extension Office.**



Bath Co. - 674-6121  
Carter Co. - 474-6686  
Elliott Co. - 738-6400  
Lewis Co. - 796-2732

Menifee Co. - 768-3866  
Morgan Co. - 743-3292  
Rowan Co. - 784-5457



University of Kentucky  
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# REGIONAL AGRICULTURE COMMODITY MEETING

PRESENTED BY: BATH, MENIFEE & MONTGOMERY COUNTY UK COOPERATIVE EXTENSION OFFICES

## THURSDAY, JANUARY 25, 2024

### 6:00PM-8:00PM

**MONTGOMERY COUNTY  
EXTENSION  
EDUCATION CENTER**

106 East Locust Street, Mt. Sterling KY  
40353

**TO REGISTER BY:**

**1/23/24**

CALL YOUR LOCAL  
EXTENSION OFFICE AT:  
606-674-6121

### PROGRAM

- 6:00PM** MEAL– SPONSORED BY: 
- 6:30PM** KENTUCKY FISH AND WILDLIFE PRIVATE LANDOWNER SERVICES
- 7:00PM** UPDATE ON INSECTS THAT BUG YOU  
JONATHON LARSON, ENTOMOLOGY SPECIALIST, UK
- 7:30PM** BEEF CATTLE DEWORMER RESEARCH AND ANIMAL HEALTH  
MICHELLE ARNOLD, UK EXTENSION VETERINARIAN

**Cooperative Extension Service**  
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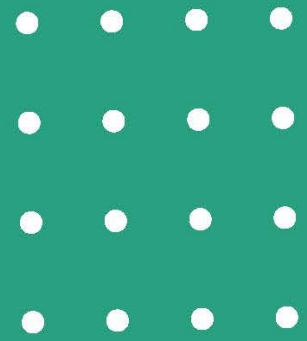
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LEXINGTON, KY 40546



Disabilities  
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with prior notification.

# GRAIN CROP PROGRAMS - INFORMATIONAL MEETING



## JOIN US FOR OUR MEETING!

This meeting will cover the details about NRCS's cover crop cost share programs, as well as other cost share opportunities related to a row crop farming operation. All farmers, landowners, and industry leaders welcome! Light refreshments will be served.



United States Department of Agriculture  
Natural Resources Conservation Service

## MEETING DETAILS:

- DATE: 1/25/24
- TIME: 9:30AM-11:30AM
- LOCATION: FLEMING COUNTY COOPERATIVE EXTENSION SERVICE

## QUESTIONS? CONTACT:

CLAY STAMM

606-210-1487

[clay.stamm@usda.gov](mailto:clay.stamm@usda.gov)



# My Permanent Pastures Aren't

Mud is the price of feeding cattle outside over winter, especially the winters here in Kentucky. So what can be done to renovate or rehabilitate damaged grass pastures?

First, there is no easy or quick fix. The damaged pastures are going to need time out of production and some inputs. Let's take a look at some things you can do to help rehabilitate your pasture grass base.

*Rest.* I would have to put this at the top of any list. Without time off, the pasture will never be much more than mud and weeds. Ideally, this rest would extend beyond the rehabilitation period to future management. If these pastures have to go back into rotation, make it a priority to implement rotational grazing with extended rest periods. Longer rest periods allow the roots to recover as well as the tops.

*Feeding somewhere else.* Getting to state the obvious is a perk of old age, and feeding somewhere else is the pinnacle of obvious. However, doing the same thing over and over again and expecting a different result is a symptom of insanity by some. Other options?

*Nitrogen.* The strongest stimulant for grass growth is nitrogen. While legumes do supply nitrogen, for this problem we need to pull out the big guns and use fertilizer N for quickest results. Spring N will stimulate grass plants that are still vigorous and growing and will produce more yield per pound of N than at any other time, generally.

*Assessment.* Determine whether you have enough grass to warrant the N. Weeds are also stimulated by spring N, and we don't need more of those. Fall applied N will stimulate cool season grasses to initiate new tillers that will emerge next spring. The timing window for N application to stimulate tillering is wider and later than the optimum window for stockpiling fescue. October and November applications will be effective.

*Planting something.* Once the cattle have been removed, you have the opportunity to smooth up the area if needed and seed. The options include red and white clover, a summer annual or even an aggressive establishing cool season grass if done early. Clover will easily germinate and grow when broadcast onto bare soil given just a little rain or packing. The taproots can help loosen the soil as well.

My choice of the ryegrasses would be perennial ryegrass and not annual. Perennial is still a temporary fix but has a chance of lasting well into the season and maybe more. Annual ryegrass will often go to seed and die by mid-summer, unless an Italian type is used.

*Summer annuals.* Species such as crabgrass, sorghum-sudan, sudangrass and pearl millet can provide high yields and make good use of the residual N, P and K from the cattle. Plant these when the soils are warmer and the chance of frost has passed.

All the options above (clover, ryegrass or warm season annuals) are just temporary solutions, of course. Their purpose is to provide some pasture while bridging to the fall seeding window when seeding of more permanent cool season grasses are more successful.

There are as many ways to rehabilitate our permanent pastures as there are farms. Adding heavy use areas, unrolling hay across more area, and even bale grazing can help. But rest, nitrogen, feeding elsewhere and replanting are some

## Spring-Calving Herd

### *Get ready for calving season this month!*

Have calving equipment, supplies and labor ready for the spring calving season. Some supplies that may be needed are: ear tags and applicator (put numbers on ear tags now), tattoo pliers and ink, record book, scales for calf weights, iodine for calves' navels and colostrum supplement. Calving equipment (puller and chains, etc.) and facilities should be ready and clean. Keep your veterinarian's phone number handy!

Overall condition of the cow herd should be evaluated. Cows losing weight now are more likely to have weak or dead calves. These cows will likely be a poor source of colostrum milk for the newborn calf.

Feed cows, if necessary, to keep them in good body condition. Cows need to calve in a BCS of 5, minimum, to expect them to rebreed in a timely fashion. Calve you heifers a little heavier, BCS of 6.

Heifers may begin head-start calving in early February. Move them to a clean, accessible pasture, away from cow herd and near facilities so that calving assistance can be given. Cows may start calving later this month. Signs of calving are relaxation of pelvic ligaments, enlargement and swelling of the vulva, and enlargement of the udder. Expect calving difficulty if (1) calf's head and two feet are not visible, (2) only the calf's tail is visible, and (3) the cow has been in labor for 1½ hours. Be sure calf is being presented normally before using calf puller. Recognize situations that are beyond your capability and seek professional help as early as possible. Calves that aren't breathing should receive assistance. Try sticking a straw in nostril to stimulate a reflex or try alternate pressure and release on rib cage. Commercial respirators are also available. Calves should consume colostrum within 30 minutes of birth to achieve good immunity.

Record birthdate, cow I.D., and birthweight immediately (use your Beef IRM calendar). Identify calf with an ear tag and/or tattoo. Registered calves should be weighed in the first 24 hours. Male calves in commercial herds should be castrated and implanted as soon as possible.

Separate cows that calve away from dry cows and increase their feed. Increase feed after calving to 25-27 pounds of high-quality hay. Concentrate (3-4 lb. for mature cows and about 8 lb. for first-calf heifers) may be needed if you are feeding lower quality hay. Hay analysis will greatly aid any decisions regarding type and amount of supplementation. Supplementation may have a beneficial effect on date and rate of conception. It's an important time to feed a beef cow after calving. Thin cows don't come into heat very soon after calving. We must have cows in good condition, if we plan to breed them early in the season for best pregnancy rates, especially on high-endophyte fescue pastures.

Sub-zero weather can mean death for newborn calves. During extremely cold spells, bring the cow(s) into a sheltered area as calving approaches to protect the calf. Be prepared to warm-up and feed newborn, chilled calves. Calving in mud can also cause problems.

Watch for scours in newborn calves. Consult your veterinarian quickly for diagnosis, cause, and treatment.

Avoid muddy feeding areas so that cows' udders won't become contaminated and spread scours. Don't confine cows to muddy lots.

Replacement heifers should be gaining adequately to reach target breeding weights by April 1<sup>st</sup>. Be sure that their feeding program is adequate for early breeding.

Start looking for herd sire replacements, if needed.



## **Fall-Calving Herd**

Breeding season should end this month – maybe Valentine’s Day. Remove bulls and confine them so that they regain condition.

Consider creep feed or creep grazing (wheat, etc.) to supply extra nutrition to fall-born calves which may have to depend solely on their dam’s milk supply for growth. They are not getting much except their dam’s milk now (i.e., there is nothing to graze). February/March is the worst time of the year for fall-born calves. Provide windbreaks or clean shelter for calves.

## **General**

Increase feed as temperature drops. When temperature falls below 15 degrees, cattle need access to windbreaks. For each 10 degrees drop below 15 degrees, add three pounds of hay, two pounds of corn, or six pounds of silage to their rations.

Always provide water. Watch for frozen pond hazards. If cattle are watering in a pond, be sure to keep ice “chopped” to keep cattle from walking on the ice and, possibly, breaking through. Keep automatic waterers working.

You should be feeding a mineral supplement with adequate magnesium to prevent grass tetany (~ 15% Mg) now. The Hi-mag UK Beef IRM mineral can be used.

Control lice. Watch for signs such as rubbing.

Begin pasture renovation. You can overseed clover on frozen or snow-covered pastures.

### **Frost Seeding at a Glance**

- \* Legumes are an essential part of sustainable grassland ecosystems.
- \* Overseeding may be required to maintain and thicken stands.
- \* Frost seeding is the simplest method for reintroducing clover back into pastures.
- \* Control broadleaf weeds prior to frost seeding.
- \* Soil test and apply any needed lime or fertilizer before frost seeding.
- \* Suppress the existing sod and reduce residue with hard grazing in the fall and winter.
- \* Choose well adapted varieties of red and white clover using the UK forage variety testing data.
- \* Calibrate seeder and check spread pattern.
- \* Broadcast 6-8 lb/A of red clover and 1-2 lb/A of white clover that has been inoculated in February or early March.
- \* Control post seeding competition by grazing pastures until clover seedlings become tall enough to be grazed off. Put pasture back into rotation once seedlings reach a height of 6-8 inches.

*\*For more information on frost seeding contact the Bath County Extension Office at 674-6121 or visit the [UK Forage Extension Website](#)*

<http://forages.ca.uky.edu/>

## **Frost Seeding Clover**

It's the time of year to begin planning to frost seed clover for the upcoming year around February. Frost seeding should be completed in most cases by mid February to get the desired affect of the seed making soil contact through freeze and thawing process. Clover seed responds well to frost seeding and can provided added nutritional quality and pasture improvements to forages for live-stock grazing. To achieve a great potential for success the field must be thinning and have some soil exposed for seed contact. Short vegetation allows for best results when frost seeding. Fields that have dense cover, tall vegetation, and little soil exposure can prevent the seed from making soil contact and giving it little chance to survive. Scout fields that are intended for frost seeding to help insure the best chance for positive results. Graze fields now leaving vegetation short if frost seeding is planned in that field. Other seeds such as grass seeds and alfalfa don't respond well to frost seeding and should not be seeded in that fashion.

With the excessive wet conditions we have had this fall and as they continue into the winter, developing a plan now to renovate pasture and hay fields can help repair those stressed fields. With animal traffic on saturated fields.

With fields needing more renovation than just clover by frost seeding, develop a plan to drill new seeds in the spring. AGR 18– Grain and Forage Crop Guide for Kentucky is a great tool that will discuss each forage seed, depth to plant, time to plant, amount to plant and several other aspects. The last two years have taken tolls on forage fields from one extreme to the other. Planning now can help be ready with the time and weather permit re-seeding.

### *2024 Forages at KCA (Hyatt Hotel at Kentucky Cattlemen Convention)*

"Harnessing the Power of Soil Life"

January 12, Lexington, KY

- |                 |                                                                                                |
|-----------------|------------------------------------------------------------------------------------------------|
| 2:30 to 2:45 pm | Welcome and Introduction-Chris Teutsch, University of Kentucky                                 |
| 2:45 to 3:15 pm | Introduction to Pasture Ecology and Regenerative Grazing-Chris Teutsch, University of Kentucky |
| 3:15 to 4:15 pm | Pinhook Farm...A Regenerative Journey-Seth Watkins                                             |
| 4:15 to 4:30 pm | UK Forage Extension Update-Ray Smith, University of Kentucky                                   |
| 4:30            | Door Prize and Adjourn-Chris Teutsch, University of Kentucky                                   |





## Venison Chili



This institution is an equal opportunity provider. This material was funded by USDA's Supplemental Nutrition Assistance Program — SNAP.



University of Kentucky  
College of Agriculture,  
Food and Environment  
Cooperative Extension Service

### Venison Chili

- 1 pound ground venison
- 1 large onion, chopped
- ½ green pepper, chopped
- 2 tablespoons vegetable oil
- 1 (16 ounces) can diced tomatoes
- 2 (16 ounces) cans chili beans, undrained
- 1 (8 ounces) can tomato sauce
- 1 bay leaf
- ½ teaspoon salt
- ½ teaspoon cumin
- ½ teaspoon garlic powder
- 1 tablespoon chili powder
- Black pepper to taste

In a Dutch oven or large skillet, brown meat, onion, and green pepper in vegetable oil. Add remaining ingredients. Simmer 1 hour on low heat, stirring frequently. Remove bay leaf before serving.

**Alternative to stove-top cooking:** use slow cooker set on high for 4 hours

**Yield:** 10 servings

Adapted from Wild Game: From Field to Table, Sandra Bastin, PhD, RD, Extension Food and Nutrition Specialist. Revised July 2007

### Nutrition Facts

10 servings per container

**Serving size** 1 cup (230g)

**Amount per serving**  
**Calories** 190

**% Daily Value\***

<b>Total Fat</b> 4.5g	<b>6%</b>
Saturated Fat 1g	<b>5%</b>
Trans Fat 0g	
<b>Cholesterol</b> 40mg	<b>13%</b>
<b>Sodium</b> 640mg	<b>28%</b>
<b>Total Carbohydrate</b> 20g	<b>7%</b>
Dietary Fiber 2g	<b>7%</b>
Total Sugars 4g	
Includes 0g Added Sugars	<b>0%</b>
<b>Protein</b> 16g	
Vitamin D 0mcg	<b>0%</b>
Calcium 67mg	<b>6%</b>
Iron 3mg	<b>15%</b>
Potassium 586mg	<b>10%</b>

\* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

## Preparing Your Cows for A Successful Breeding Season

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

A successful breeding season actually begins with management decisions made prior to calving. As we move into the winter feeding period, cattlemen need to review their management plan to ensure optimal rebreeding and success. Rebreeding efficiency can be optimized by focusing on body condition score (BCS), early assistance during calving difficulty, scheduling a breeding soundness exam for the herd sires, planning their herd reproductive health program, and developing a plan to regulate estrus in their first-calf heifers and late-calving cows.

Reproductive management begins with evaluation and management of BCS. Body condition score is a numerical estimation of the amount of fat on the cow's body. Body condition score ranges from 1-9; 1 is emaciated while 9 is extremely obese. A change in a single BCS (i.e. 4-5) is usually associated with about a 75 pound change in body weight. Evaluation of BCS prior to calving and from calving to breeding is important to ensure reproductive success.

Rebreeding performance of cows is greatly influenced by BCS at calving. Cows that are thin (BCS < 5) at calving take longer to resume estrous cycles and therefore are delayed in their ability to rebreed. Research has clearly demonstrated that as precalving BCS decreases, the number of days from one calving to the next (calving interval) increases in beef cows. Females with a precalving BCS of less than 5 tend to have production cycles greater than 1 year. For example, cows with a precalving BCS of 3 would be expected to have a calving interval of approximately 400 days, while a cow with a precalving BCS of 6 would have a calving interval of approximately 360 days. South Dakota research illustrates the influence of precalving BCS on the percentage of cows that initiated estrous cycles after calving. This experiment demonstrated that the percentage of thin cows that were cycling in the first month of the breeding season (June) was considerably lower than for cows that were in more moderate body condition. During the second month of the breeding season, 55% of the cows with a BCS of 4 had still not initiated estrous cycles, while more than 90% of the cows in more moderate condition had begun to cycle. Thin cows need a longer breeding season, which results in more open cows in the fall. They may also result in lighter calves to sell the next year because the calves from these thin cows will be born later in the calving season.

Management of BCS after calving also impacts rebreeding efficiency. Maintenance requirements for energy and protein increase 25-30% for most beef cows after calving. Producers need to plan their supplementation to match or exceed this increased nutrient requirement. Rebreeding efficiency is enhanced in cows that calved thin if their energy intake is increased (Rutter and Randle, 1984). Although the best management plan is to calve cows in a BCS of 5+, increasing the energy to cows that are thin at calving can boost reproductive performance.

Dystocia (calving problems) can severely delay the onset of estrus after calving. Research shows that for every hour a female is in stage 2 active labor there is a 4 day delay in the resumption of estrous cycles after calving. Early intervention helps; 16% more cows conceived when cows were assisted within 90 minutes of the start of calving. The best method is to reduce the incidence of dystocia via selection but early calving assistance will increase the opportunity of cows to rebreed.

One overlooked management tool that can improve reproductive performance is breeding soundness exams in bulls. Think of breeding soundness exams as breeding season insurance. These exams are a low-cost method of insuring that your bull is capable of breeding. Examine bulls for breeding soundness about 30 days before they are turned out.

I have worked in reproductive management for over 20 years and it amazes me how many cattlemen still do not vaccinate their cow herd against reproductive diseases. Several diseases are associated with reproductive loss (lepto, BVD, vibrio, trich, etc). The main problem is that most reproductive loss due to disease is subtle and ranchers don't notice the loss unless they have a massive failure. Most cattlemen are not aware of their losses due to abortion. Work with your local veterinarian to develop an annual vaccination plan to enhance reproductive success.

Lastly, ranchers need to develop a plan to enhance the rebreeding potential of their first-calf heifers and late-calving cows. Young cows and late-calving cows have one characteristic in common that will greatly impact their reproductive success; anestrus. After each calving, cows undergo a period of time when they do not come into estrus. This anestrus period can be as short as 17 days but can also last as long as 150 days depending upon a number of factors. Typically, mature cows in good BCS will be anestrus for 45-90 days (avg about 60 days) while first-calf heifers will be in anestrus for 75-120 days. Research has shown that only 64% of mature cows have initiated estrous cycles about 70 day after calving while on 50% of first calf heifers have initiated estrous cycles at nearly 90 day after calving. Let's consider the impact of anestrus and calving date for a herd that calves from March 1 until May 10. Bull turnout is May 20 and the length of anestrus for mature cows is 60 days and for young cows is 90 days. A mature cow that calves on March 1 will begin to cycle on May 1 and is highly likely to conceive early. However, the mature cow that calves on April 20 won't cycle until June 20 and her opportunity to conceive early is very limited. A first-calf heifer that calves on April 20 won't begin to cycle until July 20 and will have limited opportunities to conceive. Cattlemen can reduce the anestrus period by fenceline exposure to a mature bull or by treating the cows with progesterone for 7 days prior to bull exposure. Sources of progesterone include the feed additive melengestrol acetate (MGA) or an EAZI-Breed CIDR<sup>®</sup> insert (Zoetis Animal Health). Both sources induce estrus in anestrus cows and exposure of anestrus cows to progesterone for 7 days before bull exposure will not reduce fertility. Pregnancy rates increase in these females because inducing estrus will increase the number of opportunities these cows have to conceive in the breeding season.

Managing for reproductive success actually begins at calving. Cows need to calve with a minimum BCS of 5 and with little assistance. Effective planning for reproductive health and management plan for limiting the impact of anestrus will ensure that cattlemen are happy, happy, happy at the end of the breeding season.





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