

Robertson County Extension PO Box 283 Mt. Olivet, KY 41064

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MONEY FOR ON-FARM IMPROVEMENTS AVAILABLE...



Robertson County Soil Conservation 39 E Walnut St. Mt. Olivet, KY 41064 606-724-5472 robertsonconservation@yahoo.com

COUNTY AGRICULTURAL INCENTIVES PROGRAM (CAIP)

Applications will be available for Robertson County's CAIP to assist farmers in completing on-farm improvements.

Application Period: April 14th – May 2nd, 2025 No applications will be accepted after 4:00 PM on May 2nd.

Application Availability: Robertson County Soil Conservation Office Monday – Friday (9:00 a.m. – 4:00 p.m.) Closed 12:00 – 1:00 for lunch

For More Information: Contact Diane Ellis at 606-724-5472 or email robertsonconservation@yahoo.com.

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

Robertson County Agriculture & Natural Resources **Newsletter** April 2025

That First Calf Heifer is not a Mature Cow – So why would we treat her like one?

Dr. Katie VanValin, Assistant Extension Professor, University of Kentucky

Developing and first calf heifers are not the same as mature cows. While that seems like an obvious statement, there is still a common belief that heifers should be able to "get by" under the same management as mature cows. The thought is that we are selecting heifers that match available resources when we should be selecting heifers that *will become* cows that match our resources. Because heifers still have additional nutrient requirements for growth, they require different nutritional management than cows.

In the beef industry we talk about selecting "heifer-acceptable" bulls all the time, because we understand the need for emphasis on calving ease in heifers compared to mature cows. If we are going to keep back our own replacements or develop heifers, we also need to think about selecting a heifer acceptable feeding program.

Decades of research have helped us understand how heifers and cows prioritize nutrients (figure 1). The first priority is meeting maintenance requirements—these are the nutrients needed to keep the animal alive and maintaining their current body condition. Next up is supporting lactation, followed by growth (for growing females), supporting an existing pregnancy, and lastly the estrous cycle or the ability to breed back.

First-calf heifers are particularly vulnerable in a cow-calf operation. They must do everything a mature cow does raise a calf and breed back—while also continuing to grow. The consequence of not meeting her nutrient requirements is the inability to breed back, often resulting in young females being culled from the herd. Developing heifers is a significant investment, with costs spread over the animal's productive lifetime. Research has shown that it takes at least 4-5 years for a heifer to pay for herself. When first-calf heifers fail to breed back and are culled, it almost always results in a net loss to the operation. Not only have we failed to recoup her development costs, but we've also lost out on potential income from her future calves.

Reproductive failure in these young females is often wrongly blamed on genetics, but we know reproductive traits are lowly heritable. The real blame is likely due to nutrition, or more specifically undernutrition. The good news is that nutrition is something we can manage and control. Young growing females are smaller than their mature cow counterparts which means that their feed intake will be less than that of the mature cow. With less feed intake, this means that heifers require diets with greater concentrations of energy and protein.

In a typical spring calving system, the herd will likely be consuming lush forages during the breeding season but looking at the critical time leading up to breeding season, most herds will be consuming conserved forages. When thinking about supplementing average quality cools season grass hay, a lactating cow may require 3 lbs. of dried distillers grains, whereas a heifer consuming this same hay would require 5 lbs. of dried distillers grains.

To ensure that heifers are meeting their nutrient requirements, consider managing these young females in a separate group from the rest of the cow herd. For smaller herds, it may also make sense to manage any mature cows that have a low body condition score with these young females. This can allow for strategic supplementation for cattle need-ing extra nutrition without overfeeding mature cows that are in good body condition.

Always test your hay, and consider feeding higher quality forages to heifers, which can reduce supplemental feed costs. Another benefit to hay testing is the ability to select supplemental feeds that provide the best value based on the amount of supplemental energy or protein required by the herd. Energy is often the most limiting ingredient in forage-based systems, and it is highly unlikely that average quality grass hay is going to be an adequate source of energy for developing heifers, lactating first-calf heifers, or even lactating mature cows. Careful consideration should be made to provide adequate energy as well as protein in the diet.

At the end of the day, it is important to remember that developing and first-calf heifers are simply not the same as the mature cows in the herd. Take care to manage these animals to set them up for long-term success and longevity in the herd.

Maintenance	
Growth	
Maintenance of Pregnancy	
Lactation	
Estrous cycle (new pregnancy)	
Figure 1: Nutrient partitioning for heife	rc and

Figure 1: Nutrient partitioning for heifers and cows.

Reclaiming Pugged Up Pastures

Dr. Chris Teutsch, UK Research and Education Center at Princeton

Wet conditions this winter have resulted in almost complete disturbance in and around hay feeding areas. Even well designed hay feeding pads will have significant damage surrounding the pad where animals enter and leave. These highly disturbed areas create perfect growing conditions for summer annual weeds like spiny pigweed and cockle bur. Their growth is stimulated by lack of competition from a healthy and vigorous sod and the high fertility from the dung, urine and decomposing organic material around hay feeding areas.

Our most common approach to revegetating these areas is trying to reseed cool-season perennial grasses (tall fescue and orchardgrass) and legumes (red and white clover) in mid- to late-spring. On the surface this seems to be a logical approach. However, it rarely works as well as we would like. The problem is that cool-season perennial grasses usually don't have enough time to become fully established before the weather turns hot. In addition, summer annual weed pressure can be fierce during establishment. The net result is that these attempts at reseeding pugged up pastures often fail. An alternative strategy involves planting summer annual grasses in late spring or early summer. This approach has a much higher probability of success. Summer annual grasses, especially sorghum-sudangrass or sudangrass, have very rapid emergence and canopy closure. This will prevent summer annuals weeds from germinating and provide forage for grazing or harvesting during the summer months (Figure 2). Perennial cool-season grasses can then be reseeded under more ideal conditions in late or summer or early fall.

If you decide to use summer annuals grasses, there are several things that you can do to enhance your success. These are listed below.

Plant adapted summer annuals species. Always plant forages that are well adapted to Kentucky and the soils and conditions on your farm. Summer annuals that can be used to reclaim hay feeding areas include sudangrass, sorghum-sudangrass, pearl millet, and crabgrass. Detailed information on the adaptability, establishment, and management of these species can be found in <u>AGR-229</u>, Warm Season Annual Grasses in <u>Kentucky</u>.

Use the high end of the seeding rate. Seeding rates are normally given as a range. Make sure and use the high end of this range. Even with summer annuals, rapid canopy closure is critical for reducing summer annual weeds.

Plant after soil warms. For summer annuals grasses to germinate and rapidly emerge, soil temperatures at planting should be at least 60 degrees F. As a general rule, this is about two weeks after the "ideal" corn planting date. This should allow plenty of time to let the area dry out and to get it smoothed up prior to planting. If there is a delay in planting the summer annuals after final tillage, it may be a good idea to do one more pass of light tillage to disturb any weed seedling that may have germinated.

Control broadleaf weeds. Once warm-season annual grasses are established, some herbicides can be applied to control summer annual broadleaf weeds. If you plan to reseed cools-season perennials in the fall, make sure and check the label for reseeding restrictions prior to application. Always consult and follow label directions. For more information on using herbicides on summer annual grasses, contact your local extension agent.

Grazing summer annuals grasses. Allow taller growing summer annuals like sorghum-sudangrass and pearl millet to reach a height of 18-24 inches before grazing and stop grazing a to 8-10 inches. Regrowth can be stimulated be applying 40-60 lb N/A after each grazing, but the last. Crabgrass can be grazed once it reaches a height of 6 to 8 inches. Cattle should be pulled off once it has been grazed to a height of 3 to 4 inches.

Haying summer annual grasses. Allow taller growing to reach a height of 30 to 40 inches before mowing. This will optimize yield and forage quality. If regrowth is desired, do not mow close than 6 inches apply 40 to 60 lb N/A after each cutting, but the last. Crabgrass should be cut for hay at the late boot-stage. Care should be taken to not mow crabgrass closer than 3 to 4 inches.

Reseeding cool-season grasses in the fall. Pastures should be sprayed with a non-selective herbicide in late summer to control any remaining summer annual grass and any weeds that have germinated. Cool-season grasses can be no-tilled into the killed pasture area.



Figure 2. Sorghum-sudangrass is easily established once soil temperatures research 60 F and provides rapid growth and canopy cover outcompeting common summer annual weeds.

Soil Samples

First 10 Soil Samples are free!

\$10 deposit on soil probe

Soil bags can be picked up at the

Extension Office

For more information on renovating pastures and no-till seeding techniques visit UK Forage Extension website at <u>http://forages.ca.uky.edu/</u> or contact your local extension office.

Robertson Conservation—Equipment Rental

 \Rightarrow No-till Drill (Hay Buster)

\$65/day, 1-10 acres

\$65 + \$6.50/acre, 11 acres and up

 \Rightarrow Lime Spreader

\$50/day

NEW \$100 check deposit is required upon pick-up of equipment

Winning the war on weeds: Why Spring preemergence herbicides are beneficial

Source: Kenneth Clayton, plant and soil sciences extension associate

Spring is here, and you might be itching to give your lawn a little TLC. While many people think "it's spring, better grab the fertilizer," the truth is that the very best time to boost lawn health is actually in the fall. That's when conditions are prime for the grass to build strong roots. However, one of the most important (and often overlooked) spring lawn care practices is applying a preemergence herbicide.

If you want a thick, healthy lawn this summer, stop weeds before they even get started. If you wait until you can see them sprouting up, you're already fighting an uphill battle. Postemergence herbicides, which you spray onto actively growing weeds later, can be more expensive and less effective. By applying a preemergence herbicide now, you'll knock out those weed seeds before they even sprout, saving you time, energy and money down the road.

The best time to apply is when the soil temperature at a two-inch depth averages between 50-55°F for about five consecutive days. You can check soil temperatures online through resources like Kentucky Mesonet, or use a simple soil thermometer. If you're not into checking soil temps, another trick is to watch for forsythia blooms. When those bright yellow flowers are in full bloom, it's usually a good sign that it's time to apply. In Kentucky, this typically happens in March to early April.

For the best results, many lawn care professionals recommend a two-application approach. The first should be made when soil temperatures indicate it's time, and the second about six to eight weeks later to extend protection throughout the season. Always follow the instructions on the herbicide label to ensure you don't exceed the recommended annual use rate.

While a preemergence herbicide is an excellent tool for preventing weeds, it's not a magic fix. Another great way to keep weeds at bay is by maintaining a thick, healthy lawn that naturally shades out any potential invaders. Raising your mower height can be one of the most effective ways to do this, as taller grass helps block sunlight from reaching weed seeds.

Not every lawn will need a preemergence herbicide every year. If your lawn is already thick and weed-free, you may not need to apply one at all. However, if you've had issues with grassy weeds in the past or notice bare patches where weeds might take hold, it's a good investment. If you skipped fertilizing in the fall, you can apply a moderate amount of fertilizer in the spring along with your herbicide. Just be careful not to overdo it, or you might end up feeding the weeds instead.

Taking a preventative approach now will save you time, money, and frustration later in the season. By applying a preemergence herbicide at the right time and focusing on overall lawn health, you'll be setting yourself up for a lush, weed-free lawn all summer long.

More information can be found at the University of Kentucky Martin-Gatton College of Agriculture, Food and Environment publication here: https://publications.ca.uky.edu/files/AGR272.pdf.

Invasive Species Citizen Science Program Needs YOU!

Scan the QR code to learn more about the programs and the insects that the UK Department of Entomology is looking for this year!



Citizen Science

Preparing for Severe Weather: What You Need to Know



By Tony Edwards – National Weather Service Charleston, WV

In parts of the Deep South, the risk of severe thunderstorms persists throughout the winter months. For us here in the Bluegrass State, however, we're quickly approaching a time when thunderstorms become both more frequent and more intense. As winter storms make way for spring, severe weather—including damaging winds, hail, and even tornadoes—becomes the primary concern.

As I write this article in mid-March, much of the Bluegrass State is already facing the threat of severe weather, a common occurrence for this time of year. Data from the National Weather Service's Storm Prediction Center reveals that the likelihood of severe weather increases as March progresses, peaking in mid-June at around 4%. This means, based on historical data alone, residents of Kentucky have a 4% chance of experiencing damaging winds, hail larger than quarters, or a tornado within 25 miles of their home in the middle of June! The risk then significantly decreases by mid-September.

Given this, now is the time to start preparing for the upcoming severe weather season. The first step is simple: be aware that severe weather is a real possibility. Make checking your local forecast part of your daily routine to stay informed and prepared.

Did You Know? The National Weather Service (NWS) offices that serve Kentucky offer a 24-hour recorded weather forecast, and in many cases, you can even speak to a live person if you have questions about the forecast. Contact your local NWS office to learn more!

Preparing for Severe Weather

When severe weather is in the forecast, it's essential to take action ahead of time. Start by ensuring you have access to emergency supplies. This is particularly important if you live in an area prone to flooding and might need to evacuate on short notice.

Make sure you know where your safe spaces are. In most cases, this is the lowest floor of your house—preferably a basement. If you don't have a basement, an interior room with no windows and doors will suffice. If you own livestock, consider moving them to a protected area, especially if hail is in the forecast.

Stay Informed on Severe Weather Days

When severe weather is expected, it's crucial to stay vigilant. Be prepared to adjust outdoor plans if necessary and remain alert to weather updates.

Did You Know? NOAA Weather Radios are specialized devices designed to broadcast weather information and activate alarms when severe weather alerts are issued. Many models run on battery or solar power and do not include an AM/FM radio. You're likely near a transmitter, making this a reliable option to stay updated. Check out these handy radios at your local store to keep your home prepared.

Understanding Watches and Warnings

Severe Thunderstorm and Tornado

Watches: Issued when conditions are favorable for severe weather or tornadoes in the near future.

Severe Thunderstorm and Tornado Warnings: Issued when severe weather or tornadoes are occurring or imminent. This is when you need to act fast!

When a warning is issued, take shelter immediately. You may only have seconds to respond, so knowing what to do and where to go is essential.





DATE	PROGRAM	LOCATION
APRIL 14	CAIP APPLICATION WINDOW OPENS	
APRIL 22	CATTLE GRADING 6:00 PM	FARMER'S STOCKYARDS FLEMINGSBURG
APRIL 25	EDEN SHALE FARM TOUR 10:30 AM	CALL 606-724-5796 TO REGISTER
APRIL 29	FARMER'S MARKET EDUCATION: PARTNERING GROUPS, HOW CAN THEY HELP 6:00PM	ZOOM
MAY 2	CAIP APPLICATION WINDOW CLOSES	
MAY 2	CATTLEMEN'S MEETING 6:00 PM	ROBERTSON CO. AG BARN
MAY 9	HAY PRODUCTION FIELD DAY	1965 MARTHA MILLS RD.
	9:00AM-3:00 PM	FLEMINGSBURG, KY 41041
MAY 17	UP THE RIVER WITH A PADDLE 9:00 AM **SPOTS LIMITED** CALL 606-564-6808 TO REGISTER	BLUE LICKS STATE PARK
JUNE 7	SMALL RUMINANT WORKSHOP *SAVE THE DATE*	TBD

Broccoli Cornbread

Ingredients:

- ¹/₄ cup margarine, melted
- $\frac{1}{3}$ cup onion, chopped
- $\frac{1}{2}$ teaspoon salt
- $\frac{3}{4}$ cup low-fat cottage cheese
- 1¹/₂ cups fresh or cooked frozen broccoli, finely chopped
- 4 eggs, slightly beaten
- 1 (8.5-ounce) box quick corn muffin mix

Directions:

1. Preheat oven to 400 degrees F. In a mixing bowl, blend melted margarine, onion, salt, cheese, broccoli and eggs. Stir in muffin mix.

- 2. Pour into greased 9-by-13-inch pan.
- 3. Bake for 20 to 25 minutes, until the top is a golden brown. Cool and cut into squares.

Notes:

For thicker bread bake in a 9-inch round pan and add 5-7 minutes onto the suggested cooking time.

Robertson County Agriculture & Natural Resources Newsletter April 2025

Cooperative Extension Service

Cooperative Extension Service Robertson County 39 E Walnut St. Mt. Olivet, KY 41064 O: (606)-724-5796 C: (606)-261-0894 samantha.woerner@uky.edu

Spring is finally here! The weather is having a pretty hard time deciding which season we should be in right now, but we are hopeful for warm days ahead.

CAIP Applications will be available to pick up April 14th—May 2nd.

As normal, soil samples are taking a little bit longer then normal to get back to us. This is due to the large number of samples the lab is running each day. Please keep this in mind when planning ahead!

If you have any questions or concerns please be sure to reach out to our office at (606)-724-5796 or samantha.woerner@uky.edu

manthe Saunders

Samantha Saunders Robertson County Agriculture & Natural Resources/ 4-H Youth Development Agent



Lexington, KY 40506

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Cattlemen's Spring Meeting

Members will be receiving a letter in the mail about our spring member meeting.

*If you have not paid your dues, you can pay any time at the Extension Office or at the meeting

Member Dues—\$30

Couple Dues—\$45

Youth—Free

Cooperative Extension Service

Agriculture and Natural Resources Family and Consumer Sciences 4-H Youth Development Community and Economic Development MARTIN-GATTON COLLEGE OF AGRICULTURE, FOOD AND ENVIRONMENT

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Disabilities

accommodated

with prior notification