

AGRICULTURE & NATURAL RESOURCES

OCTOBER/NOVEMBER/DECEMBER

IMPORTANT DATES

- October 3rd: Farm School for Women at Fleming County Extension Office
- October 8th: Bull Value Assessment at Mason County Extension Office
- October 10th: Farm School for Women at Fleming County Extension Office
- October 15th: Bull Value Assessment at Mason County Extension Office
- October 17th: Farm School for Women at Fleming County Extension Office
- October 24th: Farm School for Women at Fleming County Extension Office
- November 1st: Beginning & Small Farmer School @ MSU
- November 14th: Cattlemen's Meeting at Lewis County High School
- November 22nd: Commercial Pesticide Applicator CEU
- November 28-29th: Office Closed for Thanksgiving Holiday
- December 2nd: CAIP Deadline
- December 5th: Wreath Making Workshop @ Lewis County Extension Office
- December 25th-January 1st: Office Closed for Christmas Holiday

Kennedy Perkins

Ag & Natural

Resource Agent

Kennedy.perkins@uky.edu

Lewis County Cooperative

Extension

284 2nd Street

Vanceburg, KY 41179

606-796-2732

CAIP DEADLINE:

December 2nd

If you still need an educational hour for CAIP, make sure you attend one of these meetings; if you can't, let me know.

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

Educational programs of Kentucky Cooperative Extension serve all people regardless of economic or social status and will not discriminate on the basis of race, color, ethnic origin, national origin, creed, religion, political belief, sex, sexual orientation, gender identity, gender expression, pregnancy, marital status, genetic information, age, veteran status, physical or mental disability or reprisal or retaliation for prior civil rights activity. Reasonable accommodation of disability may be available with prior notice. Program information may be made available in languages other than English. University of Kentucky, Kentucky State University, U.S. Department of Agriculture, and Kentucky Counties, Cooperating.

Lexington, KY 40506



Disabilities
accommodated
with prior notification.



FARM SCHOOL FOR WOMEN

4 THURSDAYS IN OCTOBER

6:00PM MEAL WILL BEGIN AT 5:30PM

FLEMING CO. EXTENSION OFFICE

1384 ELIZAVILLE RD, FLEMINGSBURG

CALL YOUR LOCAL EXTENSION OFFICE TO REGISTER BY 9/27/2024

- BRACKEN: (606) 735-2141
- FLEMING: (606) 845-4641
- LEWIS: (606) 796-2732
- MASON: (606) 564-6808
- ROBERTSON: (606) 724-5796



- OCTOBER 3**
BEEKEEPING
- OCTOBER 10**
POND MANAGEMENT
- OCTOBER 17**
PLANT DISEASES
- OCTOBER 24**
ELECTRICAL BASICS

OR REGISTER USING THE QR CODE



Cooperative Extension Service
Agriculture and Natural Resources
Family and Consumer Sciences

MARTIN-GATTON COLLEGE OF AGRICULTURE, FOOD AND ENVIRONMENT

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UK Cooperative Extension Service



BEGINNING & SMALL FARMER SCHOOL

FRIDAY, NOVEMBER 1

10:00AM-3:00PM
9:30AM Registration

25 MSU FARM DRIVE
Arena Classrooms

TOPICS

- First Steps
- Farm Design & Layout
- Taxes & Record Keeping
- Enterprises to Consider
- Info from Partnering Groups

To register, use the QR code or call your local Extension Office at: (606) 796-2732



Registration required by 10/25/24

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Bull Value Assessment Program

Hosted by the Buffalo Trace Area Counties Cooperative Extension Offices

Session 1 Topics (10/8)

- Breeding Soundness Exams
- Bull Nutritional Management
- Matching Genetics to Management
- Targeting Selection for Specific Markets
- Tools for Selection

Session 2 Topics (10/15)

- Mock Auction!
- Discussion of scenarios

OCTOBER 8 & OCTOBER 15

6:00PM (MEAL BEGINS AT 5:30PM) AT MASON CO. EXTENSION OFFICE

MUST ATTEND BOTH SESSIONS!

USE THE QR CODE OR CONTACT YOUR LOCAL OFFICE TO REGISTER:

- BRACKEN COUNTY: (606) 735-2141
- FLEMING COUNTY: (606) 845-4641
- LEWIS COUNTY: (606) 796-2732
- MASON COUNTY: (606) 564-6808
- ROBERTSON COUNTY: (606) 724-5796



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LEWIS COUNTY CATTLEMEN'S ASSOCIATION

November 14th at 7 p.m. at the Lewis County High School.

Our guest speaker is Ray Smith, UK Forage Specialist



Help us record drought conditions through CMOR

The National Drought Mitigation Center, the National Integrated Drought Information System and the U.S. Department of Agriculture's Climate Hubs are working with states, tribes and others across the country to collect Condition Monitoring Observer Reports on Drought (CMOR-Drought), including photos. We want to know how drought is affecting you.

How does this benefit you?

Your reports help us understand how drought is affecting local conditions. They appear on a map. The U.S. Drought Monitor (USDM) author may consult the CMOR map to help identify areas that need more attention. The USDM triggers drought responses, including the Livestock Forage Disaster Program and Internal Revenue Service tax provisions. State agencies, including emergency management and public safety, may also make use of maps to know where to direct assistance.

Where do you find CMOR-drought reporting?

Landing page for CMOR-drought:

go.unl.edu/cmor_drought

Includes current and archived maps of reports, and QR code for current form

Direct link to current CMOR-drought form:

go.unl.edu/CMOR

Works on mobile*, tablet or computer

*To report from your mobile phone, see "Getting started with the field app"

How often should you report?

We recommend that you submit a photo each month or each season, to provide an ongoing comparison of wet, dry and normal conditions. Of course, we also welcome more frequent submissions.

7/2022

go.unl.edu/cmor_drought

Questions?

Please email DIRinfo@unl.edu.

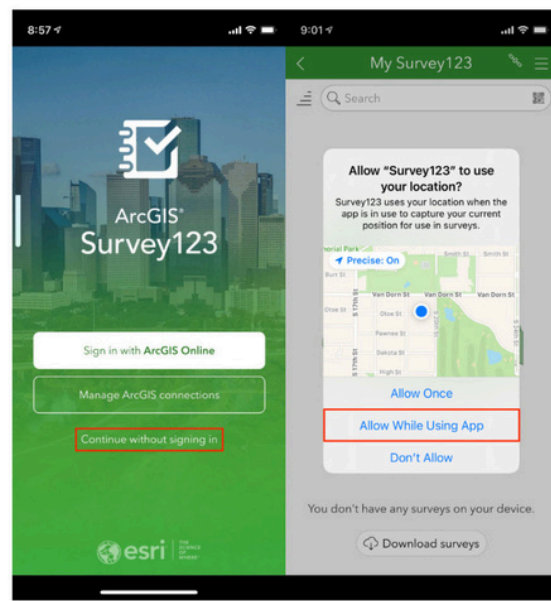
Getting started with the field app

Install the app

CMOR uses Esri's Survey123 field app. Install the app, either by searching for Survey123 at the app store or by entering go.unl.edu/CMOR into the address bar or scanning the QR code, which will prompt you to download the app.

Click on "continue without signing in."

When it asks about geolocation, choose "Allow While Using App" for best results.



Download the survey

You must go outside the app to download the survey for the first time.

From your phone or tablet, enter go.unl.edu/CMOR into the address bar or scan the QR code with the camera, and this time choose "Open in the Survey123 field app." That will download the survey and open it for you to use.

How do you submit a report?

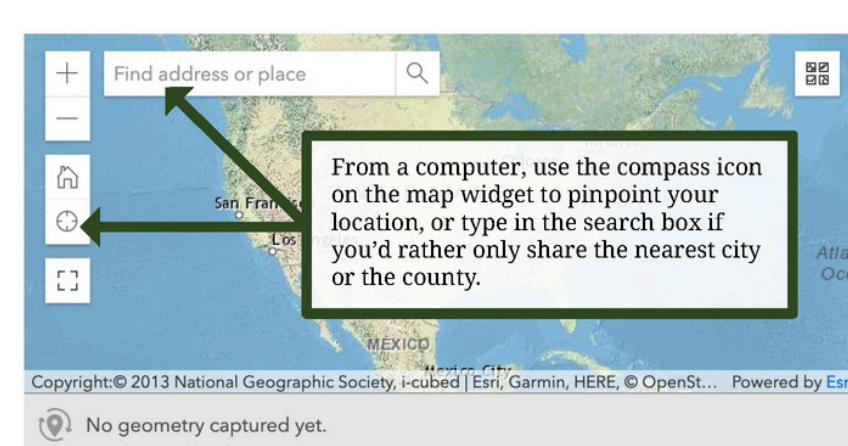
- If you are using the app on a mobile device with location enabled, it should pinpoint your location automatically. For less precision, enter the name of the nearest city or county, or the island and local jurisdiction, in the map widget search window.
- From a desktop computer, if location is enabled, use the compass icon on the map widget to pinpoint your location, or enter the name of the nearest city or county, or the island and local jurisdiction, in the map widget search window.
- Provide the date.
- How dry or wet is it? Pick from seven levels, ranging from severely dry to severely wet. Your answer to this question will be the first way that people see your report on a map.



- The questions related to your years of experience help us frame your observations as "1 in 10" or "1 in 20," which is how the U.S. Drought Monitor categorizes extremes.
- Click on the triangle to expand "Report normal or wet conditions" to submit observations during non-drought times. This helps develop a basis for comparison with drought conditions.

7/2022

go.unl.edu/cmor_drought



- What impacts of drought are you experiencing? Click on the triangle for a category or sector to expand a list of potential impacts and check any that you have experienced.
- You can upload up to five photos. If you are showing drought conditions, please consider uploading a "before" photo taken during normal conditions, to provide context. If you upload a photo, you as the copyright holder agree that it may be used by the National Drought Mitigation Center, and shared with and by government and academic partners, for drought monitoring, management, and education. Your photo will become part of a permanent public archive. The drought center reserves the right to remove objectionable content.
- Check the box that best describes your role: Extension, agricultural producer, water supplier, homeowner, climate or weather professional, outdoor enthusiast, or other (fill in the blank).
- Enter a display name. A display name will let users of this information see whether multiple reports are from a single individual.

Especially if you submit reports consistently over time, this helps you build a credible track record. You can use your real name, come up with a descriptive username such as "NDRancher07," or use a random string of letters and numbers. If you forget your display name, you can zoom in on the map to find your previous report and see what you used. If the drought center uses one of your photos, we may use your display name as attribution, i.e., "Photo by HappyRancher42 via CMOR."

Please provide your name and email address for the benefit of people assessing drought in an official capacity. This information will not appear on public-facing maps, but we may contact you for follow-up information.

COMMERCIAL PESTICIDE APPLICATOR CONTINUING EDUCATION TRAINING

NOVEMBER 22, 2024 9AM-3:30PM EST

30 MINUTE LUNCH BREAK

This training has been approved by the Kentucky Department of Agriculture for the following CEU credits in each category:

- Category 1A: Agricultural Plant **4 CEUs**
- Category 2: Forestry **1 CEU**
- Category 3: Ornamental & Turf & Lawn Care **1 CEU**
- Category 4: Seed Treatment **1 CEU**
- Category 5: Aquatic **1 CEU**
- Category 10: Demonstration & Research **1 CEU**

LOCATION: VIRTUAL VIA ZOOM

LIMITED SPOTS

Wreath Making Workshop

December 5th at 5 p.m.

Lewis County Extension Office
284 2nd Street, Vanceburg

\$15

One wreath per person

Call the office at 606-796-2732 to RSVP by
November 26th

Checks Payable to: Lewis County Extension Office

Variable Rate Frost Seeding Evaluated at UK Research and Education Center

Dr. Chris D. Teutsch, Caroline Roper, and Brittany Hendrix, University of Kentucky Research and Education Center at Princeton

Clover and other pasture legumes are important parts of sustainable grassland ecosystems. Legumes form a symbiotic relationship with Rhizobium bacteria. The Rhizobium bacteria fix nitrogen from the air into a plant available form and share it with the legume. In return the legume plant provides the bacteria with a place to live (nodules on the root system) and an energy source (sugar from photosynthesis). Nitrogen fixation is the second most important biochemical process on earth following photosynthesis. In addition to nitrogen fixation, legumes improve pasture quality and animal performance, and new research from our USDA Ag Research Unit in Lexington shows that a compound found in red clover may help to alleviate tall fescue toxicosis.

Frost seeding is the process of broadcasting clover or other legume seed onto existing pastures or hayfields in late winter and allowing freezing and thawing cycles to incorporate the seed into the soil (Teutsch et al., 2021). This method is most commonly used with red and white clover as well as annual lespedeza, all of which are legumes and an essential part of sustainable grassland ecosystems (Whitehead, 2000).

Variable rate seeding (VRS) technology allows seeding rate to be adjusted in real time as field conditions or ground speed changes (Šarauškis et al., 2022). This could be especially useful in pastures where rough terrain makes maintaining a consistent speed difficult (Figure 1). This technology could improve the uniformity of seed dispersal resulting in more uniform stands of clover. The objective of this study was to evaluate the impact of variable seeding technology on actual seeding rate as ground speed was varied.



Figure 1. Pastures often contain rough and undulating terrain that makes maintaining a constant speed difficult.

Variable Rate Seeder Evaluation

This evaluation was conducted at the University of Kentucky Research and Education in Princeton, KY. The experimental design was a random complete block with four replications. An UTV (Kawasaki Mule, 4010) was driven on a paved course that was 1,000 ft in length (Figure 2). An APV broadcast seeder, model MDD 100 M1 (APV America Inc., Pottsville, TX), was mounted in the bed of the UTV. The seeder was calibrated for a seeding rate of 10 lb/A at 6 mph. The treatments consisted of driving the course at 3, 6, and 9 miles per hour (mph) with either variable or constant seeding rates. A Raven CR7 GPS unit (Raven Applied Technology, Sioux Falls, SD) was used to monitor speed. The actual speed was also calculated by timing each run and converting that measurement into mph.

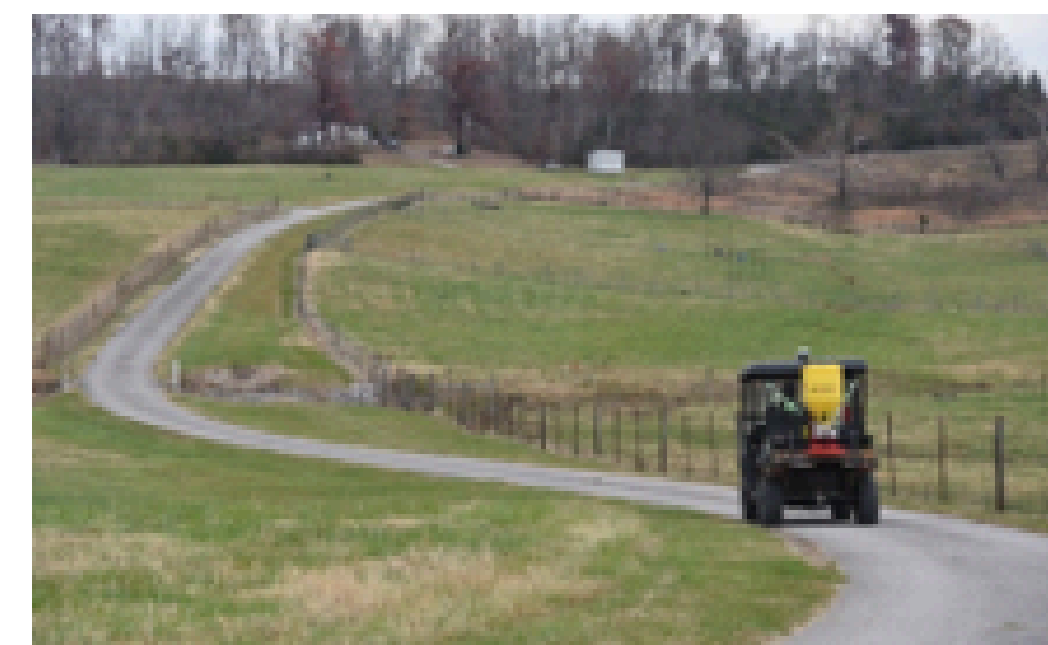


Figure 2. A UTV with the APV seeder mounted in the bed was driven on a paved course that was 1,000 ft in length.

At the beginning of each treatment, 15 pounds of wheat seed was weighed and added to the seeder. Variable or constant seeding rate was then selected based on the treatment. The course was then driven at the speed designated for that treatment. At the end of the course the seed metering mechanism was disengaged, and the remaining seed was removed with a shop vacuum and weighed (Figures 3 and 4). Data were analyzed for statistical differences.



Figure 3. Sweeping remaining seed out to determine the seeding rate by difference.

Results

Actual speeds were not different for the constant and variable seeding rate treatments for a given speed treatment (Figure 5). In addition, actual speeds for the variable or constant seeding rates were very close to the target speeds of 3, 6, and 9 mph (Figure 5). This indicates that the UTV operators were driving both accurately and consistently in terms of speed.



Figure 4. Weighing remaining seed to determine the seeding rate by difference.

As expected, when the seeding rate remained constant and the speed was varied, actual seeding rates were different (Figure 6). Increasing speed from 6 to 9 mph resulted in a 30% reduction in the seeding rate. In contrast, slowing ground speed from 6 to 3 mph doubled the seeding rate. When the variable seeding rate option was used, the seeding rate remained relatively constant (<10% variation) regardless of changes in ground speed (Figure 6).

Summary and Implications

Using variable rate seeding technology in low input pastoral systems could have a measurable impact on pounds of seed applied per acre, especially in uneven terrain where a constant speed is difficult to maintain. Overall, using variable seeding rate technology could reduce seeding costs for livestock producers and result in more uniform stands of clover. However, the cost of this technology may limit adoption. The price of the seeder used in the study was \$5,800. This is a substantial increase when compared to less automated seeders that cost \$500 to \$1,000. One potential path to adoption is for Extension offices and Soil and Water Conservation Districts to purchase seeders and make them available as part of already existing equipment share/rental programs. More research is needed on-farms to better document the economic impact of utilizing variable seeding rate technology in low input pastoral systems.

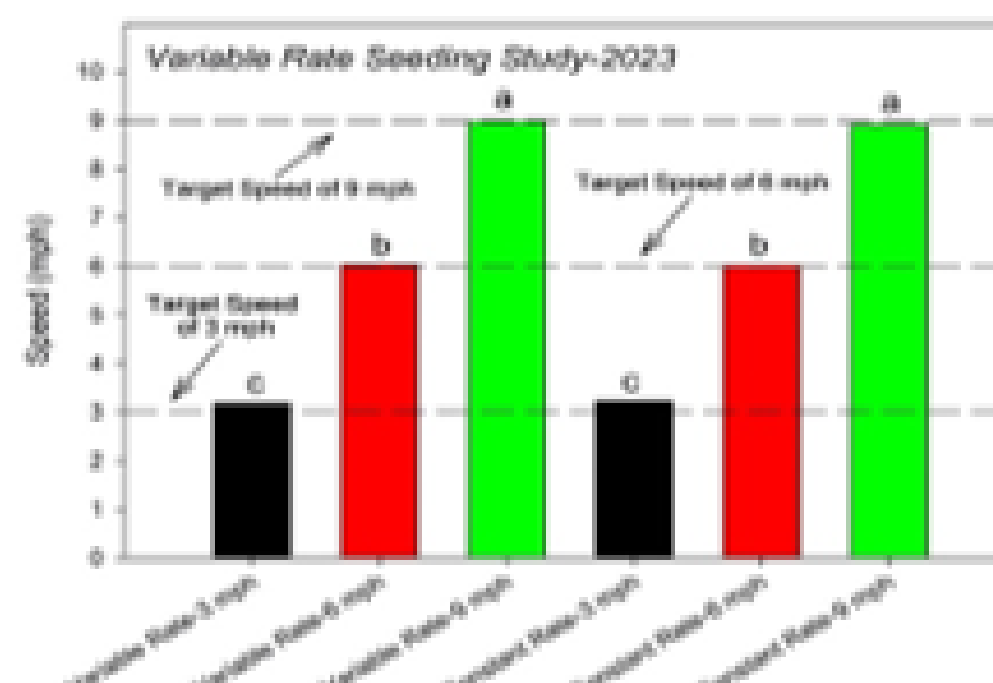


Figure 5. Actual speed in miles per hour for the 3, 6, and 9 mph treatments

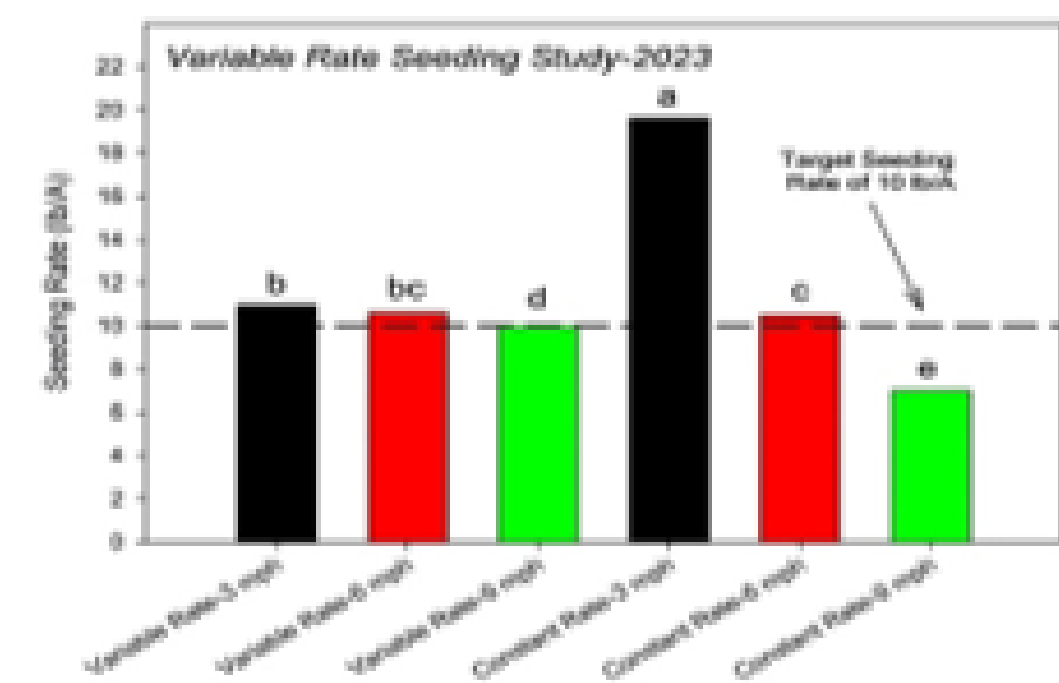


Figure 6. Actual seeding rate in pounds per acre as impacted by speed and the use of variable seeding rate option.

We will be closed
for Thanksgiving

November 28th and 29th

We will re-open on Monday, December 2nd
at 8:00 a.m.



Timely Tips

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

Spring-Calving Cows

- Bulls should have been removed from the cow herd by now! They should be pastured away from the cow herd with a good fence and allowed to regain lost weight and condition. It is a good time to evaluate physical condition, especially feet and legs. Bulls can be given medical attention and still have plenty of time to recover, e.g., corns, abscesses, split hooves, etc. Don't keep trying to get open spring cows bred – move them to fall calving or sell them when they wean this year's calf. If you don't have a bull pen and want to tighten up the calving season, remove the bull and sell him. Plan on purchasing a new bull next spring. If that is not feasible, then schedule your veterinarian to pregnancy diagnose the herd and cull cows that will calve late.
- Repair and improve corrals for fall working and weaning. Consider having an area to wean calves and retain ownership for postweaning feeding rather than selling "green", lightweight calves. Plan to participate in CPH-45 feeder calf sales in your area.
- Limited creep feeding can prepare calves for the weaning process since they can become accustomed to eating dry feed. This will especially benefit those calves which you are going to keep for a short postweaning period – like the CPH-45 program. It's time to start planning the marketing of this year's calf crop.
- Begin evaluating heifer calves for herd replacements – or culling. Each time you put them through the chute you can evaluate them for several traits, especially disposition. Consider keeping the older, heavier heifers. They will reach puberty before the onset of the breeding season and have higher conception rates.
- This has generally been a reasonably good year for pastures, but many parts of the state have experienced some drought. Evaluate moisture condition and consider stockpiling some fescue pastures. It's not too late to apply nitrogen for stockpiling fescue if moisture conditions are suitable.
- Stresses associated with weaning can be minimized by spreading-out other activities commonly associated with weaning – like vaccinations, deworming and, perhaps, castration and dehorning (which should have already been done!). Therefore, this month is a good time to do a "preweaning" working of cows and calves.
- When planning the preweaning working, consult with your veterinarian for advice on animal health products and procedures. One procedure that can be done now is pregnancy checking cows. Early pregnancy diagnosis will allow time to make culling decisions prior to weaning time. Feeding non-productive cows through the winter is a costly venture so pregnancy diagnosis is a business decision for most producers.

Fall-Calving Cows

- Fall-calving should start this month. Get your eartags ready. Cows should be moved to a clean, accessible pasture and be watched closely. Tag calves soon after they are born and record dam ID and calf birthdate, etc. Castration is less stressful when performed on young animals and calves which are intended for feeders can be implanted now, too.
- If you haven't started calving quite yet, then it's time to get ready. Be sure you have the following:
 - o record book
 - o eartags for identification
 - o iodine solution for newborn calf's navel
 - o calf puller
 - o castration equipment
- Watch for those calves which may come early and be prepared to care for them.
 - Be on guard for predators – especially black vultures.
- Move cows to best quality fall pasture after calving. Stockpiled fescue should be available to these cows in November-December to meet their nutritional needs for milking and rebreeding.
- Start planning now for the breeding season. If using AI, order supplies, plan matings and order semen now.

Stockers

- Calves to be backgrounded through the winter can be purchased soon. A good source is Kentucky preconditioned (CPH-45) calves which are immunized and have been preweaned and “boosted”.
- Plan your receiving program. Weanling calves undergo a great deal of stress associated with weaning, hauling, marketing, and wide fluctuations in environmental temperature at this time of year. Plan a program which avoids stale cattle, get calves consuming water and high-quality feed rapidly. Guard against respiratory diseases and other health problems.

General

- Keep a good mineral mix available at all times. The UK Beef IRM Basic Cow-Calf mineral is a good choice.
- Do not give up on fly control in late summer, especially if fly numbers are greater than about 50 flies per animal. You can use a different “type” of spray or pour-on to kill any resistant flies at the end of fly season.
- Avoid working cattle when temperatures are extremely high – especially those grazing high-endophyte fescue. If cattle must be handled, do so in the early morning.
- Provide shade and water! Cattle will need shade during the hot part of the day. Check water supply frequently – as much as 20 gallons may be required by high producing cows in very hot weather.
- Plan the winter-feeding program. Take forage samples of hay you will feed this winter. Request protein and TDN analysis so that supplemental feed needs may be estimated. Don’t wait until you run out of feed in February to purchase extra feed. Plan to minimize hay storage and feeding losses because feed is too expensive to waste.
- If you have adequate moisture, stockpiling fescue might be a viable option. Nitrogen application to fescue pastures can be made now and allow them to grow and accumulate until November, or when other sources of grazing have been used up. To make best use of this pasture, put fall-calvers, thin spring-calvers, or stockers on this pasture and strip graze.
- Don’t graze sorghum or sudan pastures between the first frost and a definite killing frost because of the danger of prussic acid poisoning. Johnsongrass in stalk fields can also be a problem after a light frost. Grazing can resume after the sorghum-type grasses have undergone a killing frost and dried up.

**Follow our new
facebook page at
Lewis County
Cooperative
Extension-
Agriculture &
Natural
Resources**



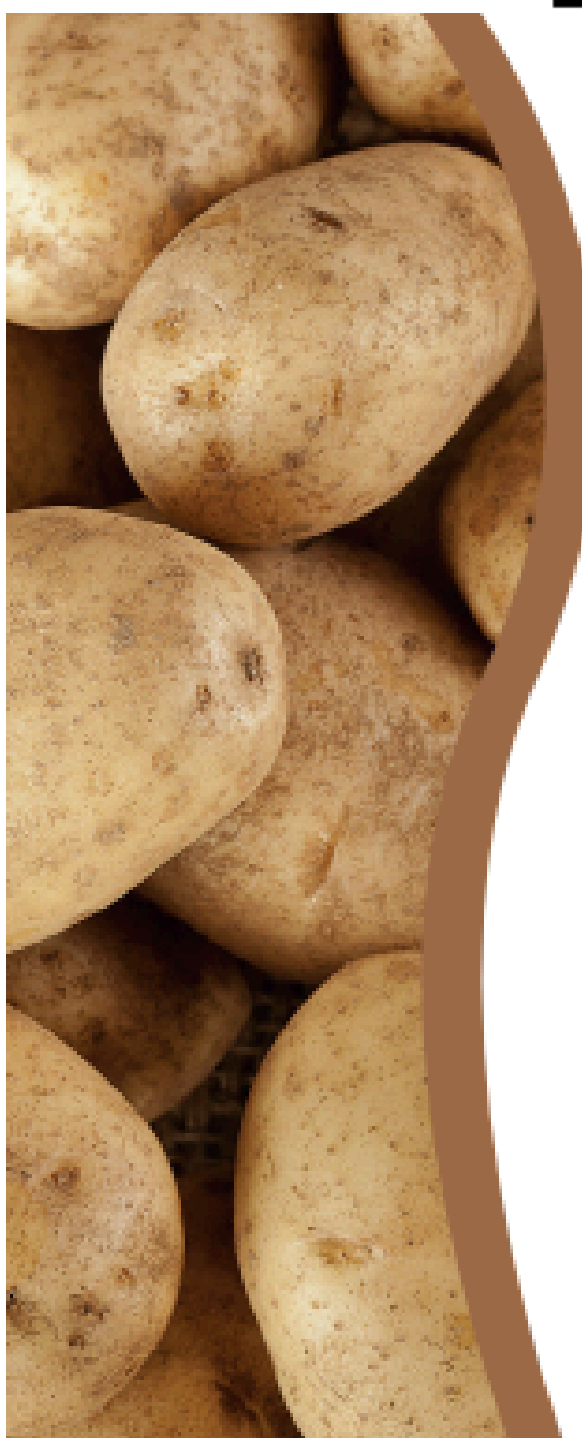
Converting from Year-round to Controlled Calving

In the United States more than half (55%) of all beef cow-calf operations do not have a defined calving season. Typically, in these operations, bulls are not removed from the herd and remain with the cows the entire year. This "uncontrolled breeding" results in cows calving over several months or, in some cases, cows calving every month. Calving year-round presents many challenges in herd management and decreases productivity. In some cases, producers have an off-the-farm job and limited time can be left to dedicate to the cowherd. In these scenarios, it is crucial to maximize time and labor efficiency.

<https://publications.ca.uky.edu/sites/publications.ca.uky.edu/files/ASC263.pdf>



Scan QR Code to access publication



Cheesy Broccoli Potatoes

5 slices turkey bacon	Salt and pepper to taste
1 tablespoon olive oil	4 large potatoes, cubed
1 clove garlic, minced	2 cups fresh broccoli florets
2 tablespoons chopped chives	1 cup fat-free, shredded cheese

Preheat oven to 425° F. **Cook** bacon until crispy, crumble and set aside. **Spray** 9x13-inch baking dish with non-stick cooking spray. In a small bowl, **combine** olive oil, garlic, chives, salt and pepper; **stir** to blend. In a large bowl, **toss** together potatoes and broccoli. **Pour** olive oil blend over potato mixture; **stir** to coat. **Pour** into baking dish and **cover** with foil. **Bake** for 35 minutes or until potatoes are

tender; **remove** from oven. **Sprinkle** cheese and bacon on top and place back in oven until cheese melts.

Yield: 8, ½ cup servings.

Nutritional Analysis: 140 calories, 5 g fat, 1 g saturated fat, 20 mg cholesterol, 470 mg sodium, 15 g carbohydrate, 2 g fiber, 2 g sugar, 10 g protein.



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

