



College of Agriculture,
Food and Environment
Cooperative Extension Service

PULASKI COUNTY EXTENSION OFFICE

AGRICULTURE NEWSLETTER

February 2023

T.J. Adkins; Agent for Agriculture & Natural Resources

2023 CAIP Sign-Ups

2023 CAIP sign-ups are fast approaching, now is the time to start thinking about completing your education requirements. Contact the Pulaski County Extension Office at (606) 679-6361 about upcoming opportunities to meet these requirements.



Lake Cumberland Area Forage Series

Weed Control in Forage Stands - Dr. JD Green

January 26th, 2023

6:00pm CST

Russell County Extension Office

Russell Springs, KY

Maintaining Fertility on Forage Stands - Dr. Chris Teague

February 16th, 2023

6:00pm EST

Hal Rogers Regional Fire Training Center

Somerset, KY

Forage Establishment - Dr. Ray Smith

March 14th, 2023

6:00 PM EST

Somerset Community College (McCreary Campus)

Whitley City, KY

Optimizing Forage Quality During Harvest- Dr. Jimmy Henning

April 3rd, 2023

6:00pm EST

Casey County Extension Office

Liberty, KY

There will be a meal served prior to each program.

Attendees must RSVP to your County Agriculture Extension Agent.

*Counts for
CAIP*

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

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, or physical or mental disability. University of Kentucky, Kentucky State University, U.S. Department of Agriculture, and Kentucky Counties, Cooperating.
LEXINGTON, KY 40546



Disabilities
accommodated
with prior notification.

February 16th meeting will count for CAIP!!! Be sure to RSVP please at (606) 679-6361.

Frost Seeding Clover: A Recipe for Success

Chris D. Teutsch, S. Ray Smith, Jimmy Henning, and T.J. Adkins

Legumes are an essential part of a strong and healthy grassland ecosystems (Figure 1). They form a symbiotic relationship with Rhizobium bacteria in which the bacteria fix nitrogen from the air into a plant available form and share it with the legume. Clover also increases forage quality and quantity and helps to manage tall fescue toxicosis. In the past, the positive impact of clover on tall fescue toxicosis has always been thought to simply be a dilution effect, but new research from the USDA's Forage Animal Production Unit in Lexington shows that compounds found in red clover can reverse vasoconstriction that is caused by the ergot alkaloids in toxic tall fescue. The primary compound found in red clover is a vasodilator called Biochanin A.

Clover stands in pastures thin overtime due to various factors and require reseeding every three to four years. There are several techniques for reintroducing clover into pastures including no-till seeding, minimum tillage, and frost seeding. Of these techniques, frost seeding requires the least amount of equipment and is the simplest to implement. Frost seeding is accomplished by broadcasting clover seed onto existing pastures or hayfields in late winter and allowing the freezing and thawing cycles to incorporate the seed into the soil (Figure 2 and 3). This method works best with red and white clover and annual lespedeza. It is NOT recommended for seeding grasses or alfalfa. This article covers the important factors for successful frost seeding.



Figure 1. Clover and other legumes are an important part of sustainable grassland ecosystems. They form a symbiotic relationship with Rhizobium bacteria in which nitrogen from the air into a plant available form, improve nutritive value, and help to alleviate tall fescue toxicosis. (Photo by Chris Teutsch)

Frost Seeding Tips

- Control broadleaf weeds. Ideally, broadleaf weeds should be controlled prior to seeding legumes since most herbicides will damage clover seedlings. This is best accomplished by controlling weeds the season prior to renovation. More information on controlling weeds in pastures and hayfields can be obtained contacting your local extension office or consulting AGR-207 Broadleaf Weeds of Kentucky Pastures.
- Soil test and adjust fertility. For clover and other improved legumes to persist and thrive in pastures, an environment conducive for their growth must be created. This starts with proper soil fertility. Prior to frost seeding clover, soil test pastures and hayfields then lime and fertilize pastures according to the soil test recommendations.

- Suppress sod and decrease residue. The existing sod must be suppressed and plant residue reduced prior to seeding. The reduction in plant residue allows seed to reach the soil surface where it can be incorporated by freezing and thawing events. Sod suppression and residue reduction is best accomplished by hard grazing in late fall and early winter.
- Ensure good soil-seed contact. Good soil-seed contact is required for seed germination and emergence. In frost seedings, this occurs when freeze and thaw cycles form cracks in the soil surface, often referred to as a honeycomb (Figure 3).
- Seed on proper date. Frost seeding is best accomplished in late winter or very early spring (February and early March). Frost seeding is accomplished by simply broadcasting the seed on the soil surface and allowing the freeze and thaw cycles to incorporate the seed into the soil. Success with frost seeding can be enhanced by dragging the pasture as the seed is being broadcast or immediately after. Rolling the field with a corrugated roller after seeding will also improve success.



Figure 2. Frost seeding is accomplished by broadcasting clover seed onto closely grazed pastures in late winter or early spring. Using GPS guidance helps operators maintain equal spacing between passes and consistent speed (inset picture). (Photos by Chris Teutsch)

- Use high-quality seed and adapted varieties. Choose clover varieties that have been tested in Kentucky. The most current variety testing results can be found on the UK Forage Extension website or by visiting your local county extension office. Using the Long-Term Summary of Kentucky Forage Variety Trials, choose varieties that have performed above average (>100%) for multiple site-years. This indicates that they are well adapted to conditions found in Kentucky. Use either a certified or proprietary seed to ensure high germination, good seed genetics, and low noxious weed content.

Do NOT use common or VNS (Variety Not Stated) seed since there is no way to tell how it will perform in Kentucky.

- Legume mixture for Kentucky. In Kentucky, a good mixture for renovating pastures with is 6-8 lb/A of red clover, 1-2 lb/A of ladino or intermediate white clover. On rented farms or where soil fertility is marginal, adding 10-15 lb/A of annual lespedeza can be beneficial. Annual lespedeza is a warm-season annual legume that was used extensively in the past before producers had ready access to lime and fertilizer. In general, cool-season legumes (red and white clover) will be more productive under good growing conditions.

- Use correct seeding rate. Make sure to maintain and calibrate broadcast seeding equipment prior to planting (see video on KYForages YouTube Channel on seeder calibration). Seeding at too high of a rate needlessly results in higher seed costs. On the other hand, seeding at too low a rate results in weak stands and lower productivity.
- Inoculate legume seed. Most improved clover seed comes with a lime-based seed coating that contains inoculant. Make sure that the seed is fresh and has not been stored under adverse conditions. If the seed is not pre-inoculated, inoculate it with the proper strain of nitrogen-fixing bacteria prior to seeding. This is relatively inexpensive insurance that optimum nitrogen fixation will take place.



Figure 3. Freeze and thaw cycles during late winter result in the formation of cracks in the soil surface often referred to as a “honeycomb”. This heaving incorporates clover seeds into the soil and is commonly referred to as “frost seeding”. (Photo by Jimmy Hennina)

- Check seed distribution pattern. When using a spinner type spreader/seeder make sure and check your spreading pattern. In many cases small-seeded forages are not thrown as far as you think. This can result in strips of clover in your pastures rather than a uniform stand. Also check your seed distribution pattern. Single disk spinners often throw more seed to one side if not correctly adjusted.
 - Use GPS guidance to maintain a consistent distance between passes and speed. It is often difficult to see where seed has already been broadcast and many ATV/UTVs do not have a functioning speedometer. Using a portable GPS unit can reduce misses and overlaps and help the operator maintain a consistent speed (Figure 2).
 - Control post-seeding competition. Not controlling post-seeding competition is one of the most common causes of stand failures. One of the best management practices is to leave cattle on pastures that have been overseeded with clover until the clover seedlings have germinated and are tall enough that the cattle start to graze them. Then remove animals from the pasture and allow the clover to reach a height of 6-8 inches. At that time the paddock can be placed back into the rotation. If the existing vegetation is not controlled, the new clover seedlings will be shaded out.
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2023 Mid-South Stocker Conference

The 2023 Mid-South Stocker Conference will return to in-person format Feb. 21-22 in Bowling Green. The conference will offer educational sessions, demonstrations and opportunities for beef producers to network with industry representatives.

The event is an annual partnership of the University of Kentucky College of Agriculture, Food and Environment and the University of Tennessee Institute of Agriculture. The conference will begin Feb. 21 at 5 p.m. CST with registration, and dinner will follow at 6 p.m. Evening sessions include industry partner education and a field necropsy demonstration from UK extension ruminant veterinarian Michelle Arnold.

“We’re looking forward to having everyone back together in person this year after two years of virtual conferences,” said Jeff Lehmkuhler, UK beef specialist. “The past few years have been challenging in many ways for our industry and for agriculture. We want to provide participants with information they can use to strengthen their operations and opportunities to gather with others who share their interests and challenges.”

The Feb. 22 the trade show will open at 8:30 a.m. CST. Katie VanValin, beef specialist at the UK Research and Education Center in Princeton, will moderate the opening session at 9:45 a.m. where topics will include:

- Considerations for forage selection and management with changing weather conditions – Kim Mullinex, Auburn University extension beef systems specialist
- Incorporating red clover for fescue toxicosis management – Brittany Harlow, animal scientist for the U.S. Department of Agriculture, Agriculture Research Service
- Southeastern market outlook – James Mitchell, University of Arkansas extension economist

Afternoon sessions include virtual tours, a stocker cattle health update from Arnold and livestock risk protection information from Kenny Burdine, UK extension livestock economic specialist. The conference will wrap up with door prizes at 4:15 p.m. CST.

The conference venue is the L.D. Brown Ag Expo at Western Kentucky University, 406 Elrod Road, Bowling Green, Kentucky. For more information and to register, visit

<https://midsouthstockerconference.utk.edu/>

The Mid-South Stocker Conference helps operators explore ideas for efficient and healthy cattle production and helps define stocker production’s role in a rapidly evolving cattle industry to effectively meet consumer expectations.

Pulaski County Extension Office Private Pesticide Applicator Trainings

Woodstock Community Center

- March 4th at 9 am

Extension Office

- February 24th at 10 am

Please be sure to RSVP at 606-679-6361 prior to the training you would like to attend. Feel free to contact us with any questions.



PULASKI COUNTY EXTENSION OFFICE

2 Part Class- Must attend both classes

12 people or 12 couples limit

Please register and pay in advance

Feb 10th 12pm Summer Sausage- You will be making your own summer sausage and preparing it for the fermentation and smoking process. Ground pork, ground beef, seasonings, add-ins & all supplies provided. Optionally you may bring your own ground venison or elk to substitute part of the ground beef. The sausage will be finished out at the extension office and you will receive it at the next class.

Feb 16th 12pm Charcuterie Boards- Putting it all together! You will receive your summer sausage once it has gone through the fermentation and smoking process. Then you will learn how to create your own charcuterie board using your summer sausage and some other ingredients.

\$25 PER PERSON / COUPLE
CALL: 606-679-6361 TO RSVP

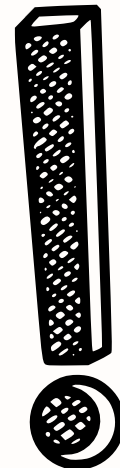
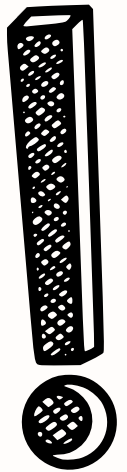
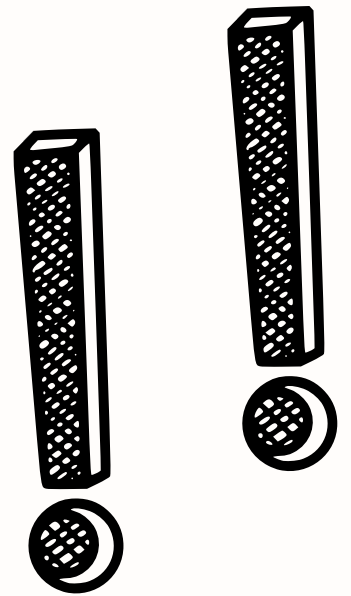


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There's
still
classes
and spots
left



Educational WORKSHOP

TUESDAY, FEBRUARY 21, 2023

6:00 PM

WOODSTOCK COMMUNITY CENTER

Hosted By:

**Pulaski County Farm Bureau Women's Committee
Young Farmers Committee
Generation Bridge**



*What does your Farm
Owners Policy Cover?*



Succulent Planters

Make a succulent planter to take home
presented by, Laura Rogers, Kentucky State
University



Speaker

Renee Carico, Kentucky Farm Bureau
Livestock and Environmental Field Specialist



**Meal is at 6:00 PM
Then choose 1 of the 3 sessions to attend
and enjoy!**

**RSVP AT: Pulaski County Farm
Bureau**

606-679-2360



Kentucky Dairy Partners Annual Meeting



College of Agriculture,
Food and Environment
Cooperative Extension Service

Kentucky Dairy Partners Annual Meeting

February 28 & March 1, 2023

Sloan Convention Center, 1021 Wilkinson Trace, Bowling Green, Kentucky



KDDC Young Dairy Producers Meeting Tuesday, February 28 (All Times are Central Time)

9:00 AM - 11:00AM	Trade Show Set up
10:00 AM	Registration for KDDC Young Dairy Producers Conference
10:30	"Manure Management for Profit" – Edwin L. Ritchey, University of Kentucky
11:15	"Show Me the Money!!" – Bill McCloskey, Kentucky Office on Agriculture Policy
11:45	Lunch and Trade Show Opens
1:30	"Managing Winter Annuals for Profit" – Jimmy Henning, University of Kentucky
2:15	"Advancing in Technology for the Betterment of Dairy Cattle through Genomics-A Producer's Perspective" – Larry Embry, David Corbin, Branden Fields and Billy Wilchur
3:15	Ice Cream Break and Visit Trade Show
1:00 - 5:00	ADA of Kentucky Board Meeting
4:30	Young Dairy Producers of Kentucky Mixer
6:00 - 8:00	Dairy Awards Dinner

Wednesday, March 1 (All Times are Central Time)

8:00 AM	Registration & Trade Show Open
8:40	Welcome – Denise Jones, Dairy Alliance
9:00	"Good Transition Cow Management Means More Milk" - Bill Weiss, The Ohio State University
9:35	"Strategies for Success in a Changing Milk Market"- Zach Myers, PA Center of Dairy Excellence
10:10	Break and Visit Trade Show
11:00	The Dairy Alliance – Jennifer Wheeler, School Nutrition Director for Marion County Public Schools
11:35	"Apply Nutritional Know-How to Your Farm" - Bill Weiss, The Ohio State University
12:10 PM	Lunch & Round Table Discussions- Trade Show Exhibits (Bidding Ends on Silent Auction Items)
1:30	Wrap up and Evaluations

**Holiday Inn Hotel room rate is \$109 and room block ends February 10, 2023
Call 270-745-0088 under KY Dairy Partners**



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Agriculture and Natural Resources

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Pulaski County Extension Office

P.O. Box 720

Somerset, KY 42502

Phone: (606) 679-6361



Roast Venison



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



Roast Venison

- 4 pounds venison roast
- 1 teaspoon salt
- 2 tablespoons flour
- 2 tablespoons oil
- ¼ teaspoon garlic powder
- 1 onion, sliced
- 2 tablespoons brown sugar
- ¼ cup lemon juice
- 4 cups low-sodium canned tomatoes
- ¼ teaspoon browning sauce, if desired

Season roast with salt and roll in flour. Brown on all sides in hot oil in a heavy skillet. Place in a slow cooker and add remaining ingredients. Cook on low for 10 hours or on high for 6 hours.

Leftovers ideas: cold sandwiches, heated in barbecue sauce for hot sandwiches, or diced into soup or stew.

Yield: 12 servings

Adapted from Venison Recipe Collection, Compiled by Becky Nash, Extension Agent for Family and Consumer Sciences

Nutrition Facts

12 servings per container
Serving size 5 ounces (255g)

Amount per serving
Calories 250

	% Daily Value*
Total Fat 6g	8%
Saturated Fat 2g	10%
Trans Fat 0g	
Cholesterol 130mg	43%
Sodium 300mg	13%
Total Carbohydrate 10g	4%
Dietary Fiber 2g	7%
Total Sugars 5g	
Includes 2g Added Sugars	4%
Protein 36g	
Vitamin D 0mcg	0%
Calcium 11mg	0%
Iron 5mg	30%
Potassium 498mg	10%

* 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.