

# AG News Today

AGRICULTURE & NATURAL RESOURCES



Martin-Gatton

College of Agriculture,  
Food and Environment

## FEBRUARY 2024

### UP AND COMING ANR CLASSES, WORKSHOP & EVENTS

- **Now accepting applications for the Livingston County Agriculture Investment Program.** To pick up a packet visit the Livingston County Cooperative Extension Office. 803 US 60 East Smithland, KY 42081 Mon-Fri 8:00am-4:30pm.
- **Pesticide Applicator Training:** Leave with your pesticide licenses same day! Wednesday February 28th 2024 12:00pm.
- **Livingston County Farmers Series:** QH2 Quality Hay For Horses with speaker Bob Coleman. Thursday February 15th 2024 6:00pm.
- **Livingston County Farmers Series:** Estate Planning Workshop with guest speaker Josh Wilson with Kentucky Farm Bureau. Thursday February 22nd 2024 6:00pm.
- **Mushrooms:** This course will be held at Marshall County Cooperative Extension March 5th 2024 at 3:30pm.

Livingston County CEA for ANR

Cooperative Extension Service

Livingston County

803 U.S. Hwy 60 East.-P.O. Box 189

Smithland KY 42081

Phone: (270) 928-2168

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[DL\\_CES\\_LIVINGSTON@EMAIL.UKY.EDU](mailto:DL_CES_LIVINGSTON@EMAIL.UKY.EDU)

## (EVEN) MORE REASONS TO LOVE RED CLOVER

Written by: Jimmy Henning  
UK College of Agriculture Food and  
Environment  
Plant and Soil Science Department

[First published in Farmer's Pride] Clover has been cool in Kentucky for a long time. Clover has long been known to benefit ruminant producers because of its high yields, high yields, biological nitrogen fixation, summer time production and dilution of the negative effects of tall fescue. New research from the USDA-ARS Food Animal Production Research Unit embedded in the UK College of Agriculture Food and Environment is adding even more reasons to love red clover.

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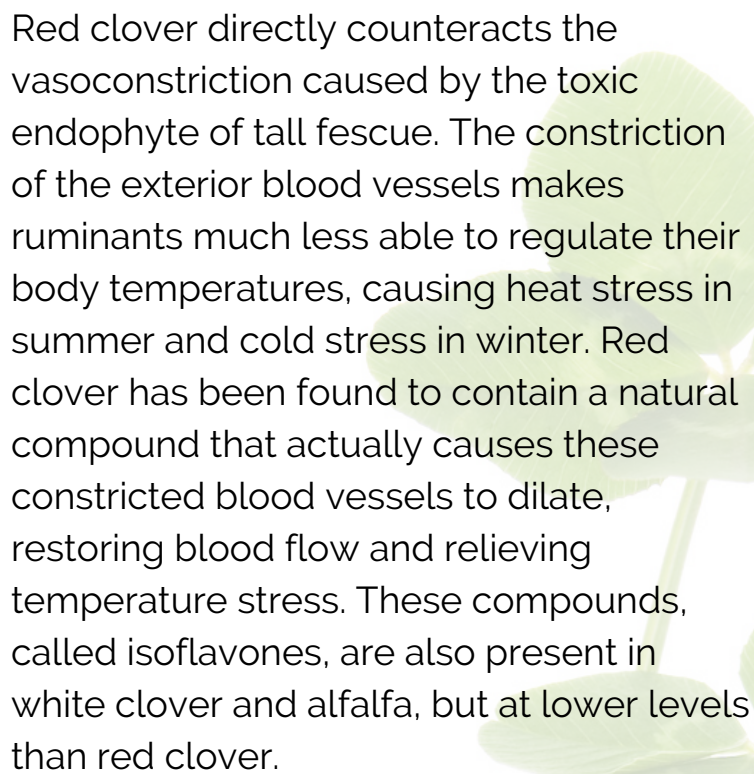
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Red clover directly counteracts the vasoconstriction caused by the toxic endophyte of tall fescue. The constriction of the exterior blood vessels makes ruminants much less able to regulate their body temperatures, causing heat stress in summer and cold stress in winter. Red clover has been found to contain a natural compound that actually causes these constricted blood vessels to dilate, restoring blood flow and relieving temperature stress. These compounds, called isoflavones, are also present in white clover and alfalfa, but at lower levels than red clover.

Surprisingly small amounts of red clover in the diet have large effects. Research by USDA-ARS group found that pastures overseeded at 15 and 30% red clover (or red clover hay as supplement) improved growth of steers and relaxed the exterior blood vessels of steers grazing toxic tall fescue. Even more significant, other studies have shown toxic fescue symptoms are alleviated by feeding mineral that contains 20% ground red clover leaves. Could red clover be the 'silver bullet' for toxic fescue that we have been looking for? It sure seems like it to me.

Addition of clover to toxic tall fescue pastures has long been known to improve conception rates of cattle. It is also known that isoflavones are estrogen-like compounds (phytoestrogens) which can

suppress reproduction when fed at high levels, especially in sheep. USDA-ARS scientist Dr. Brittany Harlowe has begun to study the effects of high levels of red clover on the reproductive efficiency in cattle. Her preliminary results found reproductive efficiency was not suppressed in heifers fed a mineral that contained 20% red clover compared to a non-red clover control. The heifers receiving the red clover mineral shed their winter hair coat better and experienced less heat stress in hot, humid weather than those fed the non-red clover mineral. Red clover improves rumen fermentation. Rumen microorganisms do some magical things, like converting forage fiber into steak. One of the things you would change about the rumen if you could is the way that that the microorganisms digest forage protein. Some rumen microorganisms will excessively break down forage protein and release ammonia. Red clover suppresses some of the rumen bacteria that are especially active in degrading forage protein. This lets more forage protein flow intact from the rumen, improving animal performance.

Better than alfalfa? Alfalfa has long been known as the queen of forage crops for its ability to produce high yields and high animal performance. Red clover has some qualities that in some ways make it superior to alfalfa. Before you burn me at the stake for this bit of forage heresy, hear me out. Both of these legumes are highly digestible,

but alfalfa as it matures tends to accumulate more lignin associated with plant fiber than red clover. Lignin in mature forages reduces the digestibility of the fiber. Lower lignin values in red clover give it an energy advantage. Also, when I ran the mobile forage testing lab at the University of Missouri, red clover always testing lower in fiber than comparable alfalfa bales. Comparing red clover to alfalfa may be like comparing Porsche to Ferrari since both are high performance entities. Just remember that red clover brings a lot of nutrition to the table too.

With red clover you get all of these benefits plus free nitrogen from the rhizobia bacteria embedded in root nodules. Don't forget that red (and white) clover can be readily introduced into tall fescue pastures by overseeding now. This establishment method is commonly known as frost seeding because the



freezing and thawing of winter creates enough seed-soil contact that clover will germinate in late spring. For more information on frost seeding clover, type 'frost seeding uky' into your internet browser or go directly to


<https://grazer.ca.uky.edu/content/frost-seeding>.

More than ever, red clover needs to be part of your strategy for managing toxic tall fescue.

Happy foraging.



# Six easy steps for Clover Frost Seeding



Conduct soil analysis  
and apply necessary  
nutrients.

Manage competition the  
following spring to improve  
establishment.

Choose a high-quality  
variety.

Utilizing a corrugated  
roller post-seeding can  
help achieve optimal  
seed-soil contact.

Apply an adequate  
quantity of seed.

Ensure seed contact  
with bare soil.

*Source: Jimmy Henning, plant and soil science professor*

*An Equal Opportunity Organization.*

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# LIVINGSTON COUNTY AGRICULTURE INVESTMENT PROGRAM (CAIP)

## MONEY FOR FARM IMPROVEMENTS



**KENTUCKY AGRICULTURAL DEVELOPMENT FUND**

### Eligible Investment Areas:

- Agricultural Diversification
- AgTech & Leadership Development
- Large Animal - Small Animal
- Farm Infrastructure
- Fencing & On-Farm Water
- Forage & Grain Improvement
- Innovative Ag. Systems
- On-Farm Energy
- Poultry & Other Fowl
- Value Added & Marketing

### Administered by:

**Crittenden County Conservation District**  
118 E. Bellville St.  
Marion, KY 42064  
(270) 965-3921

## COUNTY AGRICULTURAL INVESTMENT PROGRAM (CAIP)

Applications for cost reimbursements are available for Livingston County's CAIP, to assist farmers in making important farm investments.

### Application Period:

**beginning September 1, 2023**

***Applications will be accepted first-come, first-serve until funds are used.***

### Application Available from:

**Crittenden County Conservation District**  
118 E. Bellville St., Marion **-OR-**  
**Livingston County Cooperative Extension Svc.**  
803 US 60 E, Smithland  
Monday – Friday (8:30 a.m. – 4:00 p.m.)

### For More Information:

Contact 270-965-3921 or 270-928-2168 or email [Cynthia.Jenkins1@usda.gov](mailto:Cynthia.Jenkins1@usda.gov)

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

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Community and Economic Development

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Disabilities accommodated with prior notification.

*Adam Barnes*

CEA for ANR



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College of Agriculture,  
Food and Environment  
University of Kentucky.

**AGRICULTURE & NATURAL RESOURCES**

# **PART OF THE LIVINGSTON COUNTY FARMERS SERIES QH2 QUALITY HAY FOR HORSES**

**INCLUDING SPECIAL GUEST SPEAKER;  
DR. BOB COLEMAN – EQUINE EXTENSION SPECIALIST**

**WHEN: THURSDAY FEBRUARY 15TH 2024**

**TIME: 6:00PM**

**WHERE: LIVINGSTON COUNTY COOPERATIVE  
EXTENSION OFFICE**

**ADDRESS: 803 US 60 WEST SMITHLAND, KY 42081**

**PLEASE RSVP BY CALLING THE  
LIVINGSTON COUNTY EXTENSION OFFICE AT  
1.270.928.2168 MON-FRI 8:00AM-4:30PM**

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*Adam Barnes*

CEA for ANR



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**AGRICULTURE & NATURAL RESOURCES**

**PART OF THE LIVINGSTON COUNTY FARMERS SERIES**  
**Estate Planning Workshop**

**INCLUDING SPECIAL GUEST SPEAKER;  
JOSH WILSON WITH KENTUCKY FARM BUREAU**

**When:** Thursday February 22nd 2024

**Time:** 6:00pm

**Where:** Livingston County Cooperative  
Extension Office

**Address:** 803 US 60 West  
Smithland, KY 42081

**PLEASE RSVP BY CALLING THE  
LIVINGSTON COUNTY EXTENSION OFFICE AT  
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# PESTICIDE



**Martin-Gatton**  
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Food and Environment  
University of Kentucky.

# APPLICATOR TRAINING



WHEN: WEDNESDAY FEBRUARY 28TH 2024

TIME: 12:00PM

WHERE: LIVINGSTON COUNTY COOPERATIVE EXTENSION OFFICE  
803 US 60 EAST SMITHLAND, KY 42081

COST: FREE

YOU WILL LEAVE THIS COURSE WITH YOUR PESTICIDE LICENSE



TO RSVP OR FOR QUESTIONS  
PLEASE CONTACT THE LIVINGSTON  
COUNTY EXTENSION OFFICE AT:

1-270-928-2168

MON-FRI 8:00AM-4:30PM

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Lexington, KY 40506



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# FENCING & LIVESTOCK HANDLING FACILITIES

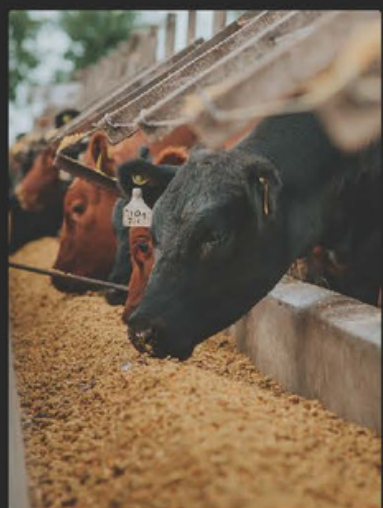


**SPEAKER:**  
**JD VAN HOOOSER**

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**THURSDAY, FEBRUARY 29**  
**6:00 P.M.**



**LIVINGSTON COUNTY**  
**EXTENSION OFFICE,**  
**803 U.S. 60 EAST, SMITHLAND**

**FOR MORE INFORMATION, OR TO**  
**SIGN UP, CALL THE OFFICE AT 270-928-2168**

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# Mushrooms

**Join Dr. Ellen Crocker, UK Forest Health Specialist,  
as she discusses the wild mushrooms  
found in our region and how to identify them!**

**3:30pm  
March 5th, 2024  
Marshall County Extension Office  
RSVP by calling 270-527-3285**

Program provided by the Marshall, Livingston & Calloway County Extension Offices

# PESTICIDE

# APPLICATOR TRAINING

WHEN: WEDNESDAY MARCH 13TH 2024

TIME: 12:00PM

WHERE: LIVINGSTON COUNTY COOPERATIVE EXTENSION OFFICE  
803 US 60 EAST SMITHLAND, KY 42081

COST: FREE

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COUNTY EXTENSION OFFICE AT:

1-270-928-2168

MON-FRI 8:00AM-4:30PM

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# PESTICIDE

# APPLICATOR TRAINING

WHEN: WEDNESDAY MARCH 28TH 2024

TIME: 12:00PM OR 6:00PM

WHERE: LIVINGSTON COUNTY COOPERATIVE EXTENSION OFFICE  
803 US 60 EAST SMITHLAND, KY 42081

COST: FREE

YOU WILL LEAVE THIS COURSE WITH YOUR PESTICIDE LICENSE

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COUNTY EXTENSION OFFICE AT:

1-270-928-2168

MON-FRI 8:00AM-4:30PM



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# FARMERS RECIPE OF THE MONTH FEBRUARY 2024

## Smashed Potatoes



<b>6 large</b> baking potatoes	<b>6 ounces</b> fresh spinach	<b>1 cup</b> 2% Cheddar cheese, shredded
Cooking spray	<b>1 tablespoon</b> canola oil	
<b>1½ cups</b> sliced, fresh mushrooms	<b>2 teaspoons</b> Dijon mustard	<b>½ teaspoon</b> salt
<b>4 green</b> onions, thinly sliced	<b>¾ cup</b> light sour cream	<b>½ teaspoon</b> black pepper

**Preheat** oven to 400 degrees F. **Wash** and dry potatoes. **Spray** the skins with cooking spray and **pierce** potatoes in several places with a fork. **Place** on a 13- by-18-inch baking sheet. **Bake** until tender, about 1 hour. **Wash** mushrooms, green onions and spinach. **Heat** oil in a skillet over medium-high heat. **Add** mushrooms and **sauté** for 6 minutes. **Add** the green onions and fresh spinach, **sauté** for 1 minute. **Slice** off the top inch of each potato, leaving a ¼ inch border around the edge. **Scoop** out the flesh into a mixing

bowl and **mash**. **Add** mushroom mixture, Dijon mustard, sour cream and ½ cup cheese. **Mix** well and season with salt and pepper. **Scoop** mixture into potato shells and **sprinkle** with the remaining cheese. **Return** the potatoes to the baking sheet and **bake** until heated through and golden brown on top, about 20-25 minutes.

**Yield:** 6 servings

**Nutritional Analysis:** 410 calories, 9 g fat, 4.5 g saturated fat, 20 mg cholesterol, 400 mg sodium, 70 g carbohydrate, 9 g fiber, 4 g sugars, 15 g protein.



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

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