

Bourbon County Cooperative Extension Service

AGRICULTURE & NATURAL RESOURCES NEWSLETTER



September &
October
2023

Lindsay Arthur

Lindsay Arthur
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& Natural Resources
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Extension Service**
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Paris, KY 40361
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Cooperative Extension Service

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

MONEY FOR ON-FARM INVESTMENTS AVAILABLE...



Applications available at:
Bourbon County Extension Office
603 Millersburg Road
Paris, KY 40361
(859) 987-1895
Bourbon.ext@uky.edu

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

MONEY FOR YOUTH AGRICULTURAL PROGRAMS



Bourbon County Extension Office
603 Millersburg Road
Paris, KY 40361
859-987-1895
Bourbon.ext@uky.edu

*Applicants must be 9-18 years old and meet all
requirements as stated in program guidelines.
All eligible approved applicants are eligible for
prorated funding at completion of program.*

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



COUNTY AGRICULTURAL INVESTMENT PROGRAM (CAIP)

Applications will be available for Bourbon County's CAIP to assist farmers in making important on-farm investments.

Application Period:
September 21st – October 13th, 2023
No applications will be accepted after October 13th.

Application Availability:
Bourbon County Extension Office
Monday – Friday (8 a.m. – 4:30 p.m. closed
for lunch 12:30 – 1:30 daily).

For More Information:
Contact Belinda Graves at 859-707-7893 or
email: blgbag1984@yahoo.com.

No Informational Meeting

2023 YOUTH AGRICULTURAL INCENTIVE PROGRAM (YAIP)

Program focus is for youth to develop agriculture projects and strength partnerships with school ag programs, cooperative extension & 4-H/FFA organizations.

Application Period:
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email: blgbag1994@yahoo.com.

No Informational Meeting

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Kentucky Agricultural Development Board.*

33rd Annual **ELITE BRED HEIFER SALE®**

Presented by Bourbon County Livestock Improvement Association

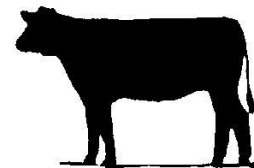
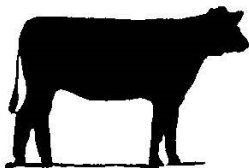
WEBSITE: www.eliteheifer.com

Virtual Sale Available (Download Form on Website)

Monday, November 6, 2023

Sale 6:00 PM E.D.T.

Inspection 1:00-5:00 PM E.D.T.



- ✓ Approximately 300 heifers available - approximately 150 AI (Angus & Angus X, Charolais X, Simmental X, Red Angus)
- ✓ All heifers calthood vaccinated
- ✓ All heifers have tested negative for **BVD, PI**
- ✓ Sale lots will be grouped to calve in 45 days
- ✓ Lots can be viewed online at www.eliteheifer.com
- ✓ Heifers bred to calving ease bulls with EPD's available, some bred AI
- ✓ Heifers have met minimum pelvic measurement requirements
- ✓ Heifers have met target weight requirements for their breed types
- ✓ Fall health work completed (Bovi Shield Gold 5 FPL5 & Pour-on wormer, 45 days before sale)
- ✓ All heifers meet Large or Medium frame
- ✓ No shorts, bad eyes, no horns, no rat tails (Inspected by Ky Dept of Ag)
- ✓ All heifers are Source Verified AND Electronically Identified
- ✓ **FREE DELIVERY OF 10 OR MORE HEAD, UP TO 500 MILES**
- ✓ Heifers owned and managed under Elite Heifer guidelines since 12/1/2022
- ✓ All heifers guaranteed pregnant 60 days post sale. Heifers may be palpated by a licensed veterinarian up to 60 days post sale and buyer be refunded \$5.00/head for heifers palpated
- ✓ **Heifers qualify for CAIP Program**

Sponsored by:
Southern States – Paris
Purina
Select Sires
Zoetis

Sale Location:
Paris Stockyards
US 68 North

Sponsored by:
Central KY Ag Credit
Farm Credit Mid-America
Peoples Exchange Bank
Traditional Bank

FOR MORE INFORMATION:

Bourbon County Extension Office – 859-987-1895 or Toll Free 1-888-317-2555

SALE DAY PHONE: 859-987-1977

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Beef Cattle SEEDSTOCK SYMPOSIUM



OCTOBER 17

Fayette County Kentucky
Extension Office, Lexington,
KY
8:30 AM - 3:30 PM

To register for the Lexington, KY event please go to
<https://www.eventbrite.com/e/709667262887?aff=oddtcreator>

OCTOBER 18

Barren County Kentucky
Extension Office, Glasgow,
KY
8:30 AM - 3:30 PM

To register for the Glasgow, KY event please go to
<https://www.eventbrite.com/e/709673651997?aff=oddtcreator>

OCTOBER 19

Middle Tennessee
AgResearch and Education
Center, Spring Hill, TN
8:30 AM - 3:30 PM

To register for Spring Hill, TN event please go to
<https://www.eventbrite.com/e/709676941837?aff=oddtcreator>

Eventbrite will have more information for each location.

MORE INFORMATION

This program is designed for seedstock producers that are marketing bulls to commercial and/or other seedstock producers. The cost for each location is \$25.

QUESTIONS

If you have any questions or would like a paper registration email Maggie.Ginn@uky.edu.



SAVE THE DATE!
Registration opens September 1st!

2023 KY ANNUAL PRODUCER CONFERENCE

www.kysheepandgoat.org

Don't Miss Keynote Speaker:
Dr. Braden Campbell,
The Ohio State University,
Assistant Professor

October 14, 2023
Boyle County Extension Office

Grazing Conference

Low Stress Livestock Handling for Serious Graziers

October 31, 2023
Elizabethtown
Hardin County Extension Office
7:30 AM - 3:30 PM CDT

November 1, 2023
Lexington
Fayette County Extension Office
7:30 AM - 3:30 PM EDT



Reducing Livestock Stress in Grazing Systems
Curt Pate, Curt Pate Stockmanship



Fencing for Multi-Species Grazing
Lewis Sapp, Stay-Tuff Fence



Designing Flexible Watering Systems
Jeff Lehmkuhler, University of Kentucky



Designing Livestock Handling Facilities for Existing Structures
Chris McBurney, McBurney Livestock Equipment



Local Producers and Spokesperson Contest



Optimizing Resources with Multi-Species Grazing
Greg Brann, Greg Brann Consulting

For more information please visit KFGC.ORG

 University of Kentucky
College of Agriculture,
Food and Environment

 KENTUCKY STATE UNIVERSITY
College of Agriculture,
Community, and the Sciences

 SEILER
GEOSPATIAL



HABITAT MANAGEMENT SYMPOSIUM

October 2-4, 2023

Harold R. Benson Research and Demonstration Farm
Frankfort, Kentucky

Day 1: Remote sensing workshop

Days 2 & 3: Natural areas management practices & demonstrations and case studies of recent conservation projects

Full agenda and registration details coming soon

This institution is an equal opportunity provider.
Reasonable accommodations for individuals with disabilities will be provided free of charge upon request. Language access services for limited English proficient individuals will be provided free of charge upon request. Please contact Kasia Bradley at kasia.bradley@kysu.edu by September 15, 2023.

**Organized and Sponsored by the Kentucky Forage and Grassland Council,
UK Cooperative Extension Service, and the Master Grazer Program**

This program is designed for producers and agricultural professionals to learn the newest fencing methods and sound fencing construction through a combination of classroom and hands-on learning

WHEN: November 7-Scott County, KY
November 9-Caldwell County, KY

WHERE: Scott County Extension Office
1130 Cincinnati Road
Georgetown, KY 40324

Kentucky Soybean Board Office
1000 Highway 62 West
Princeton, KY 42445



COST: \$35/participant -- includes notebook, refreshments, safety glasses, hearing protection, and catered lunch

Registration DEADLINE: 1 week prior to workshop

ONLINE Registration with Credit Card:

_____ Georgetown, KY [Register for KY Fencing School in GEORGETOWN](#)

_____ Princeton, KY [Register for KY Fencing School in PRINCETON](#)



Registration by U.S. Mail: Christi Forsythe
UK Research and Education Center
P.O. Box 469
Princeton, KY 42445

Name: _____

Street: _____

City: _____ State: _____ Zip code: _____

Email: _____ Cell Phone: _____

Number of participants _____ x \$35 per participant = _____ **Total Cost**



Make CHECKS payable to: KFGC

For more information contact Krista Lea at 270-625-0712 or Christi.Forsythe@uky.edu

2023 Kentucky Fencing Schools



2023 Kentucky Fencing School Agenda

7:30 Registration and Refreshments

8:15 Welcome and Overview of the Day – *Chris Teutsch, UK*

8:30 Fencing Types and Costs - *Morgan Hayes, UK*

9:00 Fence Construction Basics – *Eric Miller and Payton Rushing, Stay-Tuff*

- Perimeter fences vs. cross fences
- Fencing options on rented farms
- Proper brace construction
- Line posts and fence construction

9:45 Break – visit with sponsors and presenters

10:15 Electric Fencing Basics - *Jeremy McGill, Gallagher*

- Proper energizer selection and grounding
- Proper high tensile fence construction and wire insulation
- Electric offset wires for non-electric fences
- Underground wires and jumper wires

11:00 Innovations in Fencing Technologies - *Josh Jackson, UK*

- Wireless fences, fence monitoring, fence mapping

11:30 Overview of Kentucky Fence Law - *Clint Quarles, KDA*

12:15 Catered Lunch - visit with sponsors and presenters

1:00 Hands-on Fence Building

- Safety, fence layout, and post driving demo - *Jody Watson and Tucker LaForce, ACI*
- H-brace construction - *Jeremy McGill, Gallagher & Eric Miller and Payton Rushing, Stay-Tuff*
- Knot tying, splices, and insulator installation - *Jeremy McGill, Gallagher & Eric Miller & Payton Rushing, Stay-Tuff*
- Installation of Stay-Tuff Fixed Knot Fence - *Eric Miller and Payton Rushing, Stay-Tuff*
- Installation of High Electrified Tensile Fencing - *Jeremy McGill, Gallagher*

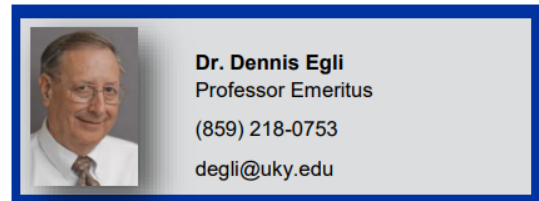
4:30 Questions, Survey and Wrap-up



Do Smoky Skies Reduce Crop Yield?

Smoke from forest fires in Canada recently produced hazy conditions in parts of the Midwest, the East and the Mid-South. Smoke and haze reduce the solar radiation reaching the earth's surface. Will this reduction reduce crop yields? This is a logical question given that photosynthesis produces yield and the energy to drive photosynthesis comes from solar radiation. Reducing solar radiation should reduce yield – right? It's not that simple. Yes, the reduction in solar radiation will reduce photosynthesis, but that doesn't automatically translate into lower yield. First, the relationship between solar radiation levels and photosynthesis is not a straight-line relationship (to put it another way, the relationship curves over as solar radiation increases), so the decrease in photosynthesis is less than the decrease in solar radiation. For example, in a field experiment with soybean, 63% shade (much much greater than reductions from smoke and haze) from planting to maturity only reduced the yield by 50%. The solar radiation – photosynthesis relationship in corn is closer to a straight line, but still the reduction in photosynthesis from a 20% reduction in solar radiation, for example, would be less than 20%. Secondly, smoky conditions increase the proportion of solar radiation that is diffuse (as opposed to direct radiation). Diffuse radiation occurs when the radiation from the sun bounces off the dust, smoke particulate matter, and other pollutants in the air and arrives at the surface from all directions (direct radiation comes in a straight line from the sun). Diffuse radiation penetrates farther into the plant canopy resulting in a more even distribution of radiation over the leaves and higher photosynthesis. The benefits of diffuse radiation may be larger on the relative compact soybean canopy compared with the more upright leaves in the corn canopy. Finally, reduced solar radiation will reduce water use (evapotranspiration, ET), which could be a positive effect for fields experiencing drought stress. The first step in the ET process is the conversion of water from a liquid to vapor which requires energy from the sun, so reducing solar radiation could reduce ET. Any reduction in ET would probably be relatively small and may be important only in marginal situations when the

crop is just beginning to experience drought stress. Reductions in photosynthesis during vegetative growth rarely carry over to yield unless there are large reductions in plant size. Lower photosynthesis during vegetative growth will reduce plant size and leaf area; if this reduction is large enough to reduce solar radiation interception during reproductive growth, yield will be reduced. If not, the smaller plants will not result in lower yield. When we shaded soybean communities (30 and 63% shade) in the field from planting to growth stage R1 (initial bloom), total plant dry weight at R1 was reduced by 20 (30% shade) and 42 (63% shade) %, but there was no effect on yield. The smaller plants still intercepted all of the solar radiation, so size did not affect yield. The overall effect of smoky skies on crop yield is the result of one negative effect (less solar radiation and less photosynthesis), one positive effect (more diffusive radiation and higher photosynthesis) and one possible positive indirect effect (reduction in drought stress). The combined effect on yield is hard to predict as it depends on how much smoke and haze is in the sky (how much the solar radiation is reduced and the proportion of diffuse radiation is increased), the water status of the crop and how long and when (before or after flowering) the smoke and the reduction in photosynthesis occurs. At this point in the growing season, most of the smoky days occurred during vegetative growth, so, my best guess is that yield potential of corn and soybean has not been affected. I don't think smoke is worth worrying about unless we get a lot more smoke later this summer and, even then, it's usually better not to worry too much about things we can't control. Practicing up on your rain dance might be a better strategy this year if you are going for maximum yield.



Dr. Dennis Egli
Professor Emeritus
(859) 218-0753
degli@uky.edu

Plate It Up Kentucky Proud Recipe



Fall Spiced Pumpkin Bread

½ cup all-purpose flour
1¼ cup whole-wheat flour
1½ teaspoons baking powder
1 teaspoon baking soda

2 teaspoons pumpkin pie spice
½ teaspoon salt
½ cup melted margarine
½ cup sugar

½ cup honey
2 cups pumpkin puree
⅓ cup olive oil
2 eggs
⅓ cup chopped walnuts

Heat oven to 350 degrees F. **Mix** flours, baking powder, baking soda, pumpkin spice and salt; set aside. In a large mixing bowl, **whisk** together margarine, sugar, honey, pumpkin puree and olive oil. **Blend** in eggs. **Add** flour mixture. **Stir** until dry ingredients are moistened. **Spray** a 8-by-4 inch loaf pan with non-stick cooking spray. **Pour** batter into pan; **sprinkle** walnuts on top of batter. **Bake** for 1 hour. **Remove** from oven

and **cover** with foil. **Return** to oven and **bake** an additional 20 minutes or until toothpick inserted in center comes out clean. **Cool** for 10 minutes and **remove** from pan.

Yield: 16 slices

Nutritional Analysis: 220 calories, 13 g fat, 2 g saturated fat, 30 mg cholesterol, 270 mg sodium, 26 g carbohydrate, 1 g fiber, 14 g sugars, 4 g protein.

Happy Harvesting

