


CARTER COUNTY

 Cooperative
Extension Service

AGRICULTURE & NATURAL RESOURCES

NEWSLETTER

Carter County

94 Fairground Drive Grayson, KY 41143

Phone: (606) 474-6686 Fax: (606) 474-8542

extension.ca.uky.edu

January 2024 Upcoming Events

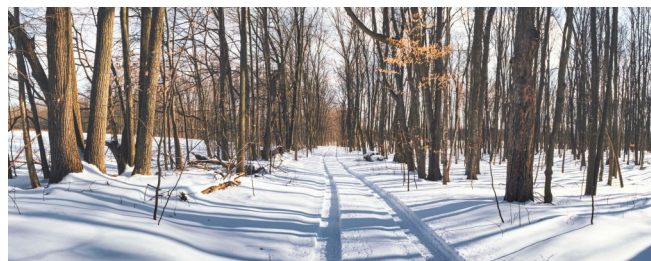
Denotes events where preregistration is required. Call 474-6686 or email Rebecca.k@uky.edu to register.

January 9 @ 10:00 AM	District Board Meeting —Extension Office
January 9 @ 8:00 PM	* Beef Webinar —Online*
January 11-12	* KY Cattlemen's Association Convention —Lexington*
January 18 @ 6:00 PM	* Small Ruminant Quality Assurance —Extension Office*
January 23 @ 6:00 PM	Northeast Area Livestock Association —Extension Office
January 30 @ 6:00 PM	No-Till Drill Clinic —Boyd County Fairground Expo Building
February 1 @ 1:00 PM	* Private Pesticide Applicator Training —Extension Office*
February 1 @ 4:30 PM	Deadline to Order Rootstock
February 6 @ 6:30 PM	Little Sandy Beekeepers —Extension Office
February 8 @ 5:30 PM	Regional Farmer's Market Meeting —Morehead State Farm Classroom
February 8 @ 6:00 PM	* Master Cattleman —Boyd County Fairgrounds Expo Building*
February 9 @ 10:00 AM	* Ag Lenders Update —Fleming County*
February 12 @ 6:00 PM	* Beef Quality Care & Assurance Training —Extension Office*
February 13 @ 10:00 AM	District Board Meeting —Extension Office
February 13 @ 4:30 PM	Deadline to Order Berry Plants
February 19 @ 6:00 PM	Ag Advancement Council Meeting —Extension Office
February 22 @ 5:30PM	Reducing Fertilizer Use —Morehead State Farm Classroom
February 27 @ 6:00 PM	Northeast Area Livestock Association —Extension Office
February 29 @ 6:00 PM	* Master Cattleman —Boyd County Fairgrounds Expo Building*

Enjoy your newsletter,

Rebecca Konopka

Rebecca Konopka,
Carter County Extension Agent for
Agriculture & Natural Resources Education



**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.

Boyd, Carter, Greenup & Lawrence Counties present:

MASTER CATTLEMAN

Boyd 739-5184
Carter 474-6686
Greenup 836-0201
Lawrence 673-9495

All sessions held at the Boyd County Fairgrounds Expo Building
1760 Addington Road
Ashland, KY 41102

\$60 Registration Fee per Individual/Couple. Register with your local office by January 25th.

A meal will be provided at each session.

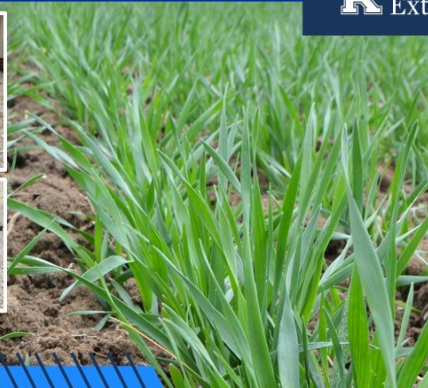
All sessions begin at 6 PM.

- 2/8 – Marketing
- 2/29 – Nutrition
- 3/7 – Reproduction & Record Keeping
- 3/14 – Genetics
- 3/28 – Facilities & Winter Feeding
- 4/4 – Animal Health

Each family that completes all 6 sessions plus BQCA and a forages program will receive a farm gate sign.



Cooperative Extension Service
MARTIN GATTON COLLEGE OF AGRICULTURE, FOOD AND ENVIRONMENT



No-Till Drill Clinic

Tuesday, January 30 at 6:00 PM
Boyd County Extension Fairgrounds Expo Building

- Seeding tips & tricks for pasture and hayfield renovation
- Calibration demonstrations
- Equipment checkout procedures for Boyd, Carter, Elliott & Lawrence Counties
- Speaker: Dr. Jimmy Henning, UK Forage Specialist
- Counts for CAIP Education Credit.

Equipment On Display:

- Great Plains 706NT
- Gandy Spred 'n Till 4ft
- Haybuster 77
- Brillion Till 'N Seed
- Woods CSS60
- Broadcast Spreader

Snacks will be provided. Feel free to bring your own dinner to enjoy while you listen to the presentations.

Private Pesticide Applicator Trainings

This training is required for those wishing to purchase and apply restricted use pesticides. A valid ID is required for training. There is no cost for attending the training.

Please preregister. Sessions will be cancelled if there are no preregistrations.

****Thursday, February 1st from 1:00-4:00 PM**

**** Thursday, March 14th from 5:30-8:30 PM**



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REGIONAL Farmer's Market MEETING

Morehead State University Farm Classroom
(Inside the Horse Arena)

Thursday, February 8, 2024

Meal & Registration - 5:30 Program - 6:00 PM

Preregister by January 29.

Scan the QR code or call your local Extension Office.



Bath Co. - 674-6121
Carter Co. - 474-6686
Elliott Co. - 738-6400
Lewis Co. - 796-2732

Menifee Co. - 768-3866
Morgan Co. - 743-3292
Rowan Co. - 784-5457

Are you providing the highest quality small ruminant products to your customers?



Attend the training!

Increase your knowledge of best management practices necessary to insure your sheep and goat products are being marketed at the highest quality.

Location: Carter County Extension Office
Cost: \$5 *Preregistration required.*
Dates: January 18th from 6:00-7:45 PM OR
 March 27th from 1:30-3:15 PM
 SRQA is required for sheep or goat reimbursement in the small animal CAIP investment area.

Assure healthy animals and practices for maximum profits and quality products.

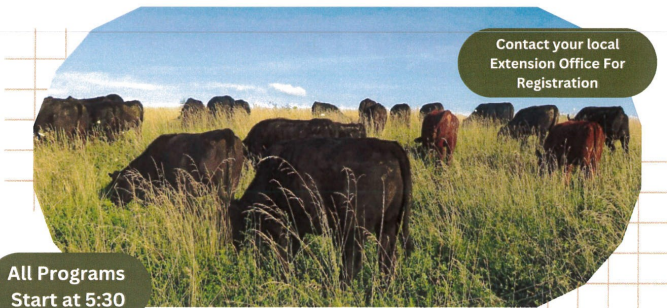


WHY SHOULD YOU PARTICIPATE IN SRQA?

- To assure your product is not considered poor quality in comparison to other red meats in the marketplace.
- To show value in your animals' welfare and your customer.
- To receive a Certificate useful in showing your commitment to showing your commitment to quality production.



STRATEGIES TO REDUCE FERTILIZER USE ON EASTERN KY CATTLE FARMS



- Using Legumes to get the Nitrogen Cycle Working
 - Feeding Hay to Recycle Nutrients
 - Clipping Weeds to Enhance Fertility
 - Having an Appropriate Stocking Rate
- Implementing Basic Rotational Grazing Without Perfect Infrastructure

Locations and Dates:

Feb. 19, 2024 Clay County Extension Excel Center 86 Muddy Gap Rd., Manchester, Ky 40962
 Feb. 20, 2024 Knott County Extension 149 Parks. Rd. Hindman, Ky 41822
 Feb 21, 2024 Lee County Extension 259 Industrial Park Rd. Beattyville, Ky 41311
 Feb. 22, 2024 Morehead State University Farm 25 MSU Farm Rd. Morehead, Ky 40351

Guest Speaker: Dr. Greg Halich,
 Associate Extension Professor with the Department of Agriculture Economics
 University of Kentucky

Northeast Area Livestock
Fourth Tuesday of the Month @ 6:00 PM

January 23rd

Speaker: Dr. Jimmy Henning, UK Forage Specialist

Topic: A Deeper Dive into Hay Samples

(If you participated in the East Ky Hay Contest please bring a copy of your results with you.)

February 27th

Speaker & Topic: TBD

Beef Quality & Care Assurance Trainings

The Beef Quality & Care Assurance (BQCA) Program's mission is to maximize consumer confidence in and acceptance of beef by focusing the producer's attention to daily production practices that influence the safety, wholesomeness and quality of beef and beef products through the use of science, research and education initiatives.

BQCA training is required for cattle reimbursement in the large animal CAIP investment area.
 Training is open to all producers though.

Cost is \$5. Farm gate signs are an additional \$5. Trainings will be offered on the following dates. Please preregister. Sessions will be canceled if there are no preregistrations.

⇒ Monday, February 12th from 6:00–7:45 PM

⇒ Wednesday, March 6th from 1:30-3:15 PM

Training is also available online at

kybeefnetwork.com.

Little Sandy Beekeepers

First Tuesday of the Month @ 6:30 PM

February 6th

2024 Berry Plant Order Form



Carter County
 94 Fairground Drive
 Grayson, KY 41143
 (606)474-6686
 Fax: (606)474-8542

<https://carter.ca.uky.edu/>
<https://www.facebook.com/CCESAG/>

Purchaser Information

Name: _____

Address: _____

City, State, Zip: _____

Telephone: _____

Email: _____

QUANTITY	ITEM	UNIT PRICE	TOTAL
_____ BUNDLE(S)	Strawberries (Seascape—Day Neutral, Heavy Producing Variety)	\$7.00 (bundle of 25)	
_____ BUNDLE(S)	Strawberries (Earliglow—Sweet, Early Season Variety)	\$7.00 (bundle of 25)	
_____ BUNDLE(S)	Strawberries (FlavorFest—Midseason Variety with Large Berries)	\$7.00 (bundle of 25)	
	Blackberries (Triple Crown – Thornless, Semi-erect plant with large, glossy fruit. May require trellising.)	\$8.00 (per plant)	
	Black Raspberries (Jewel—Winter hardy, productive & vigorous)	\$8.00 (per plant)	
		Total Due:	

Order & Payment is required by February 13th. Please pay with check or exact change. Mail checks to the Extension Office at the address listed above.

Make checks payable to: Carter County Ag Council

Plants should arrive the first week of April. All plants will need to be picked up at the Carter County Extension Office. Refunds will not be issued due to late pickup.

Payment Information:

Amount Paid: _____

Date: _____

Received By: _____

Check No: _____ or Cash _____



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.

Berry Plant Information

Brambles—Raspberries and blackberries, commonly called brambles, grow well in Kentucky. With favorable growing conditions and proper care, a raspberry planting may produce for 8-12 years. Blackberry plants usually live longer than raspberries, because they are better adapted to Kentucky's climate. They both have biennial canes and perennial roots. The roots and crowns live for a number of years and produce a new crop of canes each spring, while the fruit matures on last season's canes.

Deep, fertile soil that is well drained, high in humus and free from hard pans is best for brambles. However, almost any well-drained soil can be modified to grow brambles. Planting brambles on raised beds may help reduce root rot and prolong the life of the planting. Trickle irrigation and mulching will help ensure good plant growth and high yield. When possible, plant brambles on a northern slope or where there is afternoon shade. Such soils are cooler and hold moisture better. Remember to purchase certified, virus-free stock when possible. Two bramble varieties are available through the Extension Office:

- ⇒ Triple Crown (Blackberry) - The berry is named for its three crowning attributes – flavor, productivity and vigor. The plants yield large, glossy black fruit that are pleasantly firm. Plants can be trellised or grown upright and pruned to a height of about 42”.
- ⇒ Jewel (Black Raspberry) - The plant is vigorous, erect, consistently productive and widely adapted. The fruit ripens early and the ripening season is concentrated. The berries are large, with glossy skin, coherent, firm, of superior quality and excellent flavor.

Strawberries—For the best strawberry results, select a site with deep, sandy loam soil well supplied with organic matter. Clay soils can produce a good crop if the site has been prepared to drain well and has added organic matter. Fields with heavy perennial weed pressure should not be planted to strawberries. Avoid fields that have been in potatoes, tobacco, peppers, eggplants or tomatoes due to potential problems with Verticillium wilt. Strawberries need to be located on ground higher than the surrounding area to reduce the chance of spring frost damage. A protective straw mulch should be applied when plants become dormant in late fall and removed the following spring.

Strawberries are commonly grouped as either June-bearing, everbearing, or day-neutral. June-bearing varieties have been grown in Kentucky for many years. They are typically planted in early spring and blossoms are removed during the first season to encourage runner establishment. A full crop is harvested during the second and subsequent seasons. June-bearing varieties produce flowers under shortday conditions. Early varieties may be more subject to frost injury because of their bloom time, and the opened blossom is at the stage of fruit development most susceptible for frost injury. Strawberry varieties all ripen about 30 days after bloom. June-bearing strawberries normally produce the largest yield per season, in a short period of time. If you want enough berries for freezing and processing choose June Bearers. The two June-bearing varieties being offered by the Extension Office this year are:

- ⇒ Earliglow sets the standard for traditional strawberry taste. It is the max for fresh out of the garden eating, jams and freezing. So sweet no sugar is needed. For years Earliglow has been one of the biggest sellers in the Eastern U.S. for gardeners and smaller commercial growers. It is the earliest fruiting variety available. The first and second pickings are nice sized berries for eating out of hand and the later pickings are fantastic for jams and freezing.
- ⇒ Flavorfest performs well on plasticulture as well as matted row. Flavorfest has shown consistent high yields, bright red and excellent flavor. Also shows good resistance to red stele and most stem and leaf diseases as well as no susceptibility to anthracnose crown or fruit rot.

Everbearing and day-neutral strawberries are very similar under Kentucky conditions. Both produce few runners and flower buds develop regardless of the day length. They typically yield three crops during a season: a moderate spring crop, a summer crop of small berries, and a heavier fall crop. Total season-long yields, however, are similar to those of June-bearing strawberries. The fall crop depends on having a cooler summer for obtaining good fruit size and yields. During the first year of establishment, blossoms are removed so that only a fall crop is produced. Spotted wing drosophila is a newer pest in Kentucky that is of particular concern to any soft fruit that matures after July 1. Populations tend to be low enough prior to that time that they are not a serious concern for June-bearing varieties.

- ⇒ Seascape is a very large, hardy, heavy producing variety with firm fruit, good color and flavor when picked ripe. Resistant to Red Stele, Verticillium, Leaf Spot and Leaf Scorch.

Kentucky Corn and Soybean Yields in 2023 Compared to Past Years

Dr. Dennis Egli, UK Professor Emeritus

Kentucky corn and soybean yields this year were better than many expected. They didn't set records, but they were close. November estimates put corn yield at 183 bu./acre (record is 192 bu./acre in 2021), while soybean came in at 55 bu./acre (record is 56 bu./acre in 2021) according to the National Agricultural Statistics Service. The abnormally dry and drought conditions that developed in Kentucky in June and early July (according to the Drought Monitor, published weekly at <https://droughtmonitor.unl.edu/CurrentMap.aspx>) fueled concerns that yields might be low this year. There was, however, no indication of any lack of moisture from mid-July to mid-September according to the Drought Monitor. Rainfall in the soybean growing areas of Kentucky was mostly above normal during this period and temperatures tended to be slightly below normal. The relatively cool and wet weather during the critical part of the growing season no doubt contributed to the good yields.

Corn and soybean yields in Kentucky increased steadily from the approximate beginning of the high input era of agriculture in 1950 (Fig. 1). Linear regression curves described the trends in the data in Fig. 1 [The regression analyses were statistically significant and the r^2 's were high for corn (0.93) and soybean (0.89)], and they provide no evidence that yields are starting to plateau. Apparent plateaus have occurred in the past (see, for example, corn from 1976 through 1988 or soybean from 1971 through 1976), but they were probably weather related and yield growth continued when favorable weather returned. The linear curves also suggest that climate change has not yet reduced corn and soybean yields; that reduction will probably become apparent in the future as climate change intensifies.

The variation of yield from year-to-year is primarily a result of variation in weather conditions, with rainfall being the most important. The water available to a crop depends on rainfall and the water stored in the soil. Unfortunately, Kentucky has substantial areas of soil that are shallow (often as a result of hardpans) and don't hold much water. Year-to-year variation of yield on these soils is much greater than on soils with better water holding characteristics. Frequent rainfall is required for high yields of crops growing on shallow soils. Soils that can store more water can withstand longer dry periods without losing yield. The larger deviations for Calloway County (low yield) compared with Union County (high yield) provide a vivid example of the greater variability of yield associated with soils with lower water holding capacity (Fig. 2).

Interestingly, weather does not always affect the two crops in the same way in the same year (Fig. 1). The year 2012 is an obvious example of this differential effect – corn yields were drastically reduced (54% below the trend line) while soybean yields were just 10 % below the trend line. In 1983, both crops showed large reductions in yield (~48% below the trend line) (Fig. 1).

The key to the effect of drought stress on yield is the growth stage of the crop when the stress occurs. Both corn and soybean can tolerate drought stress during vegetative growth much better than during reproductive growth. Stress when the crop is deciding how many seeds (kernels) to produce (silking plus or minus 20 days in corn, growth stage R1 to R5 in soybean) will reduce the number of seeds (kernels) and yield. If the stress is relieved during seed filling, the crop may not be able to recover all of the lost yield by producing larger seeds, making the flowering/seed set period a very critical period. Stress during seed filling (after seed number is determined) will reduce yield by reducing seed size (weight per seed).

The importance of growth stage in determining the effect of drought stress on yield provides a mechanism to explain differential effects of stress on corn and soybean yields. For example, a lack of rainfall could result in stress around silking, reducing corn yield, but if the stress misses the soybean flowering period, yield would not be affected. The timing of stress and critical growth stages probably explains most of the differential year-to-year variation of yield in Fig. 1.

Increasing yields (Fig. 1) are usually attributed to improved varieties or hybrids (genetics) or better management. There is considerable disagreement over the relative importance of these two sources of yield improvement, not surprisingly, plant breeders tend to favor the first explanation, while agronomists and crop physiologists favor the second. In reality, I think it is impossible to separate the two sources. I don't think it

would be possible to produce bragging yields by applying modern management techniques to a 1960's variety (hybrid). Conversely, the same can be said for growing 2020's varieties (hybrids) with 1960's management. Improved management and improved varieties (hybrids) go together, and it is a waste of time to argue about which is more important.

Improvements in weather could also increase yields. Interestingly, one important aspect of the environment is the steady increase in CO2 concentrations in the atmosphere which could contribute to higher soybean yields. Photosynthesis in soybean (C3 type photosynthesis) increases as the CO2 concentration increases which should result in higher yield. Higher CO2 concentrations do not directly affect photosynthesis in corn (C4 type photosynthesis). Ironically, the same gas (CO2) that is causing climate change that is expected to decrease yield is also increasing soybean yield.

This year was a good year for Kentucky corn and soybean producers as yields were near record levels. Good weather conditions allowed the high yield potential created by modern high yielding varieties (hybrids) and up-to-date management practices to be expressed. Producers can ensure high yield potential by selecting high yielding varieties (hybrids) and utilizing the best management practices, but they are still at the mercy of the weather.

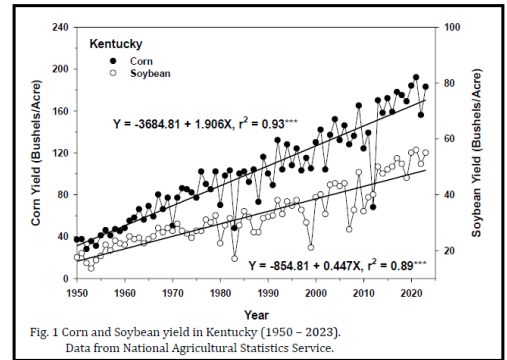


Fig. 1 Corn and Soybean yield in Kentucky (1950 - 2023). Data from National Agricultural Statistics Service.

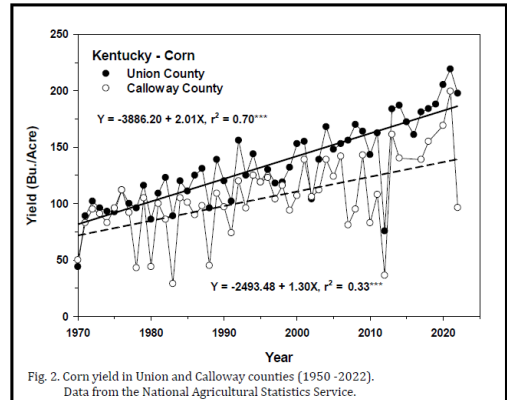


Fig. 2. Corn yield in Union and Calloway counties (1950 - 2022). Data from the National Agricultural Statistics Service.

Apple & Pear Rootstock Order Form

Now is the time to order rootstock for spring grafting. Grafting demo sessions will be held to help those who order learn to graft their own rootstock. Grafting tools will also be available for checkout. For more information on grafting visit <https://tinyurl.com/c69wpd55> and <https://youtu.be/kYgMEEPq914>.

Name: _____ Phone: _____

Address: _____

Email: _____

QUANTITY	ITEM	UNIT PRICE	TOTAL
	Pear (Pyrus Old Home x Farmingdale 87 3/16"-1/4") Rootstock	\$2.00	
	Apple (M7A 3/16") Rootstock	\$2.00	
		Total Due:	

Orders will be taken until February 1st or until sold out. Please pay with check or exact change. Mail checks to the Extension Office. Make checks payable to: Carter County Ag Council Rootstock should arrive the first week of March. All rootstock will need to be picked up at the Carter County Extension Office. Refunds will not be issued due to late pickup.

Payment Information:

Amount Paid: _____ Date: _____ Received By: _____ Check No: _____ or Cash _____

Carter County
 94 Fairground Drive
 Grayson, KY 41143

RETURN SERVICE REQUESTED

JANUARY 2024

CARTER COUNTY AGRICULTURE & NATURAL RESOURCES NEWSLETTER

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