

NIKKI'S NEWSLETTER

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Marshall County's Agriculture and Natural Resources Update

Hello, all! I want to take a second to recognize Dalton Watt and J&K Farms for their stellar **wheat yield contest** entry last summer. They made the 100 bushel club with a 125.83 bushel yield! This ranked them in 2nd place in the tillage division, 2nd place in the area and fifth in the state overall! Congrats to them!

As **input costs continue to skyrocket** and supplies dwindle, I can't help but recognize the opportunity that we have in front of us. You are probably wondering what in the world I am talking about. Let's talk this through. There are two sides to agriculture. The private sector and the university research side. The private sector can be thought of as the "cool kids" and you won't be surprised that the "nerds" are the Extension Agents in this metaphor. The cool kids do everything they can to prove that Extension isn't cool. Often saying we are too conservative and that we don't let you reach your full production potential, but the cool kids directly benefit from the sale of the products that they claim, "Extension is too conservative with!" We have current research that shows how our recommendations are solid. Why would we recommend that you limit your production potential? That doesn't make any sense. So, to bring this little comparison full circle, you must recognize the opportunity we have in front of us. With the cost of all inputs skyrocketing, we need to optimize profits and look for the most efficient and economical methods we can. Basically you can't afford to hang out with the cool kids anymore. It's time to make Extension cool again. Let's start with your soil test. I would love to show you where you can and can't afford to save money on fertilizer without losing production. You can't afford not too.

Small Packaged Pesticide Shortage? Skyrocketing Prices?

Another unhappy topic that needs discussing is availability issues and price inflation of home pesticides. After talking to one of our local suppliers, I have been informed that availability of small pack (1 gallon or less) pesticides may not be available at all this coming spring and what is available will likely be dramatically high priced. For example, there is a rumor that glyphosate (like roundup) production is being diverted to row crop production. This will likely cause a home/hobby size packaging shortage. So, how do we avoid this shortage as homeowners/hobbyists? This likely will not be avoidable but proper application rates are going to be more important than ever. When it comes to pesticide mixing, more is not always better. Use a proper measuring device and apply the correct rates. This could make the products you currently have in your garage last exponentially longer while providing the same amount of control. See page.... for more info on proper home pesticide use.

Uk offers More Beef Management Webinars. Upcoming meetings:

December 14, 2021

Shooting the Bull: Answering all your beef related questions! – Roundtable discussion

January 11, 2022

Milk: Benefit or Burdine – Darrh Bullock, Professor and Jeff Lehmkuhler, Professor

February 8, 2022

AFS Beef Research Update- Titles and speakers to be announced.

March 8, 2022

Shooting the Bull: Answering all your beef related questions! – Roundtable discussion

As we approach this holiday season, remember that November is not just for the turkey holiday. Don't forget about Veteran's Day. I want to send a special thank you to all the veterans in the county and wish everyone a happy holiday season. As always, you know where to find me! See you in the new year!

-Nikki

IN THIS ISSUE:

GENERAL

P.2. WINTER PROGRAM LINEUP

P.6 NUISANCE WEED SPRAY PROGRAM

P.9 ESTATE PLANNING GET READY

Livestock

P.4 RISING FOOD PRICES AND BEEF DEMAND

GRAIN

P.7-8 CORN EXTENDED SEASON IN KY

P.8 ANNOUNCING THE UK 2021 FALL CROP PROTECTION WEBINAR SERIES

HOME HORT.

P.3 LUNCH BREAK GARDENING SERIES

P.5-6 SO, YOU WANT TO BE A PESTICIDE APPLICATOR: CONSUMER PESTICIDES

P. 9 WHY LEAVES CHANGE COLOR IN THE FALL

RECIPE OF THE MONTH

P.10 CABBAGE JAMBALAYA

2021-22 Winter Program Lineup



Save The Date

Adult Farmer Beef Series

Monday's through December 20th

JR. Master Gardener

December 7th- Holiday Party

Restarts February 1st (Every other week)

Lunch Break Gardening Series

Every 1st Wednesday (RSVP)

Clark's River Beekeeping Meetings

Every 2nd Tuesday Night

Adult Farmer Grain Series

Monday Night's Starting January 24th

Private Applicator Trainings

January 26th

February 23rd

March 23rd

Raising The Steaks Beef Dinner

March 3rd (RSVP)

Grain Grower's Night Out

March 24th (RSVP)

For more information or to RSVP contact:

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LEXINGTON, KY 40546



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Lunch Break Gardening Series

UK University of Kentucky
College of Agriculture,
Food and Environment



December's Topic:
AFRICAN VIOLETS

African Violet Propagation and Care

Join us during your lunch break for a gardening workshop!

\$10

Includes a boxed lunch from Parcell's Deli

*1st Wednesday Monthly
12:15-12:45pm
at the Marshall County Extension Office*



*RSVP by Nov. 29th
Call 270-527-3285*

Lunch Break Gardening Series

UK University of Kentucky
College of Agriculture,
Food and Environment



January's Lesson:
Planning a Perennial Flower Garden

Plan to make your backyard beautiful!

Join us during your lunch break for a gardening workshop!

\$10

Includes a boxed lunch from Parcell's Deli

*1st Wednesday Monthly
12:15-12:45pm
at the Marshall County Extension Office*



*RSVP by Jan. 3rd
Call 270-527-3285*

Rising Food Prices and Beef Demand

4

By: James Mitchell, University of Arkansas

By now, most of us have probably seen articles in the popular press about food price inflation and the cost of this year's Thanksgiving dinner. A quick Google search will yield dozens of articles about the topic. Kenny, Josh, and I have colleagues at other institutions who have spent a significant amount of time providing commentary on the issue. Rather than reiterate their comments and analysis, which I largely agree with, I thought I would use this week's article to discuss the implications for U.S. beef demand.

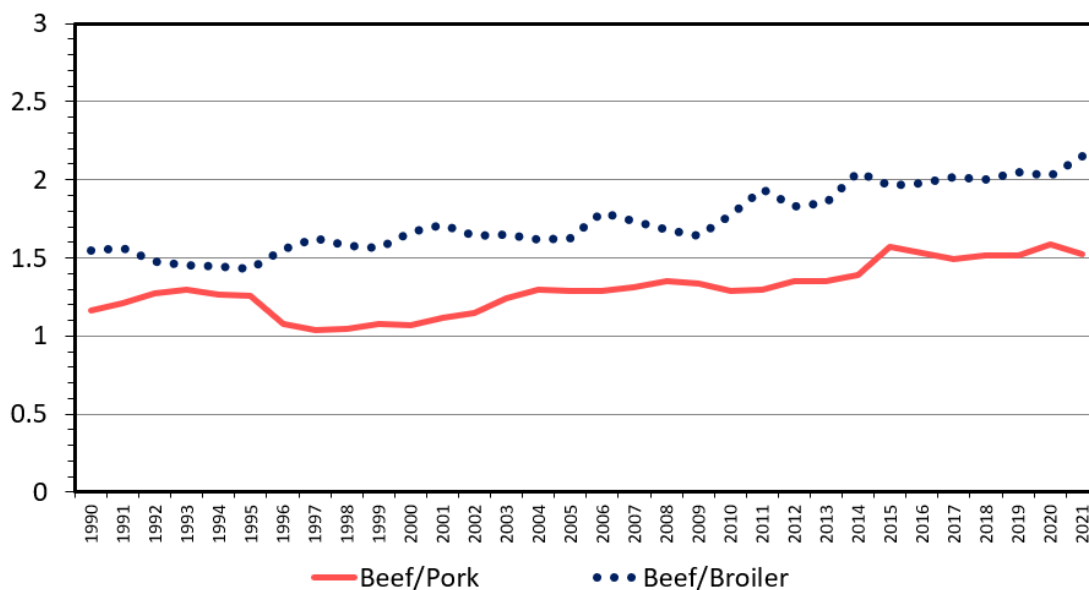
According to BLS data, food prices in 2021 are averaging 3% higher year-over-year. Beef, pork, and poultry prices are all averaging 3.5-6.5% higher in 2021. The most recent data shows that October was another record-setting month for choice retail beef prices, averaging \$7.90/lb or 24% higher year-over-year. The all-fresh retail beef price declined 9% from its high in September but remained 8% above year-ago levels in October.

Some context for the figures cited above is helpful. The 20-year historical average increase in the price of food is 2.4%. The 3-4% increase in 2021 that USDA is forecasting is not out of the realm of what we have observed historically. The 20-year historical average for beef, pork, and poultry prices is 4.4%, 2.2%, and 2.1%, respectively. The increase in meat prices this year is noticeably higher. However, USDA expects retail meat prices to moderate in 2022, averaging 2.5% higher compared to 2021.

A common concern is that the record-setting beef prices in 2021 will hurt beef demand. Unfortunately, without context, nominal meat prices provide few insights about beef demand. For demand analysis, what we really care about is relative prices. The textbook demand graph illustrates the relationship between quantity and the relative value of a good. For example, per capita beef consumption and the relative price of retail beef.

One way to determine how the relative price of beef has changed is to calculate price ratios between beef and other proteins like pork and poultry. The second figure in this article plots the all-fresh retail beef price relative to retail pork and composite broiler prices. In general, the price relationships have remained stable for the 2014-2020 period, with beef prices averaging 1.5 times the price of pork and 2.0 times the price of broiler meat. In 2021, the retail beef/pork and beef/broiler price ratios have averaged 1.5 and 2.1, respectively. I would be more concerned about beef demand prospects if the relative value of beef changed dramatically in 2021. The data shows that it has not.

Retail Beef Prices Relative to Retail Pork and Broiler Prices



Data Source: Bureau of Economic Analysis & USDA-ERS, Compiled by LMIC

Livestock Marketing Information Center

So, You Want to be a Pesticide Applicator: Consumer Pesticides

Ric Bessin, Extension Entomologist

Inherently, pesticides have some risks to the environment, the plants or animals being protected, consumers, and/or the applicator. Those pesticides with higher risks have been designated Restricted Use Pesticides (RUP), which require training and certification for their users, while pesticides with less risk are General Use Pesticides and are available without specialized training and certification. Restricted Use Pesticides are clearly marked with a warning box on the front label.

This article discusses some of the safety measures for general use pesticides, those used by persons without training or certification.

The Label is the Law

Even though no special training is needed for persons over 18 to purchase and use General Use Pesticides, users still must follow all label instructions. The label is the law!



Figure 1 (above)- Even general use consumer pesticides carry some risk and must be used according to the label directions.



READ THE ENTIRE LABEL FIRST. OBSERVE ALL PRECAUTIONS AND FOLLOW DIRECTIONS CAREFULLY.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Not for use on plants being grown for sale or for other commercial use, or for commercial seed production or for research purposes.

Figure 2 (above)- The first sentence of the 'Directions for Use' section of nearly all pesticides labels notifies users that they are required to follow all label directions.

Protective Clothing

Many consumer pesticide labels clearly specify what types of protective clothing is required during application, some do not have requirements. For those that don't specify what types of protection is required, I suggest the user wears at least long pants, long-sleeved shirt, shoes plus socks, and plastic or rubber gloves.

Figure 3 (right)- Use any personal protective equipment listed in the Precautionary Statements section of the pesticide label.

Concentrates vs. Ready to Use

With consumer pesticides, some require dilution with water and may be designated as concentrates; others are Ready-to-Use (RTU) or Ready-to-Spray (RTS) formulations. RTU and RTS pesticides do not require dilution and are often applied to surfaces until thoroughly wet.

Concentrates, on the other hand, are diluted with water, and applications must be calibrated to deliver a fixed amount per unit area. Rates are often expressed need to calculate the area intended to be treated to determine the amount of product needed.



Other Label Information

The type of area to be treated (e.g. lawn, fruit, foundation, etc.) must be listed on the label. All pesticides restrict adults, children, or pets from entering the treated area until sprays have dried. Pesticides applied to edible plants list a required 'days until harvest' waiting period for each type of edible plant to ensure pesticides residues degrade to negligible levels through exposure to wind, rain, and sunlight.

Nuisance Weed Spraying Program

John R Board III, KDA

This program consists of weed spraying demonstration plots. The department will provide the sprayer and enough chemical for the treatment of 10 acres of agricultural land or 200 gallons of spot spraying mix to be used on agricultural land. The department’s representative will demonstrate proper mixing and application techniques. A number of nuisance weeds can be treated under this program depending on the needs of the participant. This program is limited to broadleaf weeds.

Broadcast Spraying demonstration plots consist of:

- 10 acres of agricultural land will be treated with chemical provided by the department
- Application is performed with a two-wheeled trailer type sprayer equipped with non-boom nozzles
- If additional chemical is provided by the participant, an additional 10 acres can be treated

Spot Spraying demonstration plots consist of:

- 200 gallons of broadleaf chemical mix which is applied until sprayer is empty
- Application is performed with a two-wheeled trailer type sprayer equipped with a handheld spray wand used by the tractor operator
- If additional chemical is provided by the participant, an additional 200 gallons can be sprayed

For each demonstration:

- The participant must provide water source
- The participant must provide tractor and operator
- All chemical products must be labeled and the product label will be strictly followed
- A maximum of 7 participants per county. Participants may only apply to the program every 36 months.

This program is designed to target weeds that have a negative impact on the participant’s agricultural production. There will be an annual online application period to participate in this program. You may submit an application using our on-line services (located in the top menu bar) on the Kentucky Department of Agriculture Website. Dates to apply February 1 to February 28 of 2022.

Continued

So, You Want to be a Pesticide Applicator

A statement on all pesticide labels includes “Keep out of reach of children.” Generally, people purchasing and using pesticides should be at least 18 years old.

Storage

When pesticides are not being used, they should be stored in a locked cabinet or room that is kept cool and dry and according to ‘Storage and Disposal’ requirements on the pesticide label. It is important to keep pesticides inaccessible to children and pets at all times.

Pesticide Exposure

When using pesticides, if some of the product gets on your skin, thoroughly wash it off with soap and water. If it gets in your eyes, flush your eyes for 15 minutes with clean water and check the label for more instructions. If swallowed, check the label for first aid instructions as these vary according to the type of pesticide ingested, and then seek medical attention.

After using pesticides, wash thoroughly before eating, drinking, using tobacco, or using the toilet. Clothing used while applying pesticides should be washed separately from that of the rest of the family laundry, and the washer should be run once on rinse after the clothes are removed. Heavily contaminated clothes should be discarded.

Each pesticide label will have a section to address first aid for emergencies. There will be a phone number for the National Pesticide Information Center along with specific emergency medical treatment information. The doctors and first responders will need to know the name of the product; you should have the product container or label when calling a poison control center or speaking with a doctor.

The Answers Are on the Label

When you have questions about using a pesticide, reading the label is the first place to look for the answer.

2021 Corn Extended Growing Season in KY

Chad Lee, Ph.D. Grain Crops Extension Specialist

Corn planting for 2021 was ahead of schedule, yet harvest and several other developmental stages were behind. Milk, dough and dent were all behind the 5-year average. (Thanks to USDA NASS for letting us use their graph. See Figure 1). Even with the slow emergence for some of the planted corn, these crop progress estimates suggest that the corn growing season was extended. An extension during seed fill of ten means higher yields and the projected yields for Kentucky are record level. That extension of the seed fill also pushed a lot of corn into a fall that has been cool, cloudy and wet.

Once corn reaches physiological maturity (black layer) the drydown of the grain is simple physics and depends on air temperature, relative humidity (RH), windspeed and sunlight. Higher temperatures, low-er RH's, higher windspeeds and more sunlight all contribute to faster drydown of the grain. This fall was just the opposite of those. The cool, humid, calm and cloudy conditions made for a very prolonged drydown (Figure 2). Each of the past five years at Fayette County have been cloudy relative to the last eleven (Figure 3). But, 2021 is the cloudiest. Added to that delay in field drydown is larger kernel size. That extended seed fill period created some very deep kernels in some fields. Those deep kernels take longer to drydown (Figure 4).

Any farmer disappointed at how slow the corn dried down in the field SHOULD NOT BLAME THE HYBRID this year! The slow drydown of corn is a function of the timing of corn maturity and weather. That timing allowed for excellent yields and for very slow drydown. Perhaps farmers should look to improving grain drying systems and grain storage systems. For the past five years, simply relying on timely field drydown of corn has not worked very well.

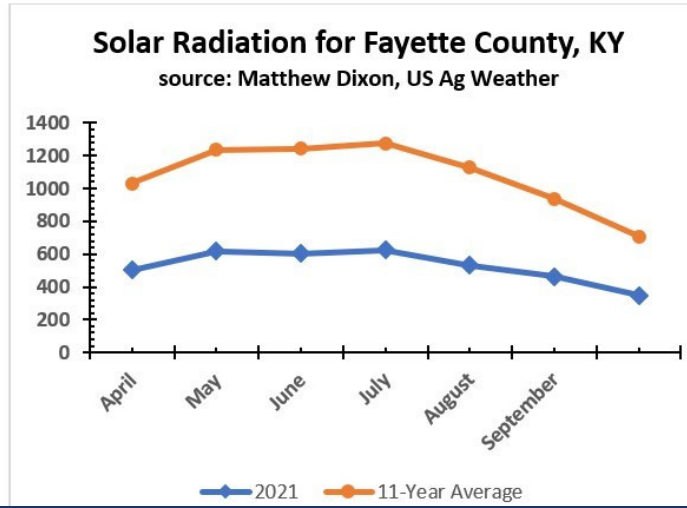
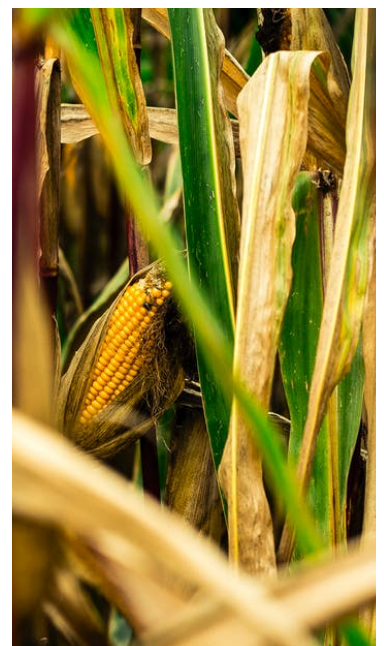
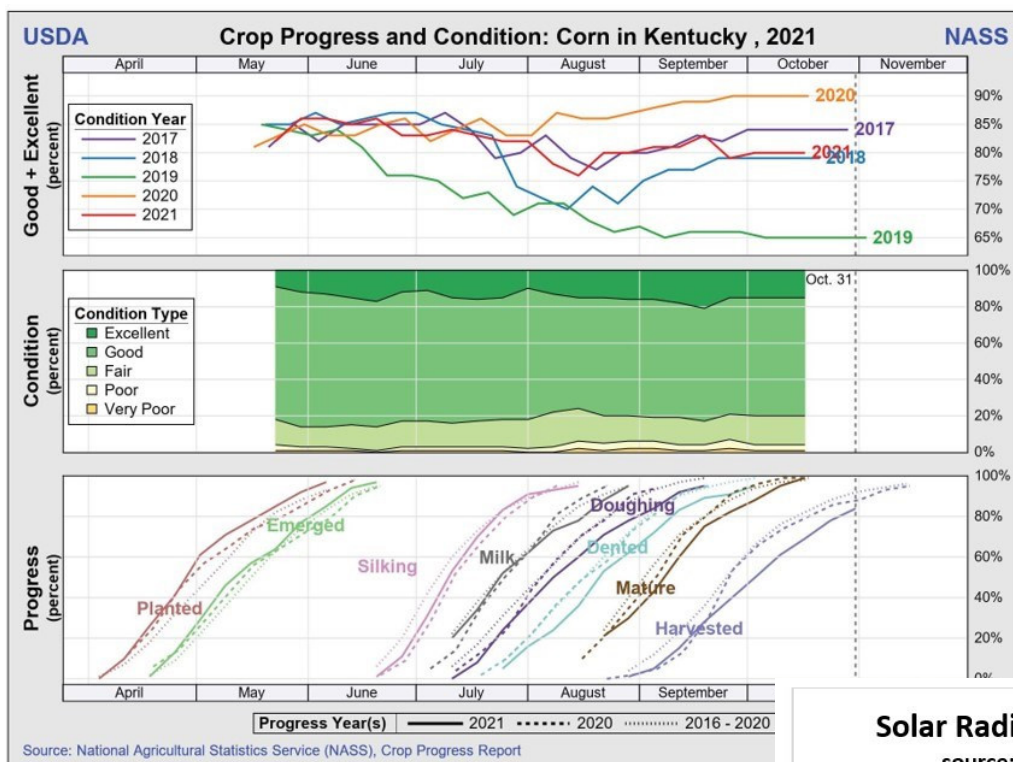


Figure 1 (above) Corn crop progress for Kentucky in 2021. USDA-NASS allowed us to use their graph.

Figure 2 (right) Solar radiation for Fayette County, KY for 2021 (blue) and the 11-year average (orange).

Continued on page 8...

Announcing the University of Kentucky 2021 Fall Crop Protection Webinar Series

Kiersten Wise, Carl Bradley, Raul Villanueva, and JD Green

The University of Kentucky has organized five webinars on field crop protection topics that will be hosted through the Southern Integrated Pest Management Center starting on November 11. These weekly webinars will cover topics such as new research on foliar corn disease management, soybean disease identification and management, updates on fall armyworm, guidelines for choosing herbicide options and herbicide-tolerant crop traits, and recommendations for control of weeds like Palmer amaranth, waterhemp, marestail (horseweed), annual ryegrass, and Johnsongrass. Kentucky pesticide applicator credits and Certified Crop Advisor continuing education credits have been applied for.

Pre-registration for the meetings is required through the registration URL provided. Dates, speakers and presentation registration links are listed below:

Date: November 18, 2021
 Title: **Re-setting the Defense for Control of Problematic Weeds**
 Registration URL: https://zoom.us/webinar/register/WN_NcCn1dgjQOC8fbvXHDMggw

Date: December 2, 2021
 Title: **What We Learned About Corn Fungicide Applications in 2021**
 Registration URL: https://zoom.us/webinar/register/WN_zd9vPB1mQEiG_VW83piXug

Date: December 9, 2021
 Title: **A Resurgence of Other Weeds from the Past**
 Registration URL: https://zoom.us/webinar/register/WN_0eljDIYARfe5m26zWJmRNng

Date: December 16, 2020
 Title: **Studies on the management of bean leaf beetle, three cornered alfalfa hoppers and the fall armyworm outbreak in soybeans**
 Registration URL: https://zoom.us/webinar/register/WN_Aqq56bqkSX-bix-uZLT3Pg

EXTENSION GRAIN CROPS

Upcoming Events

Date	Event
December 20-21	KATS Training: Drone Pilot Certification Workshop
January 4	Winter Wheat Meeting
January 13	Kentucky Commodity Conference
March 9	IPM Training School
May 10	Wheat Field Day
June 30	Pest Management Field Day
July 21 or 26	Corn, Soybean & Tobacco Field Day

Visit www.kygrains.info/events for more details

Corn Extended Season in Kentucky- Continued from page 7

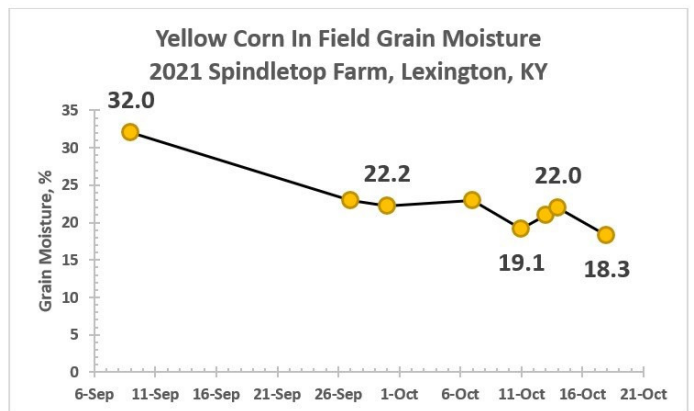
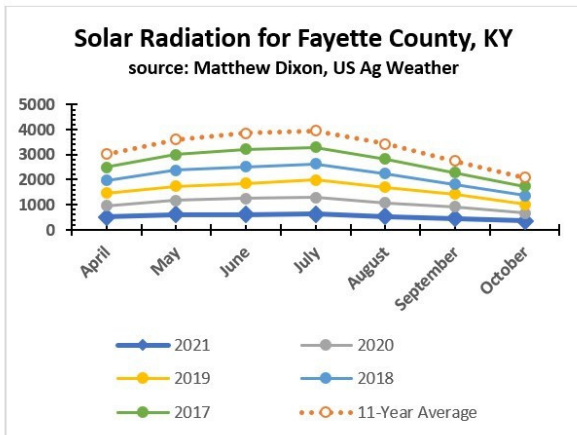


Figure 3 (Left) Solar radiation for each of the past 5 years compared to the 11-year average for Fayette County.
 Figure 4 (Right) In field drydown of yellow corn at Spindletop Farm, Lexington, 2021.

Why Leaves Change Color in the Fall

Sharon Flynt, UK Extension Horticulture Agent

Fall is one of the most beautiful seasons of the year, as tree leaves change colors to bright oranges, vibrant reds and eye-popping yellows. Trees that change color in the fall are deciduous trees. They go dormant in the winter to protect the tree from freezing temperatures and will generate new leaves in the spring.

Three factors cause the tree leaves to change color at this time of year: length of night, leaf pigments and weather. Length of night is the only constant of the three. Following the summer solstice in June, the daylight shortens in the Northern Hemisphere and nights become longer. It is the increasing length of night that triggers certain reactions in trees and leaves.

Chlorophyll, which produces the green color in leaves, and carotenoids, which gives us the orange, yellows, and browns, in conjunction with sunlight, are working all summer to produce food for the tree. After the solstice, night length steadily increases, causing excess plant sugars to build up, chlorophyll production to slow down and eventually stop in the leaf. When chlorophyll production ceases, the carotenoids pigments are unmasked and any anthocyanins in the leaf start producing the reddish, purple colors in response to bright light, giving the leaves their fall colors.

As time passes, a cell layer between the leaf petiole, where it connects to the stem of the tree, begins to close. Once that cell layer completely closes, the leaf drops, closing off any openings into the tree and protecting it from winter's freezing temperatures and harsh winds.

Fall color vividness depends on temperature and moisture. Sunny, warm days, cool nights and soil moisture in early fall produce the most color. This combination of moisture and temperature produce a vast array of color and that's why no two autumns are ever alike. Contact the Marshall County office of the University of Kentucky Cooperative Extension Service for information on trees.

Estate Planning: Get Ready

Steve Isaacs, UK Agricultural Economist, Nichole Huff, Extension Specialist for Family Finance and Resource Management and Jennifer Hunter, Assistant Director of Family and Consumer Sciences Extension

Whether you farm 10 or 10,000 acres, it is important to have a plan in place in the event that you die or are no longer able to farm. Making an estate plan ensures a smoother farm transition and that your wishes are followed. It can also save your family time, money and emotional stress compared to if you were to die without a plan in place.

Research shows only 32.9% of Americans have a will. Even though the average age of American farmers is 59.4 years, only one-third of farmers have identified their successor.

To start planning your estate, you need to determine what you want to transfer, their monetary values and your beneficiaries. There is a lot to consider before deciding to transfer anything. Transferable things include tangible and intangible assets, management and leadership. Make a list of these.

Know your current financial situation. Determine your net worth by listing all of your assets and subtracting your liabilities. You also need to determine whether your farm is profitable. Calculate your operation's net income to determine if the farm would support one or multiple families and what their anticipated standard of living might be.

Determine who you want to transfer your things to and the goals for your estate. This may include one or more people. For example, you may want one person to receive your estate but transfer your business to another. You will need to also consider if your estate could provide for a surviving spouse (if applicable) and any minor children.

Gather important documents. These include a list of assets, net worth, birth certificate, marriage certificate (if married), car titles, bank account records, stock certificates, property deeds, earning records, personal and business tax returns, property records, property improvements and insurance policies. Keep these documents in a secure place that your heirs or estate executor know about, such as a fireproof safe.

UK Cooperative Extension Service has developed a worksheet to help you determine your estate planning goals. It is available in the FCS5-420 publication titled, "Estate Planning Part 1: Getting Started." The publication is available online at <https://bit.ly/3H9s1YX> or by contacting the Marshall County office of the UK Cooperative Extension Service.



Cabbage Jambalaya

1 pound lean ground beef	1 (13 ounces) package turkey smoked sausage, sliced	1 (14.5 ounces) can diced tomatoes
1 ½ cups chopped celery		2 cups water
1 ½ cups chopped onion	1 medium head cabbage, chopped (about 10 cups)	1 cup brown rice
2 cloves garlic, minced		1 teaspoon garlic powder
		1 tablespoon Cajun seasoning

Heat a large stockpot over medium high. **Add** ground beef, and **cook** until it starts to brown, about 6 minutes. **Add** the celery, and **cook** for 2 minutes. **Add** onion and garlic, and **cook** 4 minutes while stirring. **Add** smoked sausage, and **cook** an additional 2 to 3 minutes. **Stir in** cabbage, and **cook** until it wilts, about 3 minutes. **Add** tomatoes, water, rice, garlic powder, and Cajun seasoning.

Bring to a **boil**, and **reduce** heat to medium. **Cover**, and **simmer** for 40 minutes. Serve hot.

Yield: 10, 1-cup servings

Nutritional Analysis:
250 calories, 8 g fat, 3 g saturated fat, 60 mg cholesterol, 400 mg sodium, 26 g carbohydrate, 4 g fiber, 6 g sugars, 0 g added sugars, 18 g protein

Kentucky Cabbage

SEASON: June to July and September to November

NUTRITION FACTS: Cabbage is low in fat and calories and is rich in vitamin A.

SELECTION: Leaves should be crisp and free of insects and decay. Avoid burst heads. Choose firm cabbages that are heavy for their size.

STORAGE: Cover loosely and store in refrigerator for up to 2 weeks. Wash just before using.

PREPARATION: Discard outer leaves and core.

To boil: Do not use aluminum pan. Cut cabbage into quarters and boil in water for 10 to 15 minutes, until tender. Drain and serve hot.

To steam: Place cabbage (shredded, wedges, or whole leaves) into a steamer basket. Cook 12 to 15 minutes, until tender. To bring out the natural flavor, add apples, pears, raisins, curry, caraway, dill, or onions.

To stir-fry: Shred cabbage, and place in a skillet that has been sprayed with cooking spray or oil. Cook quickly over high heat, stirring constantly.

CABBAGE

Kentucky Proud Project

County Extension Agents for Family and Consumer Sciences

University of Kentucky, Dietetics and Human Nutrition students

November 2019

Source: www.fruitsandveggiesmatter.gov

Buying Kentucky Proud is easy. Look for the label at your grocery store, farmers market, or roadside stand.
<http://plateitup.ca.uky.edu>



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For more information go to:
<http://marshall.ca.uky.edu/AgNaturalResources>
or follow us on Facebook @marshallcountyanr

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Resources Agent