

# NIKKI'S NEWSLETTER

## Marshall County's Agriculture and Natural Resources Update



Cooperative Extension  
University of Kentucky  
Marshall County  
1933 Mayfield Highway  
Benton, KY 42025  
(270) 527-3285  
extension.ca.uky.edu

Hello all! June is here and regardless of all the delays, we find ourselves in the middle of hay season, gearing up for wheat harvest and still planting our bottom ground. With all this going on, I want to take a second to remind drivers to keep their eyes peeled for large farm equipment. Transportation incidents are the leading cause of death for farmers and farm workers and it shouldn't be.

Don't forget, the **Farmers Market** at the Extension Office is open on Saturdays from 8:00am-noon!

As always, don't forget that the **Marshall County Fair Exhibits** will be hosted at the Extension Office on July 18th- 20th. Drop off will be on the 18th, viewing on the 19th and pickup on the 20th. This is a fun way to show off items that you raise or create regardless of the fair. Don't forget there will be cash premiums for winners! Agriculture Entry classes are on page 3. Contact the Office if you would like to view the Family and Consumer Science or 4-H divisions.



(Photo courtesy of Kim Conner)

I have been receiving many calls regarding **fungi and slime molds** in client's landscapes so I added an article on these topics on page 4. Most people are concerned that they are harmful but unless you eat them, they are just unsightly. As things warm up and the ground dries, most of these problems will solve themselves. I am actually a co-author to a publication on these topics entitled "Mulch Mushrooms, Slime Molds & Other Saprophytes." If you want to "nerd out" and learn more about these topics, it can be viewed at this webpage: [plantpathology.ca.uky.edu/files/ppfs-gen-06.pdf](http://plantpathology.ca.uky.edu/files/ppfs-gen-06.pdf). Also, on a similar subject, the forestry department did a webinar on **common mushrooms in Kentucky** last month. I receive so many questions on identifying mushrooms that I decided it was worth mentioning as well. The recording can be viewed at: [www.youtube.com/watch?v=CQ6BvcXWVhY](http://www.youtube.com/watch?v=CQ6BvcXWVhY).

Another great opportunity from the forestry department is the "**From the Woods Today**" Webinars. They have done 107 episodes and continue to make more. Check the live episodes and recordings at: [forestry.ca.uky.edu/woods-today](http://forestry.ca.uky.edu/woods-today)



The UK beef team is wrapping up their "**Beef Management Webinar Series**." If you missed these great meetings don't fear, you can view the recordings here: [www.youtube.com/user/UKAnimalFoodSciences](http://www.youtube.com/user/UKAnimalFoodSciences)  
Topics included: Milk: Benefit or Burden, Selenium's Impact on Female Reproduction, Simple Tools to Improve Management Decisions, New Tools for Monitoring Cattle Behavior and Shooting the Bull-Roundtable discussion.

Until Next Time....

### IN THIS ISSUE:

#### GENERAL

- P.3 COUNTY FAIR EXHIBITS
- P. 4 SLIME MOLDS
- P.8 FIRE ANTS

#### GRAIN

- P.6 TIPS FOR DRYING & STORING WHEAT
- P.7-8 POSTEMERGENCE HERBICIDE APPLICATIONS IN 2022
- P.9 WATCH CORN WATER USE OVER THE NEXT FEW WEEKS

#### Livestock

- P.2 CONVERSION OF TOXIC FESCUE TO NOVEL
- P.2 FORAGE TIMELY TIPS

#### HOME HORT.

- P.5 INSTALLING A BUTTERFLY GARDEN
- P.5 LUNCH BREAK GARDENING- JULY
- P.6 LUNCH BREAK GARDENING- AUGUST

#### RECIPE OF THE MONTH

P.10

# Conversion of Toxic Tall Fescue to Novel

*S. Ray Smith and Krista Lea - University of Kentucky*



## **Replacement Protocol:**

### *Spring*

Soil sample; adhere to lime and fertilizer recommendations

1. Take soil sample in May.
2. Follow recommendations in soil test.

1. Clip/mow the pasture in early May as low as possible. Remove/prevent all tall fescue seed heads in the spring via mowing or early hay cutting
2. Follow recommendations in soil test.

Remove/prevent all tall fescue seed heads in the spring via mowing or early hay cutting

1. Clip/mow the pasture in early May as low as possible.
2. Clip/mow the pasture a second time in late May to remove tall fescue seed heads (Note: Fescue seed can be viable 15-20 days after pollination and then germinate in the fall).

### *Mid-Late Summer*

Herbicide spray to kill out existing stand before planting novel endophyte tall fescue or other forages

1. Graze tall fescue heavily during periods of growth.
2. Stop grazing and allow tall fescue to regrow to five to six inches in height.
3. Spray with glyphosate 4-6 weeks before planting – mid to late-July.
4. Allow weeds and toxic tall fescue to germinate or re-grow from escapes.
5. Re-spray glyphosate before planting – early September

### *Early-Fall*

Plant novel endophyte tall fescue seed

1. In early to mid-September, just after last weed spray, plant a novel tall fescue variety using a no-till seed drill.
2. No-till drill at 20 lbs/ac, and ¼ inch deep. To achieve better ground cover, set drill at 10 lbs/ac and go over field twice, the second pass perpendicular to the first pass.

### *Late Fall or early next Spring*

Tall fescue seedling management

1. Low rates of N can be used to enhance stand establishment (~40 lbs/N/ac)
2. After planting, wait until tall fescue seedlings reach the 4-leaf stage (4 to 5 inches tall) before weed control.
3. If needed, apply Weedmaster (2,4-D and dicamba) or similar herbicide to control broadleaf weeds.
4. Allow good sod development before grazing next spring. Ideally, wait until plants are 8 inches tall and flash graze (a large number of animals for half a day) or mow at 4 inches residual height or simply cut for hay in the spring (4 inch stubble height).

## FORAGE TIMELY TIPS

- **Continue hay harvests. Minimize storage losses by storing hay under cover.**
- **Clip pastures for weeds and seedheads as needed.**
- **Use slower grazing rotations allowing for a longer recovery periods.**
- **Use portable fencing to decrease paddock size and increase paddock number.**
- **Do NOT graze below the minimum desired residual height (4 in for most forages).**
- **When present, johnsongrass can provide high quality summer forage when managed.**
- **Crabgrass, a warm-season annual grass, can provide high quality summer grazing. It is a annual grass highly preferred by livestock. If desired, remember crabgrass needs some annual soil disturbance to keep coming back.**
- **Begin grazing native warm-season grasses. Start at 20-24" and stop at 8-10 inches.**



*Marshall County Fair Exhibits 2022*

# FARM AND GARDEN PRODUCE

*Director  
Kelly Canfield*

1. All exhibits must be entered between 8:30 a.m. and 12 noon on Monday, July 18 at the Marshall County Extension Office
2. All entries must be removed between 8:00 a.m. and 11 a.m. on Wednesday, July 20  
Premiums will be paid at this time.
3. All entries are to be grown by the exhibitor.
4. Each person may make only one entry per class.
5. Entries will be ranked by quality, condition, display and description.
6. The judges' decision are final.
7. Each entry needs to arrive and be presented as described. Entries should be labeled with the class, scientific name and the variety (ex. Zinnia, Zinnia elegans, Bernays Giant)  
Premiums paid - \$5.00 blue/\$4.00 red/\$3.00 white, Best in Show: \$20,  
Best Vegetable Garden Basket: \$12.00 blue/\$8.00 red/\$5.00 white.

## *Field, Seed, Grain, Tobacco*

Corn, Yellow, Best Quart Jar  
Corn, White, Best Quart Jar  
Hay, Under 45 lbs., Best Bale  
Popcorn, Best Quart Jar  
Soybeans, Best Quart Jar  
Wheat, Best Quart Jar

## *Fruit and Nuts*

Berries, Best Plate  
Grapes, Best Plate  
Misc. Fruit, Best Plate  
Misc. Nuts, Best Plate  
Pecans, Best Plate  
Watermelon, Largest

## *Plants and Flowers*

Coleus, in Water, 3 Sprays, Any Color, Best  
Dahlia, in Water, 1 Stalk, Best  
Echinacea, in Water, 1 Bloom, Best  
Hosta, in Water, 1 Leaf, Best  
Hydrangea, in Water, 3 Stems, Best  
Marigold, in Water, 1 Spray, Best  
Other Flower, in Water, 1 Spray/Leaf/Cut  
Potted Plant, Best  
Rose, in Water, 1 Spray, Best  
Succulent/Cacti, Potted Plant, Best  
Sunflower, Biggest Head  
Zinnia, in Water, 3 Blooms, Best  
Hanging Basket, Best

## *Miscellaneous*

Comb Honey, Best Quart Jar  
Honey, Light, Extracted, Best Pint Jar  
Sorghum Syrup, Sweet, Best Pint  
Eggs, Best Dozen

## *Vegetables*

Beans, Best Plate  
Carrots, Best Plate  
Corn, Sweet, Best Plate of 3 Ears  
Cucumbers, Pickling, Best Plate of 3  
Cucumbers, Slicing, Best Plate of 3  
Herb Display, Best  
Garlic, Best Plate of 3  
Okra, Best Plate  
Onions, Best Plate  
Pepper, Bell, Best Plate  
Pepper, Hot, Best Plate  
Pepper, Sweet, Best Plate  
Potatoes, Best Plate of 3  
Squash or Zucchini, Any, Best  
Sweet Potatoes, Best Plate  
Tomato, Largest  
Tomatoes, Cherry, Best Plate  
Tomatoes, Other Colors, Best Plate  
Tomatoes, Red, Best Plate of 3  
Vegetable or Melon, Other, Best  
Vegetable Garden Basket, Best  
Zucchini, Largest

# Slime Molds

*Ellen Brightwell, University of Kentucky*



The only bad things about slime molds are their name and appearance. They are unsightly, but not harmful.

Some slime molds look like a dog has gotten sick at the stomach. It is alarming to see these slimy patches in yard mulches and grasses. There have been reports of people taking dogs to the

veterinarian, or accusing neighboring dogs of coming into their yard. Other slime molds are smaller and less conspicuous. They do not cause diseases, are not parasitic, and won't harm

people and pets. "Slime molds are primitive, unusual creatures," said Paul Vincelli, Extension plant pathologist with the University of Kentucky College of Agriculture. "Fungi slither around below ground for weeks or months feeding on microbes in organic matter. Abundant wet weather in late spring and early summer stimulates them to emerge into the light to reproduce by creating millions of microscopic spores. The fungi sacrifice their entire bodies to produce these spores.



"The fungi were once considered animals because of their slithering, creeping behavior."

The molds quickly appear as four- to six-inch patches of white, cream, gray or purple with a crusty surface. Some become a foot or more in size. They use grass leaf surfaces, mulches and ground-touching shrub or tree branches as support structures from which spores are dislodged by the wind, water, mowers, other equipment or movement by people or animals. Temporarily shading grass leaves may weaken the plants but does not cause severe or permanent damage.

Slime molds tend to appear in the same vicinity year after year. They like cool, shady, moist locations filled with moisture-laden organic matter. Poorly drained areas and those with heavy thatch may increase the likelihood of slime molds. More than 700 species are reported to exist.



"You can reduce potential development by aerating mulch with a gardening tool, pruning overgrown plants and trees to decrease moisture and reducing thatch in the lawn," Vincelli said. "Chemical preventive treatments are not recommended or required. Historically, they have not been effective. Treatment really isn't necessary because slime molds will disappear as soon as drier weather appears."

People with heavy infestations, or those who simply cannot stand the unaesthetic site, can remove slime molds by mowing, raking, poling, or using a forceful water stream from a garden hose. Be sure to wait for warmer weather before using the hose to keep from spreading the fungus or creating conditions for future development.

More information is available at the Extension Office or also in the publication, *Mulch Mushrooms, Slime Molds & Other Saprophytes* (PPFS-GEN-06), which can be viewed at: [plantpathology.ca.uky.edu/files/ppfs-gen-06.pdf](http://plantpathology.ca.uky.edu/files/ppfs-gen-06.pdf)

# Installing a Butterfly Garden



*Faye Kuosman, UK Extension Horticulture Agent*

Honeybees, which are native to Europe and introduced to the United States, are important pollinators for home gardens. But numerous pollinator species including native bees, butterflies and moths, beetles, birds and bats benefit our gardens. Sadly, many of the pollinators have suffered from habitat loss, chemical misuse, diseases and parasites.

Gardeners play a critical role in the nurturing and conservation of both native and introduced pollinators. Gardens and landscapes provide pollinators with food, water, shelter and habitat to complete their life cycles. Urban areas typically feature large areas of pavement and buildings and offer little in the way of food and shelter for pollinators. Garden plantings can help bridge that gap.

Just like with any new flower bed, you want to pick a site for your butterfly garden with good drainage, full sun, and an area with good weed control. If you are starting a new butterfly garden, get a soil test, eliminate the weeds and add organic matter.

Honeybees and other pollinators need protein from flower pollen and carbohydrates from flower nectar. Plan to provide a variety of different types of flowers, and aim to have three different flower species in bloom throughout the growing season. Showy, colorful flowers and massed groups of flowers, particularly in small gardens provide efficient feeding stations for the pollinators. Flowering trees and shrubs also provide excellent food sources. Native plants share a long history with their pollinators, including a wide variety of natives will make your garden a favorite destination for pollinators.

You want to have a variety of plants, preferably native ones and non-native that will bloom throughout the growing season.

Some of these are purple cone flower, black-eyed susan, asters, golden rod, yarrow, tall blazing star, milkweed, coreopsis and many more. The Kentucky Native Plant Society has an updated listing of nurseries in Kentucky that sell native plants.

Be sure to have puddling spots for butterflies to get a drink of water. Pollinators also need shelter from the wind, scorching sun and heavy rain. Fences can serve as a windbreak, which may make the garden more attractive to pollinators.

Contact the Marshall County office of the University of Kentucky Cooperative Extension Service for information.

## Lunch Break Gardening Series

 University of  
Kentucky  
College of Agriculture,  
Food and Environment

July 6th's Topic:

### Growing Blueberries



Join Master Gardener, Pat Stewart Green, as she reveals the secrets to raising delicious blueberries!

Join us during your lunch break for a gardening workshop!

**\$10**  
Includes lunch from a local restaurant!

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



RSVP by July 1st  
Call 270-527-3285

# Tips for Drying & Storing Wheat

*Sam McNeill, Agricultural Engineer Extension Specialist*



*(Photo Courtesy of Sam McNeill, UK)*

As wheat harvest approaches, now is a good time to consider drying and storage options. A good place to start is by reviewing the equilibrium moisture content chart for soft red winter wheat below, which shows the limits of drying, as well as storage, over a range of average weather conditions in Kentucky throughout the year. See *Harvesting, Drying and Storing Wheat (ID-125)* for more information.

## *Implications for Drying*

Soft red winter wheat will reach the moisture levels shown in the chart

when exposed to the corresponding temperature and humidity levels after sufficient time in the field or drying system. Drying time will depend on the airflow rate through grain, which in turn depends on the depth of wheat in a bin. The minimum drying rate for natural air drying is 1 cfm/bu, but this can take several weeks to dry the top layer—during which time spoilage can occur. For wheat, a maximum depth of 10-ft (for axial fans) or 16-ft (for centrifugal fans) is recommended to achieve the minimum drying airflow rate. Bin-specific airflow rates can be determined at this University of Minnesota website.

When the relative humidity is above 80% (at night and on cloudy days), adding 5 degrees of heat will lower the humidity by 10 points and will speed drying.

## *Implications for Storage*

The air space between grain kernels in a bin will have the humidity indicated at the corresponding moisture and temperature. For example, 13% wheat at 80°F will have a relative humidity in the air space between kernels just below 70%, but when cooled to 40°F will have a relative humidity just below 60%.

Mold growth is suppressed during storage when the environment is maintained at a relative humidity level of 65% or lower. For this reason, clean wheat in good condition should be held at 12.5% during the summer in Kentucky when the average monthly temperature in July and August is 80°F.

Wheat should be cooled below 70°F as soon as possible (usually in September) if held into the fall, and about 10 degrees each month until it reaches 35-40°F in December. Fans should be sealed after the final cooling cycle to prevent wind-driven air currents from re-warming the grain in the bottom of the bin.

## Lunch Break Gardening Series

 University of  
Kentucky  
College of Agriculture,  
Food and Environment



August 3rd's Topic:  
**Growing a Fall Garden**

Join Master Gardener, Charles Frazier, as he shares the secret to having fall vegetable gardening success!

Join us during your lunch break for a gardening workshop!

**\$10**

Includes lunch from a local restaurant!

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



RSVP by August 1st  
Call 270-527-3285

# Postemergence Herbicide Applications in 2022



*Dr. Travis Legleiter, Weed Science Specialist*

Kentucky soybean planting is quickly wrapping up and the majority of corn has or is receiving a postemergence herbicide application as it quickly advances in growth stages. Postemergence applications on soybean will soon begin if they have not already begun. In this article, we want to give farmers a few reminders when making postemergence applications in soybean. This year, more than ever before, farmers and applicators will need to focus on the small details as there may not be many second chances this year with the ongoing herbicide shortage.

## SIZE MATTERS

Weed size matters and the smaller the better. All postemergence herbicides work best when applied to 2- to 4-inch tall weeds and failures are more likely to occur when applications are made to weeds larger than this size. This is especially important this year, with many farmers relying on tank mixes of selective herbicides to achieve weed control in the absence or lack of availability of glyphosate and glufosinate. Glyphosate can be very forgiving and can control weeds much larger than the recommended 2- to 4-inch height, but many of the alternative herbicides that will be going out this year are not as flexible and forgiving. While the 2- to 4-inch rule should apply to all weed species, it is especially important to remember when dealing with waterhemp and Palmer amaranth. While it is understandable that weather can keep sprayers out of the field for extended periods of time, applications should be made as soon as possible to capture the weeds at their smallest size.

## CHECK TANK MIX COMPATIBILITY

As discussed above many applicators and farmers will be forced to use tank mixtures of selective herbicides in the shortage of broad-spectrum herbicides such as glyphosate and glufosinate. If you are using a tank mixture of selective herbicides, make sure to check that the products are both physically compatible and will not antagonize each other's activity. A combination that is often considered in the absence of glyphosate and glufosinate in auxin-resistant soybean (RR2Xtend, RR2XtendFlex, and Enlist E3 soybean) is a group 1 herbicide (i.e. Select or Assure) with a group 4 herbicide (Xtendimax or Enlist One). In this combination, the group 4 herbicides can antagonize the herbicidal effects of the group 1's (loss in control as compared to when applied alone) on certain grass weed species. Although the antagonism can be overcome by choosing either the correct rate structure or separating the application of products. The appropriate rates to overcome the antagonism can be found in the herbicide labels.

## POSTEMERGENCE RESIDUALS NEEDED IN 2022

If you're making a postemergence application, then it is likely that either your residual herbicide has broken and is no longer active or you did not apply a residual herbicide. Either way, adding a residual herbicide to your postemergence tank mix can bring significant value to the application. A postemergence application with foliar active herbicides will only control what is emerged and allow additional weeds to emerge in the unshaded space between crop rows. The addition of a residual herbicide to the tank mix will suppress further weed emergence in these spaces and can potentially get the field to the canopy and eliminate the need for a second postemergence application. This can be especially important with the ongoing herbicide shortage.

Residual herbicides that can be applied postemergence in soybean include the group 15 herbicides: S-metolachlor (Dual II Magnum, Prefix, and many others); pyroxasulfone (Zidua, Anthem Maxx, and Perpetuo); dimethenamid-P (Outlook); and acetochlor (Warrant and Warrant Ultra). The group 15 herbicide can be especially beneficial on fields dealing with small seed broadleaves and grass species.

*Continued from page 7:*

**POSTEMERGENCE HERBICIDE APPLICATIONS IN 2022-** Residual herbicides all have maximum cumulative rates that can be applied per growing season. If you plan to apply a residual herbicide postemergence that contains the same active ingredient as was applied in your preemergence application, make sure you will not be exceeding this limit.

**DOUBLE CHECK HERBICIDE TRAITS-** It may seem silly or even redundant, but double-check the soybean variety and herbicide traits prior to postemergence application in every field. We are all humans whose memories can fail us, especially when trying to remember things from a busy time of year such as planting season. An extra minute of double-checking the soybean herbicide trait can go a long way in preventing a replant situation.

**CHECK YOUR SURROUNDINGS-** While you are checking the herbicide traits of the soybean in the field to be sprayed, also take a moment to check your surroundings and the weather. While dicamba has certainly received a lot of attention in the last five years when it comes to off-target movement, all herbicides have the potential to move off-target. Double-check surrounding fields and identify any potential susceptible plants and if the current weather conditions will allow for an application to be made without affecting those susceptible plants.

**SPRAYER SETUP IS CRITICAL-** While selecting the right herbicide(s) and applying at the right time are all very important, many times nozzle selection and sprayer setup can be the difference between a successful and unsuccessful herbicide application.

Selecting a nozzle for postemergence herbicide application depends on the type of herbicides being applied and the need for drift reduction. Systemic herbicides such as glyphosate, 2,4-D, and dicamba do not have to have maximum coverage to perform, although coverage is still important. Products such as Xtenimax, Engenia, Enlist Duo and Enlist One can only be made with nozzles that are listed on the product label that reduce the potential for drift. There are a number of nozzles now available that can reduce drift potential while still achieving the coverage needed for maximum systemic herbicide activity.

Applications that contain a contact herbicide such as glufosinate should be made with nozzles that produce medium to coarse droplets. Contact herbicides need maximum coverage and thus nozzles that produce extremely coarse and ultra-coarse droplets should be avoided.

In either case, if coverage is a major concern, then spray volume should be increased to help increase coverage. Research has consistently found that spray volume has as much if not more of an influence on coverage as compared to nozzle selection and droplet size. So, if coverage is needed, applicators should strive to apply 15 to 20 gallons per acre to assure adequate coverage for maximum control.

---

## Fire Ants Gaining a Foothold in the State

---



*S. Ray Smith and Krista Lea, UK Specialists*

Fire ants have long been found further south of Kentucky. Since 2000, they have been annual issues in the Land Between the Lakes area of our state. Surveys in that area have found multiple mounds of ants but Kentucky has not been fully listed as “invaded” as these mounds are eliminated once found. While regulatory efforts were focused on the western side of the state, the fire ants were also gaining traction on the eastern side. Earlier in 2022, a call from McCreary County Extension led to the confirmation of fire

ants on a private residence in that county. The mounds there were treated and follow up inspections showed that the treatment had been successful. Unfortunately, this turned out to not be the only site. As of June 2022, there are now several confirmed finds in McCreary County and one in neighboring Whitley County.

**FIRE ANT BASICS-** There are two main species of fire ants that are considered invasive species in the U.S. The red imported fire ant is the more widely distributed pest, becoming widespread in the U.S. during the 1940s. The less famous species, the black imported fire ant, is more cold-tolerant than their red cousin. Further complicating the situation, these species can mate and hybridize, creating an even more cold hardy species. The ants found in eastern Kentucky have been hybrids.

Fire ants are known for building large mounds. These are easiest to see in the spring when not hidden by taller grass. During field visits, inspectors in Kentucky have noticed that nests are typically in open sunny areas or on south-facing slopes for warmth. Nests can be found in disturbed environments most often and they like cities, suburbs, and rural areas. Inside of the nest there can be hundreds of thousands of workers.



Continued from page 8. *How did they get here?*

Most likely the pests were imported with the movement of material like pine straw or possibly soil. Fire ants are often inadvertently moved around thanks to goods like these. They can also float as ant “life rafts” when there are floods. It is thought that may be how they arrived in western Kentucky. Once they were introduced, the colonies could have gotten larger and eventually reproduced by sending out new queens to found their own nests.

*Why is this an issue?*

Kentucky is not considered an “infested” state. With the western counties periodically experiencing new colonies, new locations in the east could mean could lead to quarantines put in place to try and curb the spread. This would lead to restrictions in the movement of certain goods out of quarantined counties that could impact farmers. If implemented, a quarantine would limit the movement of hay, forestry equipment, nursery stock, construction equipment, etc. Fire ants can also be agricultural pests and reduce yields in infested fields. The biggest issue with fire ants, though, is their medical hazard. They will defend their nest by biting the offending animal and while clamped on, each individual ant can sting multiple times. The sting area tends to hurt and burn, then turn red, and eventually a pustule will form that can resemble a pimple.

*What to do?*

If you suspect you have a fire ant mound on your property, or know where one might be, please bring a sample to the Extension Office with gps coordinates and contact information for the landowner.

---

## Watch Corn Water Use Over the Next Few Weeks



*Chad Lee, UK Field Crop Specialist*

The current heat wave is expected to last until the end of June. There are some low chances of rain scattered in the forecasts. We need to start watching water use in corn across the state. The next two weeks could provide us with some strong indicators on expected corn yields this fall. Corn water use increases from emergence to about V15 where it peaks until about R2 (blister stage) and then starts to drop off after that. At peak water demand, corn likely uses about 0.25 to 0.33 inches per day in our region. Air temperature, humidity and cloud cover all affect how much

water is lost each day. Corn that is pollinating is the most sensitive to water stress. Last year, about 20% of the Kentucky corn crop was pollinating by July 1. The 5-year average is closer to 35% of the corn crop pollinating by July 1. Corn planting was delayed a bit this year, but it is reasonable for us to assume that at least 15% or more of the corn crop will start pollinating in the next 10 days.

No-till and strip-till fields may be at an advantage over the next two weeks. Before corn gets tall enough to cover the rows, some water loss occurs from the soil. This evaporation is greater on tilled fields. Fields in no-till, strip till, and/or with excellent residue cover usually have less evaporation right now. Once the corn crop covers the rows, nearly all water loss is from the corn plants. That type of loss is transpiration. At this point, residue cover on the soil is less important than it was when corn plants were smaller. Deep roots are extremely important for the corn crop from here to the physiological maturity. Deep roots can access more water than corn plants with stunted roots from sidewall compaction or subsurface compaction. We may find out which fields were planted “just a bit too wet” this spring.

Farmers who can irrigate should be watching soil moisture and crop growth stages closely. Irrigation may need to begin in some areas where corn is farthest along. Irrigation should not overwater the field. Both dry soils and saturated soils can hurt pollinating corn. Soil moisture sensors can help greatly in targeting proper irrigation amounts. Most farms do not have irrigation. In these fields, the heat and possible water stress are a matter of timing. Corn plants closest to pollination are likely at greatest risk over the next two weeks. Corn plants at earlier growth stages are a little more resilient. If irrigation is not an option, all we can do is watch the fields closely and monitor pollination success in a few weeks.



# Carrot Cake Smoothie

## Directions:

Wash hands with soap and warm water, scrubbing for at least 20 seconds. Rinse carrots under cool running water and scrub with a clean vegetable brush to remove any dirt before chopping. Add banana, carrot, pineapple, yogurt, milk, ice, and cinnamon and vanilla (if using) to a blender, and blend until smooth. If needed, add more milk to encourage blending. Refrigerate leftovers.

## Ingredients:

1 medium frozen ripe banana  
2 medium carrots, chopped  
1/2 cup canned-in-juice pineapple tidbits, drained  
1/4 cup low-fat vanilla yogurt  
1/2 cup nonfat milk  
4-5 ice cubes  
Dash cinnamon (optional)  
1/2 teaspoon vanilla extract (optional)

Yields: 2- 1.5 cups servings

Nutritional Analysis: 160 calories, 1g total fat, 0g saturated fat, 5mg cholesterol, 90mg sodium, 36g total carbohydrate, 4g fiber, 26g total sugars, 2g added sugars, 6% DV vitamin D, 10% DV calcium, 6% DV iron, and 15% DV potassium

## Kentucky Carrots

**SEASON:** June through early August

**NUTRITION FACTS:** Carrots are an excellent source of vitamin A, which is important for growth and development, immune function, red blood cell formation, skin and bone formation, and vision.

**SELECTION:** Choose wellshaped, smooth, firm, crisp carrots with deep color and fresh, green tops. Avoid carrots that are soft, wilted, or split.

**STORAGE:** Refrigerate carrots in a plastic bag with tops removed for up to 2 weeks.

**PREPARATION:** Rinse and remove ends, peel if desired. Carrots are eaten raw or cooked. Use raw in salads, with dips, or plain as a snack. To cook whole or cut, steam, boil, microwave, roast, or add to stir-fries, soups, stews, and casseroles.

### Kentucky Proud Project

County Extension Agents  
for Family and Consumer Sciences  
University of Kentucky, Dietetics  
and Human Nutrition students

Source: FruitsAndVeggies.org

March 2022

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

[PlateltUp.ca.uky.edu](http://PlateltUp.ca.uky.edu)



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. For more information, contact your county's Extension agent for Family and Consumer Sciences or visit [www.uky.ag/fcs](http://www.uky.ag/fcs)



University of Kentucky  
College of Agriculture,  
Food and Environment  
Cooperative Extension Service

For more information go to:

<http://marshall.ca.uky.edu/AgNaturalResources>  
or follow us on Facebook @marshallcountyanr

*Nikki Rhein*  
Agent for Agriculture and Natural Resources