GRAVES COUNTY AGRICULTURE & NATURAL RESOURCES **NEWS**



GRAVES COUNTY COOPERATIVE EXTENSION SERVICE 4200 US HWY 45 MAYFIELD, KY 42066 (270)247-2334 GRAVES.EXT@UKY.EDU

December 2025





Happy December!

It's hard to believe the holidays are here and we are nearing the start of a new year. We've even had our first (small) winter storm already.

While December is a slow month here at the office, we will hit January running. It's hard to say what our weather will look like so Private Applicator Trainings are being held early enough to make sure you get what you need before the season takes off.

If you're a fruit and/or vegetable producer, I highly encourage you to check out the Kentucky Fruit and Vegetable Conference coming up in January. It's a great time to learn and connect with other growers and specialists to make sure you have all the support you need.

Make sure to save the date for our annual Winter Ag Conference on Friday, February 6th. More information is coming but we have an exciting time planned and you won't want to miss it!



Finally, thank you for the chance to serve YOU, Graves County! It's a privilege to be your ANR agent and I look forward to continuing to work with you all! Merry Christmas!



Miranda Rudelph

Miranda Rudolph
Extension Agent for Agriculture & Natural Resources
Graves County

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Upcoming Events:

- December 5th: Holiday Wreath Workshop- Graves County Extension, 5:30pm
- December 24-January 2- Office Closed
- January 12-13 Kentucky Fruit and Vegetable Conference, Bowling Green
- January 20 Private Applicator Training- Graves County Extension, 8:30am
- February 16- Private Applicator Training- Graves County Extension, 8:30am & 5:30pm

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

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It's time to prepare for Private Applicator License renewals!

Letters to expiring applicators went in the mail a few weeks ago. If you aren't sure of your expiration date you can check your card or give us, or the county you took your training in, a call and we can look it up to check.

A quick note- if you happened to take your training BEFORE your license expired please note that our system does not update licenses. It simply creates a new one. If you have gotten a letter and believe it's in error, check the date on your card or give us a call to make sure!

Below are the 3 times that we will be having trainings here at the Graves County office. I look forward to seeing you at one of these sessions!



Beef Producer Survey

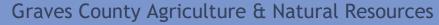
The Beef Extension Team is looking for feedback in order to better understand the needs of the beef producers of our region! This survey focuses on the adoption of management practices across the beef industry, along with producers' motivations for and against adopting certain practices. It is open to all types of beef operations, and responses are kept completely confidential.

You can access the survey by scanning the QR code below or going to: https://uky.az1.qualtrics.com/jfe/form/SV_cHizXSfCRzZqDNI











The Safe Farm Steward Project is a federally funded project, supported by the Southeast Center for Agricultural Safety and Injury Prevention and the National Institute for Occupational Safety and Health. The project's aim is to encourage farmers to become stewards of safe farm practices and to identify the farmer and farm family as a Certified Safe Farm Steward.

Signing up is easy! Scan the QR code, or talk to your Calloway or Graves County ANR agents to learn more!



Corn and Soybean Variety Trial Data Now Available

Cam Kenimer and Bill Bruening

The University of Kentucky corn and soybean variety trial information is now available online. You can access the information through the QR Code in this article. The data was collected from 7 corn locations and 6 soybean locations across the major growing areas of Kentucky.

A wet spring led to delayed planting in some trials, so pay close attention to planting dates and all the agronomic information. Remember, the multi-location state summary data is the best resource for making variety selection decisions. Growers should only use single location data in conjunction with the state summary data to identify varieties that performed well both across the state and at their regional location.



For Corn, you will find good yields across all locations, except Fayette County. This was due to planting date and then the hot, dry weather in that area in late summer. This led to a CV that is higher. The coefficient of variation (CV) is a calculated value that helps indicate unexplained variation in these studies. A smaller CV indicates less unexplained variation and more precise results. Field variability is usually amplified under less ideal/stressful environments.

For Soybean, yields across trial locations were dramatically different based on precipitation levels at each site. CV values were acceptable to good at all locations, except the Warren County site where drought stress fostered highly variable results (which was not included in the state summary).

For more information on all these tests, or to contact Bill Bruening or Cam Kenimer, please visit the website via the QR Code. We'd like to thank the Kentucky Corn Promotion Council and the Kentucky Soybean Promotion Board for their support and all others who helped make another successful year in variety testing!

Citation: Kenimer, C., Bruening, W., 2025. Corn and Soybean Variety Trial Data Now Available. Kentucky Field Crops News, Vol 1, Issue 11. University of Kentucky, November 14, 2025.

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Livestock

To Feed or Not to Feed, Soybeans that Is

Dr.Jeff Lehmkuhler, Extension Professor, University of Kentucky

The current low grain commodity prices have sparked several questions regarding feeding soybeans to beef cattle. There are several factors to consider when deciding whether to feed or sell beans to the elevator. The following will touch on a few of these items to consider when making that decision.

Let's first review the nutrient content of soybeans on a dry matter basis. In general, soybeans are used as a protein supplement as they contain approximately 40% crude protein. Soybeans also contain a significant amount of oil, near 20%, which makes them an energy supplement as well. Soybeans contain an inverted calcium to phosphorus ration which may require the diet to be supplemented with calcium. Looking at the calcium to phosphorus ratio is particularly important when feeding grain-based feedstuffs such as corn silage, wheatlage, or grain-heavy rations such as finishing diets.

Table 1. Nutrient content of whole soybeans from Dairy One Feed Composition Library (accessed 11/3/2025).

Nutrient	Value	# Samples
Crude Protein, %	39.0	2900
Crude Fat, %	21.2	1317
Starch, %	1.5	134
Calcium, %	0.26	942
Phosphorus, %	0.64	944
Nem, m cal/lb	1.25	1413
Neg, mcal/lb	0.90	1413

The oil content is the diet inclusion limiter. Excessive unsaturated oil can result in reduced forage digestibility. Research suggests that total diets containing near or greater than 6% total fat/oil can lead to reduced microbial fermentation of dietary fiber. Additionally, higher levels of dietary fat/oil reduce passage rates of feed through the gastrointestinal tract. Our forages may contain 2% which would mean soybeans would be limited to contribute an additional 3% to the total diet. For mature cows with an expected dry matter intake, the amount of soybeans fed would need to be limited to not more than 4 pounds as-fed.

To feed or not to feed is really going to be dependent upon the price one may receive at the elevator and the cost of an alternative feed. These prices can be used to calculate the cost per unit of protein from the feedstuffs. As an example, fall soybean prices are running in the \$9.80 to \$10.30 per bushel price range. If one backs out the grain hauling costs of say \$0.35 per bushel, the soybean price used for comparison may be \$9.75 per bushel accounting for the haul expense. Let's say that we can get dried distillers grains delivered to the farm at \$235 per ton with a protein content of 28% DM basis. The price per pound of protein from both feedstuffs are the same at \$0.47. Thus, if protein was the only consideration, feeding soybeans would be just as cost effective as dried distillers grains.

Soybeans contain more oil and subsequently more energy than dried distillers. To make a better comparison, we need to account for the protein and energy from feedstuffs. One way to do this is to use reference feedstuffs and valuing the protein and unit of energy based on these reference feeds. Corn is often used as the energy reference feed and either soybean meal or dried distillers grains may be used for protein.

Using corn with a price of \$5.05 per bushel if bought as feed (\$180/ton) and a price of \$235 per ton for dried distillers grains, soybeans would need to be less than \$7.26 per bushel to consider feeding. Under this scenario, selling beans at the elevator and feeding corn/dried distillers grains may be more cost effective when considering a backgrounding ration.

In summary, often feeding soybean requires the beans to receive a significant discount at the elevator to be priced into diets. The oil content of the whole bean limits the amount that can be offered in the forage-based diets. If you are interested in learning more about feeding whole soybeans to beef cattle read the fact sheet ASC-245 Feeding Soybeans to Beef Cattle which can be downloaded at

https://publications.mgcafe.uky.edu/sites/publications.ca.uky.edu/files/ASC245.pdf . You can also reach out your local county Extension office or consult with your nutritionist for more information.



Seven Simple Steps to Keep Your Indoor Plants Thriving Through colder Months

Source: Rick Durham, Department of Horticulture Extension professor

Want to keep your indoor plants thriving through winter? Here's a cozy guide to winter plant care—with tips, tricks and a few unexpected perks of greening up your space.

Winter doesn't mean saying goodbye to your green thumb. With a bit of know-how, your indoor plants can flourish even when the weather outside is frightful. Plus, having plants around isn't just about aesthetics — they boost mood, purify air and bring a sense of calm to your home.

- 1. **Lighten them up.** Winter brings shorter days and weaker sunlight, so your plants will benefit from being placed in the sunniest spots available. Try moving them closer to windows and rotating them every week or two to ensure even light exposure. If you're relocating plants to windows with direct sunlight, proceed with caution—some species can tolerate it, but they should be gradually acclimated over several days to prevent stress. For plants that thrive in direct sun, this slow transition helps avoid leaf burn. If natural light is limited in your space, consider using grow lights; LED options are both energy-efficient and effective.
- 2. Water wisely and pause the fertilizer. Many plants are in rest mode during winter due to less light, so reduce water and skip the fertilizer until spring. Overwatering is a common winter mistake. Instead, check soil moisture by sticking your finger about an inch deep—if it's dry, water thoroughly. Many houseplants may only need watering every two to three weeks during winter but check them often as the interior climate can be quite dry. Holding back fertilizer for a few months helps prevent nutrient buildup and keeps your plants from getting leggy or stressed.
- 3. **Mind the temperature and humidity.** Keep your plants away from cold drafts, radiators and vents. Sudden temperature changes can stress or even kill them. Aim for a stable environment with moderate humidity. Grouping plants or placing them on pebble trays with water can help increase humidity levels. If pebble trays are used, ensure the bottom of plant pots is above the water level in the tray.
- 4. **Check for pests.** If outside plants came indoors, be sure to inspect them for pests like aphids, scale or spider mites. Wipe leaves with a damp cloth and consider neem oil or insecticidal soap if needed. Always read and follow product labels carefully.
- 5. **Grow something new.** Winter is a great time to experiment with indoor gardening. Microgreens—tiny edible greens like broccoli or beets—are easy to grow in shallow containers with clean potting soil. Also, they're ready in 12–14 days and packed with nutrients. You can also try garlic greens, scallions, carrots, or herbs like basil and parsley. Just make sure your containers have good drainage and use organic fertilizer for herbs. These microgreens are also suited to areas with lower light conditions.
- 6. **Prolong your poinsettias.** For this season's poinsettias, choose plants with small, tightly clustered yellow buds in the center of the colorful leaf-like bracts that are commonly referred to as the flowers. Water the plant when it feels dry and discard excess water in the saucer under the plant. Place the plant in a bright, naturally lit location and gradually introduce some direct sunlight. Keep the plant out of drafty areas and away from appliances that produce heat. Poinsettias will benefit from winter fertilizer treatments. Apply houseplant fertilizer according to the label directions before the new year.
- 7. **The health benefits are real.** Indoor plants do more than look pretty. Studies show that being around greenery can lower blood pressure and increase feelings of well-being. In the gloom of winter, that's a gift worth growing. So go ahead—give your plants a little TLC this winter. They'll return the favor with beauty, freshness and a touch of nature's magic right in your living room.

To learn more about winter indoor plant care, contact the Graves County Extension office.



A Forecast of Uncertainty:

Why Kentucky's Winter Weather Could Swing Wildly This year



By Tony Edwards - National Weather Service Charleston, WV

What will the upcoming winter bring? While the Farmers' Almanac offers an early peek, the Climate Prediction Center (CPC)—part of the National Weather Service—releases the "official" U.S. winter outlook in October. Today, we're diving into the details of that forecast for the Commonwealth of Kentucky.

The El Niño/La Niña Factor

Every long-range winter outlook starts with the El Niño-Southern Oscillation (ENSO), a climate pattern defined by Pacific Ocean water temperatures near the Equator. El Niño (warmer than normal) and La Niña (colder than normal) are powerful global drivers that dictate the general winter weather across the United States. Currently, we have a **weak La Niña** pattern in place, meaning water temperatures in the central Pacific are slightly below average, a condition expected to persist through at least the beginning of winter.

A strong La Niña typically favors a storm track that keeps the Commonwealth rather wet. Temperature-wise, Kentucky often sits in a transitional zone, positioned between the typically milder air to the Southeast and the significantly colder temperatures over the Northern Plains.

This winter's official outlook aligns with this theme:

- Precipitation: Greater chances for above-normal precipitation across much of the state.
- Temperatures: Greater chances for above-normal temperatures across Southeast Kentucky.

However, the key word in this forecast is "weak." The current weakness of the La Niña pattern dramatically lowers our confidence in a "traditional" outcome. A weak La Niña can easily be overmatched by other, more unpredictable climate influencers. This results in a massive range of potential weather scenarios, as seen in past weak La Niña winters.

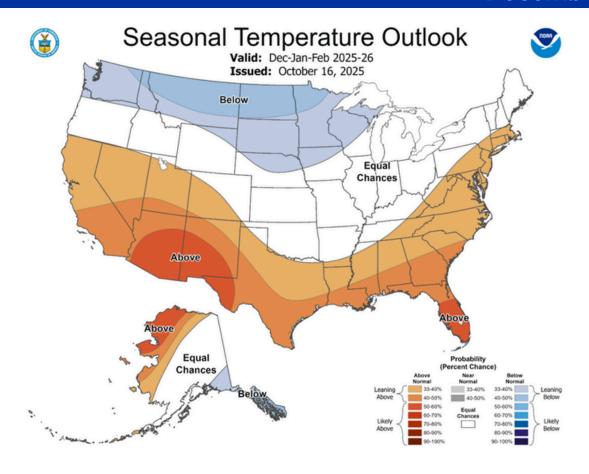
The outcomes are striking in their contrast: The winter of 1983-1984, for instance, was a weak La Niña year that brought a cold and dry season to the Commonwealth. Fast forward to the more recent 2022-2023 winter, which also featured a weak La Niña, and the result was dramatically different: a season that was distinctly mild and wet.

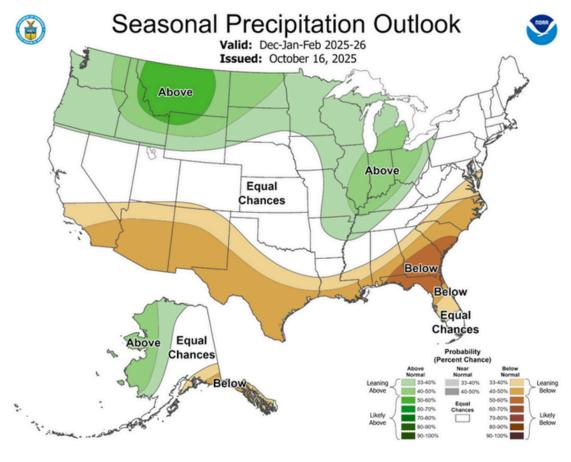
The potential for such varied outcomes means this winter's forecast carries a higher degree of uncertainty than in years with a strong ENSO signal.

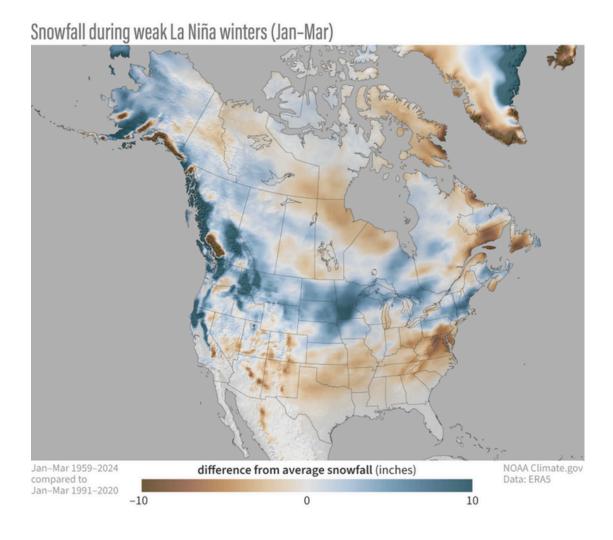
The Snow Question: Hope for Snow Lovers

While the CPC does not issue a specific winter snow outlook, looking at historical data gives us some clues. La Niña is typically not good news for snow lovers in the Commonwealth, with a historical tendency for below-normal snowfall, a signal that is even stronger during weak La Niña events. Despite the trend, exceptions prove that anything is possible. The 1995-1996 winter—which featured a weak La Niña—was a cold and snowy winter, and in fact, remains the snowiest winter on record in Eastern Kentucky.

So, keep those sleds handy! There is always a chance for that memorable snowfall.











Broccoli Chowder

2 tablespoons canola oil
½ cup chopped onion
3 cloves garlic, finely minced
½ cup chopped carrots
2 cups diced, unpeeled red potatoes

3 cups broccoli florets
1/2 teaspoon dried Italian
seasoning
1/4 teaspoon self

1/2 teaspoon salt 1/4 teaspoon pepper 3 tablespoons all-purpose flour
3½ cups low sodium
chicken broth
½ cup half-and-half
½ cup low-fat,

shredded cheese

In a large heavy pot, **heat** the oil over medium heat. **Add** the onion and garlic and **sauté** 2-3 minutes. **Add** the carrots, red potatoes and broccoli one at a time; **sauté** each about 2 minutes. **Add** the Italian seasoning, salt, pepper and flour and **toss** until vegetables are coated. **Cook** 1-2 minutes. **Add** the chicken broth and bring to a boil. **Reduce** heat to low, **cover** pot and **simmer** for 15

minutes. **Remove** lid and **stir** in the half-and-half. Bring back to a **simmer** and **remove** from heat. **Ladle** into bowls and top with cheese to serve.

Yield: 8,1cup servings

Nutritional Analysis: 180 calories; 8g total fat; 2.5 g saturated fat; 15 mg cholesterol; 340 mg sodium; 18 g total carbohydrate; 3 g dietary fiber; 4 g sugar; 8 g protein.



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

Kentucky Broccoli

SEASON: May through early July; October through mid-November

NUTRITION FACTS: Broccoli is a good source of vitamin A, vitamin C and phytochemicals, all of which have health benefits.

SELECTION: Choose tender young, dark green stalks with tightly closed buds. One and one-half pounds of broccoli will yield 4 half-cup servings.

STORAGE: Store broccoli, unwashed, no more than 3 to 5 days, in a perforated plastic bag in the refrigerator. Wash broccoli just before using.

PREPARATION: Wash broccoli under cold running water. Trim the leaves and peel the stalk.

To Steam: Place on a rack above boiling water and steam 6-8 minutes. Rinse with cold water. Drain.

Source: www.fruitsandveggiesmatter.gov

To Boil: Place in a saucepan with 1 inch of boiling water. Cover and cook 5-7 minutes.

To Microwave: Place broccoli in a microwavesafe dish. Add 1 inch of water and cover with a glass lid or plastic wrap. Microwave 3-4 minutes or until crisp-tender.

KENTUCKY BROCCOLI

Kentucky Proud Project

County Extension Agents for Family and Consumer Sciences

University of Kentucky, Dietetics and Human Nutrition students

October 2014

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COOPERATIVE EXTENSION SERVICE









Game-Stuffed Peppers

Nutrition Assistance Program — SNAP.

- · 6 medium bell peppers
- 1 medium onion, diced
- 2 garlic cloves, minced, or 1 teaspoon garlic powder
- 1 tablespoon olive oil
- 1 pound ground venison, elk, or beef
- 1 tablespoon salt-free herb blend
- 1 teaspoon ground pepper
- 1 teaspoon dried oregano
- 1 15-ounce can no-saltadded tomato sauce
- 1 cup cooked rice
- 4 ounces Monterey Jack
 Cheese, shredded
- Wash hands with warm water and soap, scrubbing for at least 20 seconds, especially after handling raw meat.
- 2. Preheat the oven to 350 degrees F.

- Gently scrub peppers with a clean vegetable brush under cool running water.
- 4. Cut off curved top of pepper. Remove stem only and throw away. Dice remaining part of pepper top.
- 5. Scoop out and discard seeds and pith from bottom part of each pepper. Preheat a 12-inch cast iron skillet over medium heat.
- **6.** Add olive oil to the skillet. Sauté the diced pepper and onion for 3 to 5 minutes, until they begin to soften. Add ground venison, garlic, salt-free herb blend, pepper, and oregano. Cook 3 to 5 minutes longer. Stir often.
- 7. Add the tomato sauce and rice to the skillet. Stir to combine.

 Fill peppers with rice and meat mixture. Top with shredded cheese.

National Institute of

Food and Agriculture.

- Bake for 30 to 40 minutes, or until peppers are soft and cheese is melted.
- Serve immediately. Store leftovers in the refrigerator within 2 hours.

Yield: 6 servings Serving Size: 1 stuffed pepper

Nutrition facts per serving:

280 calories; 9g total fat; 3.5g saturated fat; 0g trans fat; 75mg cholesterol; 380mg sodium; 25g carbohydrate; 4g dietary fiber; 9g total sugars; 0g added sugar; 26g protein; 0% Daily Value of vitamin D; 15% Daily Value of calcium; 30% daily value of iron; 6% Daily Value of potassium.