

Agriculture and Natural Resources



A Message from Your ANR Agent:

Folks,

It's that time of year! No, not talking about Christmas, but time for the seed catalogs to start arriving. I laugh and tell everyone, "I do my best farming in the winter". It may be hard to believe, but a lot of farming and farm planning takes place this time of year and into the early part of 2023. This is the time of year to research and plan. Check out all the varieties you and your family like. Make some decisions. What kinds of fruits and vegetables do I want? How much do I need to plant? How much do I have room for? It's easy to get carried away when looking at the seed catalog. In the planning, plan where to place each crop. You don't want to plant the same crop in the same spot year after year. Not rotating veggies around will allow for disease to build up. Another thing you probably want to do is take a soil test. It's simple—take a shovel and take about 1" thick sample about shovel length down. Take a bunch over your garden. Mix them together in a plastic bucket. Then bring me a sample (about a sandwich baggie full) and tell me what you want to grow in that area. Really simple. In approximately 2 weeks we will get the results back, showing exactly what nutrients your garden needs. Pike County is a little different than most of the counties. Parts of Pike, test traditional mountain soil and parts (believe it or not) test almost identical to the Bluegrass. There is no way of knowing unless you test. The nice thing about the Extension Office is that we do up to 5 soil samples free. What I tell people is that if it looks different or you know it's been treated differently, bring me separate samples for that area. For instance, if you decided to enlarge your garden and take in part of your lawn—the lawn area will most likely test a little differently than the existing garden. Be sure to label them so that you know exactly where the sample came from. Backyard as BY 01 or Lower Garden as LG 02.

Good luck and let us help you with your gardening needs.

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Cool- Season Cover Crops for High Tunnels

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Cool-season cover crops can be grown in high tunnels (HTs) in the fall or winter if you have a window of time between cash crops. Winter cover cropping is a common practice for many growers in the field, but cover crops perform differently in HTs. Additionally, there is often a shorter window for cover crops in HTs because many cash crops can be grown year-round in our region. However, just like in the field, cover crops can provide many benefits within the HT production system. This publication, based on trials in Kentucky, Tennessee and Georgia, outlines the benefits and challenges of several cool-season cover crops that may be used in HTs. This fact sheet complements an introduction to cover crops in HTs (Covers Under Cover: Managing Cover Crops in High Tunnels; CCD-SP-16) and a fact sheet on warm-season cover crops in HTs (CCD-SP-19).

Selecting the right cool-season cover crop.

Consider your goals for the cover crop: supplying nitrogen, suppressing weeds, adding organic matter, or reducing compaction. Next, consider how much time you have in your rotation for cover crop growth and decomposition. Cover crops, like cash crops, grow very slowly during the winter with low air and soil temperatures, reduced light intensity, and shorter daylength. Therefore, it is important to select a cover crop that is tolerant of the growing conditions, and that will grow enough to meet your goals. You should also consider the amount of biomass the cover crop will produce and the equipment you have to effectively terminate and incorporate that biomass. To aid in decision-making, Table 1 (Page 4) contains a description of the general traits, benefits and challenges of some specific varieties of cover crops that we have used. Table 2 (Pages 5-8) gives seeding rates and other general information about the cover crop species listed in Table 1, along with other varietal suggestions, but it is not an exhaustive list.

Planting and establishment.

Covers Under Cover (CCD SP-16) gives many general tips on establishing cover crops in HT environments. In general, cool season cover crops should be sown later in HTs than would be typical for cover crops in field settings. Due to higher soil temperatures and evapotranspiration in HTs, establishment can be difficult and plant growth may suffer if cool-season cover crops are sown too early. However, planting too late when temperatures are low may decrease establishment and will likely lead to lower cover crop biomass as well. Additionally, having a way to irrigate your cover crop during establishment is very important.



Managing growth.

Unlike in the field, cool-season cover crops may not go dormant in HTs in the winter, but growth will be slowed by cool temperatures and fewer hours of daylight. Irrigation may be needed over the course of cover crop growth, though less regular irrigation will likely be necessary for cool-season cover crops. On cool, overcast days, be careful to not irrigate too much to reduce potential for disease. The soil should not stay saturated. If high biomass production is a goal for cool-season cover crops, it may require earlier planting (which will require terminating a late summer/early fall cash crop earlier), or later termination (which will require planting a spring cash crop later). For example, from our experience in Kentucky and Tennessee, a cover crop planted in late October in a high tunnel will not reach peak biomass until late March, with much of the growth occurring during February as temperatures warm and light becomes more abundant. Lower cover crop biomass may be advantageous in some cases – if limited equipment is available for termination, or to avoid potential nitrogen immobilization (see below). It is important to consider your goals for using a cover crop when determining planting and termination dates. Alternatively, biomass may be managed by mowing at desired height before termination to keep grazing/mowing-tolerant cover crops smaller.

For quick, early growth in the fall, select fast-establishing cool-season cover crops that generally do well in the open field in your location. Options include oats (Fig. 1) or other small grains including wheat and crimson clover. If your cash crop rotation includes brassica crops (kale, turnip greens, etc.), then avoid brassica cover crops such as mustards and canola.



Figure 1. Oats in a high tunnel at the University of Kentucky Horticulture Research Farm.

Termination and decomposition.

Be sure to consider termination timing and method, and allow a few extra weeks for the cover crop to decompose before planting your next cash crop. If your goal is to maximize the amount of nutrients and biomass in the cover crop, cool-season cover crops should be terminated when legumes are flowering, or grasses and small grains are at a “soft dough” stage (soon after a head forms and you can see immature seeds/grains). You can terminate the cover crops early with mowing and incorporation (i.e., without herbicides), but you may get some regrowth. A thick cool-season cover crop can be very lush and require drying time (two to three days) before it can be effectively incorporated into the soil. A second tillage pass about a week after the first is often required. Vetches and other vining cool-season cover crops can be difficult to manage and bind around mowing equipment. As we discuss in the Covers Under Cover: Managing Cover Crops in High Tunnels fact sheet (CCD SP-16), HT cover crop residue

management may require a “less is more” strategy; therefore, early termination when there is less biomass can make the cover crop residue easier to manage.

Termination timing must also be balanced with weed management – primarily, the need to avoid adding weed seeds to the soil, but also being aware of weeds as potential hosts of pest insects and diseases. Weed suppression by cover crops can depend on multiple factors, including weed pressure, cover crop type, evenness and thickness of the cover crop stand, air temperature, and moisture. High tunnel trials in Tennessee found winter wheat (Fig. 2) to be very effective at smothering winter annual weeds but less so in Kentucky, where weed pressure was dominated by common chickweed. By irrigating the cover crops, weed growth was also increased and common chickweed produced seeds prior to cover crop termination. Therefore we inadvertently added weed seeds to the soil. This demonstrates an important point - you should always be aware of weeds growing in the cover crop and, if necessary, terminate the cover crop before these produce seed. If terminated prior to seed production, the cool-season weeds contribute to the total biomass. Chickweed samples were tested for nitrogen content and were 4% nitrogen, which is better than some covers in terms of scavenging ability!



Figure 2. Thick winter wheat cover crop in a HT in Knoxville, TN (left) compared to a more weedy winter wheat cover crop in Lexington, KY (right), both in late winter.

It is important to allow enough time for the cover crops to decompose, or they will immobilize nutrients. Cover crops decompose more slowly if the soil is cool, too dry, or if there is a large amount of carbon relative to the amount of nitrogen in the cover crop. This means decomposition of a cool-season cover crop can take longer than at warmer times of the year. It also means that the soil must be consistently moist (but not saturated) for the cover crop to decompose, so be sure to have a way to irrigate in place to aid decomposition. In general, grasses grown alone will take longer to decompose than when grown in a mixture with legumes or other broadleaves, or legumes grown alone. As a general rule, allow two to three weeks after cover crops are tilled in to the soil prior to planting your next crop. If you can see remaining cover crop residue in the soil when you are preparing the bed for the next crop, this material should be raked out of the bed or given additional time to decompose.

Considering plant-parasitic nematodes.

One other factor to consider when choosing a cool-season cover crop for your HT rotation is if pest nematodes are a problem in your area. Southern root-knot nematode (*Meloidogyne incognita*; RKN) is a common plant parasite that infects and feeds on plant roots. As a result of the feeding, plant roots form galls, or knots. The feeding reduces a crop’s ability to take up nutrients and water, which can decrease subsequent

crop yields and even lead to plant death. If RKN infects root crops, this can also affect marketability of the crop. Knowing the host suitability of a particular cover crop is useful because it can help indicate whether the RKN population is likely to increase, decrease or stay the same when in the presence of the cover crop. If a cover crop is a good host for a plant-parasitic nematode, that nematode population is likely to increase during the cover crop's lifecycle. Being a poor host indicates that the nematode does not easily infect and reproduce in the presence of that cover crop and the specific nematode population (not all nematodes) will likely decrease. Your local Cooperative Extension Service or plant diagnostic laboratory can help you determine if these plant parasitic nematodes are present in your soil. If you know you have RKN in your soil, you should avoid planting crops and cover crops that are known hosts for RKN. Keep in mind that different cultivars within a cover crop species can have different levels of host suitability (for example, 'Chinese Red' cowpea is a poor host, but 'Iron Clay' cowpea is a good host).

Cleaning up Gardens this Fall Helps Control Diseases Next Spring

By: Ellen Brightwell

Removing plant debris from gardening areas when the growing season ends, usually after the first hard frost, reduces the likelihood that several diseases will develop on flowers, vegetables, or fruits next year.

"A thorough cleanup of vegetable and flower gardens and fruit plantings is an effective way to control many plant diseases because remains provide an abundant source of microbes that can cause problems next year. This is because fungi and bacteria that cause diseases can overwinter on infected or contaminated roots, stems, leaves, flowers, vegetables, or fruits," said John Hartman, Extension plant pathologist for the University of Kentucky College of Agriculture.

Good garden sanitation reduces the possibility of such plant diseases as early blight, mildews, and gray mold fungus, as well as various root rot and wilt problems.

In the vegetable garden, remove all plants, except winter vegetables or cover crops. It is especially important to completely clean out and destroy all diseased plants from gardens and fruit plantings. Be sure to dig up roots carefully and remove them because decomposing roots can release disease-causing microbes that will survive in the soil. Also remove spent blooms from flower gardens and take mummied fruits left on or around trees and grapevines.

Gardeners who decide not to remove old plants should till the garden to break dead material into smaller pieces and turn this under. Buried plant debris decomposes faster than that left on the soil surface, reducing populations of organisms left in the garden to cause disease problems next year.

"Plant debris is a veritable gold mine for gardeners who have good compost piles," Hartman said. "A 'good compost pile' heats up and decomposes plant remains



completely over the course of a few years. This will destroy most disease-causing organisms.

"If heat development isn't possible in the composting process, plants infected with root knot or Fusarium and Verticillium wilt diseases should be disposed of and put where they cannot be recycled back into the garden."

For more information, consult "Home Vegetable Gardening in Kentucky" (ID-128) and "Home Composting: A Guide to Managing Organic Wastes (HO-75). These publications are available from your county Extension office.

Protect Your Older Horse this Winter with These Tips

Winter is here or just on the horizon. For the owners of horses 15 and up, this means bracing for some of the challenges which may hinder older equines. Preparing horses for the cold is important, especially as they progress in age.

"We must take into account several important considerations for preparing and maintaining older horses throughout the cold season," said Amanda Adams, PhD, associate professor and MARS Equestrian Fellow in the Department of Veterinary Science, who maintains a herd of senior horses as part of her program at the Gluck Equine Research Center. "Some of the most important points to consider include body condition and nutrition, dental care, parasite control, vaccination status, exercise and health monitoring."

Beginning with body condition and nutrition, first assess a horse's body condition score. While a little extra poundage won't hurt going into winter, too much could bring problems.

"Is your horse too thin or too fat? Maybe it's just fine as is," Adams said. "This is a call you have to make before winter sets in and then feed appropriately. If you don't feel comfortable making this call yourself, involve your veterinarian or a nutritionist."

Adams says that horses at a body condition score of 5 or greater will have some extra fat stores that can provide insulation during the winter months; however, if the horse is overweight, insulin dysregulation could become a problem. Therefore, she recommends owners of senior horses to determine the horse's metabolic status. Is the horse insulin dysregulated or affected by Pituitary Pars Intermedia Dysfunction? This information will also help guide in how you feed and manage the horse throughout the winter. If the horse is on the thinner side with body condition less than 5 going into winter, increase the calorie intake slowly to improve his BCS. This can be done by providing additional forage, concentrates, especially those designed for senior horses or by adding sources of oil or fat supplements. Also consider pecking order and make sure your senior horse is not at the bottom of order, as this can make a difference in body condition. Access to shelter and blanketing can also help in maintaining condition, as less calories are being used to maintain body temperature.

During cold months, it's important to provide a salt/mineral lick and make sure that they are always available and accessible. Likewise, make sure water sources aren't



frozen over and have good footing around them. Sufficient water intake in the winter for senior horses is important to help prevent impaction colic.

An older horse's teeth need to be examined at least twice a year, one of which should take place prior to cold weather setting in. This will help them chew and consume hay adequately, allowing proper utilization of energy sources needed to stay warm in the winter.

“Dental care is important especially if you notice your older horses starting to drop grain, quid or lose weight,” said Adams. “Proper dental care also helps prevent things such as choking and colic. Hoof care is important as well since bad feet can lead to large bills if not properly taken care of. When considering hoof care, you should probably think about pulling or changing their shoes to prevent slipping on ice. Adding borium or snow pads to protect their sole might also be a consideration. Most importantly, keep an eye on your horses' feet daily and remove ice accumulation as needed.”

Parasite control is critical, as older adults are likely to harbor more parasites. An example is a study by Adam's team from UK that found older horses demonstrate statistically higher fecal egg counts compared to middle-aged adults. If given anthelmintic treatments, however, FECs declined significantly. It might be beneficial to deworm your horse after the first frost, up to three times a year taking into consideration FECs. Higher parasite load could also be contributing to poor body condition in the senior horse.

Make sure to maintain a regular vaccination program. Adams' group has shown that senior horses have reduced immune responses to vaccination and are at risk for increased susceptibility to respiratory illness, in particular equine influenza. Horses with Pituitary pars intermedia dysfunction, also known as Cushing's disease, are likely to have even further reduced immune response to vaccinations and increased susceptibility to infections.

“If you have a higher risk senior, think about having your vet administer a booster for risk-based vaccines,” Adams said. “These include EIV, equine herpesvirus-1 and potentially West Nile virus, every six months, particularly if your horses are showing or co-mingling with other showing horses during the winter months.”

Like humans, if older horses don't get their share of exercise, then the less spritely they will become. During the winter months it is important to prepare your



horse for exercise with ample warm-up and cool-down periods. After finishing, cool your horse out completely. Remember, use common sense when judging riding conditions, as older horses do not adjust well to stressful conditions.

Finally, monitor senior horses closely for health conditions which you might not have previously considered. These include respiratory illnesses, skin conditions, signs of colic and arthritis. As horses progress in years, a phenomenon called Inflamm-aging happens.

“Inflamm-aging is a low-grade, chronic inflammation,” Adams said. “Inflamm-aging, like in humans, could be contributing to age-related conditions such as arthritis, however we have yet to understand the full picture in the senior horse. We have recently shown that season impacts the levels of inflammation and that levels are quite high during winter. Work with your veterinarian to determine if your older horse could benefit from anti-inflammatory therapies to help with arthritis discomfort. In the meantime, we are working on understanding if there are any effective, natural anti-inflammatories that would help the older horse.”

As horses age, we want to make sure that they are taken care of to keep them living a longer and healthier life. That protection starts by keeping them safe this winter.

Talking Turkey: Prep and Safety

Heather Norman-Burgdolf, Dietetics and Human Nutrition, and Annhall Norris, Family and Consumer Sciences

For many, Thanksgiving dinner is the largest meal prepared all year. So much time and effort go into planning the meal. There are decorations, place settings, the side dishes, the guest list, and the turkey! It’s easy to see how one could feel overwhelmed with preparing the turkey with so many other things to think about.

Turkey Nutrition

Holiday meals are typically known for their over indulgent foods; however, turkey remains a nutritious holiday staple. Turkey is low-fat, high in protein, and rich in iron, zinc, and several B Vitamins. A typical serving of turkey is 3 to 3½ ounces, about the size of a full, stacked deck of cards. A 3-ounce serving of boneless, skinless turkey breast meat has only 161 calories, 29g of protein, and 4g of fat. Similarly, a 3-ounce serving of dark thigh meat without skin is 192 calories, 28g of protein, and 8g of fat.

Purchasing a Turkey

Turkeys may be purchased either fresh or frozen. Neither is better than the other. When purchasing a turkey, plan for 1 pound per person. Free range or organic turkeys may be available at your grocery store. Free-range turkeys are raised in environments with more space, but this does not mean that they are organic. Organic turkeys must meet specific standards set forth by the USDA. Organic does not mean the turkey is free range. The nutrition of these turkeys is no different than a conventional turkey but may



be two to four times more expensive. It is personal preference on which turkey meets your personal, ethical, and economical needs. A fresh turkey should be purchased no more than two days prior to the day of preparation. Check the “sell by” or “use by” date to make sure that the turkey is fresh. If a fresh turkey is desired for Thanksgiving Day, it may be best to call the local grocer to ensure a fresh bird will be available. Frozen turkeys may be purchased weeks, even months, in advance depending on available freezer space. With frozen turkeys, allow adequate time for the thawing process.

Thawing Methods

Turkeys must be kept at a safe temperature during the thawing process. They should never be left out at room temperature on the counter, in the basement, or outside on a cool day. It is not acceptable to thaw a turkey in the dishwasher, using a blow dryer, a brown paper bag, or any place where the temperature is above 40°F. When a frozen turkey begins to thaw, any bacteria that may have been present on the meat before freezing will begin to grow. If the meat stays in the “Danger Zone,” between 40°F-140°F, for more than two hours, bacteria can grow rapidly. The United State Department of Agriculture (USDA) recommends three ways to safely thaw food containing turkey: in the refrigerator, in the sink using the cold water method, or in the microwave.

Thawing in the Refrigerator. When thawing a turkey in the refrigerator, make sure you allow enough time. You will need about 24 hours for each 4-5 pounds of turkey in a refrigerator set at 40°F. Place the bird in a large pan to collect any juices that may drip and contaminate other foods. Use Table 1 as a reference for thawing in the refrigerator. A turkey thawed in the refrigerator can remain in the refrigerator for 1-2 days before cooking. If necessary, the bird can be frozen again without cooking, but there will be some loss in quality.

Table 1. Thawing time in the refrigerator.	
Size of Turkey	Thawing Time
4 to 12 pounds	1 to 3 days
12 to 16 pounds	3 to 4 days
16 to 20 pounds	4 to 5 days
20 to 24 pounds	5 to 6 days

Table 2. Thawing time with the cold water method.	
Size of Turkey	Thawing Time
4 to 12 pounds	2 to 6 hours
12 to 16 pounds	6 to 8 hours
16 to 20 pounds	8 to 10 hours
20 to 24 pounds	10 to 12 hours

Thawing with the Cold Water Method. The cold water method is simply thawing the turkey in a sink of cold water, where the water is changed every 30 minutes. Do not use warm or hot water with this method as this will put the turkey in the “danger zone” for longer than is recommended. You should allow about 30 minutes for each pound of turkey. Be sure to use cold water and make sure the bird is wrapped securely in a leak proof bag in order to prevent cross contamination and a watery bird. Use Table 2 as a reference for thawing in cold water. A turkey thawed using the cold water method must be cooked immediately.

Thawing in the Microwave. When thawing in the microwave, follow the microwave owner’s manual for defrosting a turkey. They should have recommendations

for the cook level and time according to the size of the bird. Most microwaves cannot accommodate a turkey larger than 12 to 14 pounds. Plan on cooking the turkey immediately after thawing as some areas of the bird warm up quickly and begin to cook during the microwave 3 thaw. Turkey should not be held for later cooking after thawing in the microwave as this increases the chance for bacterial growth. Thawing in the refrigerator is preferred. This the safest method because the temperature never rises above 40°F. Inside the refrigerator, the turkey thaws gradually at a consistent, safe temperature. Don't worry if your turkey is still a little frozen before you cook it. The turkey is still safe to cook (bake); it will just take longer. It's even possible to cook a turkey that is still completely frozen. A turkey that is completely frozen will take 50 percent longer to cook than a turkey that has been thawed. For more information about cooking a frozen turkey, see the publication Talking Turkey: Dinner is Served (FCS 3-620). *Never Deep Fry a Frozen Turkey.*



Getting Started

As the turkey thaws and you ready your space to prepare the turkey and other Thanksgiving dishes, keep the following food safety tips in mind.

- Before you start the cooking preparations, wash your hands with soap and warm water for 20 seconds.
- Don't wash the turkey. This can spread bacteria onto kitchen surfaces. All raw meat contains bacteria. Washing the meat will not remove the bacteria. The only way to remove the bacteria is to cook the turkey properly.
- Keep the turkey away from all other foods during the thawing process and before cooking in order to avoid cross contamination. • Don't prepare any other foods until you have the turkey in the oven and have properly cleaned and sanitized the area.
- If possible, use a different cutting board and knife when preparing the turkey. Wash and sanitize everything that touched the raw meat, even countertops.
- Use a mild bleach solution made from 1 tablespoon unscented bleach per gallon of water to sanitize knives, cutting boards and work surfaces.

- For cooking methods, please read Talking Turkey: Dinner is Served (FCS 3-620).

Turkey Leftovers

It's never too early to start thinking about all of those wonderful turkey leftovers. Be sure to follow good food safety practices when preparing your turkey and storing it for those favorite recipes over the next several days. Storing Leftovers After dinner, don't let food sit out on the table. Leftovers should be refrigerated or frozen within two hours. It is best to go ahead and remove all the meat from the turkey. Do not store stuffing inside the turkey. Remove the stuffing from the bird and refrigerate in a separate container. Legs and wings may be left whole, if desired. Sliced meat should be stored in shallow containers 4 or small zipper bags and eaten within 3-4 days. If you aren't sure the meat can be eaten in that time frame, it is best to freeze the leftover turkey. If the freezer stays below 0°F, the turkey is safe to eat indefinitely. For best quality, sliced turkey stored in the freezer in freezer-safe zipper bags should be eaten within 6 months. Be sure to label leftovers going into the freezer with contents and the date on which they were frozen.

Leftover Ideas.

Rather than simply serving turkey again, be creative in how you prepare your leftovers.

See the list and recipe below for turkey leftover inspiration.

- Turkey hash
- Turkey salad
- Turkey noodle soup
- Turkey pot pie
- Turkey casserole
- Sliced turkey sandwich

Turkey Noodle Soup

Yield: 4 Servings

Serving Size: 1 ¼ cups

Ingredients

6 cups homemade turkey stock (or low-sodium canned turkey or chicken broth)
 1 bay leaf
 1 cup diced carrot
 ¾ cup chopped onion
 ¾ cup diced celery
 2 garlic cloves, minced
 Salt to taste
 Ground black pepper
 ¼ cup chopped parsley
 3 oz egg noodles
 2 cups leftover turkey, shredded

Directions

Fill a large pot with homemade (or canned) stock. **Add** bay leaf, carrots, onions, celery, garlic, salt and pepper to taste. **Simmer** 10-15 minutes or until the vegetables are tender. **Add** parsley, noodles, and shredded turkey. **Cook** according to packaging for noodles. **Remove** bay leaf and **serve**.

Nutrition Information

240 calories, 4g fat, 1g saturated fat, 80mg cholesterol, 620mg sodium, 11g carbohydrates, 2g fiber, 3g sugar, 39g protein.



Upcoming Dates for Oct/Nov/Dec.

When	What	Time	Where
Nov. 7	Beekeepers	6:00 pm	Extension Office
Nov. 8	Beef	8:00 pm	Zoom
Nov. 8	Fertilizer Academy	6:00 pm	Zoom—Lime and pH
Nov. 10	Master Gardeners	5:30 pm	Extension Office
Nov. 12	Farmers Market	9:00 am to 1:00 pm	Farmers Market Pavilion
Nov. 15	Fertilizer Academy	6:00 pm	Zoom—Spreading your fertilizer \$
Nov. 17	Estate Planning	6:00 pm	Zoom—Trusts
Nov. 19	LAST Farmers Market	9:00 am to 1:00 pm	Farmers Market Pavilion
Nov. 24 & 25 Thanksgiving Holidays			
Dec. 1	Estate Planning	6:00 pm	Zoom—Life Insurance & Funeral Exp.
Dec. 5	Beekeepers	6:00 pm	Christmas Dinner meeting
Dec. 8	Master Gardeners	5:30 pm	Christmas Dinner meeting
Dec. 13	Beef	8:00 pm	Zoom
Dec. 15	Estate Planning	6:00 pm	Zoom—End of Life Care
Dec. 17	Broken Trail	all day prep & “Christmas for Kids” project	

+ Still to be scheduled –

Mushroom Workshop, Farmers Market Meeting, Master Gardener Class, Landscaping Class

Pikeville Farmers Market

Vice President-Michelle W. Sword

As our 2022 Farmers Market comes to an end, I am amazed at what a wonderful season we all have had. We have many new vendors, new clients, new friendships, and many wonderful memories. With new vendors this year, came many new products that everyone has enjoyed. Start planning for your booth for next year and consider what produce or products you can add or delete for our next market season. Think new crops, new crafts, new displays, and added value foods. We only have 2 Saturdays left for this season and the 2023 Farmers Market, will be here before you know it!!! Many blessings to you and your farms/businesses!!!

The Pikeville Farmers Market is open through November 19th, 2022. There will not be any Tuesday Evening markets in November. We will have free pictures with Santa on November 12th and 19th. Be sure to follow us on Facebook for more updates and event news @PikevilleFarmersMarket.





Fall Spiced Pumpkin Bread

½ cup all-purpose flour	2 teaspoons pumpkin pie spice	½ cup honey
1¼ cup whole-wheat flour	½ teaspoon salt	2 cups pumpkin puree
1½ teaspoons baking powder	½ cup melted margarine	⅓ cup olive oil
1 teaspoon baking soda	½ cup sugar	2 eggs
		⅓ cup chopped walnuts

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

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

Yield: 16 slices

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

Pikeville

FARMERS MARKET

Shop locally grown produce for your Thanksgiving meals and handmade Christmas gifts for your loved ones!

Baked goods, Artisan Crafts, Jewelry, Canned goods, Honey, Maple Syrup, Seasonal Produce and so much more!



130 Adams Lane, Pikeville, KY 41501

Market Hours:

November 5th 9am-1pm

November 12th 9am-1pm

November 19th 9am-1pm

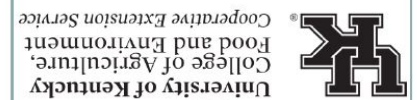




**PIKE COUNTY
EXTENSION
SERVICE**

148 Trivette Dr.
Pikeville, KY 41501

- Gardening
- Beekeepers
- Demo Garden
- Farmers Market
- Master Gardeners
- Trail Riders



Phone: 606-432-2534
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