

In This Issue

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Bluegrass Beekeepers' School

KY Beekeeper's Calendar

Container Gardening

Annual Plant Sale



University of Kentucky College of Agriculture, Food and Environment *Cooperative Extension Service* Bullitt County Extension 384 Halls Lane Shepherdsville, KY 40165

Shepherdsville, KY 40165 (502) 543–2257 www.bullitt.ca.uky.edu

MARK YOUR CALENDARS!

RSVP at 502-543-2257

<u>March</u>

- Friday, 3/11: Landscape Design Pt.
 2 at 6pm via Zoom
- Monday, 3/21: County Extension
 Council Meeting at 10am
- Monday, 3/21: Orchard Production at 6pm
- Friday, 3/25: Landscape Design
 Pt. 3 at 6pm via Zoom

<u>April</u>

- Friday, 4/8: Landscape Design Pt.
 4 at 6pm via Zoom
- Monday, 4/11: Pruning Fruit Trees at 6pm
- Monday, 4/25: Grafting Fruit Trees at 6pm
- Saturday, 4/30: 12th Annual
 Garden Art & Plant Sale 8a-2pm

<u>May</u>

- Friday, 5/6: Container Gardening at 6pm
- Thursday, 5/19: Summer
 Wildflowers at 6pm

Cooperative Extension Service Agriculture and Natural Resources Family and Consumer Sciences 4-H Youth Development Community and Economic <u>Development</u>

Beekeepers' Association Meetings

(Second Wednesday of Each Month)

 March 12th, 8am-5pm Assn. meeting and Watch Party for the 2022 Bluegrass Beekeeper's School



2

6

3-5

7-10

11

- April 13th, 7pm
- May 11th, 7pm

Master Gardeners' & Horticulture Council Meetings

(First Tuesday of Each Month)

- March 1st, 6pm
- April 5th, 6pm
 - **May 3rd**, 6pm

Natural Resources view of the solution of the

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

HOMEBASED MICROPROCESSING WORKSHOP 2022

Thursday, March 24th 9:30AM-2:00PM In-person

BULLITT COUNTY COOPERATIVE EXTENSION SERVICE

Join our in-person workshop! Homebased microprocessors are farmers who grow and harvest produce to use in their value-added products. Homebased microprocessors are required to grow a predominant ingredient in the products they make. The first step to becoming certified as a homebased microprocessor is to attend a Homebased Microprocessor (HBM) workshop presented by the University of Kentucky. The cost of the workshop is \$50.00.

For more information and to register call 502-543-2257 or visit https://fcs-hes.ca.uky.edu/homebased_processing_microprocessing

Cooperative Extension Service Agriculture and Natural Resources Family and Consumer Sciences 4-H Youth Development Community and Economic Development Educational programs of Kantos y Cooperative Johnston serve all projet respiratives of Sections' or section status and with not even number of the sears of these control drives and material or graph creatirights a control status, accusationamilies, control from by grove inspirations are proported assus, genetic information, eque, watan earlies or physical in monto descilla, University of Kornesity, Kornecky Static Cooperative U.S. Opport and 14 Aprenduce and Kentocky Countes, Cooperating, LEXINGTOR, 147 40546



Gardening in Small Spaces

Source: Rick Durham, Horticulture; Brad Lee, Plant and Soil Science; and Ashley Osbourne, 4-H Youth Development UK Cooperative Extension Service

Container Gardening

If you live in a home with only a small space available for gardening, you can still enjoy many of the rewards of growing your own vegetables. Lack of space for a traditional garden is not the only reason to try container gardening. Container gardening has many advantages:

- Container gardens can be one solution to a traditional garden site that is unsuitable because of poor soil quality, problems with drainage, too much shade, or too much sun.
- Container gardens can used for crop rotation to minimize the buildup of soil borne diseases and reduce insect pests.
- Container gardening may be suitable for people with limited mobility.



 Many containergrown vegetables also have ornamental value and can be mixed into flowering planters.

 Using containers allows you to take advantage of the various microclimates on your balco-



Choosing Vegetables for Containers

Nearly all leafy vegetables will do well in containers. Plant breeders have developed many dwarf or miniature varieties for container production. Crops with many fruits per plant, such as tomatoes, are good choices. Cultivars with a bush or compact growth habit also do well.

Tomatoes, especially cherry types, grow well in containers. Tomatoes need even moisture while developing fruit. Keep container plants well-watered and apply a mulch of straw, leaves, newspaper, or a combination of them around tomatoes growing in the garden. If you encounter problems with birds or rodents feeding on ripening fruit, pick the tomatoes as they are first starting to ripen and allow them to finish ripening indoors.

Peppers, especially small hot types or banana types, also do well in containers. These peppers are often more compact than standard bell types but give good yield and are attractive in containers. Peppers ny, patio, or walkway. need good air circulation, so don't plant

Ornamental peppers make a bright addition to any container.

them too close. Provide adequate moisture with proper drainage. Peppers can be harvested at any stage of development. For sweet types, flavors may peak as the peppers color. For hot types such as jalapeno, the flesh may gain a little more heat as they ripen. Regardless, peppers are generally quite tasty at any stage of development.

Summer squash, such as zucchini or yellow straight or crook neck types. Summer squash are very slow to vine and are suitable for containers or garden areas.

Selecting Containers

You can grow vegetables in just about any container. The container should be large enough to support the



This old stump was hollowed out to fit a container full of flowers for a lovely a naturalized look.

crop when the crop is fully grown. It should also have holes for drainage. Porous materials, such as clay and wood, lose moisture more quickly in dry weather and will require more frequent watering. Non-porous containers made of metal, plastic, glazed ceramic, glass, and wood lined with plastic hold moisture longer but can promote overwatering.

Unusual and unique containers will add interest to your garden. Use caution when selecting small containers or those of dark colors, the root zone may become dangerously overheated when such containers are exposed to full sun. Containers must have drainage holes in the bottom. If the container does not already have drainage holes, add at least four sizeable (1/4 to 3/8 inch) holes very near or on the bottom container. Containers may need to be elevated slightly to allow water to drain properly.

Planting

When planting, select a soilless media such as potting mix. Moisten the potting mix the day before you intend to plant. If you use a slow-release fertilizer, it should be added to the mix prior to planting.

Containers that are being reused should be cleaned with a 10 percent bleach solution before planting. If you are using a clay pot, soak the pot in water for 10 minutes first. Then place a coffee filter, screen mesh or clay pot fragments over the drainage holes in the bottom of the pot to keep the mix from leaking out while filling. You can add filler material to the bottom few inches of an especially large or deep container to reduce the amount of mix needed.



Unusual and unique containers will add interest to your garden.

Maintenance

Pay particular attention to watering container-grown vegetables. A soilless mix can dry out very quickly, especially on a concrete patio in full sun. Porous containers, like clay, are especially prone to dry out rapidly and can actually wick water away from plants. Daily watering may be necessary, especially during dry periods. Water should also freely drain from the base of the container and not collect in a saucer– as this may lead to a water soaked growing medium that will contain little oxygen necessary for roots, foster disease problems, and may harbor mosquito larvae.



Vegetables grown in containers should be fertilized regularly after an initial soil test has been made and adjustments to fertility have been made based on results.

Protect plants from very high heat caused by light reflection from pavement or buildings. If necessary, move plants to a cooler spot or shade them during the hottest part of the day.

After harvesting spring and early summer crops, you can replant the container with vegetables for the summer or fall garden. Remove vegetable crops from their containers once harvest is complete or after a killing frost. Saving and reusing the same soilless mix the following season is not recommended because the mix may be harboring disease organisms or insect pests.



Super Crunchy Salad

% cup pepitas (raw pumpkin seed kernels) Cooking spray % teaspoon ground cayenne pepper Salt and ground black pepper to taste pound Brussels sprouts, trimmed and thinly sliced
 pound curly kale, stems removed and thinly sliced
 pound Napa cabbage, thinly sliced
 cups dried cranberries
 (15-ounce) can Mandarin

oranges, drained

- 4 green onions, thinly sliced 8 strawberries, trimmed and
- thinly sliced 1 (16-ounce) bottle creamy poppy seed dressing

1 tablespoon orange zest Juice from 1 orange

Place pepitas in a bowl and coat lightly with cooking spray. Sprinkle with cayenne pepper, salt and pepper. Toss to coat. Place in a medium skillet over mediumhigh heat. Cook over medium heat, stirring often until lightly toasted, about 5 minutes. Remove from heat and allow to cool. Combine Brussels sprouts, kale, cabbage, dried cranberries, Mandarin oranges, green onions, strawberries and toasted pepitas in a large bowl. Dressing: Whisk together the bottled poppy seed dressing, orange zest, and orange juice in a small bowl. **Pour** over salad about ½ cup at a time and **toss** until salad and dressing are combined.

Note: Sunflower seed kernels can be substituted for pepitas. Green or red cabbage can be substituted for Napa cabbage.

Yield: 10, 11/2 cup servings

Nutritional Analysis: 300 calories, 12 g fat, 2 g saturated fat, 0 mg cholesterol, 430 mg sodium, 43 g carbohydrate, 5 g fiber, 33 g sugar, 6 g protein. Join the Bullitt County Beekeeper's Association on March 12th, from 8am-5pm for our monthly Association meeting and a Watch Party for the 2022 Bluegrass Beekeeper's School. Light refreshments provided. RSVP by calling 502-543-2257.



WHEN March 12th, 2022 9 a.m.- 4 p.m. EST

Beginners Track Incudes: Basic Bee Biology, Basic Beekeeping, Equipment and Getting Started, First Year Hive Management & Q and A session

WHERE Virtual/Online Via ZOOM

SPEAKERS/INSTRUCTORS • Randy Oliver- Scientific Beekeeper, Tammy Horn Potter, Ky. State Apiarist, Dr. Thomas Webster, KSU Assoc. Prof. College of Ag., Michael Palmer, French Hill Apiaries, Kent Williams, EAS Master Beekeeper, and many other experienced beekeepers



BEGINNER & EXPERIENCED BEEKEEPER TRACKS ADMISSION IS FREE WITH ONLINE REGISTRATION

Sessions Include:

Reading the Combs, Making Nucs, Using and Managing a Brood Factory, Pest Management, Plants for Pollinators, Honey Labeling and more





COOPERATIVE EXTENSION PROGRAM



The Kentucky Beekeeper's Calendar: March – May

Source: Thomas C. Webster, Apiculture Extension Specialist, Kentucky State University

The honey bee hive is as closely tuned to the seasons and the weather as any living plant or animal. An early spring, a dry summer, or a long winter greatly affects the life of the bee hive. For these reasons, the good beekeeper is always scrutinizing the calendar, speculating about rainfall, awaiting the arrival of warm weather, or preparing for winter. The times given for beekeeping activities will vary, according to weather and location. This calendar is for average weather in central Kentucky. A mild winter and early spring will accelerate bee colony development by several weeks or even a month. If the winter drags on into a cold, rainy spring the bees will lag behind in their development and activities.

March

What's Happening inside the Hive?

March is a critical time for the bees. The bees will thrive or suffer depending on weather and your management. Tracheal mites, starvation, and nosema disease are the main enemies at this time. The bees are starting to rear more brood, but it's an erratic process. Dandelions and henbit appear as significant pollen and nectar sources. For a few warm days the bees bring in the pollen and feed larvae. The queen increases her egg laying. Then a cold spell hits, and the cluster contracts. Often some of the brood is left outside of the cluster and starves. The bees destroy this dead brood. Brood in the center of the cluster matures, and young worker bees emerge to join the colony. Then the weather warms up again, the queen resumes her egg laying, and this cycle continues.

Gradually, young worker bees replace all of the old

"winter" bees that were reared last year. The bees have consumed a lot of honey throughout the winter but have not had a chance to make new honey, so stores are low. Brood rearing requires the bees to consume honey rapidly for two reasons : First, the hungry larvae demand a lot of food. Second, the brood cluster temperature must be raised to above 90[®]. To reach that higher temperature, the worker bees eat honey and generate more heat by "shivering" with their flight muscles. This is why starvation in March is a real danger. If you find a ball of dead bees in the comb, each with its head in a cell, that's a sure sign of starvation. The long period of confinement can take its toll in the buildup of tracheal mites and nosema disease. Both tend to increase throughout the winter because the bees are confined and unable to fly frequently.

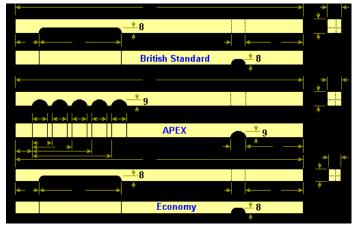


Honeybees cluster together to maintain a constant temperature in the winter.

Beekeeper Chores

Vegetable shortening patties and menthol should go into the hive as treatments for tracheal mites. The shortening is particularly helpful because it works better than menthol in cool weather. If you use Apicure (formic acid) gel packs for varroa control, this is a good time to put them in the hives. Apistan or Checkmite strips should be installed if they were not installed in February. If the bees are low on honey, feed with sugar syrup. This will boost brood rearing. The best time is when the weather is predicted to be warm (highs of 60 or above) for several days. The bees will not break their cluster to take the syrup during cold weather. Include Fumadil B mixed into the syrup, to control nosma disease. Nosema disease hurts the bees' ability to rear brood. A good start on brood rearing in spring time is essential for honey production or crop pollination later on.

The bees will soon need more room to come and go, remove the entrance reducer if you have one. Be sure you have your empty frames, supers, and new foundation ready. Beekeeping supply companies experience a rush of orders from last-minute beekeepers in April. If it happens to be a good year for honey you don't want to miss it because you didn't order equipment in time.



An entrance reducer is simply a barrier placed at the entrance to a beehive that reduces the size of the opening. They are usually made of wood, but can also be made from metal or plastic. An entrance reducer is needed if there is a danger of outside bees attacking the hive and colony or if there is inclement weather that may endanger the colony's ability to maintain proper thermoregulation of their hive. - Photo from http://www.dave-cushman.net/

Observations and ideas

This may be the time to look for new apiary sites, especially if you plan to add to your number of



Performing regular hive inspections can help to mitigate potential problems in the hive.

hives. The hives should also have direct sunlight from the south and east. Easy access by car or truck is also a plus, if you plan on hauling a good honey crop. Later in the spring, look for bee forage in the vicinity. Pasture land and most cultivated farm land is "desert" as far as the bees are concerned. If the hives are not close to or visible from the nearest road you will have fewer worries about vandalism. Avoid apiary sites that may be bothered by livestock. A large animal can easily knock over a hive.

April

What's Happening inside the Hive?

By April, the bees have made it over the hump. The problems they faced in March have not completely disappeared, but a healthy hive needs only a little nurturing now. Brood rearing should really increase this month; if it does not, your hive has serious problems. As the warmer weather comes, look for many bees returning with pollen loads. The stronger hives will have a significant amount of drone brood in preparation for the mating season.

Beekeeper Chores

In particular, keep an eye on the 5-day weather forecasts. A week of cold rain could really hurt the brood rearing. Feed the bees if you see this coming and the hive does not have at least a frame or two of stored honey. Add a second deep hive body when the brood, pollen and honey have nearly filled the first body. This extra space will help reduce swarming. The loss of productive bees in a swarm is your main threat in late spring. Remove the tracheal mite treatments. Problems with tracheal mites can continue even if you did put the treatments on in March. But as long as the hive is rearing brood, healthy bees will be replacing those with tracheal mites. Remove the varroa mite treatments according to when they were installed in February or March.

Treat your hive with terramycin to prevent American foulbrood (AFB) disease. This is especially important if you have had problems with AFB in recent years or have purchased used equipment. Be sure this treatment is completed before you put honey supers on your hives. This is a good month to requeen your hive, if the queen you have now is weak or is at least two years old. If your queen is only a year old, watch the brood pattern develop through the spring months. If the amount of brood is considerably less than it was last year at this time, think about possible causes: mites, nosema or bad weather. If you can rule out these causes, look closely at the queen. Is she long and fat, or about as small as the worker bees? A good queen will be considerably longer than a worker bee once she has started to lay eggs. Does she move all of her legs normally as she walks across the comb? An injured queen must be replaced. If she is shiny, small and "bald" she has been attacked by the workers who have chewed the hair from her. Such a queen must be replaced as soon as possible.

Observations and Ideas

Remember that bees collect pollen for brood rearing. A hive with four or five frames of uncapped brood will need much more pollen than a weak hive with only one frame of brood. The pollen foragers are the

ones that are best at transferring the pollen from one blossom to another — the essence of pollination.

May

What's Happening Inside The Hive?

In May and June you and the bees are rewarded, or disappointed, by how well you prepared for the honey flow. You may also be busy keeping up with your bees. Serious beekeepers do not take long vacations in May. If your bees



Burr comb, also known as brace comb and bridge comb, are portions of honeycomb built by the bees in other places than in the intended place in the frames.

are healthy, everything happens this month. The hive is full of young bees, the weather is almost perfect, and honey plants are blooming everywhere. The queen is laying eggs day and night, often over 1000 daily. There are now enough bees to take care of all the brood. The hive is making honey very quickly, even several pounds daily. If the bees need to make wax they will do this quickly by building onto foundation in your frames or by filling in empty spaces with burr comb. Drone production increases greatly and many drones fly out on sunny afternoons in search of the mating areas.

Swarming becomes a very important factor. May is the ideal time for a colony to reproduce, and most colonies will produce "swarm cells", or queen cells that will mature in time for swarms to issue from the hive. There are three reasons to keep your bees from swarming: (1) Your hive will be weakened and the potential for honey production much less; (2) Your queen will be replaced by a daughter queen which may not be as good as the original; and (3) Your swarming bees can be a nuisance to the neighbors. The possibility of tracheal mite and nosema problems is very low by now. Only the very weakest hives are still fighting them. Varroa mites should be at very low levels, but be aware that they are starting to increase now that the treatments are out of the hive.



Beekeeper Chores

Check your hives weekly and add supers as needed. Be sure there is plenty of space above the brood nest for honey. Frames with new foundation should go in. A strong hive will draw out the foundation into new comb in just a few days if the weather is good.

In a hive with two deep brood boxes, the bees will often move to the upper brood box, leaving the lower box relatively empty. This is an inefficient use of space in the hive and can lead to swarming. In May or June it is useful to "reverse" these brood boxes. This means removing all of the boxes, placing the second box on the bottom board where the first box had been, and placing the first box above it. This may break the brood cluster. So check the weather fore-

cast and do this when at least two warm days are coming. The bees will need to rearrange their cluster, and less brood will be lost in the process if it is not exposed to cool weather below 50 degrees.

Observations and Ideas

Hold a honey frame horizontally and shake it over the hive. If nectar sprinkles out, your bees are on a honey flow. The nectar is still dilute and watery. With time, the bees will either consume it or continue to thicken and ripen it into honey. Swarm collecting has been a favorite pastime of beekeepers for centuries. If you are interested in doing this, have a few empty hives on hand. Some beekeepers locate empty "trap hives" or "bait hives" near their own hives. Often, a swarm flying out of one of your own hives will move into the trap hive, since it is much like what the bees are searching for. In this way, the beekeeper manages to catch and save the bees, although the source hive is weakened.

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Master Gardeners' & Horticulture Council meet the 1st Tuesday of Each Month at 6pm	Learn proper techniques for grafting fruit scions and rootstock.	6pm Grafting Fruit Trees	trees for maximum production and tree health.	Proper techniques for how to prune fruit	6pm Pruning Fruit Trees	Four Part series, must attend all classes	P	6pm Landscape Design 3 via Zoom	home apple orchard.	6pm Orchard Production	P	6pm Landscape Design 2 via Zoom	P	6pm Landscape Design 1 via Zoom	How to start and grow your own garden plants from seed.	6pm Starting Seeds at Home	Food and Environment	College of Agriculture.	
	7/15			דוד		6/16			6/3		5/19		5/6			4/30		olbox	
	6pm Home Lawn Care via Zoom How to maintain a home lawn.	versatile plants for dry shade.	Struggling growing anything under those trees? This class is all about	Perennials for Dry Shade	into your landscape.	6pm Native Wildflowers How to incorporate native plants	person.	Make your own rain barrel to take home. Space limited. \$20 per	6pm Rain Barrels	Summer wildflowers to make any garden bloom beautifully.	6pm Summer Wildflowers	Growing plants in small spaces.	6pm Container Gardening	fantastic 12th annual plant sale!	Join us & our vendors for our	8a-2p Master Gardeners'		Toolbox Classes 2022 Horticulture	
Beekee the 2				11/4			10/21			9/12	9/9			8/12		7/25		Ire	
Beekeepers' Association Meeting & Class meet the 2nd Wednesday of Each Month at 7pm			Learn to grow healthy greens on your kitchen countertop.	6pm Microgreens	season apples.	Join us in tasting many varieties of apples so you can discover your favorite late	6pm Late Apple Tasting	so you can discover your favorite early season apples.	Join us in tasting many varieties of apples	How to grow tasty mushrooms at home. 6pm Early Apple Tasting	6pm Growing Mushrooms	garden to rights for the season.	How to put up the harvest and put the	6pm Putting the Garden to Bed	Extend the garden season by growing cool weather crops this fall.	6pm Cool Weather Crops	A Part of the Cooperative Extension System	etension	

Bullitt County



Master Gardener ' Plant and Garden Art Sale

Saturday: April 30, 2022 Time: 8 a.m. to 2:00 p.m. Bullitt County Extension Office 384 Halls Lane, Shepherdsville, KY 40165



Vegetables, Herbs, Flowers, Bird Houses and Lots of items for your yard

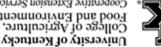
Numerous Vendors selling a wide variety of items

* Proceeds are used by Master Gardeners for projects in the local community

For Information Call: 502-543-2257

Rain or Shine

Vendor Booths Available : \$ 25 Website: www.bullitt.ca.uky.edu **Rain or Shine**

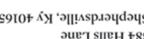


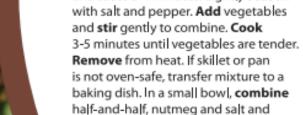
Cooperative Extension Service College of Agriculture, Food and Environment

Bullitt County Cooperative Extension

Shepherdsville, Ky 40165 384 Halls Lane

RETURN SERVICE REQESTED





Nutritional Analysis: 220 calories, 9 g fat, 3.5 g saturated fat, 0 g trans fat, 70 mg cholesterol, 340 mg sodium, 11 g carbohydrate, 3 g fiber, 4 g sugars, 23 g protein.

Yield: 6, 1 cup servings

pepper to taste. Pour mixture over chicken and vegetables. Sprinkle with Parmesan cheese. Bake 25-30 minutes until lightly golden on top. Serve hot.

2 skinless, boneless chicken breasts (about 1 pound) 1 tablespoon olive oil Salt and pepper to taste

Preheat oven to 425 degrees F.

Cut chicken into bite-sized pieces.

Heat oil in a heavy, oven-safe skillet

or pan over medium heat. Add chicken

and sauté 3-4 minutes. Lightly season

12-14 Brussels sprouts, trimmed and guartered 1 cup sliced fresh mushrooms 1 red bell pepper, diced, about 1 cup

Chicken and Brussels Sprouts

One Pan Meal

 medium yellow onion, diced, about 1 cup 2 cloves garlic, minced 1/2 cup half-and-half 1/4 teaspoon nutmeg 34 cup Parmesan cheese



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