Estill County Farm Scoop

Agriculture & Natural Resources



Happy September! As fall is approaching, there are some important things to keep in mind. Fall gardening season is coming up and now is the time to plant mustard greens, spinach greens, radishes, turnip greens and leaf lettuce. Before planting, it is important to clean the debris out of the garden, including weeds and old crops.

Next, you will need to prepare your soil. If the previous crop was well fertilized and grew vigorously you may not need to add much, if any additional fertilizer, otherwise apply about 2 to 3 pounds of a complete fertilizer such as 5-10-10 or 10-10-10 per 100 square feet of planting area. Feel free to have a soil test at the extension office done as well if you would like more

accurate recommendations on fertilization.

To learn more about fall gardening options, contact our office and ask for publication ID-128, "Home Vegetable Gardening in Kentucky." More information can also be found at https://

kentuckyhortnews.com/2017/ 07/03/planting-fall-vegetablesin-kentucky/#:~:text=For% 20late%20August%20and% 20into,and%20then% 20prepare%20the%20soil.

As always, feel free to contact me if you have any questions or concerns. I am here to help!



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Cooperative Extension Service

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University of Kentucky, Kentucky State University, U.S. Department of Agriculture, and Kentucky Counties, Cooperating.





Cicada Killer Wasp

Eastern cicada killers, Sphecius speciosus, occur throughout the United States east of the Rocky Mountains and in Mexico, where they are common in urban and suburban areas. In North Carolina, they generally appear in July and remain active throughout the rest of the summer. Cicada killers are the largest solitary wasps in the state, with females occasionally reaching 1.5 inches long and weighing about a gram (the weight of a shelled almond). Males weigh about half as much.

Adult cicada killers can be recognized by their size, body shape, and distinctive color patterns. Most striking is the black abdomen with three complex, yellow bands. The head and thorax are rust colored to dark brown, and the wings a transparent russet. Only European hornets rival cicada killers in size and bulk, but their color patterns differ, with hornets displaying more yellow on the abdomen

Cicada killer burrows are also characteristic, particularly when built on flat ground, where a U-shaped mound of soil accumulates around the nest entrance during construction.

Biology

Cicada killers are solitary, meaning that each female typically builds her own nest and hunts prey to feed her own offspring (unlike yellow jackets, hornets, and paper wasps, which live in social colonies). Even so, cicada killers are often found in groups, since many wasps are attracted to the same suitable nesting areas. These are usually sparsely vegetated, southeast-facing slopes or unmortared retaining walls, with plentiful cicadas in nearby deciduous trees. Male wasps appear a week or two before females, and spend their time feeding at flowers or sap and establishing territories. They perch on vegetation or stones and make brief, hovering flights to inspect newcomers, including people, pets, and other wasps. Although these inspections may be intimidating, male wasps cannot sting. When females emerge, they mate once and then begin to prepare nest burrows, which can be up to 40 inches deep and include about 16 individual chambers. One female wasp can excavate nearly a half-gallon of soil for a single burrow, and she makes about four burrows in her lifetime. She piles the tailings in a neat, U-shaped mound at the entrance of each burrow, and this soil can damage turf and other plants.

Cicada killers are also beneficial, in that they hunt dog-day cicadas in the genus Tibicen. The cicadas are herbivores of deciduous trees. Adult female cicadas damage tree branches by laying eggs in them, while cicada nymphs develop underground while consuming sap from tree roots.

In her lifetime, one female cicada killer can gather 100 or more cicadas--each of which weighs about twice as much as she does. She paralyzes the cicada with her stinger and hauls it back to her nest. She brings one cicada for each of her male offspring, and two or three for each female. (The wasp knows in advance the sex of the next egg she will lay). Then she lays a cigar-shaped egg, about 1/8 inch long, at the base of the cicada's middle leg and seals up the nest chamber that contains it.

The eggs hatch in a day or two and the longnecked larvae develop quickly, each one consuming a whole cicada in less than four days. Upon completing its meal, the larva spins a silken cocoon and enters diapause, remaining in a suspended state until the following May or June, when it pupates. One may occasionally unearth a cicada killer cocoon; it is brown, about 1.25 inches long, and ringed with a band of pores around its equator.

Intervention

Control of cicada killers is rarely necessary. Males are unable to sting, and females are unlikely to do so. Nest construction can damage turf and small plants, but aesthetic or economic thresholds have not been established.

There are few proven options for cicada killer control. Because these wasps rarely nest in thick, vigorous turf, proper fertilization to promote thicker vegetation should eventually deter the wasps. (Consider doing a soil test, available from the North Carolina Department of Agriculture & Consumer Services, to determine appropriate lime and fertilizer applications.)

One study in West Virginia eliminated cicada killer activity on a golf course by spraying the appropriate insecticide directly

less successful.
One wasp biologist has informally demonstrated a laborious but effective control method that involves plugging burrows and using a badminton racket to swat the wasps.

into active burrows, or immediately around

their entrances. Broader area sprays were

However, because the developing larvae may survive treatments, and because good nesting habitat remains appealing to new females year after year, wasp removal will likely be an annual undertaking unless turf or vegetation are also managed.

Recommendations for insecticides approved for control of bees and wasps can be found in the North Carolina Agricultural Chemicals Manual.

Sources and Further Reading

Biology of Cicada Killer Wasps. Halliday, C. 2012 (update). LaFayette College.
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Improved key to new world species of Sphecius (Hymenoptera: Crabronidae).
Holliday, C. W., and J. R. Coelho. Annals of the Entomological Society of America 99:

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<u>Life history and habits of the cicada killer in Ohio</u>. Dambach, Charles A., and Eugene E. Good. 1943. The *Ohio Journal of Science*,

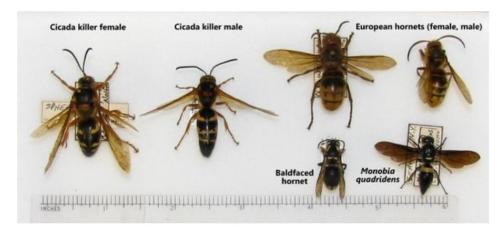
<u>Size-specific provisioning by cicada</u>
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<u>Crabronidae) in North Florida</u>. Hastings, Jon
M., et al. 2010. *Florida Entomologist* 93: 412
- 421.

The Sand Wasps: Natural History and Behavior. Howard E., and Kevin M. O'Neill. 2009. Harvard University Press. pp 37 - 43. Common name: cicada killer, giant ground hornet, scientific name: Sphecius speciosus (Drury) (Insecta: Hymenoptera: Sphecidae). Stange, L. A. 2012 (revised). Featured Creatures. Entomology & Nematology, FDACS/DPI, EDIS. NC State Extension Plant Pathology Publications

NC State Horticultural Science Publications
North Carolina Agricultural Chemicals
Manual

For assistance with a specific problem, contact the Estill County Cooperative Extension Office.

Sources: https://content.ces.ncsu.edu/cicada-killer-wasp



Although individual cicada killers have unique markings, they differ from other, similar species in size, body shape, and overall color pattern.

Time to plant your fall garden

Source: Rick Durham, UK extension horticulture specialist

As the summer warmth begins to wane, you don't have to bid farewell to the joys of cultivating your garden. This time between seasons offers a golden opportunity to plant a vibrant fall vegetable garden, promising an uninterrupted flow of produce throughout autumn. Alternating balmy days and brisk nights support a variety of cool-season vegetables for your family to enjoy.

Some of the best quality vegetables are produced during fall's warm days and cool nights. These environmental conditions add sugar to late-season sweet corn and cole crops, such as cauliflower and cabbage, and add crispness to carrots.

early September consist of two types: the last succession plantings of warm-season crops, such as corn and bush beans, and coolseason crops that grow well during the cool fall days and withstand frost.

When planting a fall garden, group crops the same way you would in the spring; plant so taller plants don't shade out shorter ones. To encourage good germination, fill each seed furrow with water and let it soak in. Keep the soil moist until seeds have germinated. Be aware that cool nights slow growth, so plants take longer to mature in the fall than in the summer.

You may use polyethylene row covers to extend the growing

Fall vegetables harvested after season of frost-sensitive crops, such as tomatoes, peppers and cucumbers. This helps trap heat from the soil and protect the crop from chilly night temperatures.

> Often Kentucky experiences a period of mild weather after the first killing frost. If you protect frostsensitive vegetables at critical times in the fall, you could extend the harvest season by several weeks.

> Once these vegetables die due to lower temperatures, you may be able to plant cool-season crops in their place. Leafy greens like lettuce and spinach may grow into November or December under polyethylene row covers if outside temperatures do not drop below the teens. Be sure to allow for ventilation on sunny days to

prevent overheating.

You may successfully seed or transplant the following vegetables now for fall harvest: beets, Bibb lettuce, broccoli, Brussels sprouts, cabbage, carrots, cauliflower, collards, endive, leaf lettuce, kale, mustard greens, spinach, snow peas and turnips.

For more information about horticultural topics or classes near you, contact the Estill County Cooperative Extension Service.



Fall Planting for the Vegetable Garden

I'll Meet You in the Garden with Shellie Wise

Fall planting is a treat. Milder temperatures, fewer pests, and fewer diseases are suitable for the plants and you. Most plants grown in the spring can be grown in the fall, and some even perform better. Many cool-season crops tolerate light frosts, which for some, can improve their flavor. Peas & cauliflower survive frosts at 28-32°. Broccoli cabbage, chard, carrots, kale, lettuce, spinach, and parsley survive hard freezes at 25-28°.

Fall plantings start now and continue into mid-September. Clear out space in your bed by removing spent crops. Weed out any un-kept areas and replenish your soil if needed. According to the National Climatic Data Center (www.ncdc.noaa.gov), we have a 50% chance of a first-killing frost (28°F) around 10/9, so we'll use that date to develop our fall planting schedule. The maturity dates of the plants you choose determine more precise planting dates, but this is a general guide. To determine specific planting dates, check your seed packets to find the number of days to maturity for each vegetable you'd like to harvest in



the fall. Count back that number of days from the frost date and add on the number of days the seeds will need to germinate.

Some plants to consider for your fall garden include arugula, beets, bok choy, broccoli, Brussels sprouts, cabbage, carrots, cauliflower, collard greens, kale, kohlrabi, mustard greens, parsley, peas, radish, spinach, and turnips. Succession planting works in the fall, similar to how it works in the spring. Succession planting is planting seeds on multiple dates throughout the season. It's an easy way to avoid having your entire crop ready for harvest at the same

time. For example, lettuce is a great candidate for succession planting. Plant just enough lettuce seed to supply a couple of weeks of salads. Two or three weeks later, do the same thing. You'll eventually fill up the place you have designated for lettuce in your plot. You'll harvest the lettuce in the same way -starting with the first seeding you did. After a few weeks, you'll begin to harvest the second planting and so on. This technique can provide you a continuous supply of lettuce until frost. This garden practice also works well with many other veggies included in the chart below.

DATES BEFORE 10/9	WHAT TO PLANT
12 weeks before frost - around July 17	seeds of: snap beans, cucumbers, summer squash, lettuces, radishes
11 weeks before frost - around July 24	seeds of: snap beans, cucumbers, summer squash, kale, lettuces, radishes
TIU Weeks before trost - around illiv 3 i	seedlings of: broccoli, cabbage, cauliflower, kale; seeds of: snap beans, beets, carrots, chard, kale, lettuces, peas, radishes, scallions
19 Weeks before trost - around August 7	seedlings of: broccoli, cabbage, cauliflower, kale; seeds of: arugula, beets, carrots, chard, kale, lettuces, peas, radishes
IX WEEKS DETOTE TROST - AROUND AUPLIST 14	seedlings of: broccoli, cabbage, cauliflower, kale; seeds of; arugula, beets, chard, kale, lettuces, radishes, spinach
7 weeks before frost - around August 21	seeds of: arugula, beets, chard, kale, lettuces, radishes, spinach
6 weeks before frost - around August 28	seeds of: arugula, chard, kale, lettuces, radishes, spinach
5 weeks before frost - around Sept. 4	seeds of: arugula, lettuces, radishes, spinach
4 weeks before frost - around Sept. 11	seeds of: arugula, lettuces, radishes, spinach
around October 2-9	garlic

Source: https://warren.cce.cornell.edu/gardening-landscape/warren-county-master-gardener-articles/fall-planting-for-the-vegetable-garden

KSU Habitat Management Symposium

About the Event

Kentucky State University (KSU) has partnered with the University of Kentucky (UK), KDFWR, KAEE, and Seiler Geospatial to conduct a 3-day symposium that will highlight natural areas practices and demonstrations, case studies and recent conservation projects. In addition to this, day one of the symposium will be specially geared towards applications of remote sensing in natural areas management. Full agenda coming soon!

Days 1: Remote sensing workshop
Days 2 & 3: Natural areas management
practices & demonstrations and case
studies of recent conservation projects
Reasonable accommodations for individuals
with disabilities will be provided free of
charge upon request. Language access services
for limited English proficient individuals will
be provided free of charge upon request.
Please contact Kasia Bradley at
kasia.bradley@kysu.edu by September 15,
2023.

Proceeds generated from registration will fund a scholarship for a student planning to pursue an education in using geospatial technology in natural resources. More information on this coming at the start of the 2023 Habitat Symposium.

Kentucky State University is an equal opportunity provider.



To register visit:

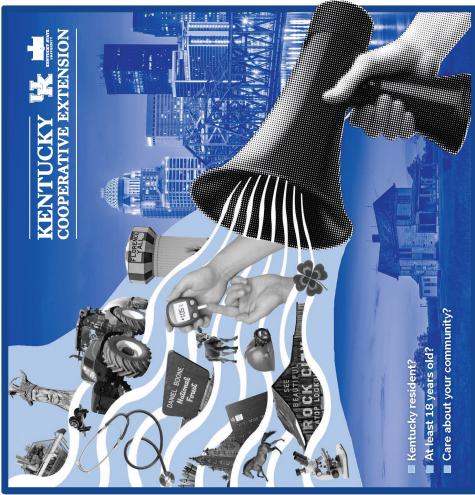
https://www.kaee.org/events-1/ksu-habitat-management-symposium?

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To file a complaint of discrimination, contact Tim West, UK College of Agriculture, 859-257-3879; Terry Allen or Patty Bender, UK Office of Institutional Equity and Equal Opportunity, 859-257-8927; or the USDA, Director Office of Civil Rights, Room 326-W Whitten Bldg., 14th & Independence Ave. SW, Washington, DC 20250-9410 (202-720-5961).



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Tickets are \$15 and include meal. Registration opens at 1:30 PM Program begins at 2:00 PM Register by searching

VISIT WITH:

Research Demonstrations Commercial Exhibitors

1051 Midway Rd. Versailles, KY C. Oran Little Research Center

Thursday, September 21

- **Educational Exhibits**
- KY Ag Leaders
- UK Personnel & Admin
- KCA Leadership & Staff

tapu228@uky.edu (859) 257-7512 **Fyler Purvis, UK Beef Extension**

Beef Bash 2023 at Eventbrite.com







Snakes! Learn more, fear less

Source: Matthew Springer, assistant extension professor of wildlife management

Around Kentucky, a fascinating world often misunderstood by many unfolds—the world of snakes. Despite their infamous reputation, these creatures are far more complex and essential to the state's cottonmouth, aka water moccasin, ecosystem than meets the eye. More than 30 snake species live in

Kentucky, but only four possess venom, while the rest contribute to the intricate balance of nature.

Kentucky's diverse landscapes provide an ideal habitat for these often-maligned creatures. The venomous snakes, ranging from the North American black racer thrive secretive copperhead and Western to the pygmy rattlesnake and the graceful timber rattlesnake, are

vital to the state's environment. They often go unnoticed, keeping populations of mice and other rodents in check. Numerous nonvenomous snakes such as the common garter snake and the throughout the state.

The University of Kentucky Martin-Gatton College of Agriculture, Food and Environment offers a comprehensive website to help you identify and learn more about snakes you may encounter around your home or farm.

A user-friendly interface allows you to pinpoint snake species based on its geographic location and unique characteristics. A snake's head shape, body structure or color patterns all offer clues to help with identification. Whether you find a snake while hiking through the woods or exploring your own backyard, this platform will help you fight fear with information.

Photographs and descriptions offer a visual encyclopedia for both venomous and non-venomous species in the region. If you come in close contact with a venomous snake, use caution and respect. You may learn to appreciate them from a safe distance and admire them in their natural habitats.

The website details each snake's unique natural history and conservation status. With newfound knowledge, you may see snakes in a new, fresh light.

Visit the website at https:// kysnakes.ca.uky.edu/. For more information about Kentucky wildlife and other topics, contact the Estill County Cooperative





The Estill County Cattlemen Association, **Southern States - Richmond Service,** Madison County Beef Cattle Association, invite you to join them at

Farm Field Day/Plot Day at McKinney Farms

Saturday, September 16, 2023 10:00 a.m. - 2:00 p.m. 1236 Dodd Rd, Richmond KY

Food: We will have the Madison County Beef Association cooking burgers and hotdogs for attendees from 11am - 1pm. Hayrides: Looking over corn, soybean and alfalfa crops. Looking at beef cattle and chickens. And enjoying the beauty of McKinney Farms. Activities for Kids: Potato sack racing, tractor/farm equipment for kids to sit on and take pictures, and inflatables for the kids. Ag Talks: Beef Specialist on site to talk about cattle nutrition, supplementation as it relates to cattle health/performance. Agronomist will be on site to talk about different varieties of corn, soybean, alfalfa, and forage seeds. Cattle Equipment Specialists from Tarter Farm and Ranch and Ritchie Waterers on site to display equipment and discuss its place on your farm.

Let us know you will be attending by calling 606-723-4557.

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https://fcs-hes.ca.uky.edu/content/plate-it-kentucky-proud

For more Plate it up recipes visit

Pumpkin Apple Muffins

pəddoyo Smith apples, finely **5 cups** Granny lio eloneo quo 🚜 bnmpkin ا الاجام و pəəınd yəəı و J

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2 large eggs

cinnamon Jys feaspoons ground 1/2 teaspoon salt 1 1/4 teaspoons baking soda J 🌿 cnbs whole-wheat flour **J ሎ cnbs** all-purpose flour

test done. Cool for 10 minutes before for 25 to 30 minutes or until muffins lined muffin cups, two-thirds full. Bake Fold in apples. Fill greased or paper dry ingredients just until moistened. honey, eggs, pumpkin and oil; stir into and spices. In a small bowl, combine bowl, combine flours, baking soda, salt Preheat oven to 325 degrees F. In a large

removing from pan.

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

Yield: 18 muffins

2 g fiber, 20 g sugar, 3 g protein

160 mg sodium, 35 g carbohydrate,

oven temperature to 350 degrees F.

Note: Can substitute two cups

fat, 0.5 g saturated fat, 35 mg cholesterol,

baking soda by ¼ teaspoon and increase granulated sugar for honey, decrease

Nutritional Analysis: 200 calories, 7 g



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