## Gifted Gardener

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### Make More Plants at Home

Spring is the season of plenty: Plenty of insects, plenty of weeds, plenty of time on the mower, and plenty of opportunities. The opportunities are what I want to focus on in this short article and in particular the making of more plants for the ever expanding flower garden.

Now is an excellent time to dig and divide many of the plants in the landscape.

plants in the la Especially those of the herbaceous perennial category. But, Smith you're saying things I don't understand "What's an Herbaceous Perennial" Well think daylily, monkey grass, black-eyed Susan's etc. The plants that bloom in the warm months and die back to the ground in the fall, fall into this category and are ripe this time of year for dividing into multiple new plants.

This article isn't the how but the you need to do this because it saves money, increases your plant numbers and is good for the divided plant.



### Qu<sup>ick</sup> Tip

Not only can invasive species take over the garden but they can degrade native habitats, decrease richness of native species and contribute to the loss of biodiversity.

# Prevent the spread of invasive plants: By: Jordan Strickler

Spring is in the air, but the improving weather also means a rise in invasive plants species. Invasive plants can have major biological, economical and aesthetic impacts on Kentucky, however, an assistant professor in the University of Kentucky College of Agriculture, Food and Environment offers methods to contain and prevent these plants from spreading.

"From the woods to your yard, invasive plants are a problem in a wide range of settings," said Ellen Crocker, assistant professor for forest health extension in the **UK** Department of Forestry and Natural Resources. "They can come in all shapes and sizes. From invasive trees, like callery pear or tree of heaven to spring ephemerals like

lesser celandine."

Not only can invasive species take over the garden but they can degrade native habitats, decrease richness of native species and contribute to the loss of biodiversity. Invasive plants may negatively affect the state's economy when they intrude on commercial fishing, aquaculture operations, forestry and agriculture as their removal comes at a cost. When recreational events such as hunting, hiking, fishing, swimming and boating are no longer possible or pleasant, tourism revenue suffers.

Managing invasive plants requires regular monitoring and removal of the plants to promote the health of diverse native plant communities. Invasive plant control can take many forms, such as pulling up seedlings to herbicide treatments, depending on the plant and location.



### Qu<sup>ick</sup> TiP

Tomatoes are a warm season fruit, meaning they prefer warm soils and warm temperatures to thrive in the garden. We often times put them out months before we should and this results in poor performance.

### Tomato season is coming: be prepared

Tomatoes are the most widely planted garden fruit in the country. We all tend to have the same goal of having the earliest fruit in the neighborhood, but that desire comes with costs. Tomatoes are a warm season fruit, meaning they prefer warm soils and warm temperatures to thrive in the garden. We often times put them out months before we should and this results in poor performance. Several issues arise from these early plantings such as Fruit deformation, Blossom End Rot, and Early Blight Disease.

Temperatures below 50 degrees will cause fruit to form in odd ways such as cat facing, zippering, double fruit and others. This does not affect the flavor but really makes them less attractive.

Early blight (Alternaria solani). The most common

fungal disease of tomatoes in Kentucky. Symptoms may appear on leaves, stems, and fruit in the form of dark-brown lesions with a concentric pattern. Older leaves are usually affected first, but the disease will spread to newer growth under favorable conditions. Lesions enlarge and



coalesce, and can result in extensive blighting and loss of foliage. Fruit are affected in severe outbreaks; the primary symptom is the presence of dark-brown lesions with a concentric ring pattern.

#### Control:

- Prompt destruction and removal of residues from previous tomato crops
- Rotation to an area

that has not had solanaceous plants in the past 3 years

Weed control



- Irrigation management, all watering should be done at the soil level to prevent prolonged wet periods
- Fungicides that contain chlorothalonil or mancozeb should be applied every 7 to ten days during the growing season. These are protectant fungicides and won't cure the problem once it begins.

**Blossom end rot** is caused by inadequate translocation of calcium through the plant



during fruit development. Generally the problem is not insufficient soil calcium levels but rather inadequate soil moisture to deliver the calcium to the plant. Once the condition has developed it cannot be corrected on affected fruit; better water management and application of calciumcontaining fertilizers, if necessary, can prevent further loss.

**Cracking** generally appears near the stem scar and is the result



of rapid fruit growth usually brought on by periods of drought followed by heavy rains or irrigation events. Concentric cracking can often occur when standing water sits on the shoulders of fruit. There are large varietal differences in susceptibility to cracking. Cracking can be greatly reduced by choosing resistant varieties and managing irrigation.

		AIIV	E F LA		INALIVE FLAN IS FOR THE SUN GARDEN
Perennials - Su	n				
Common Name	Scientific Name	Sun	Sun Moist.	Height	Comments
Bluestar	Am. tabernaemontana	F-P	A	ō	Small pale blue flowers in May; butterflies
Butterfly Weed	Asclepias tuberosa	ш	۵	1-2'	Clusters of brilliant orange flowers Jun-Aug
Aster	Aster spp.	P-S	A-D	1-5'	Will grow in low nitrogen soil; Attracts butterflies
Tickseed	Coreopsis spp.	F-P	A-D	Var.	Bright Yellow Flowers
Purple Coneflower	Echinacea purpurea	ш	A-D	3-5	Purple, long-lasting flowers summer-fall
Joe-Pye-Weed	<i>Eupatorium</i> spp.	ш	A	5-9'	Attracts butterflies
Purple-hd. Sneezeweed	d Helenium flexuosum	ш	A	1-4'	1" flowers; purplish-brown disks
Swamp Sunflower	Helianth. angustifolius	ш	M-A	5-7'	3" yellow rayed flowers
Blazing Star	Liatris spp.	ш	D	2-5'	Liberally set with purple flowers
Wild Bergamot	Monarda fistulosa	F-P	A-D	3-4'	Pink-lavender clusters; tubular florets Jun-Jul
White Beard-tongue	Penstemon digitalis	ш	A-D	3+'	Pale lavender to white flowers May-Jun
Summer Phlox	Phlox paniculata	F-P	A	2-4'	Magenta, pink, or white flower clusters May-Jun
Silverleaf Mtn. Mint	Pycnanthemum incanum	m F	A-D	2-4'	Small purple flowers above whitened upper leaves
Black-eyed Susan	Rudbeckia fulgida	ш	A	2-3'	Deep yellow flowers with dark brown disks Jul-Aug
Wrinkle-leaf goldenrod	d Solidago rugosa	ш	M-D	3-7'	Do well in any well-drained soil
Ironweed	Vernonia gigantea	ш	M-A	7	Large, loose clusters of red-purple flowers

NATIVE DI ANTS EOD THE SHADE CADDEN	INTIVE I LAN 13 FON THE SHADE GANDEN	Sun Moist. Height Comments	P-S A 1-2.5'	5 Р-S	P-S A 4-6"	P-S	P-S A-D 2'		P-S	P-S	P-S		P-S	A 2-3'		
	Shade	Scientific Name	Actea pachypoda	Aquilegia canadensis Arisaema triphvllum	Asarum canadense	Geranium maculatum	Heuchera americana	Iris cristata	Lobelia cardinalis	Phlox divaricata	Polemonium reptans	Polygonatum biflorum	Smilacina racemosa	Solidago caesia	Tiarella cordifolia	
	1.0	Sci	Act												Тіа	
	Perennials	Common Name	White Baneberry	Wild Columbine Jack-in-the-pulpit	Wild Ginger	Wild Geranium	Alumroot	Crested Iris	<b>Cardinal Flower</b>	Wild Blue Phlox	Jacob's Ladder	Solomon's Seal	Solomon's Plume	Wreath Goldenrod	Foamflower	

### Quick Tip

While their size is imposing and m ay make some people shudder, Larson said the spiders are mostly harm less.

### JORO SPIDER: MEET AND GREET NOT EXPECTED SOON By Dr. Jonathan Larson

Joro spiders, which are the size of a human palm and can fall from great heights, should pose little concern for most Kentuckians. Jonathan Larson, University of Kentucky entomologist, does not expect the large spider to appear in the state this year. "The Joro spider has

attracted a lot national attention recently because of reports regarding its potential range expansion along the East Coast this summer and beyond," said Larson, extension entomologist in the UK College of Agriculture, Food and Environment, "Its numbers have been growing since it was first found in 2014 in Georgia. Given the natural expansion rate of the spider, it is unlikely we will see it in the Bluegrass any time

soon. Though, you never say never."

A lot of the media attention regarding this spider has focused on their size and ability to "parachute" into new areas.

"It is a large spider, and their babies will 'balloon' into new areas, but this is true of how many of our native spider species disperse into new areas as well,"

Larson said. "A big spider can't float away on a silk strand. You won't see spiders the size of a kid's hand floating through the sky. It is just the ones that have emerged from eggs recently."

While their size is imposing and may make some people shudder, Larson said the spiders are mostly harmless. "Their venom is not considered medically important to people or pets, and like most spider species, they aren't looking to bite things they can't eat if they can help it," he



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said. "Typically, the larger the spider, the less potent their venom."

While it s worrisome that the nonnative Joro spiders' range is predicted to expand, little is known about how it will behave in new environments.

"It's true that a potentially invasive species expanding its range like this is a cause for concern," he said. "However, we're still

(Continued on page 14)

### Quick Tip

From a soil test we learn the levels of Phosphorous, Potassium, Calcium. Magnesium, pH and others of importance. By knowing the level of nutrients availahle we can make smarter decisions on what fertility to add back to the soil to improve productivity.

### Soil Health is the Engine that Drives Good plant Growth

Soil health is measured in many ways. Good soil health begins with a soil that has equal parts pore space and aggregate, has lots of flora and fauna growing within it and is well stocked with good nutrient levels. Sometimes the plants growing in these soils have different needs that may need to be addressed but these staples point to the health of the soil.

Lets begin with what it means to have equal parts pore space and aggregate within a soil. For many homeowners this is the most limiting factor you'll face. The aggregates I speak of are the sand, silt, clay, rock and organic matter

present in the soil. The quantity of these vary within soil types but these elements will exist. Compaction or the forcing of these materials together within the structure is what changes and begins to make a

and begins to make a soil less inhabitable. See, the

pore space is equally important because this is where the O<sub>2</sub> lives as well as the water and roots of the plant. There is no doubt that lawn and landscapes that are newly constructed are compacted severely. This alone causes shallow root systems (because they can't penetrate the soil) low oxygen levels and therefore verv low levels of the flora and fauna. Shallow root systems prevent the plant from resisting the affects of drought and the ability to reach nutrients.

Compaction occurs when we run over or work clay soils that are too wet and we force the aggregates close together therefore eliminating the pore space.

Fixing the problem involves **TIME** and top dressing with organic matter annually. In most things prevention of compaction is the best medicine.

When the soil is not compacted we can expect it to be teaming with micro and macro organisms.



Compacted soil

These work with the plant and the soil to increase quality and nutrient uptake.

The following chart Actinomycetes Fungi Algae

Organism	Number/gram (dry-weight basis)
Bacteria	100 million to 1 billion
Actinomycetes	10 million to 100 million
Fungi	100,000 to 1 million
Algae	10,000 to 100,000
Protozoa	10,000 to 100,000
Nematodes	10 to 100

represents what we would normally encounter in a gram (1/4 teaspoon) healthy soil. "Soil abounds with life. Besides the plant roots, earthworms, insects, and other creatures you can see, soil is home to an abundant and diverse population of microorganisms. Soils with more organic matter tend to have more organisms.

The more microorganisms the better. The important thing is to make the environment favorable for microorganism activity, which includes well aerated soils, warm, moist, nearneutral pH and good levels of organic matter." (AGR-204)

This brings us to the next point which is nutrient levels and pH of the soil. The only way we know this information is to conduct a soil test on the soil in question. From a soil test we learn the levels of Phosphorous, Potassium, Calcium, Magnesium, pH and others of importance. By knowing the level of nutrients available we can make smarter decisions on what fertility to add back to the soil to improve productivity. The pH of a soil is important and will often times help us diagnose problems that are occurring with plants. When the pH is not in the correct range for plants some nutrients, although in abundance in the soil, may not be available until the pH is adjusted.

#### Simple Steps for taking a soil Sample

#### Randomness and Quantity are Key



• Choose the sample area The area will depend on how many individual treatments you will want to apply. Therefore if you want to treat the front lawn differntly than the back you should make samples for each area.

Chin

• Gather your equipment To take a good sample you will need a spade or soil probe, a plastic bucket, and a clean paper bag

#### • Sample Depth

On average a soil sample should be from a profile of 4 to 6 inches in depth. If you are using a spade only the center inch column of soil should be collected.



#### Random Sampling

Within the area you wish to sample randomly select between 8 and 10 locations to pull a sample. Being random ensures a better snapshot of the entirety of the area.

#### • Mix well

Mix well in a plastic bucket and bring to the extension office about a pint of soil from each area to be tested.



Home Vegetable Gardening in Kentucky



To the left you see a image of one of our most popular publications. This is ID-128 (Growing Vegetables in Kentucky. This publication is chocked full of very useful information. The chart below is just one useful reminders of when it is appropriate to plant our vegetables for our

		t Safe Plantii	ng Date	Latest	Safe Planting	g Date <sup>1</sup>
Crops	Western	Central	Eastern	Eastern	Central	Western
Asparagus (crowns)	Mar 10	Mar 15	Mar 20		(Spring only)	
Beans (snap)	Apr 10	Apr 25	May 1	July 15	July 25	Aug 1
Beans (lima)	Apr 15	May 1	May 10	June 15	June 20	July 1
Beets	Mar 10	Mar 15	Mar 20	Aug 1	Aug 10	Aug 15
Broccoli (plants)	Mar 30	Apr 5	Apr 10	July 15	Aug 1	Aug 15
B. Sprouts (plants)	Mar 30	Apr 5	Apr 10	July 1	July 15	Aug 1
Cabbage	Mar 15	Mar 25	Apr 1	July 1	July 15	Aug 1
Carrots	Mar 10	Mar 20	Apr 1	July 1	July 15	Aug 1
Cauliflower (plants)	Mar 30	Apr 5	Apr 10	July 15	July 20	Aug 5
Celery	Apr 1	Apr 5	Apr 10	June 15	July 1	July 15
Chard	Mar 15	Mar 20	Apr 1	June 15	July 15	Aug 1
Collards	Mar 1	Mar 10	Mar 15	Aug 15	Aug 20	Aug 30
Sweet Corn	Apr 10	Apr 20	May 1	June 15	July 10	July 20
Cucumbers	Apr 20	May 1	May 10	June 15	July 1	July 15
Eggplant (plants)	May 1	May 10	May 15	June 1	June 15	July 1
Garlic	-	-	-	Nov 1	Nov 7	Nov 15
Kale	Mar 10	Mar 20	Apr 1	July 15	Aug 1	Aug 15
Kohlrabi	Mar 15	Mar 20	Mar 25	July 15	Aug 1	Aug 15
Lettuce (leaf)	Mar 15	Mar 25	Apr 1	Aug 1	Aug 15	Sept 1
Lettuce (bibb plants)	Mar 15	Mar 25	Apr 1	July 15	Aug 1	Aug 15
Lettuce (head plants)	Mar 15	Mar 25	Apr 1	July 1	July 15	Aug 1
Muskmelons	Apr 20	May 10	May 15	June 15	July 1	July 15
Okra	Apr 20	May 10	May 15	July 1	July 15	Aug 1
Onions (sets)	Mar 1	Mar 10	Mar 15		(Spring only)	
Onions (plants)	Mar 15	Mar 25	Apr 1	June 15	July 1	July 15
Onions (seed)	Mar 10	Mar 20	Apr 1	June 1	June 15	July 1
Parsley	Mar 10	Mar 20	Apr 1	July 15	Aug 1	Aug 15
Parsnips	Mar 10	Mar 20	Apr 1	June 1	June 15	July 1
Peas	Feb 20	Mar 1	Mar 15		(Spring only)	
Peppers (plants)	May 1	May 10	May 20	June 15	July 1	July 15
Irish Potatoes	Mar 15	Mar 15	Mar 20	June 15	July 1	July 15
Sweet Potatoes	May 1	May 10	May 20	June 1	June 10	June 15
Pumpkins	Apr 20	May 5	May 10	June 1	June 15	July 1
Radishes	Mar 1	Mar 10	Mar 15	Sept 1	Sept 15	Oct 1
Rhubarb (crowns)	Mar 1	Mar 10	Mar 15		(Spring only)	1
Rutabaga	Mar 1	Mar 10	Mar 15	July 1	July 10	July 15
Southern Peas	Apr 20	May 5	May 10	June 15	July 1	July 15
Snow Peas	Feb 20	Mar 1	Mar 15	July 20	Aug 1	Aug 8
Spinach	Feb 15	Mar 1	Mar 10	Aug 15	Sept 1	Sept 15
Summer Squash	Apr 20	May 10	May 15	July 15	Aug 1	Aug 15
Tomatoes (plants)	Apr 20	May 5	May 15	June 1	June 15	July 1
Turnips	Mar 1	Mar 10	Mar 15	Aug 1	Aug 10	Aug 20
Watermelons	Apr 20	May 5	May 15	June 15	July 1	July 15
Winter Squash	Apr 20	May 10	May 15 May 15	June 15	July 1	July 15

<sup>1</sup> Based on average of early maturing varieties. Mid-season and late-maturing varieties need to be planted 15 to 30 days earlier than latest date. Nearly all of the fall-planted garden crops will require irrigation during dry periods. Additional insect controls may be necessary for these tender young plants.

area. This publication is free just stop by the office and pick up a copy.

Below you see an opportunity to learn more about blueberry production. My article on pages 10-11 about soils is particularly useful if you are planning blueberries. Blueberries are one of the crops that need a lower pH in the soil that we just don't typically have and it is very important to get the soil correct before you put in a blueberry crop.

## **Blueberry Production**

### **Growing Blueberries in Kentucky**

Want to grow blueberries for your home? Or, are you a commercial grower interested in adding blueberries to your production?

Join us as we share all about growing blueberries for local sales, U-pick, and home use.



### Contact your local extension office with any questions.

### April 7

6:30pm / 5:30pm CDT

This class will be offered via Zoom.

Use the link below to join:

https://uky.zoom.us/ j/85916024438



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

#### (Continued from page 2)

Crocker said one way to keep invasive plants from spreading is simply cleaning after a hike.

"This can prevent invasive plants, whether be it seeds or tiny bulbils, from being accidentally moved by hikers on trails," she said. "This can easily happen, especially under muddy spring conditions."

Hikers should make sure to clean off any boots, clothing or equipment, especially after visiting a place known to contain invasive species.

"Whether it is rinsing the mud off boots before the next hike or cleaning the wheels of an ATV between muddy adventures, preventing the arrival of invasive plants this way is much easier than trying to manage them once they have already established," said Crocker.

#### (Continued from page 9)

not 100% sure of the ecological impact of the Joro spider when it moves into new areas." One of the biggest annoyances reported by people living in areas where the spider is already established is the size of their webs. Joro spiders' webs can be meters long and are stronger than the webs of native spiders. People may accidentally run into them and find them more annoving to untangle from.

Kentucky is home to several spiders that are similar to the Joro spiders in size and color. These include the banded garden spider, black and yellow garden spider and the golden silk orb weaver. Each of these spiders will have different colorations and leg fuzziness than the Joro spider. These spiders are also harmless to people and pets. **UK entomologists** want to hear from those who suspect they have found a Joro spider in Kentucky.

Hikers should make sure to clean off any boots, clothing or equipment, especially after visiting a place known to contain invasive species.



www.FromThe WoodsToday.com



The home for Arthro-Pod,the podcast that teaches you about the weird and wonderful world of insects!



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