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The Garden Spade **U.S. School Garden** Special COVID-19 Issue

"Reliable, Responsive and Relevant Information for the Missouri Gardener"

Victory Gardens in the Time of COVID-19

Katie Kammler, MU Extension Field Specialist in Horticulture

The term "Victory Garden" has been in use for over 100 years. It was first developed in the US in 1917 to help alleviate the severe food shortage in Europe during World War I. Imported foods, goods, and agricultural harvests were sent to soldiers overseas instead of being consumed stateside.

PLANT A VICTORY GARDEN



Victory gardens resurged again during World War II with promotions like "Sow the Seeds of Victory," "Dig on for Victory," and "Your Victory Garden Counts more than Ever". In World War II, the war gardens were not in response to a food shortage as experienced in World War I but as proactive way to prevent that. In 1942, around 15 million families planted Victory Gardens and by 1944, it had increased to an estimated twenty million gardens producing roughly 8 million tons of food.



In 1942, it was recommended that the plots be 1/10 of an acre for each member of the family, containing ten or more different kinds of vegetables, planted in succession to reap a larger harvest over time. By 1944, approximately 40% of all vegetables grown in the US came from Victory Gardens.

We can do the same thing now

in the pandemic of 2020. This is a great way to help others - enabling donations of fresh produce to friends and neighbors in need. It is good experience for kids at home to learn how to grow food. I still have many Continued to page 2

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Victory Gardens in the Time of COVID-19

Katie Kammler, MU Extension Field Specialist in Horticulture

Continued from page 1 memories of gardening when I was a kid of pulling morning glory weeds before I could even pronounce the name correctly, having fun watering, playing in the dirt and harvesting vegetables.



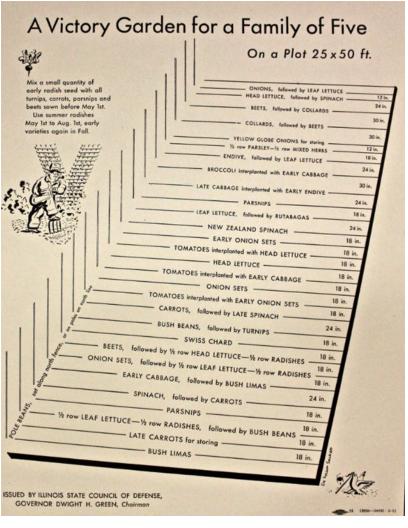
Popular produce for Victory Gardens included beans, beets, cabbage, carrots, kale, kohlrabi, lettuce, peas, tomatoes, turnips, squash, and Swiss chard. All of these are still great options today. MU Extension's Vegetable Planting Calendar is a great guide for planting dates depending on where you are located in the state. It also has recommendations on how many feet of row per person to plant, depending on fresh use or processed. <u>https://extensiondata.missouri.edu/pub/pdf/agguides/hort/g06201.pdf</u> Use the space you have and enjoy the time outside, away from the constant stream of depressing news. Vegetables can also be grown in containers so small spaces can be utilized.

In the days of the Victory Garden, families had enough produce they could also preserve it for feeding families year-round. If you have not preserved produce before, MU Extension also has guides on freezing, drying or canning. There are Health and Nutrition Specialists that can answer any preservation questions. Just

contact your local MU Extension Office.

It is a great time to get the youth involved! 4-Hers were involved in Victory Gardens in the 1940s and are still active in helping with food drives for local food banks. Getting kids invested in helping their communities by growing food is a great use of time spent at home. It is practical education in science, figuring out everything that is needed for plants to grow and produce food to feed us. It also increases problem solving skills to figure out what might be wrong, be it insects, weeds, diseases, or fertility.

Growing a modern-day Victory Garden is a worthwhile endeavor as we all rethink our access to food under stay at home orders. It is also a way to help out others in need that may not have access or resources to grow their own food. If you have produce to donate, check out <u>https://feedingmissouri.org/</u> to see where the need is in your local area. Grow a row to help those in need during these tough times and help reduce your stress level with exercise and growing plants!



Gardening Tasks During Stay at Home Orders

Donna Aufdenberg, MU Extension Field Specialist in Horticulture

I have had several people fuss at me that they just don't know what to do with their time at home. Here are some of my suggestions!

- Now is a good time to start weeding, cleaning and tidying garden beds. At this point, lots of new growth is occurring in the landscape. Areas with dead or diseased plant materials can be removed and disposed.
- Mulch is a great addition for weed control, conserving moisture in the hot summer and adding to the appearance of garden beds. A mulch layer of 3 to 4 inches is best.
- In the vegetable garden, cool season crops such as cabbage, broccoli, and kohlrabi can still be planted from transplants. Potatoes can still be planted

from seed potato pieces and onions can be planted from slips or sets. Radishes, carrots, lettuce, peas and spinach can be sown from seed. Warm season crops such as tomatoes and peppers need to be delayed until May 1st when the ground will be warm enough.



• When space, time and ability keep you from traditional gardening methods, remember that container gardens are very versatile. You can grow flowers, herbs or vegetable in them. Gardeners use all types of containers – buckets, kiddie swimming pools, storage containers, rusty old wheel barrows, etc. Regardless of what you use, just make sure the container has holes.

- Consider starting an herb garden. This is one of my favorite things to do. Once again, you can plant them in the ground or in pots. Herbs are versatile and easy to grow either way. In a 15 to 18 inch pot, you can put three herbs. Simple herbs to plant are basil, thyme, oregano, rosemary, sage or chives. I like these because they are easy to grow, easy to harvest and easy to use!
- Another part of keeping a beautiful yard is to take a look at your "hardscapes". Consider the porch, driveway, patios, sidewalks, fencing or even the vinyl siding. Do they need maintenance? Do they need to be power-washed? If you use cleaners, just make sure they are plant friendly.
- Inspect your garden tools. Now is a great time to take time to organize and clean them. Discard broken or badly worn ones and start to make a list of what needs to be replaced. Also, don't forget to replace your garden gloves!
- Add decorative items to your landscapes. Gazing globes, decorative trellis, fencing, sitting benches and decorative mailboxes for storing tools are really nice additions to the garden areas.
- If you have children or grandchildren, now is the time to get them involved in gardening! Activity sheets can be found on the last two pages of the newsletter to get them interested.

Garden Planning

This is a great time to spend time walking around your property. If not for mere pleasure, then start taking notes on the things that need to be done around the yard and in the landscape.

- Look for gaps in your landscape.
 What are some flowers that you would like to add?
- Dead shrubs? Maybe it's time to pull them out and prep the bed for planting.
- Minor reseeding of grass can be done. It may need a bit of tender loving care as the summer heat and dryness occurs.
- Want to attract butterflies? Try planting plots of zinnias, sunflowers and marigolds. These are easy to start and they have showy blooms.
- Weedy problem areas? Try ground cover and mulch.

COVID-19 Farmers Markets

Steps for Customers to Shop Safely

Farms are essential businesses

COVID-19 has NOT been shown to be spread by food

However, if you are feeling sick or were recently exposed to COVID-19...

please stay home!





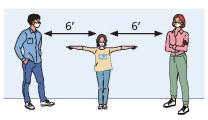
Remember to use hand-washing or sanitation stations.



Wash all produce before consuming.

- Avoid touching your face and cellphone while you are shopping.
- If your market has a website or social media, see what is available and make a list of what you need.
- Enter the market at designated points for the safety of customers and vendors alike!
- Some vendors accept debit/ credit/SNAP cards. Avoid using cash when possible.
- Please
 be patient
 while making
 purchases.
- Avoid socializing beyond completing the transaction for your product.
- Pay attention to market signs, and follow their instruction.
- Follow CDC guidelines: https://www.cdc.gov/coronavirus/2019-ncov.
- Contact your county health department for specific guidance and regulations.
- COVID-19 resources: https://extension2.missouri.edu/covid-19-resources-public

Adapted with permission from Community Farm Alliance's "Farmers Market Operations and COVID-19: Customer Guide."



Stay at least 6 feet away from other people whenever possible.



Choose items with your eyes — not your hands and let the vendors handle the product you selected.



COVID-19 Farmers Market Vendors

Setup, Safety and Operations

Farms are essential businesses

COVID-19 has raised concerns about food safety and personal safety in public spaces.

Market vendors can take actions to ensure the safety of their produce and their customers' shopping experience.

Please stay home

if you or a worker are sick or have recently been sick.







- If possible, designate one person to handle money and another to bag produce.
- ▲ Display and sell only whole, uncut produce. NO SAMPLES.
- Sanitize or wash your hands before and after each transaction.
- Clean all tables, products and signs that will be on display. Disinfect surfaces touched by customers.
- Don't reuse unlined boxes to transport produce. Use a disposable plastic liner or plastic crates that can be washed and sanitized.
- Sanitize or wash hands after using the restroom, coughing, sneezing or smoking.
- Avoid physical contact with customers — maintain social distancing.

• Follow CDC guidelines: <u>https://www.cdc.gov/coronavirus/2019-ncov</u>.

- Contact your county health department for specific guidance and regulations.
- COVID-19 resources: https://extension2.missouri.edu/covid-19-resources-public



Prevent customers from touching product:

- Separate customers from products.
- ▲ Use creative booth design and display signage such as "Shop with your eyes. Ask me for help."

Do not harvest, package or sell produce if you are or have recently been ill.



Farmers Market Vendors

Before you begin...

- Are you sick, or do you think you have been exposed to COVID-19? If so, please stay home!
- Review this COVID-19 specific guidance for safe setup, operations and customer interactions.
- If possible, designate one person to process payments while the another takes and fulfills orders.
- Display and sell only whole, uncut produce and prepackaged foods on a nonporous plastic table or tablecloth that can be easily disinfected.
- Coronavirus can survive on metal, glass and plastic for as long as 72 hours and on cardboard up to 24 hours. Consider using only plastic crates that can be disinfected OR using disposable plastic liners in cardboard boxes.
- Disinfect nonporous surfaces with a bleach solution of 5 tablespoons (¹/₃ cup) of bleach to 1 gallon of water, or 4 teaspoons bleach to 1 quart of water.

Customer interactions

- Limit conversation to reduce crowding around your booth.
- Don't touch, shake hands, hug or have any other personal contact with customers — even friends and family.
- Remind customers to keep at least 6 feet of space between them.
- Do not allow customers to touch products before buying them. Have customers "choose with their eyes" and refer to signs to make their selections. Then you bag and fulfill their orders.
- Instruct customers to wash produce before eating it.
- Minimize cash transactions.
- Devise a way that customers can order ahead by phone, email or online store — and spread the word about this option.

Sanitation checklist

- □ Sanitize your hands before and after the market and after every transaction, even if you are wearing gloves.
- □ Clean all tables, products and signs that will be on display.
- □ Wipe down your card reader with soap and water on a microfiber cloth at the end of the day.
- □ At least once an hour and at the end of the day, disinfect all metal, glass and plastic surfaces that have been touched by anyone you, your workers or your customers.
- □ Sanitize hands after going to the bathroom, coughing or sneezing.
- □ Use a paper towel to touch the hand-washing station handle or sanitizer pump.
- □ Avoid touching your face.
- Only use cellphones when making transactions.



MU Extension offers Town Hall Meetings Online for Farmers and Gardeners

COLUMBIA, Mo. – University of Missouri Extension is offering online town hall meetings led by agronomy, livestock and horticulture specialists.

"MU Extension has long served as a trusted and necessary resource to help Missourians get food on the table and gardens in the backyard," says Lee Miller, coordinator of MU's Integrated Pest Management program. "We'll strive to continue this even through COVID-19."

State and regional extension specialists will hold the weekly town hall question-andanswer sessions beginning in April.

Times and topics: Wednesdays 11 a.m.-noon, home horticulture; noon-1 p.m., commercial horticulture; Thursdays noon-1 p.m., forages and livestock; Fridays 7-8 a.m., field crops.

The sessions will be via the Zoom teleconferencing system. Registration is required to receive email with the Zoom link and instructions. Register and submit questions at <u>ipm.missouri.edu/TownHalls</u> (opens in new window).

"This effort will bridge the distancing divide that restricts our site visits and face-to-face interactions to provide the service and support our farming community needs during this crisis, when plants and animals still require care," Miller says.

MU Extension specialists continue to post timely articles to the MU Integrated Pest Management website.

Writer: Linda Geist; Media Contact: Lee Miller 573-882-5623

Best Practices for Master Gardeners during COVID-19 After Stay-At-Home Orders Have Been Lifted

Donna Aufdenberg and Kelly McGowan, MU Extension Field Specialists in Horticulture

Gardening provides many health benefits that are needed during stressful times. Are you thinking about working as a Master Gardener volunteer **once the stay at home orders have been lifted?** Consider these:

- Check with local authorities on restrictions that might apply to your garden and group activities.
- Consider limiting your volunteer site-work during times when the number of visitors are low or nonexistent. If that is not possible, not working in that location or garden may be the wisest choice.
- The CDC recommends wearing a mask while in public places. Stay home if you are sick or have been around anyone who is sick.
- Consider the necessity and potential risk of the activity. Evaluate activities based on whether they can be delayed or that bring people into close contact with others. For essential activities, practice social distancing if others are present.
- Wash hands frequently especially before entering volunteer sites and upon exiting. Have hand sanitizer available if no hand washing facilities exist.
- Conduct necessary meetings online or by phone.

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Missouri Food Finder Connects Consumers with Local Food

Katherine Foran, Editor for University of Missouri Extension

COLUMBIA, Mo. - The Missouri Food Finder (www.MOFoodFinder.org) is a new online tool that easily connects Missouri consumers with people growing and selling locally produced food in their region.

Developed by University of Missouri Extension's Center for Applied Research and Engagement Systems (CARES) in collaboration with the Missouri Department of Agriculture, the Missouri Food Finder helps address an immediate need, said Jo Britt-Rankin, associate dean with MU Extension Human Environmental Sciences.

The economic impact of COVID-19 is expected to hit local producers and growers hard, threatening businesses and livelihoods as they are cut off from their usual markets and selling opportunities, said Marshall Stewart, MU vice chancellor for extension and engagement. Consumers face the loss of many usual food options and have heightened concerns about how and where they will be able to buy food.

"This easy-to-use resource connects Missouri growers and families in powerful ways that will help farmers and small businesses continue to thrive, while also helping families find nutritious local and regional food options," Stewart said. "I'm proud of our team for seeing this problem and so quickly offering a practical solution."

As with the 4-H Feeding Missouri statewide food drive collaboration with Drive to Feed Kids, MU Extension and Engagement continues to focus on the state's food insecurity challenges, Stewart said. "We

know that during these extraordinary times, we need extraordinary solutions to resolve food insecurity challenges."

Missouri Food Finder - on the All Things Missouri site - provides one-stop access for businesses and consumers alike.

Farmers, growers and local suppliers can enter basic information about the food they sell, their hours, location and contact information. That information will automatically show up on a Missouri map. Consumers simply type in their location to see what options are available in the area they select.

The Missouri Food Finder tool was inspired by Lorin Fahrmeier, MU Extension's Farm to Institution project coordinator. The Farm to Institution project connects farmers with school cafeterias and other institutional settings to introduce more fresh, high-quality, locally grown food into meals.

Fahrmeier and her husband, Bret, also have a fruit and vegetable farm in Lexington, Missouri, that has been in their family since 1947. Several weeks ago, they shifted exclusively to online sales of produce boxes, trying to get ahead of new provisions enacted due to the COVID-19 pandemic. About the same time, she noticed that Nadler's, a butcher shop in nearby Wellington, had stopped its popular



A produce pack from Fahrmeier Farms; Photo credit: MU Extension

catering service and pivoted to selling a variety of food products - "basically shifting back to a rural grocery store model,"Fahrmeier said.

"It dawned on me we could be witnessing a resurgence of the rural grocery store that's been missing so long as an entrepreneurial outlet for farmers and as a convenience for consumers," she said. "We've been driving into town for so long we'd forgotten what's been missing. This could be a way and a

Continued to page 9

Missouri Food Finger Connects Consumers with Local Food

Katherine Foran, Editor for University of Missouri Extension

Continued to page 8 come reconnected to these local and regional food systems again."

The next step was figuring out how to help consumers find these local food sources and businesses. To develop the tool, Fahrmeier and MU Extension's Human Environmental Sciences team relied on CARES, which had experience working on food systems projects.

The Missouri Food Finder has the capacity to help growers and consumers envision and create a more local and resilient food system that has the potential to be sustained beyond the COVID-19 response, said CARES director Chris Fulcher.

"We're building this together," Fahrmeier said. "Now more than ever producers and growers have to learn to be more market-savvy and step out of their comfort zone, and we hope this tool can be a good start in helping to sustain that."



Missouri Food Finder at All Things Missouri Website can be found at Mofoodfinder.org Photo Credit: MU Extension

Garden Quote

The greatest gift of the garden is the restoration of the five senses. ~Hanna Rion

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Upcoming Events

As we monitor the national, state and university response to contain the spread of COVID-19 and keep public health top priority, all face to face MU Extension programming has been suspended through May 15, 2020. This also includes all Extension Master Gardener Program project meetings, programs, and events.

University of Missouri Extension Offices have also been temporarily closed, however Extension Specialists are teleworking from home. You may contact any of them by phone or email. You may also visit your local MU Extension County Facebook page to find out what is occurring locally in regards to posts, web trainings and opportunities, and Extension newsletters.

April and May 2020

Town Hall Meetings - Wednesdays going forward until further notice. It is a great opportunity to ask your gardening questions and learn from others. **To register, go to <u>ipm.missouri.edu/TownHalls</u>**

11:00 Home Horticulture Town Hall Meeting

12:00 Commercial Horticulture Town Hall Meeting

April 30, 2020 from 6:30 to 9 p.m. Container Grown Gardening - Zoom Session <u>https://extension2.missouri.edu/events/container-grown-gardening-zoom-session</u>

April 29, 2020 from 6 to 9 p.m. Garden soils and Composting -Zoom Session <u>https://extension2.missouri.edu/events/garden-soils-</u> and-composting-zoom-session

April 29, 2020 thru May 21, 2020 Ozark Ag 101 - Zoom Sessions. Topics covered: Soils, Livestock, Forages, Vegetable Production, Fruits and Berries, Structure Facilities and equipment, and Growing Your Farm Business. <u>https://extension2.missouri.edu/</u> events/ozark-ag-101-zoom-sessions



The Garden Spade

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Each month there is a title picture on the front cover of the newsletter. This month: Historical Victory Garden Poster

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Kids Gardening Activity

Make a Butterfly Garden

By Donna Aufdenberg Horticulture Specialist, MU Extension, 573-243-3851 Aufdenbergd@missouri.edu

Attract These Butterflies



Black Swallowtail



Monarch



Common Buckeye



Eastern Tiger Swallowtail



Painted Lady

Attract These Caterpillars



Monarch Caterpillar

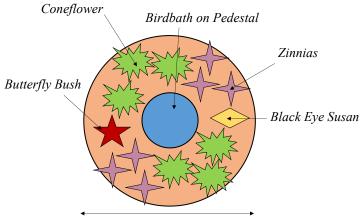


Black swallowtail

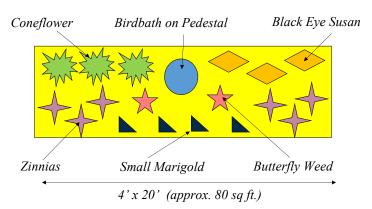
How to make a butterfly garden:

- Find a sunny location at least 6 hours of sun
- Choose a 100 square foot area (equivalent to a 10x10 area but does not have to be in one area. Needs to be relatively close though)
 - Plant lots of flowers! Different colors Different shapes Different sizes and heights
- Combine adult (nectar) and caterpillar food sources
- Plant at least 10 plants made up of at least two different flowers (more than 2 or 3 species of flowers will increase the chances of butterflies)
- Small clay saucer or birdbath with sand or small pebbles in the bottom with shallow water for butterfly puddling
- Rocks for basking in the sunlight on cool mornings
- Fruit peelings like watermelon or cantaloupe for some butterflies

Examples of Butterfly Gardens



9' diameter (approx. 80 sq. ft.)



Nectar plants you can start from *seed...* Black-eyed Susan, Cosmos, Gaillardia, Marigold, Zinnia, Snapdragons, and Sunflowers

Nectar plants you can get as transplants...

Aromatic aster, Butterfly bush, Coreopsis, Lantana, Milkweed species including butterfly weed, Monarda, Phlox, and Purple coneflower

Common host plants *for caterpillars...* Dill, Hollyhock, Milkweed Plants, Parsley, and Snapdragons



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Kids Gardening Activity Three Sister Garden

By Donna Aufdenberg Horticulture Specialist, MU Extension, 573-243-3851 aufdenbergd@missouri.edu

By the time Early European settlers arrived in America, Native Americans had been planting the "Three Sisters Garden" for hundreds of years. It used corn, beans and squash to create a partnership where each vegetable benefits from one another. The Europeans might not have survived had they not learned this technique.

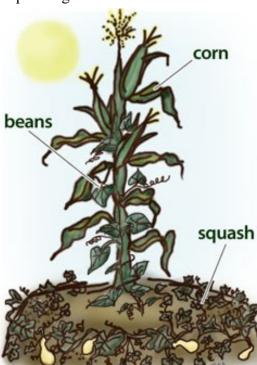
- Corn provides a natural pole for the bean vines. •
- Beans help to stabilize the corn plant and they fix • nitrogen on their roots to improve the fertility of the plot. Corn requires a lot of nitrogen.
- Squash vines are like a living mulch. They shade • the soil, preventing moisture from evaporating and preventing weeds. The prickles on the leaves deter animal pests.
- Later the vines of the beans and • squash can be left in the garden as compost/organic matter.

How to plant:

- Plan and select your site. • Consider planning on paper first. Choose an area with at least 6 to 8 hours of sunlight and access to water.
- Prepare your soil when the danger • of frost has passed. Break up the soil and rake the soil into a mound about a foot high and 4 feet wide. Multiple mounds can be made but space them at least 3 to 4 feet apart.
- Plant six corn kernels an inch deep and about 10 inches apart.
- When the corn is about 5 inches • tall, plant four bean seeds, evenly placed around each stalk.
- A week later, plant 6 squash seeds, evenly spaced around the perimeter of the mound.

What do you need?

- A planting area in full sun \Rightarrow
- Soil preparation tools \Rightarrow
- \Rightarrow Access to water
- \Rightarrow Seeds: corn, pole beans and winter squash or pumpkins
- \Rightarrow Measurement tools (rulers, yardsticks or tape measure)
- \Rightarrow Sticks or plant labels for writing names of plants.



Direct-Sow, Easy-to-Grow: The Ancient Three Sisters Method

Image: University of Illinois Extension

Maintenance: As your plants grow, weed, water and fertilize once corn is kneehigh. If beans are not "winding" their way around the corn, youngsters can help by moving the tendrils around the stalks. Gently move squash vines into walkways to allow more room for corn and beans.

Substitutions can be used:

For Corn: Sunflowers or Jerusalem artichokes (can become invasive)

For Squash: Sweet potatoes, melons or ornamental gourds For beans: vining cucumbers

Great additions:

A Scarecrow!

A Straw bale for sitting and enjoying your Three Sisters Garden



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