

Garden Talk

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Upcoming events:

- Feb 16 MG Book
 Club
- Feb 20 Master Pollinator Steward Program
- March 2 Pruning with Ben
- March 2—MG CE iNaturalist class
- March 30 Healthy Yards for Healthy Streams







Thank you for attending the Master Gardener Annual Meeting this past Saturday. Representatives from over 22 volunteer sites were present to talk with over 200 Master Gardeners about volunteer opportunities. MGs

could also talk with members of the Advisory Committee and Speakers Bureau. The meeting began with a trash talk by Kemper's Phil Egart, followed by Maypop's Tammy Behm who talked about new sustainable efforts in the retail horticulture industry. The Annual Meeting and the Outreach Committees did a great job putting the event to-



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gether. Master Gardener John Lorenz took the photos.

Nature Art



Evolution at the Plant Doctor Desk by Master Gardener Ann Robison

It was a blustery frigid Saturday afternoon in January when I was on duty at the Plant Doctor Desk at the Missouri Botanical Garden. I reflected on the wisdom of gardeners who were staying warm and cozy somewhere, maybe reading seed catalogues. Only one person came in, with a question about split bark. The peaceful interlude gave me and my co-worker, Pam Hass, time to visit with Daria, the new Supervisor at Kemper. She was full of enthusiasm and information about changes coming to the building. "Take a look at these pictures", she said as she scrolled through albums on her cell phone. "We're going to move the Plant Doctor Desk to the first floor and construct an island where both the Receptionists and Plant Docs will be located. Last week we used cardboard to mock up the layout to be sure everything will fit." I asked about the 2 libraries. "Yes," she said, "We're going to combine them but isolate those reference materials used most often by the Plant Docs."

I looked around at the desk where I had volunteered for 21 years, the shelves of books and the 2 computers. I was in my comfort zone. "Changes," I said, "Do we have to have changes?" But then I realized that there had been many changes at the desk over those 21 years. Back in the day, things were rather primitive at the Plant Doctor Desk.

I finished Master Gardener Training, Levels 1 and 11 in 1997-98 on the campus of the University of Missouri. Classes were taught via interactive television starring professors from U of MO Columbia. In addition to Colombia, our class was linked with those in Rolla and Kansas City. It was the first time this method had been used and there were lots of technical difficulties. We trainees were able to question the instructors. Sometimes it worked smoothly but often it didn't. Each area seemed to have questions peculiar to its location. Rolla had lots of farming questions. St. Louis, lots of urban gardening questions.

There were 25 in our class. We had been selected from a group of about 300 after answering a questionnaire, being interviewed by Garden staff, and sending in a \$100 fee. Level II training followed right after Level 1. On the last day of class the Extension agent said, "In order to maintain your Master Garden status you must complete 50 hours of volunteer work and 10 hours of continuing education yearly." Volunteer possibilities were outlined for us. Some were in the community and some at the Botanical Garden. I became a Plant Doctor by raising my hand.

Master Gardener John Stephens

August 11, 1921 - January 16, 2019



After retiring as a director of international research for the Agricultural Division at Monsanto, John Stephens became a Master Gardener in 1986. Not only was he a Horticulture Answer Service volunteer and Plant Doctor, but John also answered online questions received through the Kemper Center's website GardeningHelp.org. In 2009 he answered 1790 emails. That is probably where he came up with the idea for the monthly Q. and A. gardening column posted on the Master Gardener website.

When John became a Master Gardener he had extensive herbicide and pesticide

knowledge, so he was the Kemper chemical expert. He decided he wanted to know more about turf and it wasn't long before he became the Kemper turf expert. He always answered questions in a measured and thoughtful way—Sometimes he even made you feel like you came up with the answer all on your own.

MG Linda Harmon remembers John's *radio voice*, and Chip Tynan said John was a history buff who was especially interested in presidential history. Apparently, John and MG Jim Massey would spend hours talking about presidents, wars, and all things history.

Several Master Gardeners sent heartfelt messages when they heard John had died. Here are a few:

"John was an amazing living individual who was a walking dictionary. I am so blessed to have spent so many years at his side doing plant doctor. He taught me so much about everything."

"So our dear knowledgeable, gentle John has left this beautiful world, but we are all richer in our love and appreciation of plant-life because of Dr. John Stephens."

John is a treasure we just couldn't do without," said Glenn Kopp, the former Garden's plant doctor manager. "John helped tens of thousands of gardeners and willingly shared his knowledge with other volunteers. John brought a deep knowledge of plants plus a long career of working with plants to his volunteer service."

Interesting Stories



<u>George</u>, a Hawaiian tree snail, *Achatinella apexfulva*, the last known snail of his kind, died on New Year's Day, according to the Hawaii Department of Land and Natural Resources (DLNR).

The death of George, and the resulting extinction of this species of tree snail should serve as a wake-up call, highlighting a much larger issue in Hawaii's forests that's been going on for a century.

It appears that the rosy wolfsnail, *Euglandina rosea*, is responsible for the extinction of up to a third of

Photograph: David Sischo

the native snails. This snail was brought to the Hawaiian Islands

in 1955 to eat giant African snails. Well, it looks like the rosy wolfsnail liked the tree snail better and started eating through entire species at an alarming rate.



rosy wolfsnail, Euglandina rosea

https://www.nationalgeographic.com/animals/2019/01/george-the-lonely-snail-dies-in-hawaii-extinction/

Ted Talk: The Science in Our Food by Dr. Jim Carrington TEDxGatewayArch

Jim speaks on the benefits science has allowed for in the advancements in growing food. He suggests that global changes will create a need for us to leave romantic visions of farming in our past. With exploding population growth and climate change, we are at an important cross roads. Jim Carrington is president of the Donald Danforth Plant Science Center, a St. Louis-based non-profit organization that focuses scientific research and innovation at the nexus of food security and the environment. Jim leads the Danforth Center in delivering on its mission to improve the human condition through plant science. With nearly 250 employees, the Danforth Center is the largest independent plant science institute in the world. This talk was given at a TEDx event using the TED conference format but independently organized by a local community.

Learn more at http://ted.com/tedx

Resurrecting the Genes of Extinct Plants

"Gingko Bioworks, a syntheticbiology company based in Boston, Massachusetts, has successfully concocted a perfume using floral scents that have been missing from nature for decades."

The company used the DNA of a dried Hawaiian mountain hibiscus specimen. Extinct since the late 19th, early 20th century the DNA of the plant had become damaged. So the <u>Gingko Bio-</u> <u>works</u> scientists reconstructed the compounds responsible for odor. They did this by using DNA from modern plants to fill in the gaps in the genetic code. The team created 2000 gene variants that were then analyzed by an olfactory artist named Sissel Tolaas. She mixed the molecules into an appealing "piney, earthy" scent. The <u>project</u> was intended more as an art project than one to rival those by Tom Ford, Chanel, and Dior.

Chapter 3 Soils by MG Dick Cone



 With this issue of dirt to living soil & health we add context to understand issues.

 J. Richard Cone - October 2018

 Illustration - Slizabeth Cone Preston

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I am only including the first 2 paragraphs of Dick Cone's final chapter in his incredible series of articles on soils. I have attached the remaining portion of the article that Dick wrote to share with the St. Louis Master Gardeners. Thank you Dick.

Context has to be considered when discussing soil fertility

In Albrecht/Kinsey soil fertility analysis the goal is to return nutrients to our foods that have gone missing with the "Big Farm" program that squeezed the small farmsteads off of their land by first controlling pricing. I recall the summer we visited Grandpa Brookhart and how he laughed as he told us that the new Government program offered him and other farmers money not to plant crops. Imagine getting paid not to farm. Some were quick to take it up. At that time just about all farms had big gardens and most had some chickens, hogs, one or more cows, maybe a goat to eat brush. Most had a pond for fish and raised bullheads. They were operating sustainable farms without toxins before the federal government got involved in pricing and controlling acreage.

The Poirot book "Our Margin of Life" is actually a record from six decades past how to restore American farms. Louis Bromfield's "Malabar Farm" is another example. Dr. Albrecht and J.I. Rodale were invited to consult. Rodale founded "Organic Gardening" Magazine and I devoured every issue. Chapt. 13 in Malabar Farm gives a strong endorsement to the Albrecht system. Rodale went home when he found out that lime as calcium carbonate was being used in the Albrecht system along with other minerals for soil balancing. Rodale wanted manure instead. It was a matter of failing to understand that microbes do the work in turning inorganic minerals into organic compounds.

Save the Dates



Saturday, March 2 - 9:00 a.m. to noon

Pruning

One hour pruning lecture at the Kirkwood Extension office and two hours of hands-on pruning at a master gardener's house in Kirkwood. Details to follow with registration available in 2 weeks.

Very limited space—cost and details will be emailed soon.



Saturday, March 30 in the Kemper Classroom One-Day Workshop with Lunch

Healthy Soils, Healthy Plants Right Plant, Right Place Basic Lawn Care Vegetable, Flower Beds and Groundcover Basic Tree Care IPM Sustainable Landscaping

Details such as cost & registration will be available the first of March.

Trees, Vineyards, Brats & Wine Bus Tour

SATURDAY, SEPTEMBER 21, 2019

8:30 a.m. sharp: Group leaves Extension Office at 132 East Monroe, Kirkwood. Our guide for the day is Linda Koenig, a fellow St. Louis Master Gardener, and regional tour operator/guide. Linda will regale us along the way with stories about the Missouri Wine Industry, Mid-Mississippi Valley German settlement, and Hermann history.

10:00 a.m. to 12:00 p.m.: Begin VIP "Grapes to Glasses" tour. Since we are touring right in the middle of the 2019 harvest, we will be treated to behind the scenes areas that are normally off limits to the general public. Expert winemaker Dave will take us into the vineyards to explain and answer questions about wine-grape growing and Stone Hill's history, and he'll also take us into the press house, tank building, and Stone Hill's famous 1800's cellars. Along the way, we will taste various wines from the barrels and tanks, pared with snacks. Our personal wine glass will be ours to take home. We'll have a few minutes for purchases at the winery at the end of the tour.

12:15 to1:15 p.m.: Enjoy a delicious bratwurst tasting and German lunch at the Hermann Wursthaus. We'll have an award-winning brat on a bun with kraut and mustard, German potato salad, peach pecan bread pudding, and a beverage.

1:45 to 3:15 p.m.: Visit the well-known Pea Ridge Forest, one of the largest tree farms in the state of Missouri. Started as a Christmas Tree Farm in 1955, the farm now has diversified into a diverse selection of evergreen and deciduous trees, which are sold to landscape companies and garden centers. Owner Mike Rood will drive us through the farm in his big wagon, explaining all about growing and caring for trees in Missouri.

4:30 p.m.: Arrive back at the Extension Office in Kirkwood.

Tour includes transportation, lunch, gratuities, Stone Hill and Pea Ridge tour costs, and the services of Linda Koenig. Cost based on 25 participants is \$93 per person. Registration for this tour will be available the first week in August.

2019 Master Pollinator Steward

Studies show that pollinator populations are in decline because of a loss of feeding and nesting habitats, pollution and the misuse of pesticides. Learn how to protect our agricultural economy and food supply with the



Registration: 314-400-7632

Master Pollinator Steward program.

6 Sessions

Location: MU Extension	Feb 20	Insects Bob Marquis, Ph.D., Science Educator Award Winner
132 E. Monroe Ave. 63122	Feb 27	Plant Pollinator Relationship I Aimee Dunlap, Ph.D. in Ecology, Evolution & Behavior
includes all	March 6	Plant Pollinator Relationships II Aimee Dunlap, Ph.D. in Ecology, Evolution & Behavior
	March 13	Planting for Pollinators Part June Hutson, Horticulturalist, Educator & Landscape Designer
Dates: Feb 20 through	March 20	Conserving Pollinators & Their Habitat Kelly O'Mara, Ecologist & Conservationist
March 27 Registration:	March 27	Creating & Managing Pollinator Habitat

Sponsored by Eastern Missouri Beekeepers Association, MU Extension, St. Louis County Parks Foundation, St. Louis County Parks Pollinator Pantry Program, and the St. Louis Master Gardeners.



St. Louis County Park's Pollinator Pantry

Eastern Missouri Beekeepers Association



Volunteer Opportunities

- **Would you like to volunteer with a new teen program at Shaw Nature Reserve beginning Saturday, May 11 – 9:00 a.m. to noon? The new program, Plug In to Nature: Sustainable Garden Projects, is designed to teach sustainable strategies for vegetable, container, and backyard habitat gardens through hands-on activities. If you would like to volunteer, please contact Shaw's Jessica Kester at jkester@mobot.org.
- Wednesday, March 13 9:00 a.m. to noon Tree Whip Planting with Forest Park Forever. Map and details closer to the event.
- Tuesday, March 26 8:00 to 11:00 a.m. Volunteer with Holly at the <u>Museum of</u> <u>Transportation</u>, 2933 Barrett Station Rd, St. Louis, MO 63122. Bring your own gloves and tools. Map and details closer to the event.
- Selma Ducanovic Memorial Site across from Oasis 5035 Gravois Ave, St. Louis, MO 63116 . 1st Wednesday of each month 10:30- to 12:30 p.m. Beginning in March and continuing through October. Interested in volunteering email Master Gardener Renee Barry at reneebrry@yahoo.com
- Weinman Shelter— near the airport. monthly volunteering sessions beginning in April. Please contact Master Gardener Linda Monday at monday811@charter.net if you would like to help.

Meet Justin Keay

Saint Louis County, MO – University of Missouri Extension has hired Justin Keay as the next Horticulture Specialist for St. Louis and St. Charles County. Justin has worked as an agricultural research associate with Lincoln University, an organic farm inspector,



owner and operator of North County Produce Farm, a territory manager for Hummert Horticultural Supply, and served as a buyer for Whole Foods Market, helping local producers comply with insurance, food safety, and animal welfare standards.

Justin completed his M.S. in Integrated Agricultural Systems at Lincoln University. He has a B.A. in Environmental Studies from Washington University, and he has additional academic training from St. Louis Community College.

Meet Justine Kandra

On May 29 Justine Kandra became the new indoor horticulturist for the Kemper Center. Justine grew up in Pittsburgh and science, writing and plants have been her life-long passions. She pursued those passions at Kent State University in Kent, Ohio, where she earned her Bachelor of Science degree in Botany. She brings with her a well-rounded knowledge of botanical institutions having completed internships at several public gardens including Phipps Conservatory, Pittsburgh Botanical Gardens,

Cleveland Botanical Garden, the Greater Des Moines Botanical Garden, and Mount Cuba Center. Her interests center around the relationship among horticulture, technology and ethics, and she loves bike riding, running and M&Ms.



UNIVERSITY OF MISSOURI

University of Missouri Extension 132 E. Monroe Avenue Kirkwood, MO 63122 314-400-2115

St. Louis Master Gardeners Missouri Botanical Garden 4344 Shaw Blvd. St. Louis, MO 63110

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MISSOURI BOTANICAL GARDEN

www.stlmg.com



What's that tree? Check out the free app vTree created by Virginia Tech. You can enter your zip code to learn about trees in your area.

MG Merchandise

Is your Master Gardener tee shirt a little ragged? Would

you love a fleece or sweatshirt to wear in the ever changing St. Louis weather? Maybe you need a moisture wicking shirt so you are comfortable and looking good when it is 95 degrees. Whatever your reasons, visit <u>MG Merchandise</u> on <u>www.stlmg.com</u> and begin shopping for new MG ap-



parel. Contact Margaret Lahrmann with any questions at **mlahrmann@sbcglobal.net**

Master Gardener Book Club

Get reading! The next session of the MG Book Club is Sunday, February 16 and the book is <u>Mister Owita's Guide to Gardening: How I Learned the Unex-</u> <u>pected Joy of a Green Thumb</u> <u>and an Open Heart</u> by Carol Wall . The book club meets in the Kemper classroom at 1:30 p.m. Please

email: <u>nwminer@gmail.com</u> if you are interested in this 3month book club and we'll be in touch.



Volunteer Agreement & Code of Conduct

All St. Louis Master Gardeners are volunteers of the University of Missouri Extension and the University has updated their Volunteer Agreement and Code of Conduct. As a University of Missouri Extension volunteer, you are provided with liability insurance coverage when you are volunteering at an approved site. Volunteers are immune from personal liability for any act or omission resulting in damage or injury to any person intended to receive benefit from the volunteer's service. Please visit the sites below to sign the forms as soon as possible. If you have any questions at all please email me.

Volunteer Agreement
Code of Conduct



