

Summer 2019

# The Garden Path

Published by the Vance/Warren  
Extension Master Gardener<sup>sm</sup> Volunteers

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## MEMORIAL GARDEN CELEBRATION

Wednesday, June 12, 2019

10:30 AM – 12:30 PM

Vance County Regional Farmers Market  
210 Southpark Drive just off Beckford Dr. Henderson,  
NC 27536

Join the Extension Master Gardener volunteers for a drop-in celebration as we hold the official opening and dedication of the Memorial Garden at the Vance County Regional Farmers Market. We will have light refreshments and a short program, and we then invite you to stroll around the garden and visit with us. The garden is dedicated to the memory of members of our group who are no longer with us. It features drought tolerant plants that attract pollinators and other beneficial insects, and is also a Certified Wildlife Habitat.

<http://go.ncsu.edu/vancegarden>



Selected articles from The Garden Path are published  
as blog posts at <https://gardenpathnews.blogspot.com>.  
Please share links to articles that you find helpful.

### Let's Build a Rain Garden!

By Joy Smith

Recently I became aware that after a rain we have standing water on the pavement in the NE corner (front left) of our Memorial garden. (Off the photo to the far left from the above photo) Since I have been reading about rain gardens... this looks like an opportunity to me! Can we design and build a rain garden in that part of our garden that will help with the absorption of the excess water and also look attractive? I think so and here is my proposal to our group of Master Gardener Volunteers

What size can/should the rain garden be? We can measure this area the next time we are at the garden, but for planning purposes, I am going to estimate the size. The width of our rain garden is limited to approximately 7 feet, because it is bordered by the driveway and the sidewalk. I think we can make the garden 10 feet long or so. If we dig the garden a foot deep we will be digging 70 cubic feet of soil. That should be big enough to be helpful, although there may be overflow at times.

We want to amend the soil we remove with 25-50% compost. If we remove 70 cubic feet of soil we need to buy 16-35 cubic feet of compost. The well-prepared filter bed will make the garden better able to hold

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and absorb the water that will collect there. Once we measure and calculate the true size of our garden, we can buy the compost we need. Compost has lots of micronutrients, but is very low in nitrogen, phosphorus and potassium, which plants need in significant amounts. It would be a good idea to take a soil sample after the filter bed is prepared to determine how much fertilizer to apply, and also check the soil pH.

Some rain garden specialists recommend testing the water absorption rate of your planned rain garden site. To test it - dig a 4" hole, 1 foot deep, fill it with water. If it drains in 48 hours the site is suitable. If your site does not drain well, you may end up with a fish pond. Testing the absorption rate would be an interesting experiment to perform. I suggest we dig 2-3 holes in locations we are considering to see if they are suitable.

During heavy rains, our rain garden will overflow and we need to plan for this while we are designing our garden. Where would we like for the overflow to run? We could also install a drain pipe at the bottom of our rain garden to help with overflow. Some experts suggest covering the drain pipe with a filter sock to prevent sediment from entering the pipe.

Assuming our location passes the absorption test, and we decide to build our garden, we can start digging. Our rain garden needs to be bowl shaped with a large flat bottom that is 12 inches deep in the center. The soil that we remove can be divided into 4 piles and placed on tarps for easier mixing and moving. We can then mix the compost in the soil piles and shovel it back into our garden, leaving the surface 3-4" lower than the surrounding soil level.

Left over amended soil can be used to form a berm on the inside of our garden, along the sidewalk. The berm helps keep the water from overflowing easily and thus increases the garden's water holding capacity. If we line the sidewalk side of our rain garden with rocks, this would help keep the soil in the berm from washing over the sidewalk and might look quite attractive. If we decide we want to allow overflow to flow across the sidewalk we can leave a low spot in the berm for that, lined with rocks so the mulch will not wash away. There will likely be more amended soil left that we can use to fill in low spots in our garden.

Interested Extension Master Gardener Volunteers in our chapter can come together to help select the plants for our rain garden and decide where to plant them. The plants we select need to be recommended for rain gardens and able to thrive in full sun. The plants in the flat bottom center need to be able to tolerate periods of wet. We want to plant tall and short plants in the garden so the view will be interesting from all angles.

Finally, we can gather the plants we have chosen, plant them and add 3-4 inches of mulch. Since we are plan to plant in the spring, we need to water these plants every 3-5 days if the weather is hot and dry. We will likely need to water some throughout the summer months.

I am excited about this project and hope you are, too. I thoroughly enjoyed reading "Rain Gardening in the South" by Krause and Spafford. This book was very helpful in understanding how to build a rain garden.

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## References

"Rain Gardening in the South", Helen Kraus and Anne Spafford, 2009

"Solving Typical Rain Garden Problems"

<https://pashekmtr.com/?s=Solving+Typical+Rain+Garden+Problems>

"The Anatomy of a Rain Garden"

<https://www.finegardening.com/article/how-to-design-a-rain-garden>

## Summer Checklist of Things to do in the Garden

By Mary Jane Bosworth

June, July and August are the months that the preparations made in spring start to show. Did you mulch to protect flowers from drying out? Is your pre-emergent weed preventer working? Is your watering system doing it's job? As things heat up, most of us spend less time in the garden, yet still want them to look nice.

### June

- There is still time to set out summer bedding plants. Fill-in empty spots with bits of color. Water well at this time of year.
- Remove spent blooms from annuals which will keep them blooming profusely.
- Stake tall flowering plants.
- Divide and replant spring flowering bulbs.
- Fertilize plants after the first round of blooms for a boost.
- Pinch back herbs to prevent flowering. This also gives them a bushier appearance.
- Set out tomato plants in late June for harvest in the fall.
- Late June and July are the times for rooting semi-hardwood cuttings of your favorite shrubs.
- Pruning of spring flowering shrubs should be done immediately after they bloom.
- Snap off the growing tips of Chrysanthemums for them to branch and bloom more profusely.

### July

- Take it easy in the heat and work in the early morning or the evening.
- Continue to deadhead blooms.
- Use insecticidal soap to help manage scale, spider mites and lacebugs.



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- Hydrangea and forsythia can be propagated by bending stems to the ground and covering them with soil. This works with rhododendron and figs as well. This is called “layering”.
- Keep gardens watered in dry spells.

## August

- Container plants are stressed this time of the year and benefit from being moved to partially shaded areas. Check pots daily for water needs.
- Plant your fall garden of carrots, lettuce, spinach, kale and set out transplants of cabbage, broccoli and squash.
- Remember to thoroughly soak shrubs when watering to encourage deep root growth.
- August is a good time to transplant iris and daylily.

## WHAT'S BUGGING YOU BY EILEEN NOVAK

You know, it's a sad thing in my life but so little seems to go the way I plan or envision it. Just like when I played golf, I was told to see the ball rolling into the cup. I didn't see that too very often, I can tell you. The ball stopped short of, rolled past and circumnavigated the cup but rarely rolled into it. Just like gardening.

You think I would know better by now, wouldn't you? I planned out my garden, planted my seeds on the Ides of March giving myself 6 weeks for the little darlings to grow into robust, happy plants. They evidently didn't read the part about robust and happy. Anyway, a little more than 6 weeks later I was frantically clearing the last of the weeds from the garden, having had an enforced respite caused by spring pollen. I pulled EVERY weed, especially those prickly Carolina horse nettles. Then I put down all 96 tomato plants that were thin and spindly rather than robust. A week later I went out to find about 20 plants remaining, the rest having been chewed down to nubs by the just-emerging Colorado Potato bugs who, not finding their preferred meal of horse nettles, decided to make do with  $\frac{3}{4}$  of my tomato plants.



A little research told me that the villain in question was first noticed on a military exploration mission out west in 1820 by a naturalist named Thomas Say (check out Amy Stewart's book [Wicked Bugs](#) for this and more fascinating stories). The beetle was first noticed "feeding on a tough little weed in the nightshade family" but Mr. Say didn't think it a major discovery. He didn't plant potatoes, tomatoes

or eggplants. They are all in the nightshade family and will all do in a pinch when some over-enthusiastic

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gardener decides to eliminate its favorite food from a 50 foot radius. Silly me, I thought they would leave, or that flying insects would not see what they wanted and keep going. Nope. They did what they do best: they adapted.

I, therefore, had to adapt my gardening technique (death to all weeds) to a slightly modified one (leave the horse nettle till it blooms then pull it up). This new method, while leaving weeds in an otherwise orderly (yeah, right) garden allows me to easily eradicate any of the larvae that I see munching on the weed with a supremely satisfying stomp and grind, while not doing all that much damage to the weed. Those things must have springs instead of cells – they bounce right back up. And mashing of the egg masses on the undersides of leaves (with gloved hands – eeewwww!) is also good therapy.

But just for fun, let's get back to that pesky beetle's story. After switching from the buffalo burr (the nightshade it was noshing on when first noted by Mr. Say) to the potatoes planted by the settlers that arrived, it set about eating the other members of the nightshade family that the settlers so obligingly provided for the smorgasbord: tomatoes, eggplants and even tobacco. And with its newly expanded palate, it discovered it could travel east and find an even greater abundance of this feast. In 1875, it had inflicted so much damage that the European countries banned the importation of American potatoes to keep the beetle out. World War 1 made it impossible to avoid accidental importation of agricultural pests as the American doughboys marched across the continent. The Germans, in particular, thought it was an obscene form of biological warfare, believing that we were dropping the beetles from airplanes to ruin them.



Well, for our part, we didn't bring the beetle "over there" deliberately, unlike the "gifts" of sorrel, henbit and chickweed that the old world settlers inflicted on us. And luckily, there are some other bugs out there that do their part to eliminate the menace to your solanaceous crops. Here is an assassin bug happily munching on a young larva. Nice to know there are friendly insects out there.

If you lack the capacity to train assassin bugs, or are too squeamish to squish, you can head to your local garden center and look in the spray section. You'll have to read the labels carefully to see if the spray is recommended for the beetle or allowed on the plant. Don't forget your reading glasses. I found when I did get the correct spray and did spray properly, the larvae simply went to where the new growth would be and waited for the new leaves, eradicating them in the space of a day. Who says you can't train bugs??? [Extension Agent note: Colorado Potato Beetles are in fact resistant to many insecticides. Contact your County Extension Center for current recommendations].

*All photographs by Debbie Roos and published on the internet here:*

<https://growingsmallfarms.ces.ncsu.edu/growingsmallfarms-CPB/>

*Text previously published at blogger.com and reprinted with permission of the author.*

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## WHAT'S BUGGING ME?

BY JUEL DUKE

This edition, I'll explore the most annoying thing about growing succulents which is that they seem to die suddenly and for no apparent reason. My earliest memory of being entranced by plants was when I was about 10 years old and bought a packet of assorted cactus seeds. I still remember the tiny, fleshy little plants emerging and slowly growing. They were so different from what I saw in vegetable gardens.

What happened to them all I have no idea, except I'm sure they died. I grew (i. e. killed) many different ones through college, when they were popular. They were sought out in specialty nurseries when they weren't. Then I was tired of them all dying so gave up on them and tried my hand at orchids before devoting decades to landscape plants. Succulents are popular again and I'm trying, quite unsuccessfully, to resist the new and interesting varieties that are for sale. Can't say that I've lost count because I haven't kept count. It's less depressing.



Lithops, those stone-like characters from the deserts of Africa have fascinated me all along but I only allowed for a few failures before I gave up on them, decades ago. Then I tried again last fall, going with the plan I used with orchids. Buy one and if you can keep it alive a year, then buy more. I was so proud that the three in that pot have not only survived through the winter but they had grown. Thinking it was a successful experiment, and well short of a year, I decided to buy more, even mail ordering bare root specimens, 10 at a time. They're much cheaper that way!

Before they arrived, I decided to do some in-depth study and learned that what appeared to be success was actually the road to long-term failure. Lithops are dormant in the winter. Water needs to be withheld no matter how tempting. I learned that and much more from watching videos by Ashley Glassman on the YouTube Channel *Succulent Alchemy*. In the photo above you can see that the new leaves on the ones I watered all winter are really



struggling to break free of the old, outer leaves. Those old leaves are supposed to die and dry up as they feed the emerging new leaves. The new leaves should look like the ones I was lucky enough to find



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(at Lowe's) that had, quite accidentally, not been watered. The mail-order bareroot lithops haven't fared great either but four are still alive and three (not the three above) are doing okay.

Despite the "Alchemy" name, I like her videos because she is a trained botanist and speaks from many years of experience, keeping the same plants thriving long term. I will wait longer to judge my success this time.

Watching her videos, reading about the types of plants and their natural environment and watching this webinar, <https://www.youtube.com/watch?v=c9fi439dQGG>, from the Illinois Extension Service has helped me keep quite a few varied succulents alive for more than just a few weeks though I'm still pushing towards "more than a year". I'll share some tips from those sources and my own, mostly successful, experiences over the last few months.

- Buy healthy plants. You can find healthy plants at Big Box stores but you have to look carefully to make sure they haven't been watered too frequently.
- If you do buy plants (and you will) that are wet take them out of the pot and wash all the dirt off and let the roots dry for a few days. Or, if not soggy but still wet, remove the plastic pot and let the clump dry until the plant begins to shrivel slightly.
- Even if seemingly healthy and apparently dry, don't be tempted to water or repot until you've had the plant about two weeks. Succulents, like turtles, do most things in slow motion. There could be rot, from overwatering, lurking deep inside the plant. How many times have you bought a succulent and had it just melt in a few days? Or had all the leaves fall off in a couple weeks. That is often from overwatering stress. The added stress of repotting can be The End.
- Learn about the plants you've bought. Most important are the dormant period, what type of potting mix they like, and whether they are deep or shallow rooted. Don't rely on a bagged Cactus and Succulent mix to be right for every plant. It's an okay starting place but amend with perlite, chick grit, sharp sand, or pumice to create a mix that is appropriate for the age of the plant and that drains very well. It's better to water more or less frequently depending on the plant's needs than use a mix that retains too much moisture. (Personally, I prefer to use coir over peat but it will retain moisture longer so I use it VERY sparingly. Unlike peat, it easily rehydrates and is sustainable.)
- Choose pots that have drainage holes (or drill your own). I just learned that if you have a hole large enough to put your finger into that doing so will tell you if the plant is dry to the bottom. (I use a variety of pots including plastic and both glazed and unglazed ceramic but I try to match the plants needs with the pot material and my ability to remember soil moisture needs for that plant.) Rather than rocks or gravel at the bottom, use a piece of plastic window screen to prevent the soil from washing out of that larger hole. Choose a pot that is only a little larger than the current pot unless something in their culture says they need a larger pot. Deep rooted plants need deep pots! If you can't resist making an arrangement of different types in one large pot, choose plants that have similar watering and soil mix needs.

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- There is no schedule to watering or repotting. Get used to touching your plants, not just looking at the surface of the potting medium. It's an important part of thorough observation and do both when needed. If in doubt, you can probably wait, for both. Overwatering and the inevitable rot is usually easy to tell because the plant will be squishy. It may even appear bloated before the rot takes over. A plant that needs water will feel rubbery and may even be wrinkled.

Yes, that's a lot of things to remember but it's the same for most uncommon house plants. I've decided that I'm not buying any more succulents (except for one genus) until the ones I have now have survived long term with application of my new knowledge.

*Editor: Juel Duke, Extension Master Gardener volunteer*

*Extension Agent: Paul McKenzie*

*paul\_mckenzie@ncsu.edu*

305 Young St., Henderson, NC 27536

252-438-8188 or 252-257-3640

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